Notice of meeting and agenda

Transport and Environment Committee

10am Tuesday 7 June 2016

Dean of Guild Court Room, City Chambers, High Street, Edinburgh

This is a public meeting and members of the public are welcome to attend

Contacts

Email: stuart.mclean@edinburgh.gov.uk / veronica.macmillan@edinburgh.gov.uk

Tel: 0131 529 4106 / 0131 529 4283

1. Order of business

1.1 Including any notices of motion and any other items of business submitted as urgent for consideration at the meeting.

2. Declaration of interests

2.1 Members should declare any financial and non-financial interests they have in the items of business for consideration, identifying the relevant agenda item and the nature of their interest.

3. Deputations

3.1 Mid Liberton Residents Association

4. Minutes

4.1 Transport and Environment Committee 15 March 2016 (circulated) - submitted for approval as a correct record

5. Forward planning

5.1 Transport and Environment Committee Key Decisions Forward Plan (circulated)

5.2 Transport and Environment Committee Rolling Actions Log (circulated)

6. Business bulletin

6.1 Transport and Environment Committee Business Bulletin (circulated)

7. Executive decisions

7.1 Delivering the Local Transport Strategy 2014-2019: Parking Action Plan - report by the Executive Director of Place (circulated)

7.2 Sustainable Transport Accreditation and Recognition for Schools (STARS) - Update and Future Proposals - report by the Executive Director of Place (circulated)

7.3 Pedestrian Crossing Prioritisation 2016/17 - report by the Executive Director of Place (circulated)

7.4 Expansion of Recycling Services in Tenements and Flats - report by the Executive Director of Place (circulated)

7.5 Edinburgh Playing Out - report by the Executive Director of Place (circulated)

7.6 Public Spaces Protocol - update on progress - report by the Executive Director of Place (circulated)

7.7 Forth Estuary Local Flood Risk Management Plan - report by the Executive Director of Place (circulated)

7.8 Review of Scientific Services & Mortuary Services - report by the Executive Director of Place (circulated)

7.9 Appointments to Working Groups, etc 2016/2017 – report by the Chief Executive (circulated)

8. Routine decisions

8.1 Public Utility Company Performance 2015/16 Quarter 3 (October, November and December 2015) - report by the Executive Director of Place (circulated)

8.2 Landfill and Recycling - report by the Executive Director of Place (circulated)

8.3 Cleanliness of the City - report by the Executive Director of Place (circulated)

8.4 George Street Experimental Traffic Regulation Order, Concluding Report and Design Principles - report by the Executive Director of Place (circulated)

8.5 Leith Programme - Objections to Redetermination Order (Brunswick Street to Iona Street) - report by the Executive Director of Place (circulated)

8.6 Objection to Traffic Regulation order TRO/14/64 Braid Hills Drive - Proposed Speed Limit Reduction 50mph to 40mph - report by the Executive Director of Place (circulated)

9. Motions

9.1 Residential Parking – Motion by Councillor Orr

This committee:

1) Notes that in May 2015 the private contractor pulled out of what were ad hoc arrangement for controlling residential parking in a number of areas in the city including the area in ward 15 between the Pleasance and Dumbiedykes Road and also areas within the Inverleith Ward.

2) Further notes that the now uncontrolled parking arrangements have resulted in severe difficulties for those living in these areas in terms of their ability to park their vehicles near own homes, and that a number of safety risks to residents have also emerged

3) Instructs parking officials to immediately commence investigation into the implementation of a controlled parking systems, in consultation with local residents, and report back to the committee as soon as possible recommending action to be taken in relation to the above and any other areas similarly affected.

Kirsty-Louise Campbell
Interim Head of Strategy and Insight

Committee Members

Councillors Hinds (Convener), McVey (Vice-Convener), Aldridge, Bagshaw, Barrie, Booth, Cardownie, Cook, Donaldson, Doran, Gardner, Bill Henderson, Jackson, Keil, McInnes, Burns (ex officio) and Ross (ex officio).

Information about the Transport and Environment Committee

The Transport and Environment Committee consists of 15 Councillors and is appointed by the City of Edinburgh Council. The Transport and Environment Committee usually meets every eight weeks.

The Transport and Environment Committee usually meets in the Dean of Guild Court Room in the City Chambers on the High Street in Edinburgh. There is a seated public gallery and the meeting is open to all members of the public.

Further information

If you have any questions about the agenda or meeting arrangements, please contact Stuart McLean or Aileen McGregor, Committee Services, City of Edinburgh Council, City Chambers, High Street, Edinburgh EH1 1YJ, Tel 0131 529 4106 / 0131 529 4283, email: stuart.mclean@edinburgh.gov.uk / veronica.macmillan@edinburgh.gov.uk .

A copy of the agenda and papers for this meeting will be available for inspection prior to the meeting at the main reception office, City Chambers, High Street, Edinburgh. The agenda, minutes and public reports for this meeting and all the main Council committees can be viewed online by going to www.edinburgh.gov.uk/meetings .

For remaining item of business likely to be considered in private, see separate agenda.

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Minutes

Transport and Environment Committee

10.00 am, Tuesday 15 March 2016

Present:

Councillors Hinds (Convener), McVey (Vice-Convener), Aldridge, Bagshaw, Barrie, Booth, Cardownie, Nick Cook, Donaldson, Doran, Gardner, Bill Henderson, Jackson, Keil and McInnes

1. Deputation: Merchiston Community Council

The Committee agreed to hear a deputation from Kay Smith on behalf of Merchiston Community Council in relation to a motion by Councillor McInnes – Urban Gulls. The Community Council outlined the issues associated with the gull population in their area and requested that consideration be given to a gull de-nesting programme.

The Convener thanked the deputation for their presentation and invited them to remain for the Committee's consideration of the motion by Councillor McInnes at item 4 below.

2. Deputation: Portobello Amenity Society / Portobello Heritage Trust / Brighton's and Rosefield Resident's Association

The Committee agreed to hear a deputation from James Hurford and Stephen Hawkins on behalf of Portobello Amenity Society, Portobello Heritage Trust and Brightons and Rosefield Residents' Association, in relation to a report by the Executive Director of Place on Setted Streets and Road Additional Capital Investment 2016/17.

The deputation felt that a decision made at the Transport and Environment Committee on 12 January 2016 was based on false information as the setts at Brighton Place had not been replaced in recent years. The deputation asked that the Committee delay the removal of the setts until the review of the Councils setted street policy and Portobello Conservation Area had concluded.

The Convener thanked the deputation for their presentation and invited them to remain for the Committee's consideration of the reports by the Executive Director of Place at items 5 and 6 below.

(References – Minute of Transport and Environment Committee 12 January 2016 (item 3)

3. Deputation: Charlotte Chapel

The Committee agreed to hear a deputation from Paul Rees, Lead Pastor at Charlotte Chapel in relation to a report by the Executive Director of Place on Delivering the Local Transport Strategy 2014-19: Parking Action Plan.

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The deputation thanked the Committee for the extensive consultation that had been undertaken regarding the parking action plan and asked that consideration be given to an earlier finish of parking restrictions on Sundays.

The Convener thanked the deputation for their presentation and invited them to remain for the Committee's consideration of the report by the Executive Director of Place at item 7 below.

4. Urban Gulls – Motion by Councillor McInnes

The following motion by Councillor McInnes was submitted in terms of Standing Order 16.1.

"This committee:

1) Notes continuing concern amongst residents in and around tenement areas, over the increasing and invasive urban gull population.

2) Notes that the Council has in the past acknowledged that there is an issue and following a campaign by Merchiston Community Council, agreed to carry out a pilot de-nesting service in 2012.

3) Notes that the pilot – which involved just two operatives on six days between April to June – was seen to yield positive benefits but was not continued because of a budgetary decision.

4) Agrees a similar pilot is carried out in North Merchiston in this calendar year but this time allowing for a transparent and accurate budgetary analysis of the costs.

5) Agrees to set up a working group of officials, local residents and local members to formulate a multi-agency approach to tackling the gulls problem in Edinburgh.

Decision

1) To note continuing concern amongst residents in and around tenement areas, over the increasing and invasive urban gull population.

2) To note that the Council had in the past acknowledged that there was an issue and following a campaign by Merchiston Community Council, agreed to carry out a pilot de-nesting service in 2012.

3) To note that the pilot – which involved just two operatives on six days between April to June – was seen to yield positive benefits but was not continued because of a budgetary decision.

5) To agree to set up a working group of officials, local residents and local members to formulate a multi-agency approach to tackling the gulls problem in Edinburgh.

6) To refer the matter to the South Central and South West Neighbourhood Partnership to allow them to consider funding the proposed North Merchiston Pilot, if it is regarded a priority by either body.

5. Setted Streets

Details were provided on proposals to review, maintain and manage the setted street assets in Edinburgh.

Motion

1) To note the content of the report highlighting current practices on the maintenance and management of setted streets.

2) To agree the actions as set out in paragraph 3.18 of the report by the Executive Director of Place.

3) To refer the report to the Planning Committee.

- moved by Councillor Hinds, seconded by Councillor McVey

Amendment

1) To note the content of the report highlighting current practices on the maintenance and management of setted streets.

2) To agree the actions as set out in paragraph 3.18 of the report by the Executive Director of Place and that no specific action be taken at present to remove the setts in Brighton Place until the strategy for setted streets outlined in paragraph 3.19 had been agreed.

3) To refer the report to the Planning Committee.

- moved by Councillor Aldridge, seconded by Councillor Booth

Voting

For the motion	-	12 votes
For the amendment	-	3 votes

Decision

1) To note the content of the report, highlighting current practices on the maintenance and management of setted streets.

2) To agree the actions as set out in paragraph 3.18 of the report.

3) To refer the report to the Planning Committee.

(References – Minute of Transport and Environment Committee 12 January 2016 (item 3); report by the Executive Director of Place, submitted)

6. Road Additional Capital Investment 2016/17

Approval was sought for the Capital funding in 2016/17. The budget allocation and list of maintenance schemes aims to ensure that the condition of roads and footways continued to improve, whilst fulfilling the objective that the prioritisation reflects and supports the Council's Local Transport Strategy objectives and, in particular, the Active Travel Action Plan.

Decision

To approve the programme of proposed works for 2016/17 as detailed in section three of the report by the Executive Director of Place, and in appendix A.

(Reference – Minute of Transport & Environment Committee 12 January 2016 (item 3), report by the Executive Director of Place, submitted)

7. Delivering the Local Transport Strategy 2014-19: Parking Action Plan

The outcome of consultation with stakeholders regarding the draft Parking Action Plan was outlined. Approval was sought for a finalised version of the Parking Action Plan.

Motion

1) To note the full results of the Parking Action Plan recent consultation.

2) To approve the principle of extending 'parking restrictions / controls' to Sundays.

3) To reject the extension of evening controls to 7.00 pm.

4) To note that of 18 comparator cities across the UK, only 3 – namely Bristol, Perth and Stirling, operate those controls for the afternoon period only.

5) To further note that both Aberdeen and Dundee, who do have parking restrictions on a Sunday, operate those controls for the afternoon period only.

6) To acknowledge that the consultation feedback from Edinburgh, indicates significant concerns about Sunday morning parking restrictions/controls, particularly from traders and city centre residents/visitors.

7) Therefore, as referenced in paragraph 2 above, agree the principle of extending 'parking restrictions/controls to Sundays, and now instructs that a further report, in respect of the financial implications of the implementation of the wider Parking Action Plan, would be submitted to the next Transport and Environment Committee meeting in June, detailing the costs involved in:

   - The extension of any new controls to Saturdays and Sundays
   - A delayed start time on Sunday restrictions
   - The rollout of shared-use parking

8) To agree that the report above would seek to maximise the amount of shared-use parking, throughout the controlled area.

9) To additionally note that the next committee meeting in June would also receive reports on proposed changes to George Street and the Culture and Sport Committee would agree a new Events Strategy.

10) To further agree that the June report would also contain proposals for a revised pricing strategy, as proposed within the wider Parking Action Plan, noting that the introduction of a structured, policy driven pricing strategy, would have the potential to generate additional revenue.

11) To note that all the issues referenced in the paragraphs above, would be taken into full consideration prior to final agreement on the wider Parking Action Plan at the next Committee meeting in June.

12) To note that this in-principle agreement, and the proposals within the draft Parking Action Plan, would result in no immediate financial implications to the Council, this side of any actual implementation.

13) To agree to discussion with public transport providers with a view to improving Sunday service provision.

14) To agree that the eventual implementation of these proposals would be carefully monitored and any subsequent feedback would feed into a review following an initial period of operation of the new controls.

15) To note that zones 5, 5a and 6 would not change.

- moved by Councillor Hinds, Seconded by Councillor McVey

Amendment 1

1) To note the results of the PAP consultation.

2) To approve in principle the maintenance of Current Controlled Hours (as detailed in Paragraph 3.31 of the report) on the basis that:

Results of consultation and stakeholder engagement demonstrate that:

- 81% of respondents indicated that they disagreed with evening controls, with 86% suggesting that controls should remain the same as at present.
- 83% of respondents indicated that they disagreed with Sunday controls being introduced to Zone 1 to 6 and part of 7.

3) To express concern that Committee had been asked to approve the PAP without information on the full financial implications. Instructs officers to bring back a revised Parking Action Plan within two cycles to reflect recommendation 1.1.2 and provide full financial implications of the PAP alongside this.

4) To request a report back to committee which examines how proportionate implementation of double yellow lines might be used to help improve city centre traffic management, including on Sundays.

- moved by Councillor Nick Cook, seconded by Councillor McInnes

Amendment 2

1) To note the results of the Parking Action Plan consultation.

2) To approve in principle the extension of parking controls to evenings and weekends.

3) To agree to continue consideration of the precise hours of operation and details of the parking action plan for one cycle to allow a redrafting of the report, including the full financial details of the proposed hours of operation.

- moved by Councillor Bagshaw, Seconded by Councillor Booth

Votes

For the motion	-	10 votes
For amendment 1	-	3 votes
For amendment 2	-	2 votes

Decision

1) To note the full results of the Parking Action Plan recent consultation.

2) To approve the principle of extending ‘parking restrictions / controls’ to Sundays.

3) To reject the extension of evening controls to 7.00 pm.

4) To note that of 18 comparator cities across the UK, only 3 – namely Bristol, Perth and Stirling, operate those controls for the afternoon period only.

5) To further note that both Aberdeen and Dundee, who do have parking restrictions on a Sunday, operate those controls for the afternoon period only.

6) To acknowledge that the consultation feedback from Edinburgh, indicates significant concerns about Sunday morning parking restrictions/controls, particularly from traders and city centre residents/visitors.

7) Therefore, as referenced in paragraph 2 above, agree the principle of extending ‘parking restrictions/controls to Sundays, and now instructs that a further report, in respect of the financial implications of the implementation of the wider Parking Action Plan, would be submitted to the next Transport and Environment Committee meeting in June, detailing the costs involved in:

   - The extension of any new controls to Saturdays and Sundays
   - A delayed start time on Sunday restrictions
   - The rollout of shared-use parking

8) To agree that the report above would seek to maximise the amount of shared-use parking, throughout the controlled area.

9) To additionally note that the next committee meeting in June would also receive reports on proposed changes to George Street and the Culture and Sport Committee would agree a new Events Strategy.

10) To further agree that the June report would also contain proposals for a revised pricing strategy, as proposed within the wider Parking Action Plan, noting that the introduction of a structured, policy driven pricing strategy, would have the potential to generate additional revenue.

11) To note that all the issues referenced in the paragraphs above, would be taken into full consideration prior to final agreement on the wider Parking Action Plan at the next Committee meeting in June.

12) To note that this in-principle agreement, and the proposals within the draft Parking Action Plan, would result in no immediate financial implications to the Council, this side of any actual implementation.

13) To agree to discussion with public transport providers with a view to improving Sunday service provision.

14) To agree that the eventual implementation of these proposals would be carefully monitored and any subsequent feedback would feed into a review following an initial period of operation of the new controls.

15) To note that zones 5, 5a and 6 would not change.

(Reference – Minute of the Transport and Environment Committee, 25 August 2015 (item 19); report by the Executive Director of Place, submitted.)

8. Minutes

Decision

To approve the minute of the Transport and Environment Committee of 12 January 2016, as a correct record.

9. Key Decisions Forward Plan

The Transport and Environment Committee Key Decisions Forward Plan for June 2016 was submitted.

Decision

To note the Key Decisions Forward Plan for June 2016.

(Reference – Key Decisions Forward Plan, submitted)

10. Rolling Actions Log

The Transport and Environment Committee Rolling Actions Log updated to 15 March 2016 was presented.

Decision

1) To note the rolling actions log and to approve the closure of actions 3, 4, 6 and 28.

2) To note the expected completion date for rolling actions 17, 19, 20, 21, 22, 23, 24, 26 and 27 had been revised.

(References – Act of Council No 12 of 24 October 2013; Rolling Actions Log 15 March 2016, submitted)

11. Transport and Environment Committee Business Bulletin

The Transport and Environment Committee Business Bulletin for 15 March 2016 was presented.

Decision

To note the Transport and Environment Committee Business Bulletin.

(Reference - Business Bulletin – 15 March 2016, submitted)

12. Smarter Choices, Smarter Places Programme 2016/17

Details were provided of Transport Scotland's revenue allocation to the City of Edinburgh Council for 'Smarter Choices, Smarter Places' activities during 2016/17.

Decision

1) To note the allocation of £452,663 of revenue funding from the Scottish Government in 2016/17 on a 50% matched basis as part of the Smarter Choices, Smarter Places Initiative, to pursue and enhance the promotion of sustainable transport.

2) To agree the broad programme of initiatives, as set out in the report.

3) To agree to delegate powers to the Senior Manager – Roads Network, in consultation with the Convener and the Vice Convener, to further develop and deliver a plan and detailed programme for spending these monies.

(References – report by the Executive Director of Place, submitted)

13. Carbon Literacy Programme for Edinburgh

Details were provided regarding a Carbon Literacy initiative in Edinburgh and the role of the Edinburgh Sustainable Development Partnership in the delivery of such a programme.

Decision

1) To note the report by the Chief Executive and the pilot carbon literacy programme for Edinburgh.

2) To agree a further report detailing the key findings of a pilot carbon literacy programme with three city organisations would be presented to the Transport and Environment Committee in Spring 2017.

(References – report by the Chief Executive, submitted)

14. Transport Governance

Details were provided of revised governance arrangements to reflect a recent Council decision regarding Tram and the Edinburgh St James Development moving to the next stage of delivery.

Decision

1) To approve the revised governance arrangements set out in Appendix 1 of the report by the Executive Director of Place and to note that revised agendas would be issued by Committee Services, actions of the groups would be reviewed and redistributed and a work plan would be developed for the Transport Projects Working Group and Future Transport Working Group

2) To note that substitute members would be allowed to attend each of the groups.

(References – Act of Council No 11 of 10 December 2015; report by the Executive Director of Place, submitted)

15. Edinburgh Street Design Guidance – Carriageway and Footway Renewals Programme.

Details were provided on how the Edinburgh Street Design Guidance would be embedded in the delivery of the carriageway and footway renewals programme.

Decision

1) To approve the use of the Edinburgh Street Design Guidance for the design of all carriageway and footway renewals schemes.

2) To agree that any medium to large scale renewal schemes (footway or carriageway) on Strategic and Secondary Retail/High Streets (including for example city centre streets, town centres and neighbourhood shopping streets) take as their scope the entire street width from building façade to building façade.

3) To note that, as previously agreed by the Committee, initial experience with use of the guidance, including the design of carriageway and footway renewal schemes in 2016/17 would be reported back to the Committee by the end of 2016.

(Reference – Minute of Transport & Environment Committee 25 August 2015 (item 18); report by the Executive Director of Place, submitted)

16. 9% Budget Commitment to Cycling

The Council had agreed to spend 5% of its 2012/13 transport budgets (capital and revenue) on projects to encourage cycling as a mode of transport in the city, and that this proportion would increase by 1% annually.

A summary of the proposed capital and revenue expenditure on cycling for 2016/17 was submitted.

Motion

To approve the proposed Council expenditure on cycling for 2016/17.

- moved by Councillor Hinds, Seconded by Councillor McVey

Amendment

1) To note the content of the report by the Executive Director of Place.

2) To note the administration's pledge to dedicate a percentage of transport spend for cycling, which has now risen to 9%.

3) To appreciate the commitment's desirability and recognise that the continued backlog in road and footway works makes this commitment unaffordable.

4) To instruct officers to bring back revised proposals in one cycle, detailing how the dedicated cycle budget would be integrated into the wider net capital expenditure and net revenue expenditure budgets for transport and spent on road and pavement repair projects which would improve safety for all users.

- moved by Councillor Cook, Seconded by Councillor Jackson

Voting

For the motion - 12

For the amendment - 3

Decision

To approve the proposed Council expenditure on cycling for 2016/17.

(References – Act of Council, 9 February 2012; report by the Executive Director of Place, submitted.)

17. Car Free Sunday

Authorisation was sought to hold a Car Free event on Sunday on 25 September 2016.

Decision

1) To authorise the Executive Director of Place to proceed with arrangements for Car Free Sunday event on 25 September 2016.

2) To authorise the Executive Director of Place to arrange events on the spaces created by the closure of streets selected in Localities, with the assistance of an external contractor.

(References – report by the Executive Director of Place, submitted)

18. Review of School Crossing Patrol Service

Approval was sought to review and develop a methodology to prioritise the Council's School Crossing Patrol service

Motion

1) To approve a review of the School Crossing Patrol Service.

2) To approve the proposed criteria to be used in the review.

3) To approve the proposed methodology to be used in the review.

4) To note the intention to present the outcome of the review to the Transport and Environment Committee at its meeting in October 2016.

- moved by Councillor Hinds, Seconded by Councillor McVey

Amendment

1) To approve a review of the School Crossing Patrol Service.

2) To approve the proposed criteria to be used in the review.

3) To approve the proposed methodology to be used in the review.

4) To note the intention to present the outcome of the review to the Transport and Environment Committee at its meeting in October 2016.

5) To note that the cost to undertake a review through consultants is estimated to be approximately £62,000 and that this cost would be contained within the 2016/17 School Crossing Patrol Budget.

6) To note that the Council had committed to reduce consultancy costs by £2m in the financial year 2016/17

7) To note that the Council expressly rejected cuts to school crossing provision in the 2016/17 draft budget proposals.

8) To call for the review of the school crossing patrol service to be carried out in-house and for the resources saved through in-house provision to be used to cover the 25% of the school crossing locations which currently remain vacant.

- moved by Councillor Bagshaw, Seconded by Councillor Booth

Voting

For the motion - 9 votes

For the amendment - 6 votes

Decision

1) To approve a review of the School Crossing Patrol Service.

2) To approve the proposed criteria to be used in the review.

3) To approve the proposed methodology to be used in the review.

4) To note the intention to present the outcome of the review to this committee at its meeting in October 2016.

(References – report by Executive Director of Place, submitted)

19. Supported Bus Services Future Network

An update was provided on the assessment of supported bus services.

Decision

1) To note the outcome of the assessment of supported bus services.

2) To approve the termination of contracts offering fewest benefits (taking account of any mitigating factors) i.e. the Lothian 42 and 60, Horsburgh 64 and Waverely 70.

3) To approve the implementation of an enhanced service 18 with greater benefits, subject to tender returns.

4) To approve the renewal or continuation of contracts for services 20, 38, 63, 13 and 68.

5) To agree that every effort be made to secure sponsorship by third parties of Festive bus services as referred to, and that the outcome of this exercise be reported back to the August meeting of the Committee for further consideration..

6) To authorise the Executive Director of Place to consult West Lothian Council on cross-boundary services.

7) To receive a report on the outcome of these actions at a future meeting.

(References – Minute of Transport & Environment Committee 27 October 2015 (item 11); report by the Executive Director of Place, submitted)

20. Objections to Traffic Regulation Order TRO/14/15 Belgrave Place, Edinburgh

Details of objections to a traffic regulation order were provided and agreement sought to cancel proposed parking amendments in Belgrave Place.

Decision

To cancel the amendments made to the traffic regulation order (as described in TRO/14/15) in Belgrave Place.

(References – report by the Executive Director of Place, submitted)

21. Objections to Proposed Disabled Bay – Oxgangs Library Car Park (TRO 13/13/49)

Details were provided of an objection received in respect of a traffic regulation order. Withdrawal of the proposed traffic regulation order was sought.

Decision

1) To set aside the proposed traffic regulation order.

2) To leave the current bays as unenforceable until such time that the new car park is constructed to include seven new disabled persons parking places with the associated traffic regulation order.

(References – report by the Executive Director of Place, submitted)

22. Objections to Proposed Waiting Restrictions – Kirkgate, Currie (TRO 13/55F)

Details of objections received to the proposed traffic regulation order to introduce waiting and loading restrictions on a section of the Kirkgate, Currie was presented.

Decision

To set aside the proposed traffic regulation order in order that a more comprehensive public consultation on the proposals would be carried out, prior to a new traffic regulation order being proposed.

(References – report by the Executive Director of Place, submitted)

23. Objections to Proposed Waiting Restrictions – Pentland Drive at Pentland View (TRO 13/55/F)

Details were provided of a proposed a traffic regulation order in respect of waiting and loading restrictions on a section of Pentland Drive at the Junction with Pentland View

Decision

1) To acknowledge that the objection against the traffic regulation order had been considered.

2) To set aside the objection to the traffic regulation order and to approve the implementation of the waiting and loading restrictions.

(References – report by the Executive Director of Place, submitted)

24. Call on the Council to invest in improved facilities and to increase the number of inspections to tackle dog dirt – referral from the Petitions Committee

The Petitions Committee had referred a petition entitled ‘Call on the Council to invest in improved facilities and to increase the number of inspections to tackle dog dirt’ to the Transport and Environment Committee for consideration..

Decision

1) To note the referral report.

2) To note the ongoing work by Officers to address the issues raised by the petition.

3) To include an update in the Petitions Committee Business Bulletin.

(References – Minute of Petitions Committee 3 February 2015 (item 4) report by the Interim Head of Strategy and Insight, submitted)

25. Delivering Improvements in Waste and Recycling Collection Services - Presentation

Gareth Barwell, Waste and Cleansing Manager provided the Committee with a verbal update on improvements being implemented in respect of waste and recycling collection services. Various initiatives are being developed to ensure a high quality and reliable waste and recycling service to the residents of Edinburgh, such as:

- Service Reorganisation.
- Improved Consistency of Collections.
- Improved Customer Interaction.
- Improved Information.
- Improved Engagement and Enforcement.
- Investment in Staff / Vehicles / Depots.

Decision

To note the presentation 'Delivering Improvements in Waste and Recycling Collection Services'.

26. Cleanliness of the City

The outcome of the Cleanliness Index Monitoring System (CIMS) assessment of Edinburgh's streets, which had been undertaken by Keep Scotland Beautiful in December 2015, was detailed. The City of Edinburgh Council had achieved a score of 74 with 97% of the streets surveyed achieving the nationally recognised standard of cleanliness.

Decision

1) To note the report by the Executive Director of Place.

2) To note with concern that over a third of environment-related complaints received in December 2015 were in connection with fly tipping or dumping.

3) To note that Committee believes that fly tipping can blight public spaces and land where it occurs, having a significant negative impact on the quality of life for residents.

4) To agree to consult with the National Fly Tipping Prevention Group and any other relevant groups, and to receive a report within 2 cycles exploring examples of best practice in tackling fly tipping from other local authorities and significant landowners, and setting out a detailed and costed action plan for tackling dumping and fly tipping in the City of Edinburgh.

(Reference – report by the Executive Director of Place, submitted)

27. Corporate Performance Framework – Performance to November 2015

Details regarding the Council's performance against Transport and Environment stategic outcomes, covering the period to November 2015 was provided.

Motion

To note the performance for the period to November 2015.

- moved by Councillor Hinds, Seconded by Councillor McVey

Amendment

1) To note the content of the report.

2) To note with concern that the Council had missed its targets in each and every month of the last 11 months in the category of recycling, and in each of the last 8 months in the categories of emergency street lighting repairs carried out within two hours and emergency road defects required within 2 hours.

3) Committee believes that this was an unacceptably poor level of service and therefore agreed to receive a report within one cycle setting out the actions the Council would take to ensure that targets in these areas were met in the future.

- moved by Councillor Booth, Seconded by Councillor Bagshaw

Voting

For the motion - 11 votes

For the amendment - 3 votes

Decision

To note the performance for the period to November 2015.

(Reference – report by the Executive Director of Place, submitted)

28. Landfill and Recycling

A performance report regarding the amount of non recyclable waste sent to landfill and the amount of waste recycled for the period April to December 2015 was presented.

Decision

To note the content of the report by the Executive Director of Place.

(Reference – report by the Executive Director of Place, submitted)

29. Saughton Park and Gardens Heritage Lottery Fund Delivery Phase Grant Award

Details were provided of the Council's successful application for funding via the Heritage Lottery Fund 'Parks for People'.

Decision

1) To note The Council's second round application for funding to the Heritage Lottery Fund (HLF) to improve Saughton Park and Gardens had been successful and that the five year Delivery Phase of the project commenced at the start of 2016.
2) To note that an update report would be submitted to the Committee prior to the start of the Construction Phase.
3) To note that the proposed micro hydro scheme at Saughton Park would happen and that officers were currently investigating funding options.

(Reference – Minute of Transport and Environment Committee 2 June 2015 (item 6), report by the Executive Director of Place, submitted)

30. Roadside Emissions Testing and Air Pollution – Motion by Councillor Booth

The following motion by Councillor Booth, seconded by Councillor Bagshaw was submitted in terms of Standing Order 29.1.

"This committee:

1) Notes with concern figures released on 11 January 2016 following a BBC Scotland investigation into air pollution which found that only 13 of the Scotland's 32 local authorities carry out roadside emissions testing.
2) Notes that Edinburgh has powers under the Road Traffic (Vehicle Emissions) (Fixed Penalty) (Scotland) Regulations of 2003 to carry out roadside emissions testing, but it has not used these powers.
3) Notes that Glasgow Council uses these powers and has tested 2,926 vehicles in 2014/15 and that Dundee Council has applied to the Scottish Government £0.5m fund for to undertake roadside emissions testing but that Edinburgh has not applied for this fund.
4) Notes that the last report on air quality in Edinburgh, published by the Council in August 2015, found that Edinburgh breached statutory air quality standards for annual mean concentration of NO2 at 20 locations across the city.
5) Believes there is significant evidence linking poor air quality with ill health.
6) Believes that the Council should take a consistent approach to tackling air pollution, including to the air pollution impacts of new planning or development proposals.
7) Therefore agrees to receive an urgent report at the next meeting of the Transport and Environment Committee which:
    a) reviews action taken by the Council to tackle air pollution to date.
    b) reviews why no funding applications had been made by the Council to the Scottish Government to undertake roadside emissions testing under the

Road Traffic (Vehicle Emissions) (Fixed Penalty) (Scotland) Regulations of 2003 and sets out the costs and benefits of undertaking such testing.

c) sets out options for additional action to ensure the city complies with statutory air quality standards.''

Amendment

1) To note the comprehensive members briefing previously circulated to all Councillors following the BBC programme 'Car Sick' broadcast on 11 January 2016.

2) To agree that action outlined in the members' briefing demonstrates this Councils commitment to adopting sustainable long term projects for improving air quality in Edinburgh, including significant use of Scottish Government funding as detailed.

- moved by Councillor Hinds, Seconded by Councillor McVey

Voting

For the motion	-	3 votes
For the amendment	-	10 votes

Decision

1) To note the comprehensive members briefing previously circulated to all Councillors following the BBC programme 'Car Sick' broadcast on 11 January 2016.

2) To agree that action outlined in the members' briefing demonstrates this Councils commitment to adopting sustainable long term projects for improving air quality in Edinburgh, including significant use of Scottish Government funding as detailed.

Key decisions forward plan Item 5.1

Transport and Environment Committee
August – November 2016

Item	Key decisions	Expected date of decision	Wards affected	Director and Lead Officer	Coalition pledges and Council
1	Public Utility Company Performance 2015/16 Quarter 4 (January, February, March 2016)	30 August 2016	All Wards	Executive Director of Place Lead Officer: Stuart Harding, Performance Manager 0131 529 3704 stuart.harding@edinburgh.gov.uk	
2	8%Budget Commitment to Cycling - Summary of Expenditure	30 August 2016	All Wards	Executive Director of Place Lead Officer: Chris Brace, Project Officer (Cycling 0131 529 3602 chris.brace@edinburgh.gov.uk	
3	Marchmont to King's Buildings Cycle Route - Objections to Traffic Regulation Order and Redetermination Order	30 August 2016	All Wards	Executive Director of Place Lead Officer: Jamie Robertson, or Professional Officer 0131 469 3654 jamie.robertson@edinburgh.gov.uk	
4	Citywide 20mph Speed Limit - Objections to Traffic Regulation Order	30 August 2016	All Wards	Executive Director of Place Lead Officer: Simon Lievesley, Senior Professional Officer 0131 529 4315 simon.lievesley@edinburgh.gov.uk	

Item	Key decisions	Expected date of decision	Wards affected	Director and Lead Officer	Coalition pledges and Council
5	Roseburn to Leith Walk Cycle Route - Consultation Feedback	30 August 2016	All Wards	Executive Director of Place Lead Officer: John Bury, Head of Planning & Transport 0131 529 3494 john.bury@edinburgh.gov.uk	
6	National Low Emission Framework: Application in Edinburgh	30 August 2016	All Wards	Executive Director of Place Lead Officer: Clive Brown, Project Officer, Strategic Planning 0131 469 3630 clive.brown@edinburgh.gov.uk	
7	Smarter Choices, Smarter Places Programme Evaluation for 2015-2016	30 August 2016	All Wards	Executive Director of Place Lead Officer: John Bury, Head of Planning & Transport 0131 529 3494 john.bury@edinburgh.gov.uk	
8	A71 at Dalmahoy - Introduction and Funding of Traffic Signals	30 August 2016	All Wards	Executive Director of Place Lead Officer: Iain Peat , Professional Officer 0131 469 3316 iain.peat@edinburgh.gov.uk	
9	Secure On-Street Cycle Parking	30 August 2016	All Wards	Executive Director of Place Lead Officer: Allan Tinto, Transport Officer (Cycling) 0131 469 3778 allan.tinto@edinburgh.gov.uk	

Item	Key decisions	Expected date of decision	Wards affected	Director and Lead Officer	Coalition pledges and Council
10	Transport for Edinburgh Strategic Plan	30 August 2016	All Wards	Executive Director of Place Lead Officer: Clive Brown, Project Officer, Strategic Planning 0131 469 3630 clive.brown@edinburgh.gov.uk	
11	Supported Bus Service Network - Update	30 August 2016	All Wards	Executive Director of Place Lead Officer: Chris Day, Project Officer 0131 469 43568 chris.day@edinburgh.gov.uk	
12	School Streets Pilot Evaluation	30 August 2016	All Wards	Executive Director of Place Lead Officer: Steve Murrel, Senior Project Manager 0131 469 3699 steven.murrell@edinburgh.gov.uk	
13	Objections to Proposed Car Club Parking Places - Station Road, Corstorphine and Manor Place	30 August 2016	City Centre	Executive Director of Place Lead Officer: John Richmond, Senior Professional Officer 0131 469 3765 john.richmond@edinburgh.gov.uk	
14	Proposed Priority Parking - Telford Area, Edinburgh	30 August 2016	Inverleith	Executive Director of Place Lead Officer: Ruth Muir, Customer Care Team Leader 0131 469 3512 ruth.muir@edinburgh.gov.uk	

Item	Key decisions	Expected date of decision	Wards affected	Director and Lead Officer	Coalition pledges and Council
15	Review of Tables and Chairs Summer Festival Trial in George Street	30 August 2016	City Centre	Executive Director of Place Lead Officer: Anna Herriman, Information Manager 0131 469 3853 anna.herriman@edinburgh.gov.uk	
16	Resilient Edinburgh – Climate Change Framework 2014-2020 - progress report	30 August 2016	All Wards	Chief Executive James Garry, Corporate Policy & Strategy Officer 0131 469 3578 james.garry@edinburgh.gov.uk	
17	Proposed Priority Parking - Telford Area, Edinburgh	30 August 2016	Inverleith	Executive Director of Place Lead Officer: Ruth Muir, Customer Care Team Leader 0131 469 3512 ruth.muir@edinburgh.gov.uk	
18	Pedestrian Crossing Update	30 August 2016	All Wards	Executive Director of Place Lead Officer: John Bury, Head of Planning & Transport 0131 529 3494 john.bury@edinburgh.gov.uk	
19	Update on Street Scene project - phase 2	30 August 2016	All Wards	Executive Director of Place Lead Officer: Karen Reeves, Openspace Strategy Manager 0131 469 5196 karen.reeves@edinburgh.gov.uk	
20	Cleanliness of the City	30 August 2016	All Wards	Executive Director of Place Lead Officer: Murray Black, Local	

Item	Key decisions	Expected date of decision	Wards affected	Director and Lead Officer	Coalition pledges and Council
				Environment Manager 0131 469 5232 murray.black@edinburgh.gov.uk	
21	MyParkScotland	30 August 2016	All Wards	Executive Director of Place Lead Officer: David Jamieson, Parks & Green Space Manager 0131 529 7055 david.jamieson@edinburgh.gov.uk	
22	Plan for tackling fly tipping in Edinburgh	30 August 2016	All Wards	Executive Director of Place Lead Officer: Gareth Barwell, Waste & Cleansing Manager 0131 529 5844 gareth.barwell@edinburgh.gov.uk	
23	Landfill and Recycling	30 August 2016	All Wards	Executive Director of Place Lead Officer: Andy Williams, Environmental Services Support Unit Manager 0131 469 5660 andy.williams@edinburgh.gov.uk	
24	Public Utility Company Performance 2015/16 Quarter 1 (April, May and June 2016)	1 November 2016	All Wards	Executive Director of Place Lead Officer: Stuart Harding, Performance Manager 0131 529 3704 stuart.harding@edinburgh.gov.uk	
25	George Street Public Realm	1 November 2016	City Centre	Executive Director of Place Lead Officer: Iain MacPhail 0131 529 7804	

Item	Key decisions	Expected date of decision	Wards affected	Director and Lead Officer	Coalition pledges and Council
				iain.macphail@edinbrugh.gov.uk	
26	Water of Leith Basin	1 November 2016	All Wards	Executive Director of Place Lead Officer: Tom Dougall, Maintenance Manager 0131 469 3753 tom.dougall@edinburgh.gov.uk	
27	Review of Public and Accessible Transport Action Plan	1 November 2016	All Wards	Executive Director of Place Lead Officer: Chris Day, Project Officer 0131 469 3568 chris.day@edinburgh.gov.uk	
28	Bus Lane Network review	1 November 2016	All Wards	Executive Director of Place Lead Officer: Jamie Robertson, Senior Professional Officer 0131469 3654 jamie.robertson@edinburgh.gov.uk	
29	Update on Glyphosate Reduction Trials	1 November 2016	All Wards	Executive Director of Place Lead Officer: David Jamieson, Parks & Green Space Manager 0131 529 7055 david.jamieson@edinburgh.gov.uk	
30	Landfill and Recycling	1 November 2016	All Wards	Executive Director of Place Lead Officer: Andy Williams, Environmental Services Support Unit Manager 0131 469 5660 andy.williams@edinburgh.gov.uk	

Item	Key decisions	Expected date of decision	Wards affected	Director and Lead Officer	Coalition pledges and Council
31	Cleanliness of the City	1 November 2016	All Wards	Executive Director of Place Lead Officer: Murray Black, Local Environment Manager 0131 469 5232 murray.black@edinburgh.gov.uk	

Rolling Actions Log

Item 5.2

Transport and Environment Committee

7 June 2016

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
1	15 March 2016	Delivering the Local Transport Strategy 2014-19: Parking Action Plan	Therefore, as referenced in paragraph 2 above, agree the principle of extending 'parking restrictions/controls to Sundays, and now instructs that a further report, in respect of the financial implications of the implementation of the wider Parking Action Plan, would be submitted to the next Transport and Environment Committee meeting in June, detailing the costs involved in: - The extension of any new controls to Saturdays and Sundays - A delayed start time on Sunday restrictions - The rollout of shared-use parking	Executive Director of Place Lead Officer: Andrew Mackay, Professional Officer 0131 469 3577 a.mackay@edinburgh.gov.uk	7 June 2016		Please see item 7.1

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THE CITY OF EDINBURGH COUNCIL

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
2	15 March 2016	Delivering the Local Transport Strategy 2014-19: Parking Action Plan	To additionally note that the next committee meeting in June would also receive reports on proposed changes to George Street and the Culture and Sport Committee would agree a new Events Strategy. To further agree that the June report would also contain proposals for a revised pricing strategy, as proposed within the wider Parking Action Plan, noting that the introduction of a structured, policy driven pricing strategy, would have the potential to generate additional revenue.	Executive Director of Place Lead Officer: Andrew Mackay, Professional Officer 0131 469 3577 a.mackay@edinburgh.gov.uk	7 June 2016		Please see item 7.1
3	15 March 2016	Carbon Literacy Programme for Edinburgh	To agree a further report detailing the key findings of a pilot carbon literacy programme with three city organisations would be presented to the Transport and Environment Committee in Spring 2017.	Chief Executive Lead Officer: Jenny Fausset, Senior Corporate Policy Officer 0131 469 3538 jenny.fausset@edinburgh.gov.uk	Spring 2017		
4	15 March 2016	Review of School Crossing Patrol Service	To note the intention to present the outcome of the review to this committee at its meeting in October 2016.	Executive Director of Place Lead Officer: Caroline Burwell, Road Safety Manager 0131 469 3668 caroline.burwell@edinburgh.gov.uk	1 November 2016		

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
5	15 March 2016	Supported Bus Service Future Network	To agree that every effort be made to secure sponsorship by third parties of Festive bus services as referred to, and that the outcome of this exercise be reported back to the August meeting of the Committee for further consideration. To authorise the Executive Director of Place to consult West Lothian Council on cross-boundary services. To receive a report on the outcome of these actions at a future meeting.	Executive Director of Place Lead Officer: Chris Day, Project Officer 0131 469 3568 chris.day@edinburgh.gov.uk	30 August 2016.		
6	15 March 2016	Cleanliness of the City	To agree to consult with the National Fly Tipping Prevention Group and any other relevant groups, and to receive a report within 2 cycles exploring examples of best practice in tackling fly tipping from other local authorities 15 March 2016 and significant landowners, and setting out a detailed and costed action plan for tackling dumping and fly tipping in the City of Edinburgh.	Executive Director of Place Lead Officer: David Lyon, Head of Environment 0131 529 7047 david.lyon@edinburgh.gov.uk	30 August 2016		

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
7	15 March 2016	Saughton Park and Gardens Heritage Lottery Fund Delivery Phase Grant Award	To note that an update report would be submitted to the Committee prior to the start of the Construction Phase.	Executive Director of Place Lead Officer: David Lyon, Head of Environment 0131 529 7047 david.lyon@edinburgh.gov.uk	21 March 2017		
8	12 January 2016	Annual Review of Major Events in Parks	To agree to receive a further report on the outcome of the consultation with a view to any new arrangements coming into force in 2017.	Executive Director of Place Lead Officer: David Jamieson, Parks and Green Space Manager 0131 529 7055 david.jamieson@edinburgh.gov.uk	17 January 2017		
9	12 January 2016	Transport for Edinburgh – Developing a Strategic Plan	To note that the Transport for Edinburgh Strategic Plan would be reported to Committee later this year.	Executive Director of Place Lead Officer: Ewan Kennedy, Policy & Planning Manager 0131 469 3575 ewan.kennedy@edinburgh.gov.uk	1 November 2016		
10	27 October 2015	Weed Control and Use of Glyphosate – Motion by Councillor Booth	To report to committee within twelve months with options and costs of alternative weed control methods.	Executive Director of Place Lead Officer: John Bury, Head of Planning and Transport 0131 529 3494 john.bury@edinburgh.gov.uk	1 November 2016		
11	27 October 2015	Public Utility Company Performance 2015/16 Quarter 1	Officers to approach the Scottish Government to ask that consideration be given to increasing the fixed penalty notices and to report back to a future Transport	Executive Director of Place Lead Officer: Stuart Harding, Performance Manager 0131 529 3704	7 June 2016		Please see item 8.1

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
		(April, May, June 2015)	and Environment Committee meeting.	stuart.harding@edinburgh.gov.uk.			
12	27 October 2015	Policies - Assurance Statement	An update on the review process to be brought back to a future meeting of the Committee, this should also include a review of the maintenance fees of presentation seats.	Executive Director of Place Lead Officer: John Bury, Head of Transport and Planning 0131 529 3494 john.bury@edinburgh.gov.uk Executive Director of Place Lead Officer: David Lyon, Head of Service of Environment 0131 529 7047 david.lyon@edinburgh.gov.uk	1 November 2016		
13	27 October 2015	Update on the Street Scene Project	To ask that an update report be submitted regarding the next phase of the project to a future meeting of the Transport and Environment Committee.	Executive Director of Place Lead Officer: Karen Reeves, Open Space Strategy Manager 0131 469 5196 karen.reeves@edinburgh.gov.uk Executive Director of Place Robert Turner, Open Space Strategy Senior Project Officer 0131 529 4595 robert.turner@edinburgh.gov.uk	1 November 2016		
14	25 August	Edinburgh Street Design	To note that part C of the Guidance made up of detailed factsheets	Executive Director of Place Lead Officer: Nazan Kocak,	17 January		

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
	2015	Guidance	would be developed and reported to future meetings of the Committee.	Professional Officer 0131 469 3788 Nazan.kocak@edinburgh.gov.uk	2017		
15	25 August 2015	Edinburgh Street Design Guidance	To note that there would be a report back to the Committee on initial experience with use of the guidance by the end of 2016. In the meantime, authorise the Head of Transport to make necessary drafting changes to the guidance as presented with the report (see para 3.8)	Executive Director of Place Lead Officer: Nazan Kocak, Professional Officer 0131 469 3788 Nazan.kocak@edinburgh.gov.uk	17 January 2017		
16	25 August 2015	Edinburgh Conscientious Objectors Memorial Petition referral from the Petitions Committee	To note the agreement that officers would report on the outcome of discussions with the principal petitioner.	Executive Director of Place Lead Officer: David Jamieson, Parks and Greenspace Manager 0131 529 7055 david.jamieson@edinburgh.gov.uk	30 August 2017		Expected completion date revised to 7 June 2016 from 12 January 2016 **Update**: Expected completion date revised from 07 June 2016 to 30 August 2016
17	2 June 2015	Seafield Waste Water Treatment Working – Monitoring of	In light of the above, and recognising that local residents interests at present are not best served by the legislation and/or regulation currently in place, to	Executive Director of Place Lead Officer: Susan Mooney, Head of Housing & Regulatory Services 0131 529 7587	TBC – pending outcome of Scottish Government		Letter sent to Minister for Environment, Climate Change and

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
		Scottish Water Odour Improvement Plan	instruct the Acting Director of Services for communities to engage with the relevant Authorities with a view to reviewing and strengthening the existing Code of Practise and report back to Committee on the outcome.	susan.mooney@edinburgh.gov.uk Andrew Mitchell, Community Safety Senior Manager 0131 469 5822 andrew.mitchell@edinburgh.gov.uk Alan Moonie, Team Manager, Planning Service 0131 529 3909 Alan.moonie@edinburgh.gov.uk	response.		Land Reform (29/06/2015) report to be provided when a response from the Minister is received – Lead Officer from Scottish Government met with the Convener and Vice Convener and Senior Officers to discuss the community concerns regarding odor and a letter has been sent to this Lead Officer concerning the actions which have been agreed.

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
							Further meetings are scheduled between elected members community representatives and officers. **Update**: Expected completion date revised to 1 November 2016
18	2 June 2015	Seafield Waste Water Treatment Working – Monitoring of Scottish Water Odour Improvement Plan	To note the recent improvements which have become operational as set out in section 3.15 and requests that an evaluation report be provided in one year detailing the findings of the continued monitoring and assessment programme, including the outcome of any investigations into any major odour incidents	Executive Director of Place Lead Officer: Andrew Mitchell, Community Safety Senior Manager 0131 469 5822 andrew.mitchell@edinburgh.gov.uk	07 June 2016		**Update**: Expected completion date revised from 07 June 2016 to 1 November 2016
19	2 June	MyParkScotl	To agree to receive an update in 12	Executive Director of Place	07 June		**Update**:

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
	2015	and – Innovative Funding for Edinburgh's' Parks	months time.	Lead Officer: David Jamieson, Parks and Greenspace Manager 0131 529 7055 david.jamieson@edinburgh.gov.uk	2016		Expected completion date revised from 07 June 2016 to 17 January 2017
20	2 June 2015	City Centre Public Spaces Manifesto Update	To note that a report on the findings and recommendations of this public consultation and Castle Street trial would be submitted to the Transport and Environment Committee in the Autumn of 2016.	Executive Director of Place Lead Officer: Iain MacPhail, City Centre Programme Manager 0131 529 7804 iain.macphail@edinburgh.gov.uk	1 November 2016		
21	2 June 2015	Review of Tables and Chairs Summer Festival Trial in George Street	To agree to consult further with key stakeholders in the New Town and Old Town Community Council areas of the city centre, on the impact on residential amenity that could arise from any extension of the operating hours of the current tables and chairs permit system and to receive a report on the outcome of the consultation.	Executive Director of Place Lead Officer: Anna Herriman Partnership & Information Manager/ 0131 429 3853 anna.herriman@edinburgh.gov.uk	7 June 2016		Expected completion date revised from 12 January 2016 to 7 June 2016 **Update**: Expected completion date revised from 07 June 2016 to 1 November 2016
22	2 June	Bus Lane	To note that the results of the trials	Executive Director of Place	1 November		

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
	2015	Network Review – Objection to the Experimental Traffic Regulation Orders	would be reported to the Committee in Autumn 2016	Lead Officer: Len Vallance, Senior Professional Officer, Projects Development 0131 469 3629 len.vallance@edinburgh.gov.uk	2017		
23	17 March 2015	George Street Experimental traffic Regulation Order Mid Year review	To agree to accept a further report on the outcomes of the Experimental Traffic Regulation Order (ETRO) trial, design options for the long-term layout of the street and a summary of the research outcomes in November 2015.	Executive Director of Place: Lead Officer: Iain MacPhail, City Centre Programme Manager 0131 529 7804 iain.macphail@edinburgh.gov.uk	7 June 2016		Expected completion date revised from 12 January 2016 Please see item 8.4
24	17 March 2015	A71 Dalmahoy Junction Options Report	To agree to undertake a detailed design for the signalisation of the junction with a more detailed cost estimate, including land acquisition and any required planning consents and to receive a report on these issues, along with details of how to find the additional required funding, in the first quarter of next year.	Executive Director of Place Lead Officer: Iain Peat, Professional Officer, Road Safety 0131 469 3416 iain.peat@edinburgh.gov.uk	7 June 2016		Expected completion date revised from 15 March 2016 **Update:** Expected completion date revised from 7 June 2016 to 30 August 2016

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
25	17 March 2015	Travel Discount Cards for Young Carers – Motion by Councillor Hinds	The Acting Director of Services for Communities to explore options with Lothian Buses concerning the purchase of Discount Cards (with 100 journeys) for Young Carers (16-18 years old) and how these could best be distributed to Young Carers.	Executive Director of Place Lead Officer: David Lyon, Head of Service - Transport 0131 529 7047 david.lyon@edinburgh.gov.uk			Discussions have taken place between Lothian Buses and H&SC. If required, a report will be submitted to a future meeting of the committee. Expected completion date revised from 12 January 2016 **Update:** This will now be incorporated into a wider 'carer' agenda and will be reported to Health, Social Care and Housing Committee.

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
26	13 January 2015	Updated Pedestrian Crossing Prioritisation 2014/15	To carry out a PV2assessment of the 62 signalised junctions without full pedestrian crossing facilities and to receive the results of the assessment, in the annual report on Pedestrian Crossing Prioritisation in late 2015.	Executive Director of Place Lead Officer: Stacey Skelton, Transport Officer 0131 469 3558 stacey.skelton@edinburgh.gov.uk	7 June 2016.		Expected completion date revised from 15 March 2016 Please see item 7.3
27	13 January 2015	Young Street Experimental Traffic Regulation Order	A report to be brought to Committee in December 2015 analysing the trial's impact and making further recommendations based on the research outcomes	Executive Director of Place Lead Officer: Anna Herriman Partnership & Information Manager/ 0131 429 3853 anna.herriman@edinburgh.gov.uk	7 June 2016		Expected completion date revised from 15 March 2016 Please see item 6.1
28	13 January 2015	EU Mayors Adapt	To note a climate change adaptation action plan will be developed and presented to Committee for consideration in Winter 2015.	Chief Executive Lead Officers: James Garry & Fiona Macleod 0131 469 3578/469 3513 james.garry@edinburgh.gov.uk / fiona.macleod@edinburgh.gov.uk	7 June 2016		Expected completion date revised from 12 January 2016. **Update**: Expected completion date revised from 7 June 2016 to 30 August 2016.

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
29	13 January 2015	Attitudes to Recycling	To agree for an updated communications and engagement strategy to be brought to Committee in Autumn 2015.	Executive Director of Place Lead Officer: Ryan McEwan, Community Engagement Manager 0131 469 5443 ryan.mcewan@edinburgh.gov.uk	7 June 2016		Expected completion date revised to 7 June 2016 from 12 January 2016. **Update**: Expected completion date revised from 7 June 2016 to 1 November 2016
30	28 October 2014	Resilient Edinburgh - Climate Change Framework 2014-2020	To note an action plan will be developed and presented to Committee for consideration in Winter 2015.	Chief Executive Lead officer: James Garry, Corporate Policy and Strategy Officer & Fiona Macleod, Corporate Policy and Strategy Officer 0131 469 3578/0131 469 3513 james.garry@edinburgh.gov.uk fiona.macleod@edinburgh.gov.uk	7 June 2016		Expected completion date revised from 12 January 2016 to 7 June 2016. **Update**: Expected completion date revised from 7 June 2016 to 30 August 2016

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
31	28 October 2014	Water of Leith Basin	To instruct the Acting Director of Services for Communities to submit to the Transport and Environment Committee update reports as appropriate during 2013 as each phase of the project progresses'.	Executive Director of Place Lead officer: Tom Dougall, Maintenance Manager 0131 469 3753 tom.dougall@edinburgh.gov.uk	7 June 2016		The progression of the siltation study has been delayed. The study is linked to the Integrated Catchment Study (ICS) which is being progressed in partnership, but is behind programme. There has also been an issue in appointing the same consultant to do both pieces of work, and it is now anticipated that approval to award a contract will

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
							be sought at the F&R Committee on 14 January 2016. Expected completion date revised from 12 January 2016 **Update**: The tender documents for this project have now been prepared and are with Procurement awaiting approval and issue. It is intended to report to F&R in May 2016 seeking to appoint a consultant to undertake

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
							this work. Expected completion date revised to 7 June 2016 Please see item 7.7
32	04 June 2013	Public Realm Strategy Annual Review 2012-13	To agree to a review of the Public Realm Strategy.	Executive Director of Place Lead Officer: Karen Stevenson, Senior Planning Officer 0131 469 3659 karen.stevenson@edinburgh.gov.uk	12 January 2017		Review of the Public Realm Strategy. To be aligned with the Edinburgh Street Design Guidance and the Public Spaces manifesto in 2016. Expected completion date revised from 27 October 2015.

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
33	19 March 2013	(Signage and Branding) Leith Programme – Consultation and Design	To agree that officers hold discussions with relevant stakeholders on signage and branding and report back to a future Transport and Environment Committee.	Executive Director of Place Lead Officer: Ian Buchanan, City Centre & Leith Neighbourhood Manager (operations) 0131 529 7524 ian.buchanan@edinburgh.gov.uk	7 June 2016.		Expected completion date revised from 12 January 2016 to 7 June 2016. **Please note:** This is not a Leith Programme specific action as it covers all of Leith. Please see item 6.1
34	15 January 2013	Automated Recycling Points	To provide a further report once the findings of the Zero Waste Scotland pilot became known.	Executive Director of Place Lead Officer: Angus Murdoch, Strategy and Recycling Officer 0131 469 5427 angus.murdoch@edinburgh.gov.uk	7 June 2016		This report requires Officers to report on the outcome of national pilots funded by Scottish Government/ Zero Waste Scotland. The date of publication for the afore-

No	Date	Report Title	Action	Action Owner	Expected completion date	Actual completion date	Comments
							mentioned reports is to be confirmed. Please see item 6.1

Business Bulletin Item No 6.1

Transport and Environment Committee

10 am Tuesday 7 June 2016

Dean of Guild Court Room, City Chambers, High Street, Edinburgh

EDINBVRGH
THE CITY OF EDINBURGH COUNCIL

Transport and Environment Committee

Convener:	Members:	Contacts
Convener Cllr Lesley Hinds  Vice- Convener Cllr Adam McVey 	Councillor Robert Aldridge Councillor Nigel Bagshaw Councillor Gavin Barrie Councillor Chas Booth Councillor Steve Cardownie Councillor Nick Cook Councillor Marion Donaldson Councillor Karen Doran Councillor Nick Gardner Councillor Bill Henderson Councillor Allan Jackson Councillor Karen Keil Councillor Mark McInnes	Marie Craig Business Manager ☎ 0131 529 7739 Jemma Blackwood Business Manager ☎ 0131 529 3473 Stuart McLean Committee Services ☎ 0131 529 4106

Recent news	Background
Community Policing Service Level Agreement (SLA); Performance Update The Police and Fire Scrutiny Committee on 18 March 2015 considered an update on the joint working activities and detailed performance carried out under the SLA with Police Scotland from October to December 2015. The Committee agreed to note the content of the report and to receive the next update in June 2016. The report was referred to the Health, Social Care and Housing Committee and the Transport and Environment Committee for information.	**For further information:** Michelle Miller, Head of Safer and Stronger Communities 0131 529 8520 Michelle.Miller@edinburgh.gov.uk

Forthcoming Activities:

None

Recent news	Background
Automated Recycling Points At the Transport and Environment Committee meeting of 15 January 2013, a report was presented addressing a motion from Councillor Mowat to investigate the use of automated recycling facilities linked to deposit schemes, to encourage recycling. It was recommended that a further report be presented to Committee in light of the findings from Zero Waste Scotland pilots which were to be undertaken. Whilst Zero Waste Scotland has undertaken some trials of automated recycling facilities, a report on the outcome of these trials has not been published. It is understood that the Scottish Government is committed to developing this going forward, however it is not clear at this time whether this will involve Local Authorities – some of the pilots undertaken were in retail environments such as shops. In view of this, Waste Services will continue to consider opportunities as they arise where involvement may be appropriate, and undertake to report to Committee on any relevant developments in this area	**For further information:** Automated Recycling Points

Forthcoming Activities:

None

Recent news	Background
Leith Signage and Branding The Transport and Environment Committee, at its meeting of 19 March 2013, requested officers hold discussions with relevant stakeholders, on Leith signage and branding. Over recent years there has been a continuing dialogue with stakeholders. Discussions have been held and banners were erected on Ocean Drive and at the Kirkgate during summer 2015, to coincide with the Ocean Cruise Liner season. Small projects are proposed following discussion with the Leith Chamber of Commerce to promote Leith to cruise liner visitors, such as hoardings and local temporary signage.	**For further information:**

Forthcoming Activities:

None

Recent news	Background
Water of Leith Flood Prevention Scheme Phase 2 **Project Governance** A dedicated Council project team is now in place led by the Project Director, Rob Leech. Building on lessons learned from Phase 1, strict governance was put in place in 2014 with the formation of an oversight group chaired by the Head of Planning and Transport. In addition a working group chaired by the Strategic Service Manager - Infrastructure convene monthly to discuss the status of the project and to provide advice and guidance as necessary. **Advanced Utilities** Advanced utility diversions for the Scottish Power and Street Lighting in Riversdale Crescent have been completed. The gas main diversion by SGN is ongoing, nearing completion and expected to be complete by June 2016. **Design & Build Construction** The design of the works is progressing well and the detailed designs are on programme to suit the commencement of the main construction works during May 2016. The works complete to date include: • Construction compound established at Balgreen,	The Water of Leith Flood Prevention Phase 2 works consists of the construction of 1.2km of flood defences along the Water of Leith at Murrayfield. These works will include structural walls and earth embankments, flood gates, pumping stations, drainage and the construction of two new bridges to replace the bridges at Baird Drive and Saughtonhall Avenue. The project was awarded to McLaughlin & Harvey Ltd in November 2015 with a planned completion during the first quarter 2018 **For further information:** Darren Wraight, Project Manager 07990540736

Recent news	Background
accommodating both the CEC project team and the contractor. • Extensive ecology studies have been carried out complemented by the installation of bird/bat boxes and the creation of an otter holt. • Tree clearance works have been completed for Phases 1 and 2 of the project with further felling to complete after the 2016 bird nesting season. • Property condition surveys have been commissioned by the Contractor (McLaughlin & Harvey Ltd) and are on track for completion prior to main works commencing. • Test piling has been carried out in five locations to ascertain pile driveability and to determine the effects of noise and vibration. **Stakeholder Management** Pre contract award the Council carried out detailed stakeholder discussions with all interested parties and this included the formation of the Stakeholder Engagement Group chaired by the Transport Convener which will continue throughout the project. McLaughlin & Harvey Ltd has taken an active role in the stakeholder management with a detailed plan in place and a dedicated stakeholder manager. McLaughlin & Harvey Ltd has actively engaged with, amongst others, the local primary schools and Education Scotland, Friends of Roseburn Park, Community Councils and local residents, SRU, Ice Rink and other local businesses.	darren.wraight@edinburgh.gov.uk

Forthcoming Activities:

Main construction works commence during May 2016 with the flood walls adjacent to Riversdale Crescent and around Roseburn Park.

Recent news	Background
Young Street Traffic Regulation Order A Traffic Regulation Order (TRO) process for Young Street commenced on 19 April 2016, with statutory bodies, and has been followed by advertising of the TRO on 10 May 2016. This process seeks to secure the continuity of arrangements that are working well, currently, under an Experimental Traffic Regulation Order (ETRO) which came	**For further information:** In January 2015, Committee agreed to progress an Experimental Traffic Regulation Order (ETRO) for Young Street to help alleviate localised traffic pressures relating in part to trial changes in

Recent news	Background
into operation on 23 March 2015. The ETRO reverses the one-way traffic in the street to an east-west direction. Assessment and feedback shows the reversal continues to provide ongoing benefit for local residents and for traffic management arrangements in the city centre. An ETRO may remain in operation for up to 18 months, and the Young Street ETRO will end on 22 September 2016. Subject to consideration of objections to the TRO, it is hoped that an outcome to the TRO process can be reported to Committee on 30 August 2016, and a permanent order made prior to the compulsory end date of the ETRO. If the order can be made ahead of 22 September, it will avoid confusion from changing a one way traffic direction backwards and forwards. It will also avoid unnecessary costs associated with reverting to the extant TRO for Young Street, such as changing signage.	George Street, promoted under a separate ETRO.

Forthcoming Activities:

None

Transport and Environment Committee

10.00am, Tuesday 7 June 2016

Delivering the Local Transport Strategy 2014-2019: Parking Action Plan

Item number	7.1
Report number	
Executive/routine	
Wards	All

Executive Summary

At its meeting of 15 March 2016, Committee considered a report that detailed the results of the Parking Action Plan (PAP) consultation.

That report made recommendations related to weekend and evening parking, based on both the consultation results and consideration of the Council's wider transport policy. It also recommended that Committee approve an amended version of the PAP.

The Committee called for additional information, on the financial implications of extending controls to weekends and of the proposed roll-out of shared use parking. Committee also requested proposals for a policy driven pricing strategy.

The purpose of this report is to provide Committee with the requested information and to seek approval for the amended PAP.

Links

Coalition Pledges	
Council Priorities	
Single Outcome Agreement	

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Report

Delivering the Local Transport Strategy 2014-2019: Parking Action Plan

1. Recommendations

1.1 It is recommended that the Committee:

1.1.1 notes the financial implications of introducing shared use parking and the different options for Sunday parking restrictions;

1.1.2 determines its preferred option, from the three detailed in this report, for Sunday parking restrictions;

1.1.3 approves the PAP; and

1.1.4 notes the outline proposals for a policy driven pricing strategy.

2. Background

2.1 In March 2016, Committee considered a report which detailed the results of the consultation on the draft PAP.

2.2 Having considered the report, Committee requested a further report, within one cycle, that would provide additional information on the financial implications involved in:

2.2.1 the extension of controls on Saturdays and Sundays;

2.2.2 a delayed start time to Sunday restrictions; and

2.2.3 the roll-out of shared use parking.

2.3 Committee requested that the report also contain proposals for a revised, policy driven pricing strategy, as proposed within the wider PAP.

2.4 This report provides:

2.4.1 The requested financial information;

2.4.2 An outline proposal for developing a policy driven pricing strategy; and

2.4.3 An up to date version of the PAP.

3. Main report

3.1 In March 2016, Committee considered a report on the consultation for the draft PAP.

3.2 This report seeks to provide the additional information requested by Committee on both the financial implications of key aspects of the PAP and the proposals for a policy driven pricing strategy. It also provides a proposed timetable for implementing the key aspects of the PAP and indicates the outstanding work and processes, that need completed prior to implementation.

Financial implications of implementing the Parking Action Plan

3.3 The report that Committee considered in March 2016, detailed two primary options for extending controls to operate on Sundays. Those two options were:

3.3.1 Partial control in zones 1 to 4 - where restrictions would operate between 1300 and 1830; and

3.3.2 Full control in zones 1 to 4 - where restrictions would operate between 0830 and 1830.

3.4 Both of these options included main traffic route controls, with restrictions operating throughout the Controlled Parking Zones. Main traffic route restrictions would mirror those on Saturday, starting at 0800.

3.5 The decision from Committee in March, indicates that further financial details are required for the extension of "any new controls to Saturdays and Sundays" and for a "delayed start time on Sunday restrictions". In order to provide sufficient detail on the potential implications of the primary options available, this report provides financial implications on three separate options:

3.5.1 Option 1: Partial Control, with all restrictions in zones 1 to 4 and main routes throughout the CPZ operating between 1300 and 1830;

3.5.2 Option 2: Partial Control, with all restrictions in zones 1 to 4 operating between 1300 and 1830 and main route restrictions throughout the CPZ operating 0800 and 1830; and

3.5.3 Option 3: Full Control, with all restrictions in zones 1 to 4 operating between 0830 and 1830 and main route restrictions throughout the CPZ operating 0800 and 1830.

3.6 None of the three options detailed above, makes any alterations to operation of restrictions on Saturdays. A plan showing the extent of the three Options can be found in Appendix 1.

3.7 The PAP includes a proposal for a wider roll-out of shared use parking into zones 1 to 8. While some parking places of this type are already on street, this proposal would result in many more being introduced.

3.8 These two proposals, the extension of parking controls to cover Sundays and the roll-out of shared use parking, would separately require changes to many of the same signs. Implementing the required changes separately, would result in a significant amount of abortive work, requiring the same signs to be altered or replaced entirely, on more than one occasion. In order to minimise both the work involved and the cost of separately implementing the necessary changes, it is proposed that these proposals be introduced at the same time.

3.9 The full financial implications of the available options are shown in Appendix 2 to this report. An indicative timeline, indicating the anticipated timescale for introducing Sunday parking restrictions, shared use parking and a revised pricing strategy, can be found in Appendix 4.

Options Analysis

3.10 The following table very briefly summarises the relative benefits of each of the three options.

	Option 1	Option 2	Option 3
Controls in Zones 1-4 and on main routes*:			
Sunday Mornings	No	Main routes only	Yes
Sunday Afternoons	Yes	Yes	Yes
Fit with consultation responses	Best	2nd best	Worst

Note * - The controls are expected to manage visitor parking and protect residents parking in zones 1-4 and on main routes help traffic and bus movement, parking for blue badge holders, crossing the road and cycling on main routes.

Pricing Strategy

3.11 The Local Transport Strategy (LTS) sets out the Council's transport policies. In general, the aim of those policies is to create conditions that support increased use of sustainable forms of transport, and to reduce the number of trips that are made by private car.

3.12 However, both the LTS and the draft PAP recognise that the car remains an essential means of transport for many, and that providing parking opportunities is a significant function of parking control. It is, however, also the case that parking space is a finite resource and that effective management of that resource is required in order to manage demand, create turnover and support accessibility.

3.13 What the draft PAP proposes is to, "Develop and publish a parking pricing strategy to steer the approach to charges for parking permits and pay and display parking". The report to Committee in March 2016 further indicated that the pricing strategy would be policy driven, with the potential to realise additional revenue for the Council.

3.14 That report also indicated that this would be the subject of a further report which would give full details of the proposed strategy. The process involved in bringing forward a report within the timescales required by Committee means that it has not been possible to fully consider many aspects of the pricing strategy. A full report, with a detailed pricing strategy proposal, will be submitted to Committee in two cycles.

3.15 For the purposes of this report an outline of the proposed strategy has been prepared. The outline broadly explains the approach that is proposed and provides details for those aspects of the strategy where there is already a preferred course of action. Full details can be found within Appendix 3.

3.16 The aims of the strategy will be to:

3.16.1 ensure that the available parking space is effectively managed to the benefit of all users, including for residents, shoppers, visitors and businesses;

3.16.2 support local and national policies on sustainable travel, air quality and vehicle emissions; and

3.16.3 provide a structured approach to pricing across all parking-related charges.

3.17 It is anticipated that changes to the permit bands, taking a holistic approach to the application of permit charges and the application of demand-based pay-and-display charging, will provide the Council with a policy-driven approach to parking charges and permit prices, directly supporting policies contained within the LTS.

3.18 The strategy will provide direct linkages to existing Council policies on emissions, vehicle usage, travel choices and public transport.

3.19 In financial terms, it is anticipated that there will be an increase in parking revenue in line with approved budgetary requirements.

Public Transport

3.20 The decision from Committee in March 2016 agreed to discussions taking place with public transport operators with a view to improving Sunday service provision. Whilst initial discussions had already taken place with Lothian Buses prior to Committee considering that report, it is recognised that continuing dialogue with public transport operators will be fundamental to improving public transport services on Sundays. Further discussions will be held with Transport for Edinburgh.

Parking Action Plan

3.21 The draft PAP is appended to this report (Appendix 5). The document has been amended since it was considered by Committee on 15 March 2016. The main amendments are as follows:

3.21.1 The section on evening parking controls, as per the Committee decision from 15 March 2016, has been removed; and

3.21.2 The details relating to Sunday parking controls have been amended. The PAP now generally discusses the need for Sunday controls without specifying the proposed hours of operation, in order to accommodate any of the three options detailed in this report.

3.22 It is recommended that Committee approve the draft and that the Council adopts the PAP, as its vision for parking in Edinburgh over the next five years.

4. Measures of success

4.1 In order to assess the impact of the PAP against its objectives, it is proposed to carry out a new Parking Satisfaction Survey, shortly after implementation of the changes outlined in this report. This will consider impacts on the following groups:

4.1.1 CPZ residents, both permit holders and non permit holders;

4.1.2 Other permit holders (businesses, trades etc);

4.1.3 City centre businesses;

4.1.4 Non residents who park in the city centre; and

4.1.5 Other road users.

4.2 The outcomes that we will seek to measure, relate to improving perceptions held by the full range of customers/users including:

4.2.1 perception by city centre residents and their visitors that finding parking spaces is easier;

4.2.2 perception of fair and high quality of service by business/retail/trades permit users;

4.2.3 maintaining or improving perception of ease of parking in the city centre for visitors;

4.2.4 perception that parking restrictions are helping to improve conditions for people with mobility impairments, pedestrians, cyclists and public transport users on main roads and in the city centre, particularly on Sundays;

4.2.5 maintaining or improving the perception of city centre businesses about parking, as part of the Council's overall approach to transport; and

4.2.6 improved understanding of the permits that are available to businesses and retailers.

4.3 A further outcome sought is a change in the permit holder vehicle fleet to more environmentally friendly vehicles.

5. Financial impact

5.1 The recommendations contained within this report and within the draft PAP, will result in no immediate financial implications to the Council. It is proposed that a further report in respect of the financial implications of the proposed pricing strategy will be submitted to Committee within two cycles.

6. Risk, policy, compliance and governance impact

6.1 It is considered that there are no known risk, policy, compliance or governance impacts arising from this report.

7. Equalities impact

7.1 Consideration has been given to the Council's Public Sector Duty in respect of the Equalities Act 2010. A full assessment of the proposals contained within the draft PAP has been prepared. With the next stage in the process of adopting the PAP being detailed consultation, it is proposed that the current ERIA be considered as a live document that will be updated and amended as the process progresses.

7.2 Further consideration will also be given to the potential impacts of the pricing strategy as that strategy is developed.

8. Sustainability impact

8.1 The recommendations within this report do not have any adverse impact on carbon impacts, adaptation to climate change or sustainable development.

8.2 It is anticipated that the proposal to introduce a revised pricing strategy and the extension of the hours of control to Sundays will have a positive impact in reducing carbon emissions and in building a sustainable Edinburgh. This would be achieved by reducing the number of trips made by private vehicle, encouraging use of public transport and active travel alternatives to private vehicles, improving road safety and improving accessibility.

8.3 The proposals in this report will help achieve a sustainable Edinburgh because public transport and active travel usage will be encouraged, the provision of measures designed to manage parking demand will create equality of opportunity, parking controls will provide for improved road safety and improved accessibility for those who have mobility issues.

8.4 It is anticipated that the finalised proposal for a pricing strategy, which may involve changes to the existing arrangements for permit charges, will have a positive impact on pollution and air quality within the city centre. Full details of those anticipated impacts will be described within the report to Committee in two cycles.

9. Consultation and engagement

9.1 A consultation exercise on the content of the draft PAP, was conducted during October 2015. The responses to that consultation were considered by Committee on 15 March 2016.

9.2 Most of the potential changes that may arise from the PAP will require the processing of one or more TROs. As is specified within the governing legislation, any changes made by TROs are subject to a full, statutory consultation process.

9.3 Given the nature of the likely changes and their implications, it is proposed that any arising TROs will include consultation with a wide range of stakeholders representing all parties likely to be affected.

10. Background reading/external references

10.1 Economic Impact Assessment.

Paul Lawrence

Executive Director of Place

Contact: Andrew MacKay, Professional Officer

E-mail: a.mackay@edinburgh.gov.uk | Tel: 0131 469 3577

11. Links

Coalition Pledges	
Council Priorities	
Single Outcome Agreement	
Appendices	1 - Options Plan
	2 - Financial Implications
	3 - Pricing Strategy
	4 - Timeline
	5 - Parking Action Plan

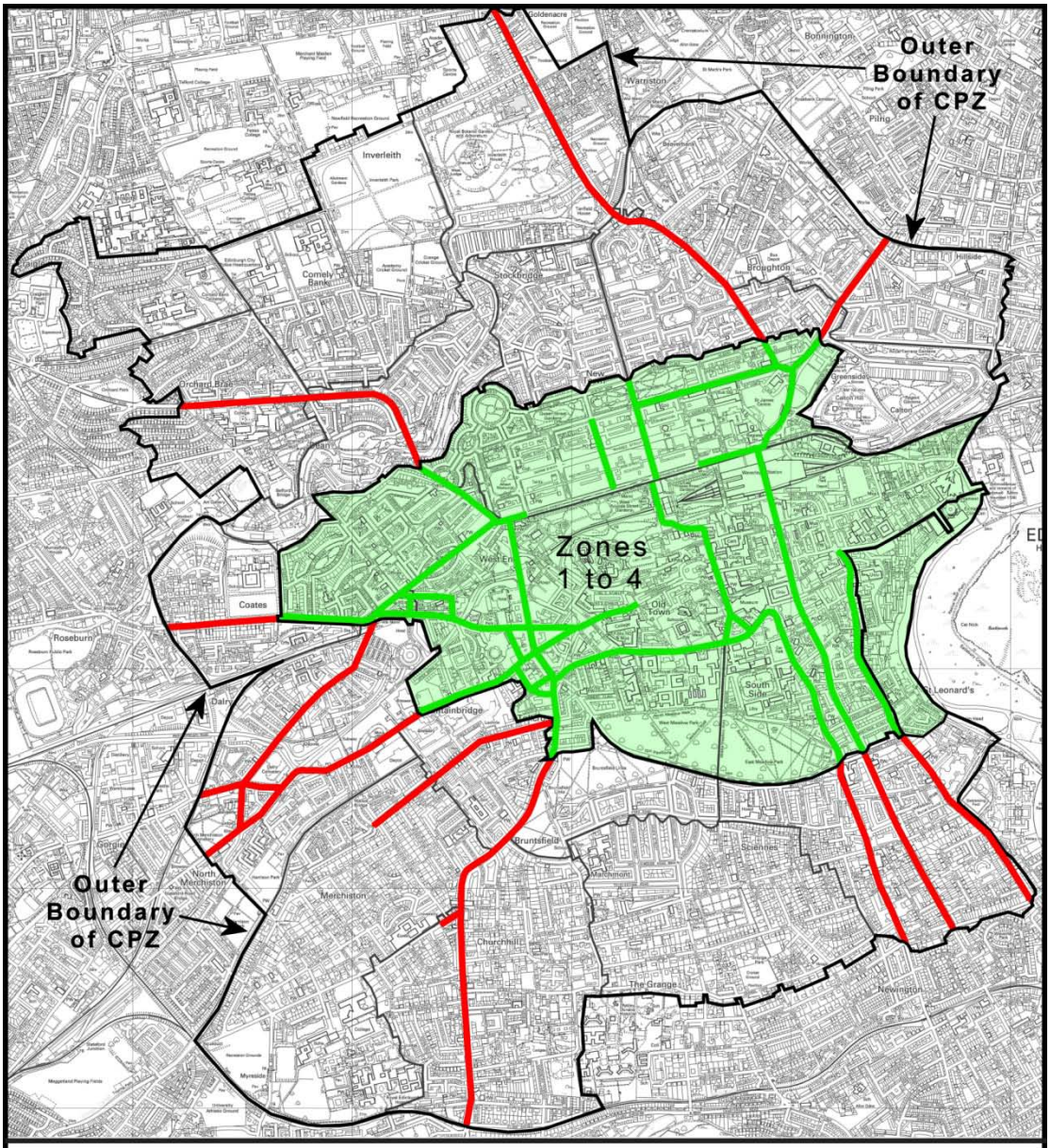
Appendix 1 - Options Plan

The plan on the following page indicates the extent of the three different options described within this report.

Option 1:	Partial Control, with all restrictions in zones 1 to 4 and main routes throughout the CPZ operating between 1300 and 1830;		
	Restriction:	Operational:	Details:
		PM only	All restrictions operate only between 1300 and 1830
		PM only	
		PM only	

Option 2:	Partial Control, with all restrictions in zones 1 to 4 operating between 1300 and 1830 and main route restrictions throughout the CPZ operating 0800 and 1830.		
	Restriction:	Operational:	Details:
		PM only	General CPZ restrictions operate from 1300 to 1800 only
		All day	All highlighted main route restrictions operate from 0800 to 1830
		All day	

Option 3:	Full Control, with all restrictions in zones 1 to 4 operating between 0830 and 1830 and main route restrictions throughout the CPZ operating 0800 and 1830.		
	Restriction:	Operational:	Details:
		All day	General CPZ restrictions operate from 0830 to 1830
		All day	All highlighted main route restrictions operate from 0800 to 1830
		All day	


Outer
Boundary
of CPZ
Zones
1 to 4
Outer
Boundary
of CPZ
Key:
Main routes within Zones 1 to 4
Main routes within other CPZ areas

Appendix 2: Financial Implications

		Option 1 – Partial Control	Option 2 – Partial Control	Option 3 – Full Control
General Restrictions		13:00 to 18:30 Zones 1 to 4	13:00 to 18:30 Zones 1 to 4	08:30 to 18:30 Zones 1 to 4
Main Traffic Routes		13:00 to 18:30 Zones 1 to 4	08:00 to 18:30 Throughout CPZ	08:00 to 18:30 Throughout CPZ
One-off Implementation Costs				
Shared Use Rollout		£330,000	£330,000	£330,000
Zone Entry signing		£40,000	£40,000	£20,000
Main Route Signing		£30,000	£75,000	£57,000
Recurring Annual Costs				
Enforcement Costs		£140,000	£160,000	£210,000
Removal Costs		£35,000	£65,000	£65,000
Admin/Management Cost		£30,000	£18,000	£30,000
Total Cost (Year 1)		**£605,000**	**£688,000**	**£712,000**
Total Cost (Year 2 etc)		**£205,000**	**£243,000**	**£305,000**
Income				
Pay & Display		£490,000	£490,000	£900,000
PCN		(See note 1)	(See note 1)	(See note 1)
Shared Use		(See note 2)	(See note 2)	(See note 2)
Total Income		£490,000	£490,000	£900,000
Overall Financial Position				
Year 1		**£115,000**	**£198,000**	**£188,000**
Year 2 etc		**£285,000**	**£247,000**	**£595,000**

Notes:

1. It is not possible to predict the likely level of non-compliance with Sunday restrictions. As such, no assumptions have been made in respect of the likely income from Penalty Charge Notices.
2. Shared-Use is primarily intended as a means of redressing the current imbalance between permit holder numbers and the parking spaces available to them. While Shared-Use might also have the benefit of improving accessibility for visitors (in terms of ease of finding spaces near to their destination), it is not considered that this will result in any significant revenue increase.

Appendix 3: Pricing Strategy

	Description	Comments

Resident Permits	• Charging bands – investigate potential for move from 5 bands to 6 bands;
	• Move to RPI-based annual price increase, where:
	  o Prices in the lower bands (greener vehicles) are subject to lower increases;
	  o Prices in the higher bands are subject to higher increases;
	• Alter differential between 1st and 2nd permit (currently + 25% for 2nd permit) so that 2nd vehicles in the higher bands are subject to higher percentage increases;
	• Increase charges for 3 and 6 month permits;
	• Investigate potential for payments to be made by Direct Debit.
		Permit charges were linked to emissions in 2010. The current banding system reflects the make-up of the national vehicle fleet at that time. In 2016, the majority of permits fall into bands 2 and 3 and only vehicles with very high CO2 emissions fall into the highest bands. A restructuring of the bands would allow permits to be better distributed across the bands, providing an incentive for more permit holders to consider more environmentally friendly vehicles and providing a direct linkage to local and national policy.
		
		NOTE: The current banding system and the percentages of permits in each band can be found at the end of this appendix.

Visitor Permits	• Annual increases in line with pay-and-display rates; • Direct linkage to prevailing pay-and-display rates, with visitor permit charges set at 75% of that rate; • Consider increasing the additional allowance available to people with disabilities (currently entitled to a double allocation); • Consider a reduced rate for people with disabilities (currently 50% of standard rate);	The price of visitor permits has not changed since they were introduced in 2006. Where visitor permits are charged at a rate equivalent to £0.40/hr, pay-and-display is currently £1.80/hr. While it is appropriate for visitor permits to be cheaper than pay-and-display, prices should be linked to pay-and-display in order to apply the same principles of demand management.
Trades Permits	• Annual increases in line with resident permit prices • Permit prices to be linked to vehicle size and/or emissions; • Determine a banding system that could be applied to Trades, Business and Retail permits. • Discounted rates for electric vehicles.	Historically, the V5 document for commercial vehicles did not include information on vehicle emissions. That information is now commonly included on V5s for newer vehicles.

Appendix 3: Pricing Strategy

Business & Retail permits	• Amalgamate the separate Business Permit and Retail Permit into one permit; • Consider potential for additional classes of use to be entitled to permits; • Annual price increases in line with resident permit prices; • Permit prices to be linked to vehicle size and/or emissions. • Determine a banding system that could be applied to Trades, Business and Retail permits. • Heavily discounted price for electric vehicles	Business and Retail permits serve practically the same purpose, with only minor eligibility differences. Amalgamating these permits would reduce operating costs and simplify the application process. Historically, the V5 document for commercial vehicles did not include information on vehicle emissions. That information is now commonly included on V5s for newer vehicles.
Healthcare Workers Permit	• General review of pricing • Annual increases in line with other permits	Current pricing of these permits remains at the rate originally set when these permits were introduced in 2006/7. That rate (currently £10) should reflect the same premise of demand management as other permit prices.
Pay-and-display - General	• Annual increases on a similar model to residents permits, utilising a system based on RPI; • Detailed monitoring to determine levels of demand on a geographical basis; • "Heat maps", showing levels of demand will help to show demand relative to neighbouring areas; • Geographical changes in rates of charge to be based on demand, with: o Areas of high demand subject to higher prices; o Areas of low demand subject to static or lower prices;	Pay-and-display rates are currently set on either an area or zonal basis. Monitoring of data will allow more detailed consideration to be given to the actual demands for parking, potentially down to a street by street level. This will allow the Council to make informed decisions about parking prices, matching charging rates to demand in order to provide more effective management of the space. It is anticipated that pricing changes will continue to be applied on an area basis, but that the level of information available will allow a more nuanced approach.

Appendix 3: Pricing Strategy

Pay-and-display – 9 hour parking	• Annual increases on a similar model to residents permits, utilising a system based on RPI; • Move to a pricing system more closely linked to the standing pay-and-display rate in the surrounding area (A), with: o Pro rata payments up to a set number of hours (B); o A maximum payment of, for example, (A x B)+A	The existing means of charging in 9 hour parking places allows users to pay pro rata for a set period. Once they pay the maximum amount (usually £3 or £4), that payment allows them to stay for the entire day. What is proposed is that pro rata payments would still be allowed, but payment for the whole day would require an additional charge. This would address current concerns that 9 hour parking is substantially cheaper than other, short stay parking in the same area.
Discretionary charges	• General annual increase of all discretionary charges in line with the Corporate Charging policy such as: o Suspensions o Dispensations	

Appendix 3: Pricing Strategy

Existing Permit Charging Bands

DVLA VED Band	A	B	C	D	E	F	G	H	I	J	K	L	M
Emissions range	0 To 100	101 To 110	111 To 120	121 To 130	131 To 140	141 To 150	151 To 165	166 To 175	176 To 185	186 To 200	201 To 225	226 To 255	256 to :
CEC Permit Band	1	2					3			4		5	
%age of permit holders	3.3%	4.9%	9.3%	8.4%	15.4%	14.9%	16.9%	6.8%	5.4%	5.2%	4.0%	3.0%	2.4%
%age of permit holders	3.3%	52.9%					29.1%			9.2%		5.4%	

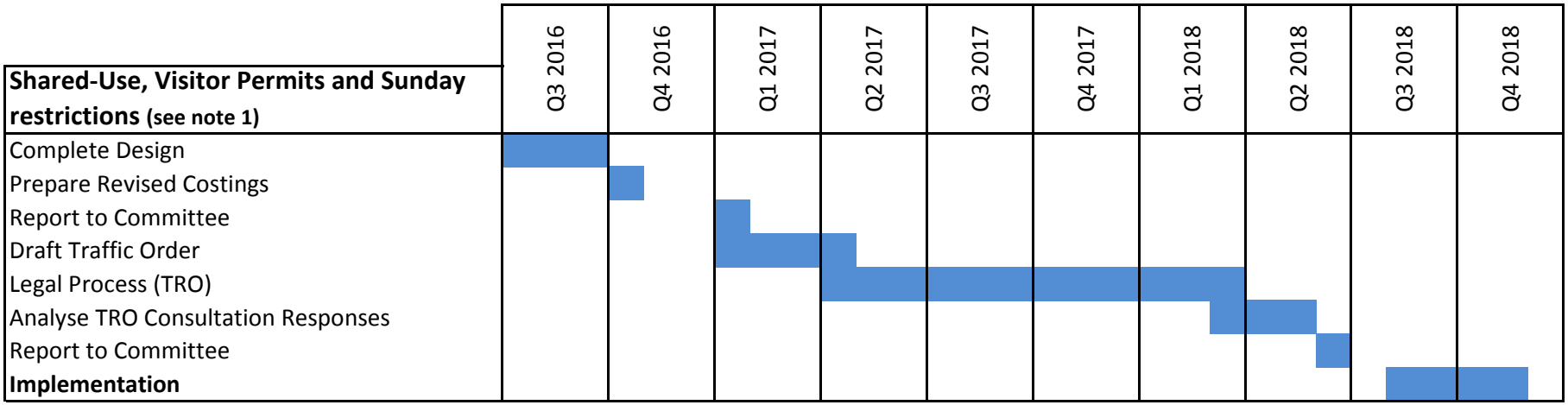
Indicative example of Revised Charging Bands

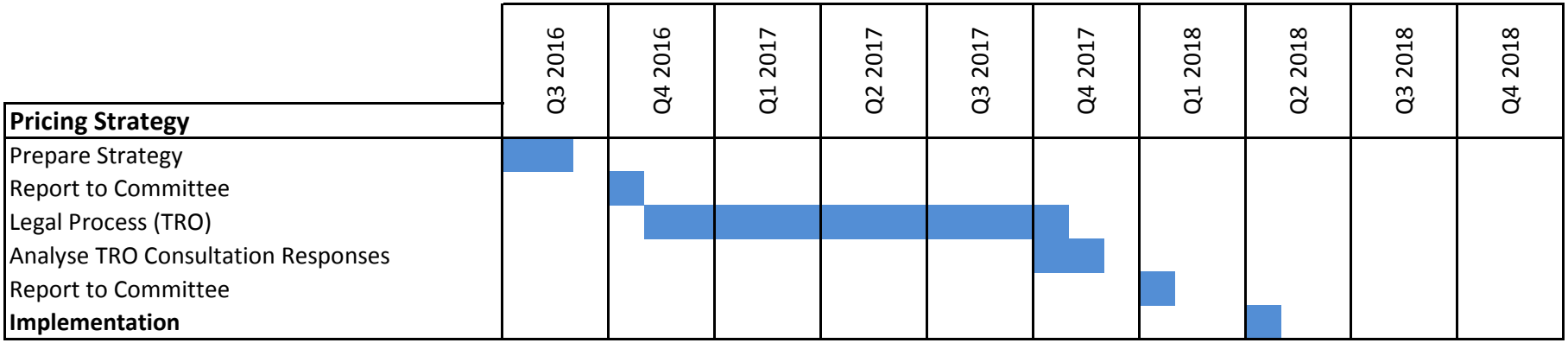
CEC Permit Band	1	2	3	4	5	6
%age of permit holders	8.2%	17.7%	30.3%	23.7%	14.6%	5.4%

Notes:

1. Under the current arrangements the majority of permit holders fall into the lowest two bands. If emissions based charging is to bring about changes in the permit holder fleet, then it should be the case that there is a clear incentive to change to an environmentally friendlier vehicle. The current arrangements do not provide that incentive.
2. As an example of how the charging bands might be revised, the above example shows how permit holders might be more equally split across the middle four bands. This type of adjustment would create a clearer incentive for permit holders to consider their choice of vehicle.

Appendix 4 - Anticipated Timelines





Notes

1) Depending on the results of the Traffic Order consultation process, the Council might elect to hold a public hearing. Preparations for a hearing could extend the indicated timeline by between 9 and 12 months.

The Parking Action Plan

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Contents

Foreword

This Parking Action Plan sets out to support our wider transport strategy, achieve greater flexibility in parking controls, provide better information for our customers and to deliver best value for the Council and Edinburgh's residents. The Parking Action Plan prioritises the key actions for parking in our city which aim to make Edinburgh a better place to live.

Parking policy is an important part of Edinburgh's overall transport strategy, in tackling congestion, improving safety, helping to reduce car commuting, encouraging walking, cycling and public transport and reducing air pollution. Public parking has a role in supporting the city centre economy, while on-street residents' parking is important for many city centre dwellers. The Council's role in parking is all about balancing these different and sometimes competing objectives and demands.

The Council has been responsible for the enforcement of decriminalised parking regulations in the city since 1998. Since then we have also taken responsibility for the enforcement of Greenway restrictions, in 2007, and bus lane restrictions, in 2012, from the Police. This gives the Council significant scope to shape and influence Edinburgh's future travel habits for the better.

This Parking Action Plan includes a balanced range of actions. We aim to improve our service to city centre residents by introducing visitors' permits. We will roll out 'shared use' parking much more widely, increasing the overall parking supply and its flexibility for residents and shoppers alike. We will review our business and retailer permits with a view to simplifying the system. We will put in place a new protocol to improve our communications about parking changes.

The plan includes pricing and marketing actions aimed at helping to balance parking supply and demand and also supporting the Council's strategy to reduce emissions.

The Council's parking strategy should take account of trends and changes in the city. As a result, this plan proposes some significant changes to the operation of parking controls, including extending controls to Sundays .

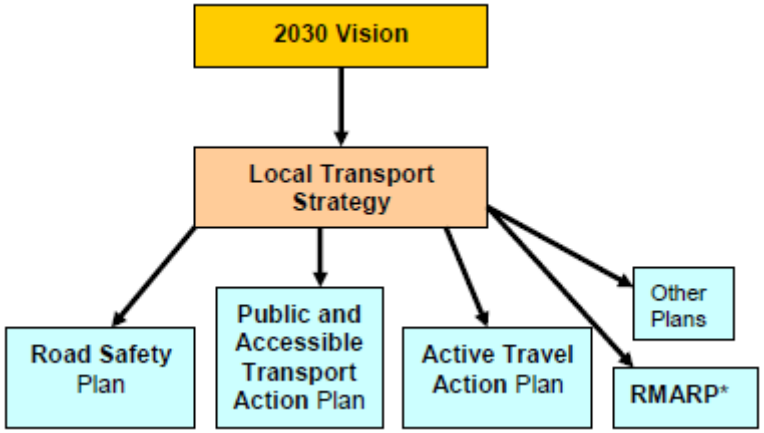
John Bury
Head of Planning and Transport

Councillor Lesley Hinds
Convener of Transport and Environment Committee

Introduction

Edinburgh is a great place to live, work, study and visit. The city is home to over 480,000 people, innovative businesses, world renowned universities, two world heritage sites and hosts several cultural festivals. A thriving modern city built around an outstanding architectural heritage brings many benefits, but is not without its challenges. Edinburgh has mixed old with new successfully over the years and the aim of the Parking Action Plan is to help develop a modern, more sustainable transport system around the heart of its historic city centre.

To steer this development and ensure our transport strategy supports wider Council policies, the Transport 2030 Vision guides the long-term development of transport services in Edinburgh over the next 20 years.



**Road Maintenance and Renewals Action Plan*

'By 2030, Edinburgh's transport system will be one of the greenest, healthiest and most accessible in northern Europe.'

Transport 2030 Vision

The Vision is an ambitious plan for the future of transport in Edinburgh. It challenges us to think creatively and be innovative to deliver its nine outcomes.

To be:

- Environmentally friendly
- Healthy
- Accessible and connected
- Smart and efficient
- Well planned, physically accessible and sustainable
- Safe, secure and comfortable
- Inclusive and integrated
- Customer focused and innovative
- Responsibly and effectively managed.

The Vision sits above the Local Transport Strategy 2014-19 (LTS) which contains more detailed policies and actions to achieve the stated outcomes up to and beyond 2030.

'Parking control is essential to keep Edinburgh moving safely and efficiently and to manage the overall amount of traffic in the city.'

Local Transport Strategy 2014-19

The LTS sets out the Council's parking strategy which aims to balance the needs of residents, businesses, pedestrians, cyclists and public transport users whilst discouraging commuter parking.

This action plan complements the good work already under way to; improve road safety (Road Safety Action Plan), improve bus services (Public and Accessible Transport Action Plan) and encourage more people to walk and cycle (Active Travel Action Plan).

Objectives

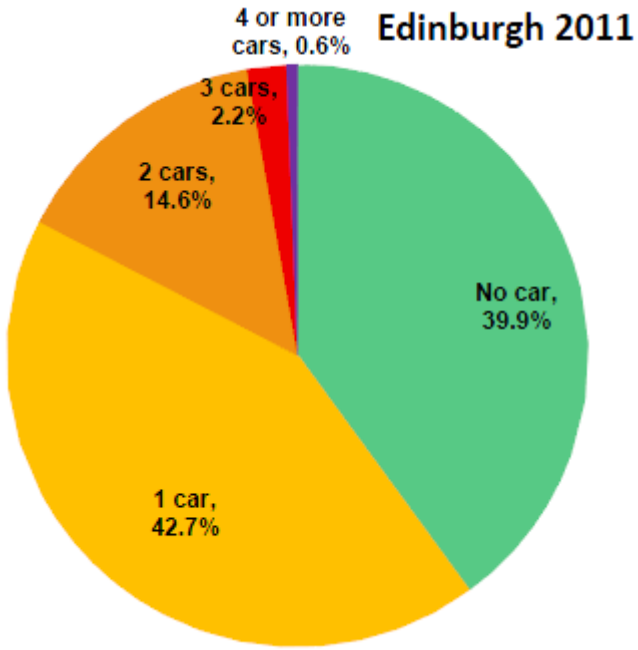
The Local Transport Strategy includes 8 objectives for parking. These are set out in the table below, which also briefly summarises how parking and loading can help address each objective. An additional objective relating specifically to customer service is also listed. This plan sets out a package of measures aimed at working towards these objectives

	Parking Objectives	**Summary of how parking and loading actions can contribute to objective**
Local Transport Strategy Parking Objectives	To maintain and improve the economic vitality of the City Centre and traditional district and local shopping centres.	• *Ensuring sufficient parking and loading opportunities are available to support businesses* • *Restrictions to support pedestrian activity and sustainable transport access*
	To ensure that parking provision does not encourage commuter car travel, especially to the City Centre and relates to the ease of access by public transport, cycling and walking.	• *Using Controlled and Priority parking Zones to manage on-street parking to favour residents, shoppers and essential business users* • *Controlling parking supply in new developments through the planning process*
	To minimise the negative impacts of parking on streetscape and on public and private space in new developments.	• *Parking restrictions to enhance public space, protect surfaces from vehicle damage and support pedestrian activity* • *Controlling parking supply in new developments through the planning process*
	To improve road safety and reduce congestion and pollution.	• *Managing parking helps people cross the road safely, keeps pavements clear and encourages more people to cycle. Parking restrictions can be especially helpful to vulnerable road users such as wheelchair users and children who cannot be seen from behind parked cars* • *Parking restrictions on main roads help keep all forms of traffic moving*
	To facilitate access and movement by mobility impaired people, pedestrians, cyclists, public transport and its users, and motorcyclists.	• *Using parking and loading restrictions to protect crossing points, bus stops, bus lanes, other bus routes and cycle lanes*
	To protect and, where possible, enhance residents' ability to park and load close to their homes.	• *Using Controlled and Priority parking Zones to manage on-street parking to favour residents, shoppers and essential business users.*
	To protect and, where possible, enhance the parking and loading needs of businesses, trades people, carers and visitors.	• *Manage parking opportunities and protect loading bays for deliveries* • *Parking permits for businesses and trades people* • *Extra visitors' permits allowance for carers*
	To facilitate the operation and expansion of Car Clubs.	• *Allocating specific parking bays and allowing access to permit holder bays in order to help car clubs expand so reducing overall car ownership and therefore parking pressure*
New	To improve the performance of and public perception of parking management in Edinburgh	• *Continuing to update the parking service, using new information and adopting new payment channels* • *Better communication, allowing all road users to better understand parking controls and their value*

Travel Statistics

Car Ownership

The 2011 Census found that the percentage of households in Edinburgh without a car was 39.9% which is well above the Scottish average of 34%.



CEC, Transport and Travel, 2011 Census Data

Travel to Work

Edinburgh was the only Scottish local authority to see a fall, of more than 3%, since the 2001 Census, in the proportion of people driving to work.

Other results demonstrating the evolving nature of travel in Edinburgh between 2001 and 2011 include:

- Increased bus travel - to the highest percentage in Scotland;
- Train travel continued to rise;
- Cycling accounted for nearly 5% of all journeys to work, well above the national average of 1.6%;
- 18% of people walked to work, the joint highest proportion in Scotland; and
- More than 22,000 people work from home reducing their need to travel.

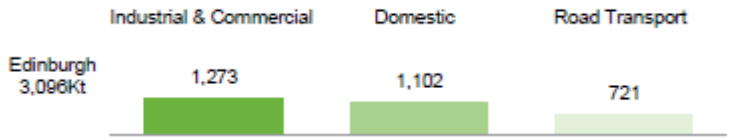
Travel to Work in Edinburgh 2011	
Mode	Percentage (%)
Car driver	41
Bus/Coach	28.6
On foot	18.2
Bicycle	4.8[1]
Car passenger	3.5
Train	2.1
Motorcycle	0.5
Taxi	0.4
Other	0.8

These figures, which continue to develop positively, suggest that the importance of car ownership is decreasing and that there is a shift to more sustainable forms of transport, particularly for journeys to work. The Council supports the continued growth of these trends and will use parking management as a tool to sustain and foster these changes.

[1] Bike Life 2015 – Cycling mode share of journeys to work up to 7.3%.

Environment

Road transport is an important part of daily life but produces many negative impacts that everyone must bear, such as 23% of all carbon dioxide (CO_2) produced in Edinburgh (*Department of Energy & Climate Change*).



The sector also produces other harmful emissions (NO_X and PM10), contributing to poor air quality and is a factor in causing severe health problems. The Council is required by the Climate Change (Scotland) Act to do everything within its power to tackle these pollutants.

Edinburgh has five Air Quality Management Areas, each of which contains a major traffic corridor, reflecting the strong link between road transport and poor air quality and the need to protect the travelling public from harmful pollutants. Parking controls play a key part in encouraging changes in travel behaviour which support the environment.

Road Safety

Since the mid 1970s, the numbers of fatal and serious accidents on Scotland's roads have fallen considerably with the numbers of slight accidents remaining relatively constant. The Scottish Government regard road safety as a top priority and has set challenging targets for further road safety improvements by 2020.

The latest information available indicates that, during 2013, there were 1,368 casualties as a result of road traffic collisions on Edinburgh's roads. Of these, eight people died, 130 were seriously injured and 1,230 were injured slightly.

The data also shows that vulnerable road users including pedestrians, cyclists and motorcyclists, make up 45% of all casualties and 75% of fatalities.

We strive to constantly improve road safety and the continued enforcement of parking controls helps to ensure safe crossing places for vulnerable road users and reduce the number of people injured or killed on Edinburgh's roads. Parking regulations also prevent inconsiderate parking around junctions which improves sight-lines for pedestrians, cyclists and motorists while protecting children who cannot be seen behind parked vehicles.

To improve road safety we should; prevent parking at junctions, crossing points and school keep clear areas to improve sightlines, take appropriate action against footway and double parking, keep cycle lanes clear to protect cyclists and encourage more people to cycle.

Parking Enforcement

The number of parking tickets issued in Edinburgh has fallen over the past five years while the income received from parking charges has increased. This suggests that there is greater compliance with the parking regulations and vehicles are parking correctly to keep the city moving freely.

LTS Outcomes

The LTS identified a number of indicators which the Council should work toward to achieve the 2030 Vision. The key outcomes the Parking Action Plan aims to accomplish are to;

- Reduce greenhouse gas emissions for road transport in Edinburgh;
- Reduce the levels of motor traffic within the city;
- Improve customer satisfaction with streets, buildings and public spaces;
- Improve satisfaction with access to public transport;
- Reduce the number of killed or seriously injured casualties on Edinburgh's roads;
- Improve accessibility for those with no access to a car; and
- Improve the level of satisfaction with Transport Service.

Main Issues

The Parking Action Plan is strongly linked with overarching transport policy, parking objectives and travel statistics. They have informed the development of a package of proposals to improve parking management and contribute to a future transport system that is safe, healthy and sustainable.

The plan considers the main transport issues and parking problems facing the city today and outlines the intended approach to resolve these issues.

Many residents find it difficult to park near their homes so making the parking restrictions more flexible with the introduction of shared use parking places will improve conditions for permit holders.

Shopping on Sundays in the city centre has become the norm which makes the day busier than it was before the CPZ was introduced.

The lack of parking restrictions on Sundays results in congestion, delays to public transport and poor conditions for cyclists and pedestrians. To ensure Edinburgh remains a safe and pleasant place at all times, the operating hours of the parking restrictions will be reviewed.

The proposals aim to achieve a balance between improving accessibility for essential car journeys while making sustainable travel more appealing. This will necessitate developing a comprehensive parking pricing strategy to manage demands better. The following information will set out the necessary actions to achieve our objectives and the reasons for them.

Key Priorities

The core objective of the Parking Action Plan is to:

Improve parking management in the city while continuing to support the development of walking, cycling and public transport links as everyday travel options in Edinburgh.

The plan will seek to work towards its core objective by:

- Introducing shared use parking places which can be used by permit holders and pay and display users, to increase accessibility to parking places and the flexibility of the parking controls;
- Extending the operating hours of parking restrictions on Sundays to better manage demand; and
- Developing a parking pricing strategy to manage demand and encourage people to consider their travel options and reduce private car dependency.

The plan sets out actions over three timescales:

- Short term (2016 – 2017)
- Medium term (2018 – 2020)
- Long term (2021 – 2025).

Information and Communications

Finding a parking space and purchasing the right amount of time in Edinburgh is often perceived as a difficult task. Many people first attempt to park on major shopping streets, such as George Street, when they visit the city centre. These streets are often fully occupied and this can give the impression that parking in Edinburgh is difficult even when there are spaces available just a few streets away.

Action 1: Develop a marketing plan to increase awareness of the parking options available for people visiting the city centre including; P&R, on-street and off-street parking places.

The marketing plan will promote sustainable travel options as the first choice for all visitors where having a car in the city centre is not essential. However, research has found that in towns and cities 30% of the traffic on average is circulating looking for a parking space (Shoup: 2006). For those who choose to drive, better information about where to park may help them to find a space more quickly and easily. With better information on the range of available options for visitors coming by car many may choose to use Park and Ride, use an off-street car park or park in quieter streets.

Not everyone shopping or doing business in the city centre arrives by car. Research from the previous “Alive After 5” city centre promotion campaign indicated that parking was not a significant factor in determining whether or not people visited the city centre. However, to protect the economic vitality of the city and ensure people know that Edinburgh is open for business, better information on where they can park quickly will be publicised. This process will also explore the best approach to communicate this information to motorists.

Action 2: Develop a publicly available parking regulation enforcement protocol to demonstrate that the process is fair, consistent and transparent for all motorists.

To further strengthen a positive perception of parking in Edinburgh an enforcement protocol will be produced to explain why parking tickets are issued for each contravention of the regulations. This will help demonstrate that enforcement of the parking regulations is fair, consistent and transparent.

Action 3: Establish a communications protocol to better inform people about changes to parking.

These are important commitments and they need to be communicated to the public clearly. A communications protocol will be established to manage our interactions with the public and ensure that people receive the information they need, when they need it.

This will include consultations on future improvements to parking controls through amendments to traffic regulation orders and ensure that they are produced using Plain English where possible. We will also make better use of electronic communications with permit holders.

Action 4: Conduct a parking satisfaction survey every two years covering all road users’ experience of parking-related issues to track satisfaction levels and monitor improvements.

In 2013, a parking satisfaction survey was conducted to evaluate our customers’ perception of the service and to collect suggestions on what we could do better. This was a worthwhile action and we will continue this conversation with all road users’ in the coming years.

Action 5: Publish financial and statistical information online annually demonstrating openness and commitment to customer service.

There is a high level of interest in parking in Edinburgh and to remain open and transparent we will continue to publish frequently requested financial and statistical data on the Council’s website. This avoids customers having to submit written requests and demonstrates our commitment to provide excellent customer service.

On-Street Parking

Parking controls are not just of interest to motorists looking for a parking space, they also play an important part in many people's everyday lives. They determine; where deliveries can be made, where people can cross the road safely, where cyclists can travel with ease and where passengers can access public transport.

Building on the objectives of the LTS, the Parking Action Plan aims to make parking easier for essential car journeys as well as improving conditions for other road users, promoting sustainable alternatives and deterring commuter parking.

Although parking charges are not popular with many people, they are an effective demand management tool and help support the policy-driven approach that is set out in the introduction of this action plan.

With Sundays becoming much busier than they used to be, conditions on the city's roads warrant a more effective management system than the current first come, first served approach allows. There are considerable benefits in introducing parking controls, in terms of policy and practice, such as; improving accessibility, helping the environment, tackling congestion, supporting sustainable transport and enhancing health opportunities.

The introduction of parking charges on Sundays is considered to be the most effective method of control available, but this naturally produces concerns that the main motive is to raise revenue. Parking income is required by law, Section 55 of the Road Traffic Regulation Act 1984, to be spent on enforcement costs first, before any surplus is spent on transport improvements, such as; Park and Ride sites, bus lanes, cycle lanes or supported bus services.

Income received from Sunday parking controls will be used to provide; additional enforcement by Parking Attendants before contributing toward new signs, which reflect the changes in the controls and shared use parking bays.

Sunday Parking Controls

The extent and times of controlled parking zones 1-8 in the city centre have remained largely unchanged since their introduction in the early 1970s. This was a time before Sunday trading, on-street events and entertainment activities became more widespread, making Sundays busier than they were before the parking restrictions were introduced.

Today, Sundays experience a similar level of activity to Saturdays, but with far fewer parking controls. This can result in a range of parking problems such as:

- Congestion on main roads caused by kerbspace being heavily occupied by parked cars, with consequent delays to public transport and general traffic;
- Fewer loading opportunities which can cause problems for shops and businesses receiving goods and poor parking causing delays to traffic;
- Increased difficulty for pedestrians when crossing roads or at places where vehicles park on the footway;
- Significantly increased difficulty for people with mobility impairments, both those who rely on public transport (access to bus stops is often impeded) and car users (a blue badge confers no meaningful advantage when parking is unrestricted and available spaces are far fewer);
- Significantly worse conditions for cycling, with almost all on-road cycle facilities rendered useless by parked cars;
- Free parking on a first come first served basis means that people commuting by car, for example to work in city centre shops, can occupy street space that could be more effectively used by visitors/customers; and
- No reserved space for residents.

To investigate these issues, an on-street parking survey collected data on the numbers of vehicles parked in key locations and their duration of stay to indicate where demand is greatest and whether parked vehicles are likely to belong to residents, visitors or commuters.

A questionnaire also collected qualitative data from motorists parking on Sundays. It asked them to give their reasons for visiting the city centre by car and the extent to which free parking played a role in their decision. The results from these investigations suggest that:

- Nearly four thousand vehicles park on main traffic routes on Sundays;
- Demand is highest during the afternoon period and there is currently no pronounced morning peak on Sundays ;
- Vehicles tend to park for longer periods on Sundays than allowed by the maximum stay periods during the week;
- There is less turnover of spaces and many streets have higher occupancy rates;
- Demand is greatest in areas near to major shops;
- Residents find it difficult to park in their streets; and
- The majority of drivers visited the city centre for shopping. However, for example, on Sunday afternoon just under half of all parking spaces on George Street were occupied by cars that surveys suggested belonged to residents or employees rather than shoppers or other visitors.

As a result of these investigations it is considered that there are good reasons to consider parking controls on Sundays. Introducing Sunday restrictions would improve the management of the available space and create a turnover of parking space, improving accessibility and controlling all day parking. Controlling main public transport corridors would also create the potential for increasing the frequency and reliability of bus services.

The investigations also revealed that there was little support for weekend controls outside of the city centre. On this basis it is proposed that additional controls should be limited to Zones 1 to 4 of the CPZ, but that monitoring should take place in order to gauge whether any new controls have impacted upon parking availability elsewhere in the CPZ.

There is, however, justification for further extending restrictions on main public transport corridors as a means of ensuring that public transport can move freely to and from the city centre.

Action 6: Introduce Sunday parking controls, including restrictions on main public transport corridors and parking charges as a means on managing the demand for parking.

Parking controls will support Sunday bus services by reducing delays during the busiest times of day and encouraging both city centre workers and visitors to travel by public transport. Initial discussions with Lothian Buses reveal that with changes in demand enhancements to the frequencies of Sunday bus services are already being introduced. It is also supportive of measures that will assist bus movements and traffic flow while encouraging more people to travel by public transport.

Lothian Buses has also committed to continued dialogue with the Council with a view to further changes to bus services to complement extensions to parking controls as and when these take place.

The extent of Sunday controls has yet to be determined, with consideration being given to a range of options.

It is, however, considered that Sunday parking controls would address many of the problems faced by road users, improving accessibility and enhancing conditions for pedestrians, cyclists and public transport users.

Shared use Parking Places

In many areas of the city centre the residential permit scheme is currently oversubscribed, with more parking permits being purchased than there are spaces available to accommodate them. The adjustment of zone boundaries is not considered a suitable option to address this; zone changes can be confusing and in some cases may encourage internal zone commuting when walking or cycling are better options.

Other suggestions have been considered, such as; only issuing one permit per household but in some areas there will be more spaces than permit holders or limiting the number of permits to the spaces available, but many households could lose out under such a system. To address these problems, it is proposed to introduce shared use parking places; to improve the flexibility of the controls and to help all motorists park closer to their destinations.

Action 7: Introduce shared use parking places to increase the flexibility of the parking controls for residents and other road users.

Shared use parking places can be used by residents' permit holders, disabled persons' blue badge holders and by visitors who must pay for their parking and are time-bound by a maximum stay period. Shared use places offer greater flexibility and allow the introduction of visitors' parking permits (See Action 23).

All parking places will not become shared use as current arrangements work well in many areas. However, shared use will increase the number of parking places available to permit holders as lengths of single yellow lines and public parking places are changed. This will, for instance, allow permit holders to park in areas which were previously only available to them outwith the controlled hours.

Shared use parking provides many benefits to permit holders, such as; increasing parking opportunities, reducing unnecessary car use (when permit holders move their vehicles from a yellow lines to permit places in the mornings) and reduces inconvenience from road works (as there will be less impact if places are suspended to accommodate road works).

The introduction of shared use parking will also help to improve the perception of parking and reduce uncertainty for visitors. It is expected this will result in a reduction of circulating traffic looking for a parking space which adds to congestion and pollution.

In addition, creating long shared use bays can minimise the number of signs and poles required, thereby reducing the impact within Edinburgh's World Heritage Site.

While some bays can be marked individually, this does not apply to each type of parking place and it is considered that such markings can reduce the number of vehicles that can be accommodated.

Shared use parking places have proven to be very successful in the extended parking zones (N1-N5 and S1-S4), such as around Marchmont, where residents enjoy the flexibility they offer and many city centre permit holders support such controls.

Permit holders in Zones 1-4 are currently allowed to park in pay and display places within their own zone on Saturday afternoons. The additional space created by the widespread roll-out of shared use parking places will create more parking opportunities for permit holders than exist at present. This means that there will be less benefit to permit holders from this exemption and its removal will maintain pay and display places, at specific locations, primarily for visitors to the city centre.

Action 8: Remove the Saturday afternoon exemption for permit holders to park free of charge in pay and display parking spaces as the introduction of shared use parking places means this is no longer required.

Parking Pricing Strategy

The Council recognises that for some people car use is an essential means of travel, but there are times when more people want to park in the city centre than can be accommodated. Therefore, parking charges are used to manage demand and ensure a general availability of spaces.

The Council's approach to demand management also encourages people to consider their means of travel and a parking pricing strategy will consider all parking related charges further to ensure these conditions are being met.

Action 9: Develop and publish a parking pricing strategy to steer the approach to charges for parking permits and pay and display parking. This will involve investigating, but will not be limited to, factors including:

- Residents' permits and pricing structure;
- Visitors' permits and operation;
- Nine hour parking places;
- Vehicle based charging for permits and parking charges; and
- Additional charges for credit card payments for parking permits.

As part of this process, introduce graduated hourly charges in 9 hour parking places and consider increasing their number where this will help reduce parking pressures outside the CPZ.

Parking charges and maximum stay lengths are set at levels which accommodate essential short to medium length journeys. They ensure the turnover of spaces throughout the day but discourage and prevent all-day commuter parking.

A new IT system will be able to monitor parking; patterns, utilisation and demand better which will enable prices to be set more effectively in smaller areas, rather than across broad zones as is currently the case.

Parking permit prices are also considered to be a good way of managing demand for spaces in residential areas. Since 2010, residents' permit prices have been linked to a vehicle's CO_2 emissions or engine size (for older vehicles). This has helped to encourage the use of more environmentally-friendly vehicles, support local air quality improvements and ensure permit holders' vehicles in Edinburgh remain in line with national ownership trends.

With the introduction of visitor's permits throughout the CPZ, this presents an opportunity to review their prices and how they operate.

While pay and display charges and residents' permit prices have increased, the same cannot be said for; visitors', trades', retailers', business or health care workers' parking permits. The prices of these permits will be included within the review.

Nine hour parking places were initially introduced in the extended zones as a means of mitigating the impact of the new parking zones on businesses. However, with the introduction of other permits their use has changed to cater for others, such as; essential shift workers who may not have access to the same level of public transport services as others.

They can also help to balance parking pressures on the boundary between Controlled Parking Zones, Priority Parking Areas and uncontrolled streets outwith the CPZ, where anyone can park free of charge without restriction.

The current pricing of these bays involves a flat rate for stays of 3 hours or more, and could be seen to be encouraging commuting by car. Currently many of these bays have very high occupation rates and it is considered that a review of the charging regime is justified. Alongside this, it may be appropriate to review the location and number of the bays.

Action 10: Develop and introduce a system of charges for the enforcement of traffic management procedures at public events.

Most major events will have associated road closures, parking suspensions, parking enforcement and other road services which can incur costs. Furthermore, when traffic management arrangements are in place for such events; Parking Attendants are needed to ensure the measures remain safely in place but opportunities for visitors to use pay and display facilities may become unavailable.

In 2011, the Council approved an approach to charge for the traffic management services provided for public events and to recover these costs when parking places were suspended. In addition, as part of the Council's budget setting process, for the 2015/16 financial year, charging for the enforcement of public events by Parking Attendants was also approved.

When parking places are suspended for public events, ensuring they are kept clear and taking necessary enforcement action in order to facilitate a successful event is a time consuming, labour intensive and administratively heavy process. In addition, when parking places are suspended motorists are unable to pay and display and the Council loses revenue.

The key to any successful event is making sure that these parking places and associated streets are clear and remain so for the event's duration. This is usually managed by issuing warning notices and relocating vehicles to other streets, but this does not generate any income for the Council.

The Council plans to discuss the costs associated with parking place suspensions with all events organisers and aims to introduce a charging structure in financial year 2016/17, this will cover; traffic management services, enforcement costs and possible loss of revenue. Any proposed charges made in the future will be discussed fully before the event takes place and form part of the parking pricing strategy (Action 9).

In addition, where parking places are removed permanently to facilitate an alternative use of the public space, where possible, another nearby location should be identified and steps taken to introduce a similar parking place as a replacement. This will maintain accessibility and ensure different user groups are not disadvantaged.

Enforcement

Managing parking in Edinburgh includes monitoring approximately 30,000 parking spaces and more than 515Km of single and double, red and yellow lines. Overall, the Parking Action Plan aims to improve the way we manage, operate and perform when enforcing these restrictions.

Parking Attendants issued nearly 180,000 parking tickets in 2014-15 but the number of parking tickets issued each year is falling and more drivers are paying for their parking time, helped by the introduction of new technology such as cashless parking. This information helps to determine the number of Parking Attendants that are needed in Edinburgh.

However, even with greater payment rates and fewer parking tickets being issued, incorrect parking continues to persist in some locations and Parking Attendants cannot detect every instance of incorrect parking in the city.

The Council responds to many requests from the public for additional enforcement activity each year. In some instances, what appears to be incorrect parking such as vehicles parking on yellow lines can be entirely correct, such as vehicles being loaded or unloaded or displaying a disabled persons' blue badge. Yet, many motorists continue to ignore the rules. Some will even drive away when an Attendant approaches but quickly return when they've walked on rather than park their vehicle correctly.

Action 11: Discuss with the Scottish Government the possibility of allowing Scottish Council's to use CCTV cameras for parking enforcement.

One approach to improve compliance with the parking regulations and maintain road safety is to introduce the use of CCTV enforcement cars. This will allow enforcement of important restrictions, such as school keep clear areas, bus lanes and bus stops over a greater area and with the ability to instantly issue a parking ticket to those who would otherwise drive away.

This approach has the added benefit of being able to respond quickly to public requests for enforcement and is safer for Parking Attendants when working in hazardous conditions, such as on busy roads.

Action 12: Discuss with the Scottish Government the possibility to decriminalise school streets enforcement.

Another measure which could help to increase compliance with the parking restrictions is to decriminalise the enforcement of Edinburgh's school streets initiative. This would remove the duty from the Police and allow Parking Attendants to enforce these restrictions at the same time as the parking controls.

Car Sharing

For many residents, research suggests that their cars will spend around 90% of their time parked by the side of the road. This is a poor use of public spaces and for most residents is a considerable expense for the limited amount of time that they use their vehicles.

The Council supports the use of SEStrans' trip sharing service as a way to improve accessibility and reduce the environmental impact of car travel. Sharing journeys can reduce; costs and congestion, while benefiting people in areas with poor public transport links or few parking opportunities.

Another approach for people to reduce the number of vehicles on our roads and save money is through car sharing. It is estimated that one car club vehicle could remove 25 vehicles from the road and reduce parking problems for many other residents. This helps to reduce congestion, makes better use of public spaces and can dramatically cut the cost of motoring for residents.

The Council supports the introduction of car club vehicles at new housing developments around the city to demonstrate to residents that they can have access to a car when they need it without having to own one.

Action 13: Remove parking charges for car clubs within the CPZ and include the requirement to purchase a parking permit for each vehicle as part of the tender process.

The Council is committed to reducing all possible barriers regarding the use of car clubs. People already pay for using the vehicles, so removing parking charges should make car sharing more attractive to potential members.

As part of the Council's 2015/16 budget proposals, it was recommended to undertake a competitive tender process to secure the services of a car club provider. Included within the tender process is the requirement for the operator to pay for the use of the parking places and provide each vehicle with its own parking permit. This will remove a direct charge from users, allow vehicles to park in more locations and encourage new members to join the scheme.

This action is not expected to have a negative impact on the accessibility of the city centre. With minimal financial cost it may produce positive outcomes for car sharing in Edinburgh and result in many policy benefits.

Parking at Local Shops

Town centres and local centres are the focal points of their communities and these areas are identified within the second proposed Local Development Plan. They are important as they support jobs, provide places for public life to flourish and allow people to enjoy public spaces while interacting with others. In addition, they can reduce car dependency by providing local shops and services within walking distance of people's homes. Good access to these amenities can support older people or those with mobility impairments to live in the community for longer.

However, all-day parking at such locations can discourage passing trade and make it more difficult for goods to be delivered. Long-term parking also increases the chances of double parking which obstructs traffic and is a hazard for vulnerable road users like cyclists and children crossing the road.

Action 14: Establish a protocol for considering requests for parking provision/restrictions outside local shopping areas to protect short-stay parking and improve conditions for deliveries.

Should local communities request restrictions to help tackle such problems we will have a process in place to ensure that relevant parties are consulted, agreement is reached and restrictions are prioritised appropriately.

Action 15: Introduce parking charges in limited waiting parking places that lie within the CPZ to enable better enforcement, ensure the turnover of spaces and to address problems with commuting.

Along many main traffic routes and Greenway lanes, limited waiting parking places currently exist which are difficult to enforce and do not effectively manage parking demands. This can lead to all-day parking and potential commuting in many areas with fewer opportunities being available for short-term parking. In some locations, such as on Leith Walk, it can result in double parking which obstructs buses, makes it more hazardous for cycling and is difficult for people to cross the road safely.

Furthermore, some of these parking places lie within the CPZ and it is inconsistent that one parking place is charged while another one is free.

There have been numerous complaints received concerning poor parking in such places and about the lack of parking opportunities. The monitoring of these locations will continue to inform future decisions on the introduction of parking charges as part of the pricing strategy review.

Action 16: Introduce parking charges in Greenways parking places with a cashless only payment service and roll out this approach elsewhere.

It is proposed to introduce parking charges in Greenways parking places to better manage demand. Currently, more than one third of all pay and display transactions are cashless and this can help to reduce; street clutter, maintenance issues and cash collection costs. Some London Boroughs have already moved to cashless only payments for on-street parking while many other cities in the UK have introduced cashless options.

Cashless parking has a number of benefits to customers over the use of coins; parking time can remotely be extended up to the maximum stay period, people can pay safety from within their vehicle without having to pay with cash on the street, motorists do not need to have the right change and drivers have a choice of payment options, such as; text, web and app.

The introduction of the new £1 coin will require each ticket machine to be upgraded so that it can recognise and accept it as payment. This will incur considerable costs and it is proposed to give consideration to a significant reduction in ticket machine numbers to reduce potential costs to the Council.

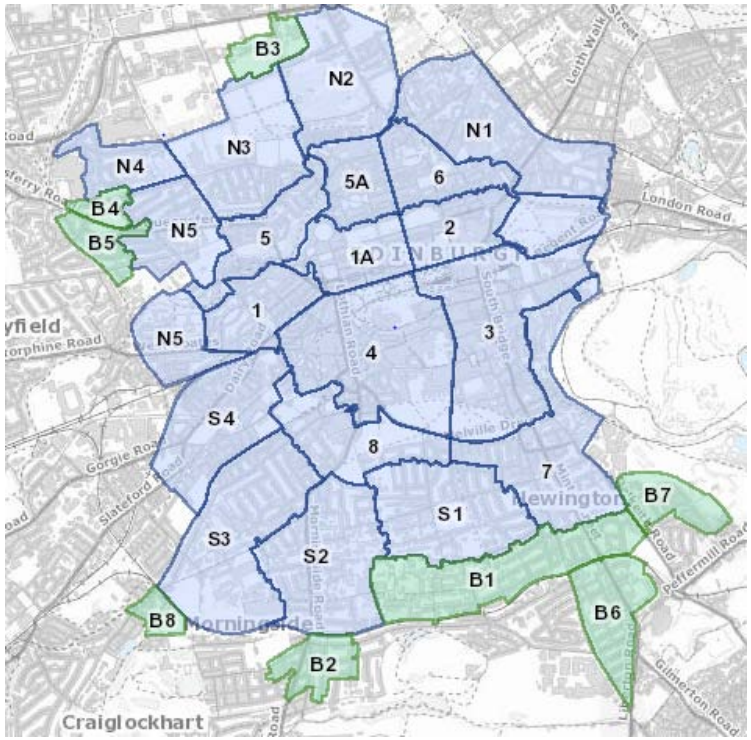
However, this approach will also attempt to minimise the extent to which this may impact on; people with disabilities, people without bank accounts or those who do not own a mobile phone. It may be the case that for some people with disabilities the existing ticket machines are not suitable for them to use. Furthermore, research suggests that the number of people with bank accounts and mobile phones in Scotland is around 97% and 91%, respectively.

There are some streets where ticket machines are likely to remain, such as in the city centre or outside schools and hospitals. We will seek to keep these machines to ensure ease of access and remove the ones that are only used infrequently, taking up space unnecessarily on the footway.

Controlled Parking Zones and Priority Parking Areas

The Council introduced the original Controlled Parking Zones (CPZ) in the 1970s to manage commuter parking pressures in the city centre and to protect parking opportunities for residents and visitors.

The CPZ was extended with further zones to the north and south from 2006 onwards and more recently Priority Parking Areas have been implemented to address commuter parking pressures on the boundaries of the CPZ.



Many of the proposed actions concern the CPZ only, although parking controls apply across the city and consistent enforcement is important to ensure the plan meets its objectives.

To ensure the effective running of parking controls, road markings and signs need to be maintained to a high standard. This allows motorists to have a clear understanding of the regulations and for restrictions to be correctly enforced.

Action 17: Ensure that the lines and signs review within the CPZ and Priority Parking Areas is completed correctly and that high standards are maintained in the future.

The parking enforcement contractor will review all parking related lines and signs in the city to identify any faults, repair them and then maintain them to a high standard. Maintenance of parking related lines and signs will be measured through a closely monitored key performance indicator.

To ensure that this aim is achieved and that the Council receives best value from the contract, a significant role for the contract management team is to monitor the key performance indicators and maintain good working relationships with the contractor.

Action 18: Establish a protocol for considering requests for new/extensions to Priority Parking Areas or CPZ. This will consider the available evidence on current and future parking pressures, the degree of local support, the wider parking strategy and implementation costs.

The current CPZ and Priority Parking Areas were introduced to tackle commuter parking problems and help residents to park closer to their homes while improving accessibility for visitors, trades persons and people with disabilities. Therefore, in streets with evident parking problems there are frequent requests for new parking controls to be introduced.

Where such controls are being considered, Priority Parking should be the preferred approach as it is a low-cost option, makes good use of limited kerbside space and reduces the likelihood of parking problems moving to other areas.

However, extending the CPZ could remain an option where there is a need to accommodate numerous demands or a large amount of short-term parking is required, such as around town centres and local centres, and where implementation costs can be funded by projected future income.

To help consider such requests in a more formal manner, a protocol will be established to ensure that all relevant factors are taken into account. This will allow areas to be compared on a number of standard measures, will inform decisions on the most appropriate solution and prioritise areas for consideration.

Action 19: Consult with residents around Tram stops to ascertain whether they support the introduction of parking controls as a result of increased parking pressures associated with the Tram.

Consultation with residents living near to Tram stops will reveal whether they are experiencing commuter parking problems and if they would like the Council to take action to address them.

That may include the introduction of restrictions, such as yellow lines, to address traffic management and road safety issues, or potentially the introduction of parking controls should commuter parking problems be more prevalent. However, it is not our intention to introduce parking controls in these areas if residents do not consider them to be necessary.

Action 20: Continue to update traffic orders to make it clear to residents of developments, without specific parking provision, within the CPZ that they are not entitled to apply for parking permits and publish this information.

To support investment and sustainable development, within the CPZ, new housing can be approved without the need for specific parking provision and on the basis that residents are not eligible to apply for a residents' parking permit. These developments are within the CPZ, close to the city centre and are more likely to have good public transport links, reducing the need for residents to own a car. There is no intention to apply these conditions to developments retrospectively. Since residents are not entitled to apply for parking permits, this should be made clear to potential buyers and traffic orders updated regularly to include new properties.

In addition, many refurbished, sub-divided or change of use properties are approved on the grounds that only one permit is issued to each household. These steps aim to prevent circumstances where residents purchase a property and apply for a residents' parking permit when they are not entitled to apply for one.

Action 21: Establish a protocol for the issue of parking permits to residents living on private roads within the CPZ.

Similar to residents of car free developments, residents of privately controlled roads within the CPZ should not be permitted to apply for parking permits. Many have their own parking areas and restrictions to stop others from using them.

On-street parking places are available to residents' permit holders on the basis that everyone has an equal chance of finding a parking place in their street. Those with access to parking on private roads should not restrict parking opportunities for other residents who do not have similar options.

At this time, residents living on private roads are not able to purchase visitors' parking permits for their guests. This will be reviewed as part of the pricing strategy and the operation of visitors' parking permits.

Action 22: Establish a process for members of the public to request Electric Vehicle charging point parking places.

The Council recognises that there are increasing numbers of electric vehicles being used in the city and supports the potential for future growth. The Council is proposing a pilot of on-street charging points in the Marchmont and Sciennes Community Council area.

To support the potential development of an on-street charging network, the Council will establish a process for requesting future electric vehicle charging point parking places on public roads. Once the outcome of the proposed trial has been fully assessed, the results will be used to develop a set of criteria to evaluate requests. The application of those criteria will ensure that any future network of charging points can be introduced and managed effectively, while not disadvantaging other road users such as disabled persons' blue badge holders.

Parking Permits

With the introduction of shared use parking places within the central and peripheral CPZs greatly improving the flexibility of controls, there will be the potential to introduce visitors' permits in these areas. These permits are only available to households within the area and residents distribute them to their guests; they are not intended for commuter use or available for sale to the general public. Without the enhanced flexibility that shared use parking offers, it is not considered appropriate to introduce a further demand on the limited space where permits are oversubscribed.

Action 23: Introduce visitors' parking permits in Zones 1-8 of the CPZ with an additional allocation for those with special care needs.

The introduction of visitors' parking permits is frequently requested by city centre residents. They allow residents to buy short-term parking permits for their visitors at a lower cost and for longer periods of time than in pay and display bays. This is useful for trades' persons or for those who only need to use a vehicle occasionally.

Similar to the terms in the extended zones, disabled persons' blue badge holders will be able to apply for more than the normal allowance of visitors' permits and at half the standard price for one. The number of permits available per household will be set once the operation of the scheme has been reviewed.

Action 24: Review on-street motorcycle parking and consider appropriate charges for motorcycle parking places and for residents' permits.

Dedicated motorcycle only parking places in the city centre and residents' parking permits are currently free of charge for motorcycles. Powered two wheelers can also park free of charge in all shared use and public parking places in the extended zones. This charging policy resulted from concerns about the possible loss of pay and display vouchers and permits.

With the success of virtual parking permits, which may be rolled out to all vehicles in the future, the popularity of cashless parking and the proposals to introduce shared use parking; the grounds for retaining free parking for motorcycles are diminished. Other considerations are that such vehicles; occupy public space, the application process for residents' permits incurs administrative costs and the users of the parking places do not directly contribute toward the cost of their enforcement.

When compared to cars there are environmental benefits in using powered two wheelers, however there is less of a case when compared to public transport, cycling and walking. It is proposed to review this matter further as part of the parking pricing strategy (Action 9) and await its outcome before any decisions are made.

Action 25: Improve the security of motorcycle parking places by considering the introduction of facilities to secure such vehicles to.

The review of motorcycle parking places and the possible introduction of charges also provides the opportunity to use additional income to improve the security of these places and maintain facilities to which motorcycles could be attached to reduce the likelihood of vehicle theft.

The parking pricing strategy review provides the opportunity to investigate this matter further and open discussion with interested groups to examine all the issues in greater detail.

Action 26: Review the eligibility criteria for all parking permits to ensure that they are only issued to those who are eligible and who need them.

With changes being made to the eligibility criteria for residents permits in new housing developments, there is also an opportunity to review the conditions for all parking permits within the traffic order. This will allow potential changes to be made as part of the same process and ensure that only those residents who are entitled to a parking permit receive one.

Action 27: Investigate the potential to replace existing paper-based residents' permits with a virtual parking permits system.

The current process for issuing residents' parking permits is labour intensive and fails to meet our customers' needs. With more transactions being completed on the Council's website there is an expectation that permits can also be applied for online. Currently, residents need to provide proof of address and vehicle documentation, by post or in person, before a permit can be issued. This is a demanding and time-consuming process.

With the aim to meet the needs of our customers and shift transactions online, there is a desire to move toward virtual parking permits. Using new technology, it will be investigated whether the application process can now be managed entirely online.

Off-Street Parking

Off-street car parks are an integral part of the parking opportunities available in Edinburgh. They improve perceptions of accessibility, remove parked vehicles from the road and enhance our streets for pedestrians, cyclists and public transport users.

Action 28: Discuss with off-street car park operators the possibility of allowing residents' permit holders the use of such facilities in areas where there are significant parking pressures.

The Council does not operate any off-street car parks in the city centre and has no direct control over their operating procedures or their prices. However, there may be potential to work with the operators to improve parking opportunities for residents in areas where there are parking pressures. The introduction of shared use places will address many of these issues but in some areas few additional places can be created on-street.

It is our intention to work with car park operators with the aim to allow permit holders to park in off-street spaces over night or when there are higher demands on residents' parking places. This will help improve conditions for residents and may remove vehicles from our streets.

Action 29: Encourage all existing and new off-street and underground car parks to introduce Park Mark standards.

The Council's Park and Ride facilities all comply with Park Mark industry standards. Building upon the existing design considerations for off-street car parks in the second proposed Local Development Plan, providers will be encouraged to introduce Park Mark standards to enhance conditions within such facilities for all their customers. This will improve the appeal of the car park by making it; feel safer, more permeable and accessible while potentially allowing for an alternative use of on-street space. The Council will continue to use its existing planning powers to ensure new car parks, in Edinburgh, meet current design standards.

Action 30: Support the development of new underground or off-street car parks in the city where they can replace or reduce on-street parking provision.

Working in partnership with the private sector, the Council will support proposals for new off-street car parks in areas where they can provide additional short stay parking opportunities and can replace or allow a reduction in on-street parking provision. The second proposed Local Development Plan has identified the west and north-west edges of the city centre where the potential benefits of additional off-street car parking would be significant.

The Council will apply a similar test to its own property portfolio in considering whether to pursue off-street car parking as a potential land use.

Action 31: To work with off-street car park operators to encourage a management structure that discourages all-day commuter parking.

The Council will work with partners and off-street car park operators to encourage charging structures and length of stay requirements that aim to facilitate short to medium length trips while discouraging all-day commuter parking. This will ensure a turnover and availability of spaces throughout the day.

Action 32: Improve facilities for secure cycle parking in off-street car parks and, where appropriate, use existing planning powers to secure such provision in new car parks.

The second proposed Local Development Plan, considers the provision of secure cycle parking in new off-street car parks. This is a further opportunity to encourage existing car parks to enhance cycle parking provision and give more people the opportunity to cycle who may not have access to secure and covered cycle parking, for instance at their place of work.

Legislation

In the rest of the UK, local authorities can vary their parking ticket charges based on the seriousness of the contravention. For instance, those issued for compromising road safety can have a higher charge than those issued for over staying the paid for time in a parking place.

Action 33: Discuss graduated parking ticket charges with other Scottish local authorities and the Scottish Government and introduce such charges if/when enabling legislation is passed.

Currently, legislation does not allow Scottish Councils to vary parking ticket charges. It is our intention to discuss this matter with; other Scottish local authorities that operate decriminalised parking enforcement and with the Scottish Government. The discussions will focus on the benefits that graduated penalties may add to compliance with the parking regulations and on improving road safety.

Action 34: Continue to support the introduction of the Double Parking and Footway Parking (Scotland) Bill and introduce a ban if/when enabling legislation is passed.

The Council has always supported requests to tackle irresponsible footway and double parking in our streets. However, there are few options available to address such problems and we continue to support a change in legislation that would allow action to be taken against vehicles parked at dropped crossings, on pavements or double parked.

Should enabling legislation be passed we will promote a traffic order to ban irresponsible parking, improving access for pedestrians, enhancing safety and protecting our public spaces from being damaged by vehicles parking on the footway.

This is the Council's preferred approach as alternatives require traffic orders to be made, add further street clutter with new signs being required and will result in additional costs.

Traffic Orders

Changing parking places, yellow lines or speed limits all require traffic orders to be made or amended. The Council must follow statutory procedures to ensure changes are advertised correctly and where necessary, receive comments or objections from the public, but this can be a lengthy process.

Action 35: Develop an approach for advertising on-street and press notices to make traffic orders more user-friendly.

When making changes to traffic orders, the Council must inform people who may be interested and provide an opportunity for comments or objections, which can be considered by Committee. Some orders do not allow objections to be made, such as temporary road closures for safety reasons.

Street notices or newspaper adverts are some ways to inform people of possible changes. Due to the legislation, they tend to be written in a legal style which can be unclear. To improve these notices, the language will be reviewed and Plain English used where possible.

Action 36: Respond to requests for new parking restrictions within 3 months and, where agreed, advertise within one year of receipt.

Changes to the parking regulations need to be made quickly to ensure the restrictions meet the needs of users and reduce delays to other projects. However, hundreds of requests are received each year and this can delay other orders being processed. We will monitor and aim to improve the standards of service that customers receive.

Action 37: Ensure that traffic orders are processed on time and that high standards are maintained in the future.

Producing a publicly available process map will help to guide the introduction of new orders. Best practice in other local authorities will be reviewed and reveal whether there are opportunities to improve current processes. In addition, a new file management system will be developed to better monitor progress on each order.

Public Transport and Accessibility

The majority of bus services within the city are operated commercially and the Council has no direct control over the provision of these services. However, we can influence the conditions in which public transport operates and encourage members of the public to travel more sustainably in the city.

The CPZ provides a number of benefits to public transport such as; protecting bus stops, reducing the volume of traffic on Edinburgh's roads and removing inconsiderate parking, for example parking in bus lanes which delays buses. These factors help to improve the reliability of journey times and makes using public transport more attractive.

In addition, since there are other parking regulations to manage, Parking Attendants are more likely to be available to monitor bus stop clearways within the area. There are fewer Attendants available to protect these areas in the evenings and weekends, where controls do not apply.

When the CPZ does not operate, public transport operators lose many of the associated benefits and free parking can encourage people to drive into the city centre. In such conditions, when there is less demand for public transport, services may operate less frequently.

Introducing parking controls on Sundays is expected to improve traffic flow and operating conditions while enhancing demand for public transport services.

Action 38: To work with operators to identify missing bus stop clearways and develop a programme to introduce them.

Lothian Buses has requested the introduction of new bus stop clearways at various bus stops around the city to allow buses to draw up close to the kerb and improve accessibility for passengers with disabilities. The intention is to work with operators, to identify where clearways are missing and develop a programme to introduce them.

To ensure that parking policy continues to support sustainable travel; the operation of bus lanes are currently under review, further cycle lane restrictions will be considered and conditions for pedestrians at crossing points will be improved.

Action 39: As part of the roll out of shared use parking places, identify locations where 24 hour restrictions need to be introduced to; protect pedestrian crossing points, improve facilities for cyclists and give priority to public transport within the Controlled Parking Zone by 2017.

Improving accessibility in Edinburgh not only relies on enhancing bus services, but also making shorter journeys on foot and by bike easier. It helps people become more active, healthier and to make Edinburgh a more pleasant place to live and visit.

Improving conditions for pedestrians to cross the road safely by preventing parking around; corners, junctions, traffic islands and dropped crossing points, is vital for people with disabilities. However, there are added benefits for everyone, such as; people pushing buggies or prams and for those pulling suitcases.

The expansion of cycle parking facilities will continue to be led by the Active Travel Action Plan, but there may be scope to investigate on road cycle parking spaces at key locations around the city.

Action 40: Review and upgrade where necessary provision for cyclists on main roads and in cycle lanes. This will include better protection of cycle lanes and junctions to prevent inconsiderate parking.

Cycling forms a major part of the city's active travel future and is ideal for many short to medium distance journeys. With more people cycling at all times of the day, there is a strong case for upgrading conditions for cycling, such as extending the operating hours of cycle lanes and protecting sight-lines around junctions at all times of the day. This will help people feel safer when cycling on Edinburgh's roads and may encourage others to start cycling.

Action 41: Continue to comply with terms of Disabled Persons' Parking Places Act and review disabled parking places throughout Edinburgh.

Many people choose to travel by car, but for some it is an essential method of transport, due to severe mobility problems which can make using public transport or taxis impossible.

For many blue badge holders finding a suitable parking place outside their home can be a challenge and the Council will continue to consider requests for new disabled persons' parking places in residential areas to help improve the mobility of those who need them the most.

Action 42: Identify key locations where disabled persons' parking places are required in the city centre and review their provision.

Disabled persons' parking places are provided where there is likely to be high demand for such parking, for instance outside public buildings and near to essential service providers. We will identify key locations where such parking places are likely to be needed and along with existing locations, review the current provision to ensure that a sufficient number of places are available.

Action 43: Take action to minimise parking-related fraud, including the misuse of disabled persons' blue badges and parking permits.

To ensure that disabled persons' parking places remain available for those who need them the most and to maintain the reputation of the scheme, misuse of blue badges will continue to be investigated and those concerned prosecuted.

Collaborative Working

Parking Operations continually strive to improve the service provided in Edinburgh, to learn from the other authorities and ensure industry best practice is followed.

Action 44: Continue working with Parking Scotland to share knowledge and ensure best practice.

Through participation in and leadership of industry bodies, such as Parking Scotland, better outcomes have been delivered for residents and customers. This is considered to be a vital part of service development and continuous improvement.

Action 45: Promote opportunities for collaborative working with other local authorities through the new parking enforcement contract and hence increase income to the Council.

The procurement of the new parking enforcement model contract provides the Council with the opportunity to help other local authorities with their decriminalised parking enforcement operations. This allows other Councils to buy-in to the existing enforcement contract and benefit from lower costs while benefiting from the knowledge and expertise of the Parking Team.

This involves a commitment to promoting these services to potential partners with the possibility of delivering better value for the Council.

Action 46: Ensure that new vehicles used in the operation and enforcement of parking restrictions in Edinburgh have high safety standards and good fuel efficiency ratings.

The parking enforcement contract requires our enforcement contractor to operate in accordance with the Council's environmental policies and to reduce the impact of our services on the city and make them greener and safer for all roads users.

To achieve these goals, the procurement of new vehicles to be used in the enforcement of the parking regulations are expected to be as environmentally friendly as possible with the highest safety standards available.

While it may be aspirational for them to be electric vehicles, it is unlikely that all the vehicles concerned could be, as electric vehicle removal trucks may not currently be available on the market.

Action 47: Consult with operators on the movement and parking of freight vehicles.

The efficient movement of goods and services is fundamental to Edinburgh's economic success and for the quality of life of its residents. However, road transport produces 23% of the city's carbon dioxide and such emissions can have a negative impact on air quality and public health.

With the final delivery of the vast majority of goods in Edinburgh coming by road this requires good loading and unloading opportunities to reduce congestion, noise and pollution. Many areas are on main routes or adjacent to residential properties and we will work with the industry to minimise the impact of freight movements in the city.

Monitoring

Action 48: Set up a monitoring group to meet regularly to review and report on progress to the LTS Steering Group.

Progress monitoring of the Parking Action Plan is an important job to ensure that work remains on track and that the actions are achieved on time and to budget. With many financial challenges facing the Council and growing demands on our services, ensuring good project management principles will be key to the success of this action plan.

Appendix 1: Prices and Sunday Parking in Other Cities

Feedback received during the public consultation questioned the price of parking in Edinburgh and whether other cities have introduced parking controls on Sundays. Research was undertaken to find the highest hourly price in each city and whether parking controls operate on Sundays. While this will offer some comparison, there are many other considerations that need to be taken into account, such as; number of spaces available, demand and availability of Council run off-street car parks.

Rest of UK	Sunday Parking	Times	Highest Price per Hour
Aberdeen	Yes	1pm to 5pm	£3.00
Birmingham	Yes	8am to 7.30pm	£3.30
Brighton	Yes	9am to 8pm	£3.60
Bristol	No	-	£1.75
Cardiff	Yes	10am to 5pm	£1.70
Dundee	Yes	1pm to 6pm	£2.20
Edinburgh	Under proposal		£3.50
Glasgow	Yes	8am to 10pm	£3.00
Inverness	Only MSCPs		£1.00
Leeds	Yes	10am to 10pm	£2.60
Leicester	Yes	7.30am to 6pm	£1.00
Manchester	Yes	8am to 8pm	£3.00
Newcastle	Yes	8am to 6.30pm	£2.50
Oxford	Yes	10am to 10pm	£3.00
Perth	No	-	£2.00
Reading	Yes	8am to 8pm	£1.50
Sheffield	Yes	8am to 8.30pm	£1.00
Stirling	No	-	£1.50
York	Yes	8am to 8pm	£2.10

Appendix 2: Parking Action Plan Actions

- Short term (2016 – 2017)
- Medium term (2018 – 2019)
- Long term (2020 – 2021)

Priority 1 = High
2 = Medium
3 = Low

Costs L = Low
M = Medium
H = High

No.	Action	Timescale	Cost	Priority
	Information and Communications			
1	Develop a marketing plan to increase awareness of the parking options available for people visiting the city centre including; P&R, on-street and off-street parking places.	2017	L	2
2	Develop a publicly available parking regulation enforcement protocol to demonstrate that the process is fair, consistent and transparent for all motorists.	2017	L	2
3	Establish a communications protocol to better inform people about changes to parking.	2017	L	2
4	Conduct a parking satisfaction survey every two years covering all road users' experience of parking-related issues to track satisfaction levels and monitor improvements.	2017 plus every two years	L	2
5	Publish financial and statistical information online annually demonstrating openness and commitment to customer service.	Annual	L	3
	On-Street Parking			
6	Introduce parking controls on Sundays, including yellow lines on main public transport corridors and public parking charges.	2018/19	H	1
7	Introduce shared use parking places to increase the flexibility of the parking controls for residents and other road users.	2018/19	H	1
8	Remove the Saturday afternoon exemption for permit holders to park free of charge in pay and display parking spaces as the introduction of shared use parking places means this is no longer required.	2018/19	L	2
9	Develop and publish a parking pricing strategy to steer the approach to charges for parking permits and pay and display parking. This will involve investigating factors, but will not be limited to, including: • Nine hour parking places • Residents' permits and pricing structure • Visitors' permits and operation • Vehicle based charging for permits and parking charges • Additional charges for credit card payments for parking permits As part of this process, introduce graduated hourly charges in 9 hour parking places and consider increasing their number where this will help reduce parking pressures outside the CPZ.	2016	L	1

10	Develop and introduce a system of charges for the enforcement of traffic management procedures at public events.	2017	L	2
11	Discuss with the Scottish Government the possibility of allowing Scottish Council's to use CCTV cameras for parking enforcement.	2017	L	2
12	Discuss with the Scottish Government the possibility to decriminalise school streets enforcement.	2017	L	2
13	Remove parking charges for car clubs within the CPZ and include the requirement to purchase a parking permit for each vehicle as part of the tender process.	2018	M	1
14	Establish a protocol for considering requests for parking provision/restrictions outside local shopping areas to protect short-stay parking and improve conditions for deliveries.	2017	L	2
15	Introduce parking charges in limited waiting parking places that lie within the CPZ to enable better enforcement, ensure the turnover of spaces and to address problems with commuting.	2018	M	3
16	Introduce parking charges in Greenways parking places with a cashless only payment service and roll out this approach elsewhere.	2016	M	1
	Controlled Parking Zone and Priority Parking Areas			
17	Ensure that the lines and signs review within the CPZ and Priority Parking Areas is completed correctly and that high standards are maintained in the future.	2016	L	1
18	Establish a protocol for considering requests for new/extensions to Priority Parking Areas or CPZ. This will consider the available evidence on current and future parking pressures, the degree of local support, the wider parking strategy and implementation costs.	2017	M	2
19	Consult with residents around Tram stops to ascertain whether they support the introduction of parking controls as a result of increased parking pressures associated with the Tram.	2016	M	1
20	Continue to update traffic orders to make it clear to residents of developments, without specific parking provision, within the CPZ that they are not entitled to apply for parking permits and publish this information.	2017/18	L	2
21	Establish a protocol for the issue of parking permits to residents living on private roads within the CPZ.	2017/18	L	3
22	Establish a process for members of the public to request Electric Vehicle charging point parking places.	2017/18	L	2
	Parking Permits			
23	Introduce visitors' parking permits in Zones 1-8 of the CPZ with an additional allocation for those with special care needs.	2018/19	H	1
24	Review on-street motorcycle parking and consider charging in motorcycle parking places and for residents' permits.	2020	L	3
25	Improve the security of motorcycle parking places by considering the introduction of facilities to secure such vehicles to.	2017	L	1

26	Review the eligibility criteria for all parking permits to ensure that they are only issued to those who are eligible and who need them.	2017	L	3
27	Investigate the potential to replace existing paper-based residents' permits with a virtual parking permits system.	2017	M	1
	Off-Street Parking			
28	Discuss with off-street car park operators the possibility of allowing residents' permit holders the use of such facilities in areas where there are significant parking pressures.	2017	L	3
29	Encourage all existing and new off-street and underground car parks to introduce Park Mark standards.	2020	L	3
30	Support the development of new underground or off-street car parks in the city where they can replace or reduce on-street parking provision.	Ongoing	L	3
31	To work with off-street car park operators to encourage a management structure that discourages all-day commuter parking.	2019	L	3
32	Improve facilities for secure cycle parking in off-street car parks and, where appropriate, use existing planning powers to secure such provision in new car parks.	2017	L	3
	Legislation			
33	Discuss graduated parking ticket charges with other Scottish local authorities and the Scottish Government and introduce such charges if/when enabling legislation is passed.	Ongoing	L	3
34	Continue to support the introduction of the Double Parking and Footway Parking (Scotland) Bill and introduce a ban if/when enabling legislation is passed.	Ongoing	L	1
	Traffic Orders			
35	Develop an approach for advertising on-street and press notices to make traffic orders more user-friendly.	2017	M	2
36	Respond to requests for new parking restrictions within 3 months and, where agreed, advertise within one year of receipt.	Ongoing	L	2
37	Ensure that traffic orders are processed on time and high standards are maintained in the future.	2016	L	2
	Public Transport and Accessibility			
38	To work with operators to identify missing bus stop clearways and develop a programme to introduce them.	2018	L	2
39	As part of the roll out of shared use parking places, identify locations where 24 hour restrictions need to be introduced to; protect pedestrian crossing points, improve facilities for cyclists and give priority to public transport within the Controlled Parking Zone.	2017	M	1
40	Review and upgrade where necessary provision for cyclists on main roads and in cycle lanes. This will include better protection of cycle lanes and junctions to prevent inconsiderate parking.	2017	M	1

41	Continue to comply with terms of Disabled Persons' Parking Places Act and review disabled parking places throughout Edinburgh.	Ongoing	M	2
42	To identify key locations where disabled persons' parking places are required in the city centre and review their provision.	2018	M	2
43	Take action to minimise parking-related fraud, including the misuse of disabled persons' blue badges and parking permits.	Ongoing	L	2
	Collaborative Working			
44	Continue working with Parking Scotland to share knowledge and ensure best practice.	Ongoing	L	2
45	Promote opportunities for collaborative working with other local authorities through the new parking enforcement contract and hence increase income to the Council.	2016	M	2
46	Ensure that new vehicles used in the operation and enforcement of parking restrictions in Edinburgh have high safety standards and good fuel efficiency ratings.	Ongoing	L	2
47	Consult with operators on the movement and parking of freight vehicles.	2017	L	3
	Monitoring			
48	Set up a monitoring group to meet regularly to review and report on progress to the LTS Steering Group.	2016	L	1

Transport and Environment Committee

10:00am, Tuesday, 7 June 2016

Sustainable Transport Accreditation and Recognition for Schools (STARS) - Update and Future Proposals

Item number	7.2
Report number	
Executive/routine	Routine
Wards	All

Executive Summary

The purpose of this report is to update the Committee on the Sustainable Transport Accreditation and Recognition for Schools (STARS) project 2013-16 and seek approval for its continuation, after the end of the pilot project.

Links

Coalition Pledges	P44
Council Priorities	CP1, CP4
Single Outcome Agreement	SO3, SO4

EDINBVRGH
THE CITY OF EDINBURGH COUNCIL

Report

Sustainable Transport Accreditation and Recognition for Schools (STARS) - Update and Future Proposals

1. Recommendations

1.1 It is recommended that the Committee:

1.1.1 notes the progress made by schools participating in STARS in reducing car use, encouraging active travel and tackling road safety;

1.1.2 approves the continuation of the STARS model for primary schools after the EU project ends in March 2016;

1.1.3 approves an allocation of the road safety revenue and capital budget to support schools working towards accreditation; and

1.1.4 requests an annual progress report, the first being in June 2017.

2. Background

1.2 The STARS project has delivered a behaviour change programme to increase the number of pupils cycling to and from school, who would previously have travelled by car.

1.3 It ran for three years until March 2016 and was supported and funded through the Intelligent Energy Europe programme.

1.4 The aim of STARS was two fold; firstly to support activities to increase walking and cycling levels in school and secondly to encourage schools to extend provision of road safety education in the curriculum.

1.5 A total of 13 partner cities and organisations were involved in the STARS consortium; eight implementation partners, namely Edinburgh, Bielefeld, Budapest, Krakow, Madrid, Milan, the London Borough of Hackney and the Province of Noord Brabant. Partner cities engaged with their schools to offer them a dedicated package of measures to help increase cycling levels and to work towards a common accreditation standard.

1.6 STARS involves the whole school community; pupils, staff, parents, volunteers and external partners, such as Sustrans' IBike team and Police Scotland.

1.7 The main activity in primary schools was an accreditation scheme, which focused on providing recognition for the work undertaken by the school community. Schools can work their way up an awards scale, from Bronze, Silver to Gold, depending on how many activities they are doing to promote cycling and walking and the mode shift they achieve. Levels are designed to reflect the increasing amounts of commitment needed from both the school and the local community. All these activities are recorded as part of a school travel action plan.

2.1 The project was enthusiastically welcomed by primary schools across the city, with many more signing up to take part than orignially envisaged. The target was for 20 schools to participate during the project. A total of 41 schools had been signed up when the project ended in March 2016.

2.2 In the first two academic years of the scheme from 2013-15, one school, Nether Currie Primary School, achieved the Gold level, with four Silver level schools and eleven Bronze level.

2.3 A further 25 schools did not quite meet the criteria for Bronze and will continue working on the project to secure their award in 2016. Appendix 1 shows a list of participating schools.

3. Main report

3.1 The target set by the project was for 20 schools to participate in STARS over the two full academic years (2013-14 and 2014-15). At the end of the project, a total of 41 schools were participating.

3.2 There is a high level of desire from current STARS schools to continue participating in this accreditation scheme, so this report sets out the way forward to achieve this. The process is summarised in a flow chart (Appendix 2). New schools are also welcome to join STARS.

3.3 Each school has to register on the programme by signing a letter of commitment, selecting a co-ordinator and setting up a working group to oversee the progress of the project. The group should include pupils, staff, parents and local residents and will be guided by a member of the Council's Road Safety team.

3.4 The group will work together to produce an annual school travel action plan tailored to the needs and requirements of their school.

3.5 In order to develop the plan, questionnaires are sent out to pupils, parents and staff to find out how they currently travel to and from school, what would persuade them to change from the car to more active travel modes (if driven to school) and how safe they feel on the journey. It will also help to identify any issues and locations that can be improved to make the journey to school more pleasant and safe for all.

3.6 School traffic can also have an impact on the lives of residents living around the school, so by filling out the questionnaire they will be letting the school know how they are affected and any issues and suggestions they have that could improve the current situation.

3.7 The questionnaires are put on the Council's Consultation Hub with the option of a paper version if requested.

3.8 Using the information from the questionnaires, alongside feedback from focus groups, the plan is drafted, including aims, objectives, targets and a number of activities covering five main areas:

- Core Elements;
- Walking;
- Cycling/Scooting;
- Road Safety; and
- Promotion and Publicity.

3.9 A sample action plan is included as Appendix 3.

3.10 Schools that are committed to the STARS initiative and have developed a school travel action plan will be offered more support and wider access to funding, resources, initiatives and services. STARS schools are encouraged to tackle road safety and active travel issues particular to their own situation on an ongoing basis. Road safety and active travel are embedded in the school ethos and there is less need for the Road Safety Team to react to problems.

3.11 Each year, in the summer term, action plans will be monitored and outcomes evaluated by the Road Safety Team. Schools will receive awards at relevant level.

4. Measures of success

4.1 Success will be measured through:

4.1.1 increasing numbers of schools signing up, participating and gaining accreditation awards each year, and their progression from Bronze though to Gold;

4.1.2 increased numbers of children walking and cycling to school; monitored through the annual Sustrans Hands Up Survey;

4.1.3 a corresponding reduction in car trips as measured through the annual Sustrans Hands Up Survey; and

4.1.4 increasing and continuing use of STARS accreditation toolkit, guidance and website to see continued modal shift from the car towards cycling (and other sustainable modes) with more schools reaching higher levels of accreditation

5. Financial impact

5.1 Funding of £8,000 will be allocated from the Road Safety revenue budget in 2016/17 to help schools with activities promoting cycling, walking and road safety as set out in Appendix 4

5.2 Funding of £50,000 will be allocated from the Road Safety capital budget in 2016/17 for the Safer Routes to School Challenge Fund to assist schools with any minor road safety engineering works in the vicinity of the school e.g. crossing points, new footways and cycle paths, signing and lining and guardrail across pedestrian accesses.

6. Risk, policy, compliance and governance impact

6.1 The principal risks associated with this initiative are summarised as:

6.1.1 Reduce schools operating in a vacuum and following their own path with reference to road safety education. Schools will benefit from having a template to follow with regard to promoting STARS in their school. They will have a menu of activities to engage in that will bring accreditation levels from Bronze to Gold.

6.1.2 Schools do not write their own activity plan to tackle specific problems, such as congestion at the school gates themselves, so increase the risk of staff having to intervene on a piecemeal basis rather than the co-ordinated approach offered by STARS.

6.1.3 No change in parental behaviour in moving from the car to walking and cycling, so perpetuating the negative impact on the lives of local residents through congestion and inconsiderate parking.

6.1.4 The recommendations in the report are expected to assist in the delivery of the Council's Road Safety and Active Travel Action Plans (2010-2020) and to make progress towards achieving the targets they contain. They are also complementary to a number of other Council policies, including the Transport 2030 Vision, the Sustainable Travel Plan and the Open Space Strategy.

7. Equalities impact

7.1 An Equalities and Rights Impact Assessment has been undertaken in parallel with the project. Consideration has been given to the relevance of the Equalities Act 2010 and there is no infringement of rights or impact on duties under this Act.

7.2 The main positive impacts on rights are Life, Health and Physical Security. There are no negative impacts on rights as a result of this report. There are positive impacts on Health through increased walking and cycling levels.

7.3 Participation, Influence and Voice: The school travel action plans will be subject to a neighbourhood consultation process enabling the whole community to participate and influence the activities in the final plan.

8. Sustainability impact

8.1 The impacts of this report have been considered in relation to the three elements of the Climate Change (Scotland) Act 2009 Public Bodies Duties. The proposals in this report will reduce carbon emissions, increase the city's resilience to climate change and help achieve a sustainable Edinburgh by reducing the number of vehicles and congestion outside school gates and encouraging pupils to walk or cycle to school.

9. Consultation and engagement

9.1 The school travel action plans for individual schools will be subject to a neighbourhood consultation process permitting pupils, parents/carers, staff and local residents to participate in decision-making and make choices affecting how children travel to and from school and the impact their travel patterns have on the lives of local residents.

9.2 The views of different users will be gathered through a series of questionnaires on the Council's Consultation Hub. This information will be used to develop initiatives in the action plan.

10. Background reading/external references

10.1 http://starseurope.org.

Paul Lawrence

Executive Director of Place

Contact Lorna Henderson, Road Safety Officer - Road Safety

E-mail: lorna.henderson@edinburgh.gov.uk | Tel: 0131 469 3786

11. Links

Coalition Pledges	P44 Prioritise keeping our streets clean and attractive.
Council Priorities	CP1 - Children and young people fulfil their potential CP4 - Safe and empowered communities
Single Outcome Agreement	SO3 - Edinburgh's children and young people enjoy their childhood and fulfil their potential SO4 - Edinburgh's communities are safer and have improved physical and social fabric.
Appendices	Appendix 1 - List of participating schools Appendix 2 - Flowchart of STARS accreditation process Appendix 3 - Sample Action Plan Appendix 4 - Table of STARS activities

Appendix 1 – Schools participating in STARS scheme (March 2016)

Gold Award
Nether Currie

Silver Award
Cramond
Duddingston
Oxgangs
St Mary's Edinburgh

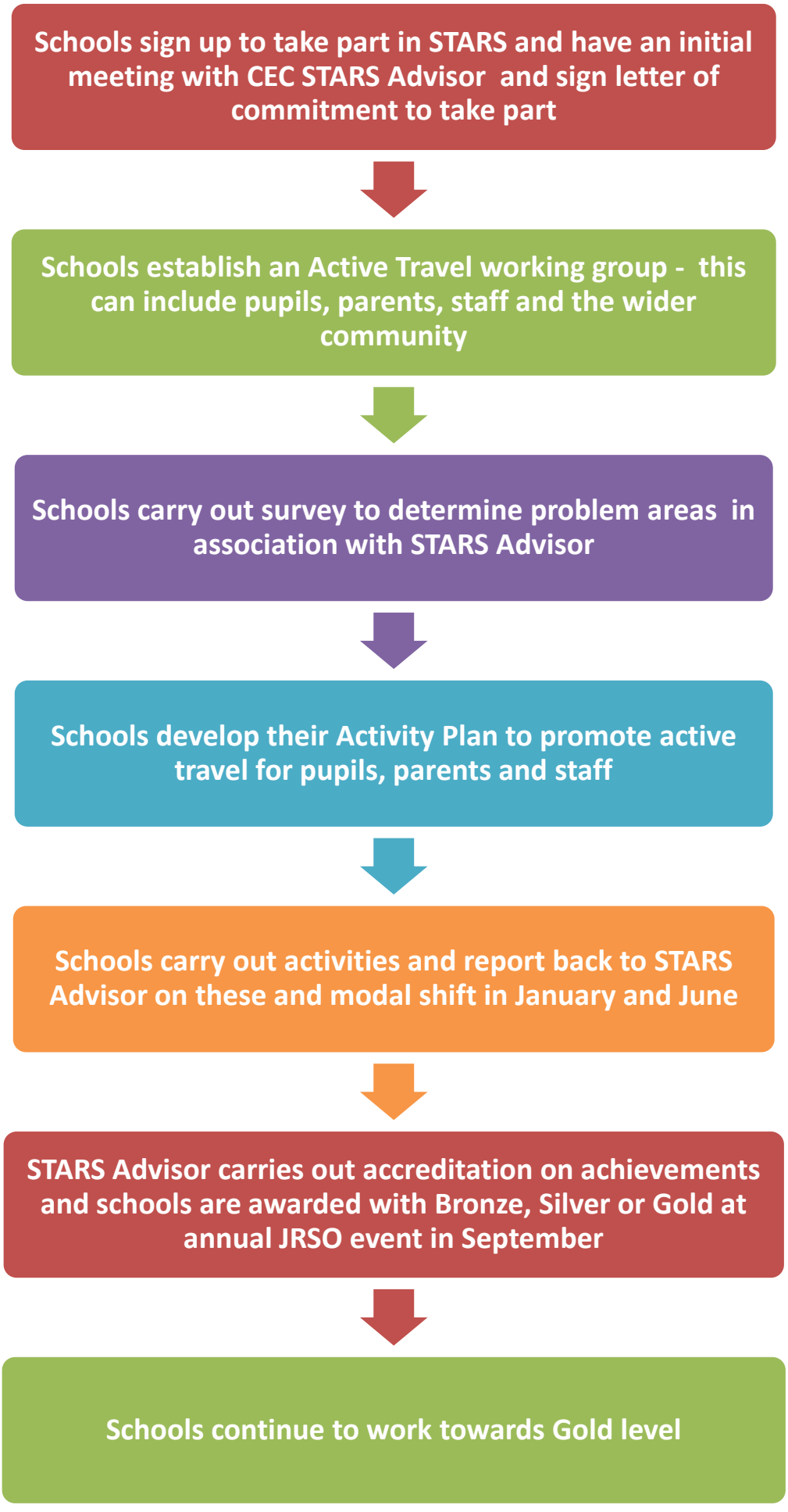
Bronze Award
Abbeyhill
St John's RC
Blackhall
Bonaly
Broomhouse
Buckstone
Clermiston
Davidsons Mains
Ferryhill
Royal Mile
Towerbank

Working towards
Broomhouse
Carrick Knowe
Colinton
Craigour Park
Craigentinny
Currie
Flora Stevensons
Fox Covert
Fox Covert RC
Gilmerton
Gylemuir
Hermitage Park
Juniper Green
Liberton
Lorne
Prestonfield
Sciennes
StJoseph's RC
St Peter's RC
Stenhouse
Stockbridge
The Edinburgh Steiner
Trinity
Victoria
Wardie

Total:41

Appendix 2

Accreditation Framework for schools taking part in STARS



SAMPLE ACTION PLAN

Edinburgh Primary School February 2016 – January 2017

Our action plan is in two parts

1. Main Targets that measure our success in reaching our School Travel Plan Objectives

2 Actions and Initiatives planned to help us work towards our objectives

1 Main Targets

Objective	Target	Target Date	Progress
Summary of the Objectives	Summary of Targets *Each objective must have a **S**pecific, **M**easurable, **A**chievable and **R**ealistic target.*	Target Date for completion *Each objective must be **T**ime bound*	*Space to make notes on progress, barriers that led to a target not being achieved and any new approaches identified as a result.*
1 Reduce car usage on the school run	Reduction of 5% in number of pupils travelling by car compared to 2015 Hands Up data	Hands Up survey September 2016	
2 Increase level of walking to school	Increase by 5% number of pupils walking to school compared to 2015 Hands Up data	Hands Up survey September 2016	
3 Support the promotion of healthy, safe and sustainable travel choices	Minimum of 50% of pupils participate in Walk to School Weeks	May & Oct 2016	School submits SRTS funding bid April16; awarded £200
4.Improve infrastructure around the school	Provide new footpath link to Greenover estate	New footpath link to be constructed by December 2016	School submits SRTS funding bid April16; awarded £15,000

2 Actions and Initiatives

(It is a good idea to create an action plan table for EACH of your STP objectives)

OBJECTIVE: Eg 1 Reduce car usage on the school run

TARGET: Eg Reduction of 5% in number of pupils travelling by car compared to 2015 Hands Up data

Proposed Actions	**Milestone Tasks**	**Responsible Person**	**Other Partners**	**Target Date**	**Resources -Cost & Funding Source**	**Success Indicators** (how you can demonstrate that an action is complete)
For example…… Run ParkSmart Campaigns	For example…… Run competition to design banner. Order banners & leaflets Run campaigns for 2 weeks	For example…… Mrs Findlay, Depute Head	For example…… CEC Road Safety team Community Police Parking Attendants	For example… Feb 16 March 16 May & Sept16	For example… 2x banners (£200 school funds) Leaflets (free CEC RS)	For example…… Hands Up survey in 2016 shows 5% reduction compared to 2015

OBJECTIVE: Eg 2 Increase level of walking to school

TARGET: Eg Increase by 5% number of pupils walking to school compared to 2015 Hands Up data

Proposed Actions	**Milestone Tasks**	**Responsible Person**	**Other Partners**	**Target Date**	**Resources -Cost & Funding Source**	**Success Indicators**
Set up Walking Bus	Contact CEC RS for advice & support Identify possible routes Recruit volunteers Funding bid for equipment Launch Bus	Parent Council	CEC Road Safety team	Feb 16 March 16 April 16 May 16	20+ pupils hi-vis vests, 2 adult vests (£100 bid to SRTS Challenge fund)	Two Walking Buses established running morning and afternoon At least 20 pupils using daily

OBJECTIVE: Eg 3 Support the promotion of healthy, safe and sustainable travel choices

TARGET: Eg Minimum of 50% of pupils participate in Walk to School Weeks

Proposed Actions	Milestone Tasks	Responsible Person	Other Partners	Target Date	Resources -Cost & Funding Source	Success Indicators
Participate in Walk to School Week	Structure activities into curriculum Obtain W2SW resources Publicise to parents Reward pupils	The Head Teacher	CEC Road Safety team	2 campaigns in 2016	W2SW resources (£200 bid to SRTS Challenge fund) School website /Twitter account (free)	Campaign run May & Oct16

OBJECTIVE: Eg 4.Improve infrastructure around the school

TARGET: Eg New footpath link to be constructed by December 2016

Proposed Actions	Milestone Tasks	Responsible Person	Other Partners	Target Date	Resources -Cost & Funding Source	Success Indicators
Provide new footpath link to Greenover estate, including safe crossing facility.	Arrange site visit with CEC RS Engineer	The Head Teacher	CEC Road Safety team	Feb16	bid to SRTS Challenge fund for £15,000	Increase number of pupils now walking & cycling to school on path rather than by car
	Produce draft plans of options	CEC RS Engineer		April 16		
	Consult parents /local residents on options- information evening	The Head Teacher	CEC RS team /Community Council /community police	April 16		
	Detailed design and construction of path	CEC RS Engineer	CEC RS team	Sept 16		
	Host opening event	The Head Teacher		Oct 16		

Appendix 4

Table of STARS activities

Activity	What is it?	Who
Core Elements		
Hands Up Survey	The annual travel survey takes place every September. Every child in each year group is asked how they travel to school and how they would prefer to travel to school. This is administered via hands up survey in class and results are recorded and sent to Sustrans as part of the national survey.	Whole school
Safer Routes to School Challenge Fund	This funding is available to schools with a school travel action plan, for engineering measures and promotional and publicity materials. Funding is allocated on an annual basis.	Headteacher & Parent Council
Walking		
Kerbcraft pedestrian training	The programme is designed to equip children with the skills and knowledge required to ensure their safety as pedestrians. Itis run by a team of volunteers, trained by RS team. It builds upon practical pedestrian training skills in choosing safe places and routes to cross the road, and crossing safely at parked cars and junctions.	P2
Traffic trails	Led walk on route in vicinity of school to help pupils identify safe places to cross and road safety knowledge	P3-4
WOW-Walk Once a Week	This is an incentive scheme that rewards children for active* travel on the journey to school (*Walking, Scooting, Cycling, Park and Stride and Public Transport). Pupils record their mode of travel each day and are rewarded with badges when they achieve a set amount of active travel journeys in a half term period.	Parents &pupils
Walk to School Weeks	This week-long activity encourages students to walk to school every day for the week, with rewards for all those who participate.	Parents &pupils
Park & Stride	This scheme is designed to encourage parents who to drive their children to school to park away from the school gates and walk the remainder of the journey. Schools identify quiet streets or a car park, such as a supermarket, church or leisure centre, within a 5-15 minute walk of the school. After obtaining permission from the land owner for parents to use the car park, it is promoted as a Park & Stride site.	Parents &pupils
Walking Bus	A walking bus is an organised group of children walking a pre-determined route to school supported by adult volunteers. This activity takes place on a regular basis. It is a formal activity which requires: a co-ordinator, supported by volunteers to operate it on a rota basis, parents to register their children to travel on it and a timetable showing when and where it will be stopping.	Parents & pupils
Cycling & Scooting		
Scooterbility scooter training	The aim of the programme is to use the scooters as a fun and active way to learn and reinforce basic pedestrian safety messages. The programme is broken down into activities which encourage active travel and help develop skills such as steering, stopping and balancing.	P 1-3
Bikeability cycle training	This is the national cycle training delivered in 3 levels –in the playground, on road & advanced on road	P4-7
Bike maintenance sessions	This is a one-off session on bike maintenance lasting between 30 minutes -1 hour and is best run with a maximum group size of 12. Sessions can be run outdoors or indoors dependent upon weather. Ideally, pupils bring in their own bikes and learn how to check them over as part of the session	P5-7
Cycle & scooter parking	Match funding is available through Sustrans for installation of cycle and scooter parking in school grounds	Headteacher & Parent Council

Road Safety		
R S Education in the curriculum	Schools have a range of learning resources produced by Road Safety Scotland for use with pre-school, primary and pupils with additional learning needs. These resources are linked to Curriculum for Excellence, making it easy for teachers to incorporate road safety learning into the classroom. Main resources are *Go Safe with Ziggy* (Nursery – P1) and Streetsense2 (P1-7). RSS also provide Theatre in Education productions	Nursery- P7
Junior Road Safety Officers	The aim of the JRSO scheme is to empower children to highlight road safety issues within their school. Schools appoint two senior pupils to become JRSOs usually for a one year period. Their role is to maintain a road safety noticeboard, deliver presentations to classes or assemblies, and run road safety competitions. The RS team supports the JRSOs by providing monthly bulletins on relevant themes, like Be Safe, Be Seen and seatbelts	P6-7
Transition to High School	Activities carried out with pupils before they move on from primary to high schools, including journey planning, using public transport, coping with peer pressure and led rides to show routes to new high school	P7
Publicity & Promotion		
ParkSmart campaigns	A promotion campaign to encourage drivers to park considerately and not on the School Keep clear zig zags, includes leaflets, banners and publicity materials	Parents &Carers
School Streets	The aim is to reduce congestion around school gates and so encourage more pupils to walk and cycle. This currently is a pilot project at 9 primary schools to March 2017, where traffic is banned from streets around schools at beginning and end of school day	Whole school & local residents
Road Safety Campaigns	Throughout the academic year there will be various opportunities for schools to take part in one or more local, regional or national campaigns	Whole School
Parental Engagement & Publicity	Engaging with parents/carers to help launch, promote and encourage participation with the overall programme. Some methods of engagement could include: Leaflets — Newsletters Website (StreetsAhead Edinburgh and School) — Letters Events — Parents evenings New parent induction meetings — Notice boards	Headteacher & Parent Council

Transport and Environment Committee

10.00am, Tuesday, 7 June 2016

Pedestrian Crossing Prioritisation 2016/17

Item number	7.3
Report number	
Executive/routine	Routine
Wards	All - City wide

Executive Summary

This report provides an updated pedestrian crossing priority and construction list and reports back on the consultation on locations approved in the report, to the Transport and Environment Committee meeting, on 13 January 2015.

Links

Coalition Pledges	P44
Council Priorities	CP4, CP9
Single Outcome Agreement	SO4

EDINBVRGH
THE CITY OF EDINBURGH COUNCIL

Report

Pedestrian Crossing Prioritisation 2016/17

1. Recommendations

1.1 It is recommended that the Committee:

1.1.1 approves the updated pedestrian crossing priority list for 2016/17 detailed in Appendix 1;

1.1.2 notes the locations that did not meet the priority list criteria in Appendix 2; and

1.1.3 approves the updated construction list and notes the results of the public consultations setting aside any representations, to allow construction to progress (Appendix 3).

2. Background

2.1 In accordance with the decision made by the former Transport, Infrastructure and Environment Committee on 28 July 2009, on the report titled “Pedestrian Crossing Prioritisation Process”; this report provides an update on the priority list for pedestrian crossings.

3. Main report

Pedestrian Crossing Prioritisation

3.1 The previous pedestrian crossing priority list (approved by Transport and Environment Committee on 13 January 2015) consisted of 16 locations. Twelve of these sites remain on the priority list for construction as listed in Appendix 1, the remaining four locations have had facilities installed, so have been removed from the Priority List, as detailed in paragraph 3.5.

3.2 The base data which is used to assess if a location is suitable for a crossing, is known as the PV2 value. This is a nationally recognised value that indicates the number of passing vehicles and pedestrians. Pedestrian and vehicle counts are taken over the peak hours of a week day, between both 7am to 10am and 3pm to 6pm, and avoid any school holidays or other factors which may skew results. This base PV2 value is then adjusted to take account of local factors, such as the age of those crossing, the composition of passing traffic, the number of pedestrian incidents and the number of trip-attractors such as schools, doctors' surgeries, shops etc.

3.3 A location with an adjusted PV2 value of 1 or higher would be considered for a puffin crossing, locations with a value of 0.3 or higher would be considered for a suite of measures that includes a zebra crossing, a refuge island or pavement build-outs. If a very low PV2 value is achieved, no additional crossing facilities may be recommended. Appendix 4 is a flow diagram which details the steps carried out in a pedestrian crossing assessment. This process is only used for the provision of stand alone pedestrian facilities, such as puffin crossings and pedestrian islands; it does not include the provision of facilities at existing traffic signals.

3.4 Since January 2015 a total of sixty two locations have been assessed. Twenty two of these locations met the criteria for additional pedestrian facilities, by achieving an adjusted PV2 value greater than 0.3, and nineteen of these have been added to the priority list for construction. The three that have not been added are; Marchmont Road at Spottiswood and Marchmont Road at Sainsburys, which are being constructed as part of a large cycle and pedestrian scheme and Arboretum Place at the west entrance to the Botanic Gardens which is being considered as part of a wider public realm scheme.

3.5 Pedestrian facilities have been introduced at four locations from the construction list, which was reported to committee in January 2015. Facilities have been introduced at West Granton Road, Crewe Road North, Colinton Road and Braid Road.

3.6 Three locations have been removed from the Priority List for differing reasons. Great Junction Street has been removed, as it has been improved as part of the Foot of the Walk proposals. Ferry Road at Dudley Avenue has also been removed from the priority list as site surveys and initial design indicated that a scheme cannot be constructed here due to the road layout. Dalry Road at Dalry Place has been removed from the priority list as a new crossing is being constructed as part of an adjacent development. The local Councillors for each ward have been informed that these locations have been removed from the Priority List and advised of the reasons for their removal.

3.7 Due to the potential loss of on-street parking it has not been possible to take a workable locally acceptable solution to construction on Pilrig Street at Cambridge Avenue. This location will therefore remain on the Priority list until all potential pedestrian crossing options are explored with the local community and local members.

3.8 A total of 40 requested locations have an adjusted PV2 value of less than 0.3, or which are deemed unsuitable, are not being progressed and are listed in Appendix 2.

3.9 It should be noted that, due to consultation requirements, some locations may fall back into the following year's programme. Issues may arise which require alterations to the proposed designs or Traffic Regulation Orders may be required, which may affect construction timescales. Should any location fall back into the following year's construction programme, additional locations will be brought forward on the basis of highest ranking from the priority list.

Provision of pedestrian facilities at existing traffic signals

3.10 In the report to the Transport and Environment Committee in January 2015, it was agreed that PV2 assessments would be carried out at 62 signalised junctions, without full pedestrian crossing facilities. These PV2 assessments are in the process of being carried out and the results will be reported to the Transport and Environment Committee, at its meeting in August 2016.

Provision of a pedestrian crossing on the Calder Road at Napier University

3.11 In 2011, the City Development Department tendered a scheme to signalise fully the junction of Calder Road and Sighthill Court, in accordance with the approved 2007 North Sighthill Development Brief. This was done following the granting of planning permission to Napier University for the refurbishment and expansion of their Sighthill campus. The contribution from Napier University through the Section 75 agreement (which expires in 2018), was seen as one of a number of sources for the improved junction arrangements. However, the full campus refurbishment, which proposed a bus only link from the interchange in front of Napier University to Bankhead Avenue, did not proceed.

3.12 The provision of an alternative means of crossing the Calder Road has been a long running issue for both the local community, Napier's student body and elected members, who have over a sustained period of time expressed their respective concerns, about the personal safety of persons using the nearby underpasses. In addition, the provision of a pedestrian crossing will enhance the 21st Century Homes housing development planned at North Sighthill, which is due begin in the 2017/18 financial year. To that end, formal agreement was reached with Napier University to utilise the Section 75 (£150k), attached to the Napier University planning permission for the provision of an at grade signalised puffin crossing on the Calder Road in June 2015. In recent months the South West Neighbourhood Manager has secured the full package of funding required from the section 75 agreement with Napier University, contributions from 21st Century Homes, Yellow Box, Cycling and Neighbourhood budgets to deliver a suitable pedestrian crossing to meet the needs of both the local community and Napier's student body.

4. Measures of success

4.1 Pedestrian crossing facilities are provided at locations across the city, which have been assessed as having the greatest demand and difficulty experienced by pedestrians. Local consultation helps to ensure the facilities provided meet the requirements of the local community and stakeholders.

5. Financial impact

5.1 Funding of up to £240,000 has been made available from the 2016/17 capital road safety budget of £900,000, to introduce crossing facilities at locations from the priority lists. It is proposed that a similar amount will be allocated in the 2017/18 budget. Appendix 3, details estimated costs and in which financial year it is anticipated that these facilities will be constructed.

6. Risk, policy, compliance and governance impact

6.1 The Edinburgh Road Safety Plan puts forward the vision that the Council and its partners will work towards Vision Zero and provide a modern road network, where all users are safe from the risk of being killed or seriously injured. In the Plan, a number of interventions have been developed for pedestrians, including the provision of new crossings, to enable more people to walk greater distances safely and reduce conflict at key points. By not progressing the proposals, it would not be possible to construct new pedestrian crossing facilities at these key points across the city, therefore not meeting the policy objectives.

7. Equalities impact

7.1 The new pedestrian crossing priority list will take into account the road safety needs of all users. Due regard will be given to the protected characteristics (Age, Disability and Religion and Belief) through the consultation and design process.

8. Sustainability impact

8.1 Potential for positive impact on the environment by providing improved pedestrian facilities. This should encourage walking; reduce vehicle use and lower carbon emissions.

9. Consultation and engagement

9.1 Consultation will be carried out at the proposed locations on the pedestrian crossing construction list once approval has been granted and a design has been produced. The results of the consultation on three schemes approved in the report of 13 January 2015 are included in Appendix 3.

10. Background reading/external references

10.1 Report to the Transport, Infrastructure and Environment Committee 28 July 2009 titled "Pedestrian Crossing Prioritisation Process" http://www.edinburgh.gov.uk/download/meetings/id/8638/pedestrian_crossing_prioritisation_process

Paul Lawrence

Executive Director of Place

Contacts:

Pedestrian Crossing Prioritisation:-

Gary Patton, Senior Professional Officer, Road Safety

E-mail: gary.patton@edinburgh.gov.uk | Tel: 0131 469 3674

Calder Road Crossing:-

Andy Edwards, South West Area Roads Manager

E-mail: andy.edwards@edinburgh.gov.uk | Tel: 0131 527 3852

11. Links

Coalition pledges	P44 Prioritise keeping our streets clean and attractive.
Council priorities	CP4 - Safe and empowered communities. CP9 - An attractive city.
Single Outcome Agreement	SO4: Edinburgh's communities are safer and have improved physical and social fabric.
Appendices	Appendix 1 - Updated Pedestrian Crossing Priority List 2016/17 Appendix 2 - List of locations which failed to meet priority list criteria Appendix 3 - Consultation and Construction List Appendix 4 - Pedestrian Crossing Assessment Process

Appendix 1
Updated Priority List 2016/17

Adj PV2 > 1.0 therefore site can be considered for a Signalised Crossing
Adj PV2 < 1.0 and > 0.30 therefore site can be considered for Pedestrian Island, Build-outs or a Zebra Crossing
Adj PV2 < 0.30 therefore Do Nothing

		Base PV²	Date of PV²	Vulnerable Users		Vehicle Composition		Ped. Accident Factor	Road Width Factor	85th Percentile Speed Factor (mph)					Trip Ends		Adjusted PV²	
Rank	LOCATION			Children >15% (% plus 100)/115)	Elderly & Disabled >15% (% plus 100)/115)	Buses & coaches > 10% (2)	HGVs > 10% (2.3)	1 + (N/10)	Actual width/7.3	<30 (1)	30-35 (1.1)	36-40 (1.2)	41-45 (1.3)	>46 (1.4)	Serves 2 trip-ends i.e. school, shops, leisure, community (1.25)	Serves 3 trip-ends i.e. school, shops, leisure, community (1.4)		Current Status
Previously Approved Sites from January 2015 Committee																		
1	London Street at Drummond Place	0.68	Dec-12	1	1	1	1	1	2.2	1	1.1	1	1	1	1	1	1.48	Various crossing options to be designed and consulted on. Construction dependant on implmentation of TRO.
2	Myreside Road at Footbridge	0.19	Jan-13	1.348	1	1	1	1	1.2	1	1.1	1	1	1	1	1	0.33	Pedestrian island designed and audited. Still to be consulted on. Construction dependant on implmentation of TRO.
3	East Fettes Avenue at Broughton High School opposite entrance to Inverleith Park	0.16	Apr-14	1.217	1	1	1	1	1.9	1	1.1	1	1	1	1.25	1	0.50	Pedestrian island designed. Still to be audited and consulted on. Construction dependant on implmentation of TRO.
4	Pilrig Street at Cambridge Avenue	0.25	Apr-14	1	1	1	1	1	1.3	1	1	1	1	1	1	1	0.32	Unabale to achieve a workable soulution due to loss of parking. Continue to explore design options with local community and local members.
5	Telford Road at Telford Gardens	0.63	May-14	1	1	1	1	1	2.0	1	1.1	1	1	1	1	1	1.30	Signalised crossing designed, audited and consulted on. Scheduled for construction 2016/17
6	Ferry Road at Silverknowes Neuk	0.35	Oct-14	1	1	1	1	1.1	1.0	1	1	1	1	1	1	1	0.39	Pedestrian island designed, audited and consulted on. Scheduled for construction 2016/17
7	South Gyle Crescent, 150m south of junction with Redheughs Avenue	0.18	Oct-14	1	1	1	1	1.3	1.0	1	1	1	1	1	1	1	0.34	Pedestrian refuge island designed. Still to be audited and consulted on. Construction dependant on implmentation of TRO.
8	Ocean Drive - Between exit from BHS and Roundabout	1.37	Oct-14	1	1	2	1	1.3	2.0	1	1	1	1	1	1.25	1	1.37	Signalised crossing to be designed and consulted on.
9	Costorphine Road (A8) at Kaimes Road	1.24	Oct-09	1	1	1	1	1.1	1.9	1	1.1	1	1	1	1	1	2.81	Signalised crossing to be designed and consulted on. Awaiting developer funding.
New Sites Added from Assessments																		
10	St Johns Place at Elbe Street	0.40	May-15	1	1	1	1	1	1.0	1	1	1	1	1	1	1	0.44	Pedestrian island to be designed and consulted on. Construction dependant on implmentation of TRO.
11	South Gyle Broadway at Roundabout	0.56	May-15	1	1	1	1	1	2.0	1	1	1	1	1	1	1	1.15	Controlled crossing to be designed and consulted on.
12	Crewe Road South at Comely Bank Roundabout	0.52	May-15	1.052	1	1	1	1.1	1.0	1	1	1	1	1	1	1	0.79	Upgrade existing pedestrian refuge island
13	Marionville Road at Wishaw Terrace	0.58	May-15	1	1	1	1	1	1.0	1	1	1	1	1	1	1	0.57	Various crossing options to be designed and consulted on.
14	South Gyle Crescent south of roundabout with South Gyle Access at entry to Tesco bank	0.39	May-15	1	1	1	1	1	1.0	1	1	1	1	1	1	1	0.57	Pedestrian refuge island to be designed and consulted on.
15	Ratcliffe Terrace at South island at BP garage	0.29	May-15	1	1	1	1	1	1.0	1	1	1	1	1	1	1	0.40	Upgrade existing pedestrian refuge island
16	West Granton Road to the east of Granton Mains East	1.68	May-15	1	1	1	1	1.1	2.0	1	1	1	1	1	1	1	3.67	Controlled crossing to be designed and consulted on.

Rank	LOCATION			Children >15% (% plus 100)/115)	Elderly & Disabled >15% (% plus 100)/115)	Buses & coaches > 10% (2)	HGVs > 10% (2.3)	1 + (N/10)	Actual width/7.3	<30 (1)	30-35 (1.1)	36-40 (1.2)	41-45 (1.3)	>46 (1.4)	Serves 2 trip-ends i.e. school, shops, leisure, community (1.25)	Serves 3 trip-ends i.e. school, shops, leisure, community (1.4)		Current Status
17	Gilmerton Dykes Street at Bus Terminus	0.39	May-15	1	1	1	1	1	1.0	1	1	1	1	1	1	1	0.49	Pedestrian refuge island to be designed and consulted on.
18	Lanark Road West at Stewart Road	0.69	May-15	1	1	1	1	1	1.0	1	1	1	1	1	1.25	1	0.89	Various crossing options to be designed and consulted on.
19	Fettes Avenue at Comley Bank Road at existing D island	1.75	Nov-15	1.278	1	1	1	1.1	1.6	1	1	1	1	1	1.25	1	1.75	Controlled crossing to be designed and consulted on.
20	North West Circus Place at junction with Royal Circus	0.25	Nov-15	1	1	1	1	1.2	1.8	1	1	1	1	1	1	1	0.54	Various crossing options to be designed and consulted on.
21	Gilmerton Dykes Street at Gilmerton Dykes Crescent for access to shops	0.22	Nov-15	1	1	1	1	1	1.3	1	1.1	1	1	1	1.25	1	0.39	Pedestrian refuge island to be designed and consulted on.
22	Great King Street (west end towards St Vincent St)	0.20	Nov-15	1	1	1	1	1	2.1	1	1	1	1	1	1	1	0.41	Various crossing options to be designed and consulted on.
23	Restalrig Road at Ryehill Terrace	0.19	Nov-15	1.174	1	1	1	1	1.2	1	1	1	1	1	1.25	1	0.35	Various crossing options to be designed and consulted on.
24	Lasswade Road at Little Learners Nursery (Existing Double D)	0.28	Nov-15	1	1	1	1	1	1.5	1	1	1	1.3	1	1.25	1	0.66	Pedestrian refuge island upgrade to be designed and consulted on.
25	Corbiehill Road at Junction with Main Street	0.10	Nov-15	1	1	1	1	1.1	2	1	1	1	1	1	1.25	1	0.30	Pedestrian refuge island to be designed and consulted on.
26	Milton Road East at Brunstane Road (existing D)	0.23	Nov-15	1	1	1	1	1	2	1	1.1	1	1	1	1	1	0.43	Pedestrian refuge island upgrade to be designed and consulted on.
27	Torphichen Street - centred on existing drop crossing near corner.	0.29	Nov-15	1	1	1	1	1	1	1	1	1	1	1	1	1	0.40	Various crossing options to be designed and consulted on.
28	South Bridge at Drummond Street	3.29	Nov-15	1	1	2	1	1.2	2	1	1.1	1	1	1	1	1.4	19.14	Controlled crossing to be designed and consulted on.

Appendix 2

Locations Which Failed to Meet the Priority List Criteria or Have Been Removed from the Priority List

Adj PV2 > 1.0 therefore site can be considered for a Signalised Crossing
Adj PV2 < 1.0 and > 0.30 therefore site can be considered for Pedestrian Island, Build-outs or a Zeb
Adj PV2 < 0.30 therefore Do Nothing

	Base PV²	Date of PV²	Vulnerable Users		Vehicle Composition		Ped. Accident Factor	Road Width Factor	85th Percentile Speed Factor (mph)					Trip Ends		Adjusted PV²	
LOCATION			Children >15% (% plus 100)/115)	Elderly & Disabled >15% (% plus 100)/115)	Buses & coaches > 10% (2)	HGVs > 10% (2.3)	1 + (N/10)	Actual width/7.3	<30 (1)	30-35 (1.1)	36-40 (1.2)	41-45 (1.3)	>46 (1.4)	Serves 2 trip-ends i.e. school, shops, leisure, community (1.25)	Serves 3 trip-ends i.e. school, shops, leisure, community (1.4)		Current Status
Locations Removed From the Priority List																	
Great Junction Street	1.651	May-14	1	1	1	1	1.2	2.0	1	1	1	1	1	1	1	3.311	Recommended for removal as locus was upgraded as part of the Foot of The Walk improvements.
Ferry Road between Dudley Avenue and Summerside Place	0.713	Oct-14	1	1.017	1	1	1	1.0	1	1.1	1	1	1	1	1	0.842	Recommended fpor removal as unable to construct any additional facilities due to the existing road layout.
Dalry Road at Dalry Place	0.223	Oct-09	1	1	2	1	1.1	1.6	1	1	1	1	1	1	1.4	1.09	Recommended for removal as a new crossing is being provided as part of the adjacent Tiger housing development.
Locations Which Failed to Meet the Priority List Criteria																	
Abbeyhill at Brand Place	0.05	May-15	1.087	1	1	1	1	1.0	1	1	1	1	1	1	1	0.05	Low score, failed to meet criteria (>0.3)
Newhaven Road at Summerside Place	0.09	May-15	1.096	1	1	1	1	1.0	1	1	1	1	1	1	1	0.12	Low score, failed to meet criteria (>0.3)
Clermiston Road at Cairnmuir Road	0.07	May-15	1.104	1	1	1	1	1.0	1	1	1	1	1	1	1	0.08	Low score, failed to meet criteria (>0.3)
Lanark Road West outside 399-409	0.07	May-15	1.000	1	1	1	1	1.0	1	1	1	1	1	1.25	1	0.09	Low score, failed to meet criteria (>0.3)
Build out at Echline Primary School on Bo'ness Road	0.06	May-15	1.443	1	1	1	1	1.0	1	1	1	1	1	1	1	0.08	Low score, failed to meet criteria (>1) to upgrade existing facilities to a puffin crossing.
Sleigh Drive at Lochend Avenue	0.25	May-15	1.000	1	1	1	1	1.0	1	1	1	1	1	1	1	0.25	Low score, failed to meet criteria (>0.3)
Roseburn Street at Roseburn Place	0.15	May-15	1.000	1	1	1	1	1.0	1	1.1	1	1	1	1	1	0.20	Low score, failed to meet criteria (>0.3)
Russell Road at pedestrian access to Russell Gardens	0.01	May-15	1.000	1	1	1	1	1.0	1	1	1	1	1	1	1	0.01	Low score, failed to meet criteria (>0.3)
Beaverhall Road at Broughton Road	0.02	May-15	1.000	1	1	1	1	1.0	1	1	1	1	1	1	1	0.03	Low score, failed to meet criteria (>0.3)
Broughton Road at Beaverhall Road	0.09	May-15	1.000	1	1	1	1	1.0	1	1	1	1	1	1	1	0.09	Low score, failed to meet criteria (>0.3)
Belford Road west of Belford Bridge	0.32	May-15	1.000	1	1	1	1	1.0	1	1	1	1	1	1	1	0.31	Low score, unsuitable location for islands, failed to meet criteria (>1) to install a puffin crossing.
Dock Street at Coburg Street	0.05	May-15	1.000	1	1	1	1	1.0	1	1	1	1	1	1	1	0.06	Low score, failed to meet criteria (>0.3)
Orchard Road at Comely Bank Roundabout at exisiting island	0.17	May-15	1.078	1	1	1	1	1.0	1	1	1	1	1	1	1	0.20	Low score, failed to meet criteria (>1) to upgrade existing islands to a puffin crossing.
Craigleith Road at Comely Bank Roundabout at existing island	0.35	May-15	1.000	1	1	1	1	2.0	1	1	1	1	1	1	1	0.59	Low score, failed to meet criteria (>1) to upgrade existing islands to a puffin crossing.
Greendykes Road at Niddrie Marischal Place	0.03	May-15	1.000	1	1	1	1	1.0	1	1	1	1	1	1	1	0.03	Low score, failed to meet criteria (>0.3)
Redford Road - West of Old Farm Place at Sheltered Housing	0.02	May-15	1.000	1.052	1	1	1	1.0	1	1	1	1	1	1.25	1	0.03	Low score, failed to meet criteria (>0.3)
Oswald Road/ Oswald Court junction	0.07	Sep-15	1.235	1	1	1	1	1.0	1	1	1	1	1	1	1	0.11	Low score, failed to meet criteria (>0.3)
Crewe Road North at Scotmid	0.11	May-15	1.078	1	1	1	1	1.0	1	1	1	1	1	1	1	0.16	Low score, failed to meet criteria (>0.3)

LOCATION			Children >15% (% plus 100)/115)	Elderly & Disabled >15% (% plus 100)/115)	Buses & coaches > 10% (2)	HGVs > 10% (2.3)	1 + (N/10)	Actual width/7.3	<30 (1)	30-35 (1.1)	36-40 (1.2)	41-45 (1.3)	>46 (1.4)	Serves 2 trip-ends i.e. school, shops, leisure, community (1.25)	Serves 3 trip-ends i.e. school, shops, leisure, community (1.4)		Current Status
Henderson Street at Great Junction Street	0.03	May-15	1.000	1	2	1	1	1.0	1	1	1	1	1	1	1	0.07	Low score, failed to meet criteria (>0.3)
Kilgraston Road at Grange Loan	0.10	May-15	1.043	1	1	1	1	1.0	1	1	1	1	1	1	1	0.10	Low score, failed to meet criteria (>0.3)
Craighall Road North of Craighall Gardens	0.02	May-15	1.000	1	1	1	1	2.0	1	1	1	1	1	1	1	0.03	Low score, failed to meet criteria (>0.3)
Muirhouse Parkway, west of Pennywell Road roundabout	0.10	May-15	1.078	1	1	1	1	1.0	1	1	1	1	1	1	1	0.15	Low score, failed to meet criteria (>0.3)
Greenbank Drive at Steps/Path adjacent to No 30.	0.02	May-15	1.226	1	1	1	1	1.0	1	1	1	1	1	1	1	0.02	Low score, failed to meet criteria (>0.3)
Greenbank Drive - between roundabout and Morningside Grove	0.10	May-15	1.000	1	1	1	1	1.0	1	1	1	1	1	1	1	0.10	Low score, failed to meet criteria (>0.3)
Seafield Road at Seafield Crematorium	0.07	May-15	1.000	1	1	1	1	1.0	1	1	1	1	1	1	1	0.10	Low score, failed to meet criteria (>0.3)
Eyre Place at King George V Park	0.10	May-15	1.000	1	1	1	1	2.0	1	1	1	1	1	1	1	0.16	Low score, failed to meet criteria (>0.3)
Spylaw Road - East of mini roundabout with Gillsland Road	0.06	Nov-15	1.070	1	1	1	1	1.4	1	1	1	1	1	1	1	0.09	Low score, failed to meet criteria (>0.3)
Queensferry Road at Hillpark Steps	0.00	Nov-15	1.000	1	1	1	1	2.0	1	1	1	1.3	1	1	1	0.00	Low score, failed to meet criteria (>0.3)
Gillespie Road West of Spylaw Avenue	0.03	Nov-15	1.000	1	1	1	1	1.0	1	1	1	1	1	1	1	0.03	Low score, failed to meet criteria (>0.3)
Murrayburn Road at Dumbryden Drive (at existing island)	0.26	Nov-15	1.000	1	1	1	1.1	1.2	1	1	1	1	1	1	1	0.42	Low score, failed to meet criteria for upgrade to signallised crossing (<1)
Roseberry Avenue at Lloyds Pharmacy/Arrol Road	0.05	Nov-15	1.330	1	1	1	1	1.0	1	1.1	1	1	1	1.25	1	0.09	Low score, failed to meet criteria (>0.3)
Outside 23 Captains Road at entrance to Gracemount HS	0.07	Nov-15	1.365	1	1	1	1	1.3	1	1.1	1	1	1	1	1.4	0.19	Low score, failed to meet criteria (>0.3)
Lanark Road at Dovecot Park	0.02	Nov-15	1.000	1	1	1	1	2.0	1	1	1	1	1	1	1	0.04	Low score, failed to meet criteria (>0.3)
Cultins Road at Bankhead Avenue	0.05	Nov-15	1.000	1	1	1	1	1.0	1	1	1	1	1	1.25	1	0.16	Low score, failed to meet criteria (>0.3)
Cultins Road at ped access to Hermiston Gait	0.03	Nov-15	1.000	1	1	1	1	1.0	1	1.1	1	1	1	1	1	0.03	Low score, failed to meet criteria (>0.3)
Cultins Road at Calder Road	0.08	Nov-15	1.000	1	1	1	1	1.0	1	1.1	1	1	1	1	1	0.19	Low score, failed to meet criteria (>0.3)
Dumbryden Drive at Junction with Hailesland Road	0.00	Nov-15	1.043	1	2	1	1	1.0	1	1.1	1	1	1	1	1	0.00	Low score, failed to meet criteria (>0.3)
Clovenstone Road at junction with Hailesland Road	0.10	Nov-15	1.078	1	1	1	1	1.0	1	1	1	1	1	1.25	1	0.13	Low score, failed to meet criteria (>0.3)
Clermiston Road North at Drum Brae Drive	0.02	Nov-15	1.061	1	1	1	1	1.0	1	1	1	1	1	1	1	0.03	Low score, failed to meet criteria (>0.3)
Greenbank Crescent at Greenbank Loan	0.0215	Nov-15	1.000	1	1	1	1	1.0	1	1.1	1	1	1	1	1	0.02	Low score, failed to meet criteria (>0.3)

Appendix 3
Construction List and Public Consultations

3.1 Construction List

Location	Locality	Crossing Type	Estimated Construction Cost	Construction Year
Telford Road at Telford Gardens	North West	Signalised Crossing	£40,000.00	2016/17
Ferry Road at Silverknowes Neuk	North West	Refuge Island	£15,000.00	2016/17
East Fettes Avenue at Broughton High School opposite entrance to Inverleith Park (TRO Required)	North West	Refuge Island	£15,000.00	2016/17
South Gyle Crescent, 150m south of junction with Redheughs Avenue	North West	Refuge Island/ Build Out	£15,000.00	2016/17
Ocean Drive - Between exit from BHS and Roundabout	North East	Signalised crossing	£40,000.00	2016/17
South Gyle Broadway at Roundabout	North West	Signalised Crossing	£40,000.00	2016/17
Crewe Road South at Comely Bank Roundabout	North West	Refuge Island Upgrade	£10,000.00	2016/17
London Street at Drummond Place (TRO Required)	South East	Signalised Crossing	£40,000.00	2016/17
Myreside Road at Footbridge (TRO Required)	South East	Refuge Island	£15,000.00	2016/17
Ratcliffe Terrace at South island at BP garage	South East	Refuge Island Upgrade	£10,000.00	2016/17
St Johns Place at Elbe Street	North East	Refuge Island/ Build Out	£15,000.00	2017/18
Marionville Road at Wishaw Terrace	North East	Various Crossing Options to be investigated	£20,000.00	2017/18
Milton Road East at Brunstane Road (existing D)	North East	Island Upgrade	£15,000.00	2017/18
South Gyle Crescent south of roundabout with South Gyle Access at	North West	Refuge Island	£15,000.00	2017/18
West Granton Road to the east of Granton Mains East	North West	Signalised Crossing	£40,000.00	2017/18
Fettes Avenue at Comley Bank Road (existing D island)	North West	Options to be investigated, possible tie in with Local Safety Scheme	£30,000.00	2017/18
Gilmerton Dykes Street at Bus Terminus	South East	Refuge Island	£15,000.00	2017/18
Lasswade Road at Little Learners Nursery (Existing Double D)	South East	Island Upgrade	£15,000.00	2017/18
Gilmerton Dykes Street at Gilmerton Dykes Crescent for access to shops	South East	Refuge Island	£15,000.00	2017/18
Lanark Road West at Stewart Road	South West	Various Crossing Options to be investigated	£30,000.00	2017/18
Restalrig Road at Ryehill Terrace	North East	Various Crossing Options to be investigated	£30,000.00	2018/19
Corbiehill Road at Junction with Main Street	North West	Refuge Island	£15,000.00	2018/19
North West Circus Place at junction with Royal Circus	South East	Various Crossing Options to be investigated	£30,000.00	2018/19
Great King Street (west end towards St Vincent St)	South East	Various Crossing Options to be investigated	£30,000.00	2018/19
Torphichen Street - centred on existing drop crossing near corner.	South East	Various Crossing Options to be investigated	£30,000.00	2018/19
South Bridge at Drummond Street	South East	Signalised Crossing	£40,000.00	2018/19
Corstorphine Road at Kaimes Road (Awaiting Developer Funding)	North West	Signalised Crossing (£25,000 Developer Contribution)	£40,000.00	Dependent on development programme.
Pilrig Street at Cambridge Avenue	North West	Refuge Island/Build Out	£15, 000	Dependant on achieving a locally acceptable solution.

3.2 Telford Road Consultation Responses

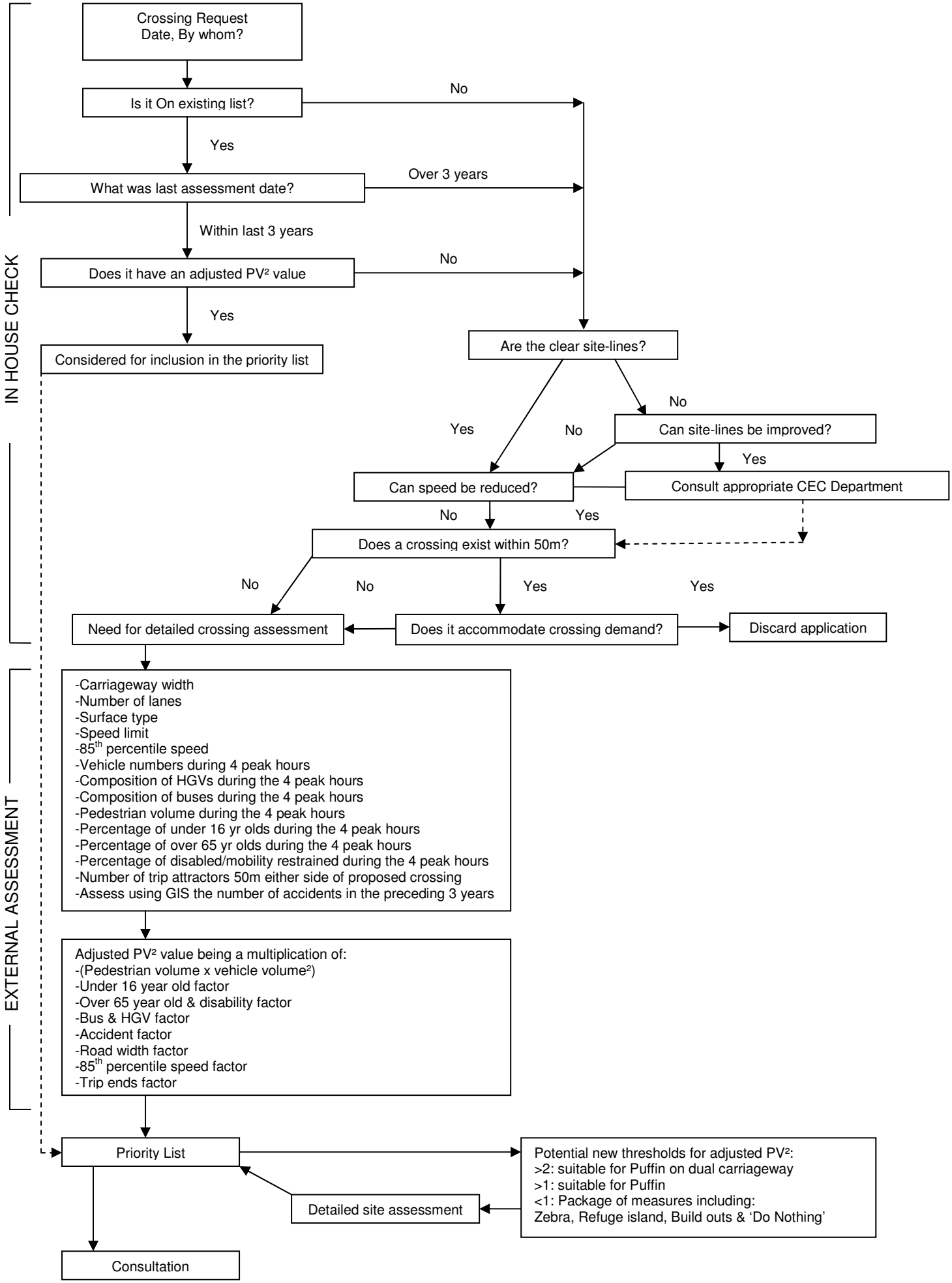
Summary	In Favour	Representation	Comments	Response to Representation
Police Scotland			Concerned about the length of the crossing, is the facility a single or staggered crossing?	Originally planned to be a Puffin, the facility is being put in as a Toucan for use by cyclists to tie into a planned cycle route. As a result a staggered crossing was avoided as this would lead to a pedestrian/cycle conflict and also be difficult for cyclists to negotiate a central island. The length of the crossing will be taken into consideration when the signal timings are prepared and on-crossing detectors will maintain a green phase for pedestrians crossing the full width of the carriageway. The central island was included in the design, following consultation with the traffic signals team, as a means of displaying an offside signal head for the offside lane vehicles rather than providing refuge for pedestrians. Push button units have been provided in the central island for use in any exceptional circumstance.

Local Councillor			Asked why the bus lay-by was being infilled.	It is now policy to provide bus boarding either parallel to the kerb or where there is parking by incorporating bus boarders that protrude out into the carriageway. This keeps the bus in the traffic lane and means it doesn't have difficulties getting back out into the traffic flow. It can also have a speed reduction benefit on the road.
East of Scotland Squash and Racketball Assocsatiuon		Yes	Stated that there is already is a crossing at the entrance to the Western General Hospital. Felt closing bus lay-bys would mean pedestrians have to go further to a stop. Crossing is more needed at Telford Place.	The location was assessed and a pedestriuan crossing was recommended given the measured pedestrian and vehicle flows. The crossing is 130m away for the nearest controlled crossing. Although the bus layby is being in-filled, in accordance with current policy, the bus stops will remain.
Resident	Yes	No		

3.3 Ferry Road at Silverknowes Neuk - Consultation Responses

Summary	In Favour	Representation	Comments	Response to Representation
Muirhouse & Salviston Community Council	Yes	No	None	
Police Scotland	Yes	No	None	
Resident	Yes	No	Great idea as this is a very busy road and there is busy bus stop nearby.	
Resident	Yes	No	Great proposal as this part of the road is very dangerous and this will help to cross safely.	
Resident	Yes	No	Sounds like a great idea as it is near a busy bus stop.	
Resident	Yes	No	Disabled and can only walk slowly, therfore this will be a great help, also will help access to those with buggies and children	
Davidson's Mains and Silverknowes Association	Yes	No	Tress are obscuring street lighting at the locus. Will this proposal effect the proposal for realigning the roundabout.	The Neighbourhood team will be asked to cut back the hedges and trees. A new lighting column will be provided as part of the scheme. There are no plans to realign the roundabout at this time.

Pedestrian Crossing Prioritisation Process 2016/17
Appendix 4 – Pedestrian Crossing Assessment Process



Transport and Environment Committee

10.00am, Tuesday, 7 June 2016

Expansion of Recycling Services in Tenements and Flats

Item number	7.4
Report number	
Executive/routine	Executive
Wards	All

Executive summary

This report describes the two pilots carried out to test new recycling arrangements for areas of high density housing (tenements and flats) and the lessons learned for enhancing communal recycling provision.

However any future roll out of new recycling provision will only take place once the detail of the Scottish Government's Code of Practice on Waste Management has been finalised.

The lessons learned from the pilot schemes are:

- The placement of recycling bins next to landfill bins reduces issues around contamination of recycling;
- The amount of recycling collected is influenced by convenience for residents; and
- Changes in the ratio of landfill to recycling capacity does not correlate in increased dumping.

Links

Coalition pledges	P44, P49, P50
Council priorities	CP8, CP9
Single Outcome Agreement	SO4

EDINBVRGH
THE CITY OF EDINBURGH COUNCIL

Report

Expansion of Recycling Services in Tenements and Flats

Recommendations

It is recommended that Committee:

1.1 notes that the tenement recycling pilots have been successful; and

1.2 notes that a further report will be brought forward in due course with a detailed proposal on enhancing recycling provision, including the mix of materials, for tenements and other flats, once the Council has fully considered the implications of the Scottish Government's Household Recycling Charter.

Background

2.1 Proposals to pilot enhanced recycling services in communal bin areas were approved by Transport and Environment Committee ("Enhancing Communal Recycling Services", 18 March 2014).

2.2 The main aims of the trial, as set out in the original report, were to provide an improved capacity for recycling compared to that for landfill, and to improve the availability of on street glass recycling.

2.3 These pilots have been successfully carried out and a number of lessons learned which will shape future strategy. Whilst they concentrated on areas with on street bin collections, some of the principles (specifically the mix of materials collected for recycling) can be replicated in other areas which use communal bin collections (e.g. flats with off street storage), and can therefore act as a blueprint for the collection of recyclable materials where communal bins are used.

Main report

3.1 The pilots took place in two distinct areas: Hillside and Bellevue, which allowed the testing of approaches using different bin types, as well as proximity to tipping points. These are summarised in Appendix 1.

Pilot 1: Hillside area

3.2 This pilot used existing wheeled bins. There was no change to the landfill bin capacity but the existing paper (blue lid) and packaging banks (green lid) were rebranded as mixed recycling bins, with green lids. These accepted paper and

cardboard (including drinks cartons); plastic bottles, pots, tubs and trays; and steel and aluminium cans, tins, aerosols and trays. This is the same mix of materials used in areas of the city which receive the new kerbside collection service.

3.3 The existing fortnightly blue box glass collection was replaced with on-street glass bins with purple lids (again used elsewhere in the city). These were sited alongside other communal bins, and were designed to be more convenient so that householders did not have to store glass between collections. This is the same principle applied to other waste collections from flats.

3.4 The results of this pilot are set out in Appendix 1: Collection crews measured how many glass boxes were presented before the pilot and an average weight was applied to these (provided by the collection contractor). A similar study was carried out by the glass collection contractor on the glass bins to assess how full each bin was on collection days (and therefore the weight).

3.5 On average it was estimated that glass collection in this area increased from 1166 kg per fortnight to 3692 kg (approximately 300%). However this assumes that each glass collection box was full - in reality this would not be the case, and therefore the improvement can be assumed to be greater.

Pilot 2: Bellevue/ Broughton Area

3.6 This pilot used the larger side loading bins to collect landfill, and for the first time mixed recycling. The overall capacity for waste remained the same, but the capacity for recycling increased. A capacity of approximately 30% recycling to 70% landfill was provided for the trial.

3.7 The same mix of materials was collected in the mixed recycling as in Pilot 1, and replaced an existing blue and red box kerbside collection system. Three glass banks were sited in the pilot area.

3.8 A similar methodology as that undertaken in Pilot 1 was carried out to assess weight of recyclable materials before and after the changes. This suggested that over a two week period the old box collection diverted 1519 kg of mixed materials from landfill.

3.9 The mixed recycling bins collected an estimated 1051 kg per week (i.e. 2102 kg over two weeks). This represents an increase of 583 kg (38%) through using communal bins instead of the kerbside box collection. Once again it should be noted that this would represent the minimum improvement as in reality the boxes would not all be full.

Challenges and barriers

3.10 While the pilots were designed to test different approaches to improving recycling services in tenement areas, the limits of the pilots should be noted.

3.11 In particular because the pilots covered approximately 2200 households it was not possible to use dedicated collection rounds which would have been

desirable from the point of view of data gathering. However this was overcome by using the methodology outlined in Appendix 1.

3.12 While no operational issues were reported in the Hillside pilot, two issues arose of collection crews in Bellevue collecting the recycling bins at the same time as the landfill. On one occasion this was managed as a crew training issue, while the other was due to a vehicle breakdown. Nevertheless this is unacceptable but would not be expected to occur in a situation where recycling was routinely being collected in this type of bin. Rolling out the communal recycling scheme would allow the service to dedicate a side loading vehicle to this stream of recycling.

Contamination /bin types/recycling lids

3.13 Waste Services' experience is that where recycling bin lids are broken the materials are more prone to contamination by black bags, etc, and it is important to mitigate this by ensuring damaged bins are swiftly repaired.

3.14 The size of the aperture used on the recycling bins in the Bellevue pilot was wider than would normally be the case- sufficient to allow for a black bag of general waste to be deposited. Although there were some instances of contamination recorded in bins it was of a level that would be considered to be manageable by recycling processors.

3.15 Nevertheless on a wider scale this would represent an unacceptable risk to the integrity of the recycling service and therefore side loading bins will only be used where the bin lids can be adapted to keep contamination of the recycling to a minimum.

Outcomes and principles

3.16 While the two pilots achieved their objectives of increasing recycling and testing different approaches, it should be noted that neither can be applied in a blanket approach across the relevant parts of the city.

3.17 In particular the existing road layouts, number of bins in place already and other streetscape issues would mitigate against a blanket approach. Nevertheless the principles to be used have been developed as follows:

- Both types of bin will continue to be used at on street locations but in some locations recycling may be collected in side loading bins to increase the capacity required, provided that the issues around the lids can be resolved (and that the bins can be specified with a suitable recycling lid);
- Paper and packaging will be merged into a single stream in line with the pilots and as collected in kerbside collection areas (i.e. collecting paper, card, cans and tins, plastic bottles, pots, tubs and trays) subject to the Household Recycling Charter;
- Glass and food will also be collected using on street bins; and

- Where possible the existing number of bins on any one street will remain. The ratio of recycling and landfill bins will however change. Waste Services will seek to increase the mixed recycling capacity to a minimum of 30% of the total capacity provided in the first instance, with the ultimate aim of increasing this to no less than 40% of the total capacity if it can be shown that this will not adversely affect the amenity of the surrounding area. Glass and food bins will be provided in addition to this.

Code of Practice

3.18 The Scottish Government has recently worked with Zero Waste Scotland and CoSLA to develop a Household Recycling Charter and associated Code of Practice. This is a wide ranging project but one element has significant implications for the Council's approach to recycling in flats (and elsewhere in the city).

3.19 One element of the Code deals with the range of materials which are collected for recycling, and the extent to which these are separate from each other.

3.20 At present the Code envisages that paper and cardboard will be collected separately from cans, plastics and drinks cartons (e.g. Tetrapak type containers), which is contrary to the approach adopted in these trials.

3.21 This runs contrary to most existing Scottish (and UK collections) and it is not clear at this point whether this element will change in the coming months.

3.22 In effect the Government's strategy would instead require a realignment of the current paper/ mixed packaging (card, cans, Tetrapak type containers, plastics) split, into paper and card/ mixed food and drinks containers (cans, plastics and Tetrapak type).

3.23 Adopting the Charter, and therefore the Code of Practice, is voluntary but would represent a commitment to introducing the type of services outlined above. A separate report will be brought before Committee to consider whether the Council becomes a signatory.

Measures of success

4.1 The roll out of an enhanced recycling service will be deemed successful if it results in an increase in waste recycled, and delivers a high level of customer satisfaction with the recycling and waste collections offered.

4.2 A survey is currently being designed for those residents within the pilot areas.

4.3 As outlined within the report the amount of recycling collected during the trial increased significantly from the baseline.

Financial impact

5.1 Diversion of waste from landfill will result in a reduction in waste disposal costs. The audit of communal bin provision in 2015/16 cost approximately £48,000 and was met from external funding secured from Zero Waste Scotland. A further application will be made for funding to complete the roll out in 2016/17.

5.2 Waste Services is currently tendering the mixed recycling contract, but a conservative estimate is that each ton diverted from landfill would save in the region of £50-60 per ton, with greater savings still from diverting glass from landfill to recycling.

5.3 In terms of funding the Capital element of this project, an Outline Business Case has been submitted to the Council's Asset Investment Group for consideration. Talks are also ongoing with Zero Waste Scotland regarding funding arrangements.

Risk, policy, compliance and governance impact

6.1 The roll out of an enhanced recycling service will allow the Council to comply with the Waste (Scotland) Regulations in particular with the provision of facilities for the collection of glass and plastics (the new service will collect a wider range of materials than the existing service).

6.2 The implementation of a mixed recycling system, as per the trials, would be contrary to the Scottish Government's Household Recycling Charter.

Equalities impact

7.1 The Public Sector Equality Duty (PSED) general duties will be accommodated through the provision of a service which is easier to use, and by enhancing the access to recycling facilities in areas which use communal bins.

Sustainability impact

8.1 The provisions of the Climate Change (Scotland) Act 2009, and the Waste (Scotland) Regulations 2013 will be met in the following ways:

- The provision of an enhanced recycling service will divert additional waste from landfill, reducing the carbon impact of managing this waste;
- In particular, residents in flats will receive enhanced services for the recycling of mixed plastics and glass; and
- The diversion of waste from landfill will ultimately provide wider environmental, social and economic benefits and so contribute to sustainable development.

Consultation and engagement

9.1 Waste Services are working with Strategy and Insight to design and run a customer experience survey in the trial areas. The results of the survey will be included part of the further report on enhancing recycling provision in tenemental areas.

9.2 As with the roll out of the new service in kerbside areas, the implementation of enhanced recycling for flats and tenements would be accompanied by a programme of customer engagement and clear communication.

Background reading/external references

None

Paul Lawrence

Executive Director of Place

Contact: Campbell Clark, Project Officer

E-mail: campbell.clark@edinburgh.gov.uk | Tel: 0131 469 5384

Links

Coalition pledges	P44 Prioritise keeping our streets clean and attractive. P49 Continue to increase recycling levels across the City and reducing the proportion of waste going to landfill. P50 Meet greenhouse gas targets including the national target of 42% by 2020.
Council outcomes	CP8 – A vibrant, sustainable local economy CP9 – An attractive city
Single Outcome Agreement	SO4 Edinburgh's communities are safer and have improved physical and social fabric.
Appendices	Appendix 1: Summary of Pilots and Outcomes.

Appendix 1: Summary of Pilots and Outcomes

Hillside Pilot	Bellevue Pilot
• No change to landfill capacity • Existing wheeled paper and packaging bins combined into single stream mixed recycling bin, on street • Communal glass bins sited on street to replace blue box glass only collection withdrawn. • Existing on street food collection	• Rebalance capacity (70% landfill, 30% mixed recycling) • Side loading static bins used for both landfill and mixed recycling on street • Existing blue and red box (mixed materials) kerbside recycling collection withdrawn • Communal bins sited on street to collect glass

Hillside Pilot: Replacement of blue box glass collection with on street communal glass banks, general waste collected in existing communal wheeled bins.

Prior to commencement of the pilot a set out study was carried out on the flatted properties to assess the number of boxes presented on the collection day.

An average weight was allocated to each box (11Kg), as provided by our contractor. Each box was deemed to be full. The set out number and weight collected are as follows:

Date	Properties Surveyed	Blue Box Presented	Estimated Weight (11Kg per box)
15/01/2015	1519	109	1199
29/01/2015	1519	103	1133

After installation of the glass banks, the extent to which the banks were filled was monitored on the day of collection by our contractor and a weight allocated to each bank. The average total weight of the glass banks collected was 1846Kg per week.

Collection Method	Weight (Kg)
Blue box collection per fortnight (averaged)	1166
Glass bank collection per fortnight (average)	3692

This would indicate an increase of 2500 Kg of glass collected over a fortnightly period.

Bellevue Pilot: Replacement of blue and red box mixed material collection with on street communal dry mixed recycling banks, using side loading bins for both landfill waste and dry mixed recycling. Glass collected in communal bins.

A set out study was carried out on the flatted properties and an average weight allocated to each box (blue box 11Kg & red box 4Kg), as provided by our contractor. Each box was deemed to be full.

Date	Properties Surveyed	Blue Box Presented	Blue Box weight (11Kg)	Red Box Presented	Red Box Weight (4Kg)
06/01/2015	613	105	1155		
13/01/2015	613			91	364

The total weight collected from the recycling box collection over the fortnight was 1519Kg.

The Dry Mixed recycling banks were installed and weight data was provided from the weighbridge at Powderhall Transfer Station.

The average weight per weekly collection from the Dry Mixed recycling banks in the pilot area was 1051Kg. (2102 kg per fortnight).

This would indicate an increase of 583Kg collected per fortnight in the Dry mixed recycling banks in comparison with the recycling box service, with glass collected in addition to this.

Transport and Environment Committee

10am Tuesday 7 June 2016

Edinburgh Playing Out

Item Number	7.5
Report number	
Executive/routine	Executive
Wards	All

Executive Summary

This report is a follow up to the Playing Out report presented to the Corporate Policy and Strategy Committee on Tuesday 12 April 2016. The recommendations of the aforementioned report highlighted the need for a protocol to be developed and guidelines written for residents to apply for permission to hold an event under the Council's new Playing Out policy, to be agreed by the Transport and Environment Committee.

Links

Coalition Pledges	P33
Council Priorities	CP1, CP2, CP4
Single Outcome Agreement	SO2, SO3, SO4

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Report

Playing Out

1. Recommendations

1.1 It is recommended that the Committee:

1.1.1 notes the recommendations of the Corporate Policy and Strategy Committee report of Tuesday 12 April 2016;

1.1.2 approves the implementation of a one year pilot project; and

1.1.3 approves the public consultation, application and cost recovery procedure.

2. Background

2.1 The Corporate Policy and Strategy Committee on 12 April 2016 approved the recommendation to develop guidance for residents wishing to organise Playing Out events and develop a set of procedures for hosting such an event.

3. Main report

3.1 The Planning and Transport Division will draw up a pilot arrangement, for a period of one year, to assist local communities, city wide, who wish to hold 'Playing Out' activities in residential streets.

3.2 The pilot arrangement will start at the beginning of the 2016 school summer holiday period for a duration of four months.

3.3 Following completion of the pilot period the findings will be reported back to the Transport and Environment Committee.

Procedures

3.4 Only non-traffic sensitive streets of a residential nature will be considered as part of the scheme. Permission for the closure will be agreed through the Locality Teams who will have local knowledge of any other events in the surrounding area which may have a direct impact.

3.5 The applicant is required to seek the agreement of all affected residents and be able to demonstrate, to the Council, a supporting majority of not less than 70% in support of the proposed event.

3.6 Ideally a Temporary Traffic Regulation Order (TTRO) under the Road Traffic Regulation Act would be promoted for a number of streets over a period of months. This would limit the amount of work in raising Street Notices for each application and be more cost effective, with costs split proportionally across all applications.

Example:

Option 1 - A Day Notice would currently incur a cost of £410 (Exc VAT).

Option 2 - An advertised TTRO would incur a cost of £550 (Exc VAT) + the cost of the advert - typically around £500 say.

If we had, say, 10 communities with 10 streets advertised under one advert in Option 2 this would equate to £100 each for the whole pilot period and allow a number of events to take place in that time.

By raising a Day Notice under Option 1 the cost to the organiser would be £410 for each and every event.

3.7 The applicant will be responsible for erecting Street Notices or information signs to inform residents of any approved closure.

3.8 The organiser will be responsible for storing equipment locally and will be responsible for implementing and removing the closure.

3.9 The Council can provide, at a cost, the signage required and provide the organisers with details of barrier suppliers.

3.10 Emergency and pedestrian access must be maintained at all times.

3.11 Given the unknown numbers of potential closures, communities will be given their first event free of charge, after which cost recovery will be sought for any additional events.

4. Measures of success

4.1 Development of a procedure which minimises staff time and costs associated in promoting the TTRO.

4.2 Increase in the number of Playing Out events across the city.

5. Financial impact

5.1 Staff time costs will be incurred during the development of the procedures.

5.2 Staff time will be incurred in promoting the necessary TTRO.

6. Risk, policy, compliance and governance impact

6.1 There is a risk that the equipment is not set out by parents in accordance with Council instructions. This would result in the road not being correctly closed in terms of the Road Scotland Act 1984.

7. Equalities impact

7.1 The rights of the child will be enhanced by improving children's right to play (UNCRC article 31), including children with disabilities.

8. Sustainability impact

8.1 There is no adverse economic, social and environmental impact arising from this report.

8.2 The proposals in this report will reduce carbon emissions locally for the duration of any road closure, reducing children's exposure to emissions from road vehicles whilst playing outside.

9. Consultation and engagement

9.1 Consultation and agreement will be carried out by residents within each community as part of the Playing Out process as laid down in the guidelines.

10. Background reading/external references

10.1 Playing Out report to the Corporate Policy and Strategy Committee of 12 April 2016.

Paul Lawrence

Executive Director of Place

Contact: Scott Findlay, Senior Works Officer

E-mail: scott.findlay@edinburgh.gov.uk | Tel: 0131 529 3433

11. Links

Coalition Pledges	P33 – Strengthen Neighbourhood Partnerships and further involve local people in decisions on how Council resources are used.
Council Priorities	CP1 – Children and young people fulfil their potential. CP2 – Improved health and wellbeing: reduced inequalities. CP4 – Safe and empowered communities.
Single Outcome Agreement	SO2 – Edinburgh's citizens experience improved health and wellbeing, with reduced inequalities in health. SO3 – Edinburgh's children and young people enjoy their childhood and fulfil their potential. SO4 – Edinburgh's communities are safer and have improved physical and social fabric.
Appendices	None

Transport and Environment Committee

10.00am, Tuesday, 7 June 2016

Public Spaces Protocol - update on progress

Item number	7.6
Report number	
Executive/routine	
Wards	11

Executive Summary

At its meeting of 2 June 2015, Transport and Environment Committee agreed that the development of a 'manifesto' on the use of public spaces should commence, in order to provide a clear policy statement that provides a basis for the balanced use of the city centre's civic spaces. The manifesto is now referred to as the Public Spaces Protocol (PSP).

Work on the development of the protocol has now commenced, and includes a wide ranging consultation and listening exercise, which began in May 2016. Consistent with the work programme outlined to Committee last June, the development of the protocol also includes the trialling of distinct interim management arrangements in key spaces, in order to test the effectiveness of a more prescriptive approach to the use and management of public spaces.

To facilitate the implementation of the Protocol, a revised application and approval process is also required, and this is under development.

This report seeks to update Committee on the work underway to deliver a Protocol for Public Spaces in the City Centre, and the timetable for completion this calendar year.

Links

Coalition Pledges	P24, P28, P31
Council Priorities	CP6, CP8, CP9
Single Outcome Agreement	SO1, SO4

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Report

Public Spaces Protocol - update on progress

1. Recommendations

1.1 It is recommended that the committee:

1.1.1 Notes progress to date in developing a PSP.

1.1.2 Agrees to the consultation approach and overall timetable for the development of the PSP.

1.1.3 To discharge the motion from Councillor Mowat at the meeting of the City of Edinburgh Council on 4 February 2016.

1.1.4 To refer the report to Regulatory Committee for information.

2. Background

2.1 A report to Transport and Environment Committee on 2 June 2015 set out the rationale for the development of a manifesto, or protocol, for the use of public spaces Edinburgh's city centre. This followed an internal review of events governance within the Council, completed in January 2014, which noted the requirement for the development of a clear policy statement on how civic spaces in the City Centre are used. This is required to help achieve a balance of use and bring a greater transparency to decisions about events that are held in the city. The Committee approved the recommendations including the submission of a further report on the outcome of a public consultation and trail of management arrangements for Castle Street, in the autumn of 2016. (The full decisions in relation to this report are provided at Appendix 4.)

2.2 An initial series of discussions in 2015 sought to engage with key stakeholders on the proposed outline for the development of a PSP. This process identified unanimous agreement on the need to develop a protocol for all public spaces, including those owned by the Council and other organisations or individuals, with specific arrangements for key sites where the diverse needs of users groups require to be carefully balanced. Similarly, strong unanimous support was also noted for a protocol which can offer greater clarity for the Council, event applicants, neighbouring residents and businesses on appropriate event types, frequency, and preferred uses. Stakeholders pointed out that in the absence of a single policy statement the Council lacked a mechanism to address situations of over use, or monopolising of the space for a single use, or under use.

2.3 At its meeting of 4 February 2016, in considering a motion by Councillor Mowat, Council noted the production of a Public Space ‘Manifesto’, or Protocol, was currently in preparation, and noted that in relation to the Grassmarket, this would attempt to include management of several factors including those that create unwelcome noise. In the meantime, Council asked officers to put in place arrangements in the Grassmarket, taking account of the above issues, for the summer festivals 2016. The full decisions taken at Council in relation to the motion are also provided for reference at Appendix 4.

3. Main report

3.1 A PSP is currently being developed, which will set out how a range of spaces in the city are used, and the guiding principles for their use. The PSP is required as currently, there are a number of discrete ways in which events, occupations or uses of public space can be arranged, and these approaches don't currently offer a coherent assessment of how each space individually, or all spaces together, are being used. The PSP will itself bring a measure of coherence, however behind that, a revised application and approval process is to be developed, to help the Council take a more proactive role in the use of our public spaces.

3.2 The PSP will bring clarity to a complex set of considerations for all public spaces, with specific guidance for several key spaces. As a central reference, it will help to set out the balance of needs for a very wide range of uses of space, and users of space (stakeholders). For example, consideration must be given to Edinburgh's status as a renowned Festival City and World Heritage Site destination for visitors without excluding the needs of residents to enjoy a high quality of life, of established local businesses that are active all year round, seasonal traders and events promoters.

3.3 The PSP must be applicable to a vast range of 'events' (defined as short term or one off activities, including licensed and unlicensed activities) and seek to set standards that guide decisions on the use of 'the right events, in the right place, at the right time', whilst providing for flexibility to respond to the city's evolving context.

3.4 Within the City Centre, a large number of areas can be described as public space. The majority of these are Council owned, or in some form of public ownership. Many can easily accommodate civic uses such as newspaper stands, or licensed market stalls, however fewer of them are of a size to be suited to larger scale events, festivals or one-off activities like sporting events, rallies, races, cultural experiences or live entertainment.

3.5 Those public spaces which will be covered by the proposed scope of the PSP, included at Appendix 2, have been the subject of an in depth study. All information on the specific physical properties of each the sites and their surroundings and characteristics has been collated by officers across a wide range of service areas.

Consultation

3.6 A desk top review of all recent and relevant exercises was carried out in April 2016, in order to remove the need for unnecessary duplication. This was supported by a review of relevant trends in citizen perceptions gathered from Edinburgh People Survey results since 2010. These early actions have helped to provide a quantitative and thematic understanding of issues identified prior to the current consultation process, and have led to a more nuanced consultation approach.

3.7 A carefully structured consultation exercise, using a combination of methodologies commenced in May 2016. The methodologies include focus group research with key stakeholder groupings, wider survey work and specific localised research for some key sites, to help elicit informed and creative thinking around the use of City Centre spaces. An Equalities and Rights Impact Assessment will be used to ensure the consultation process is robust and is inclusive of all relevant stakeholder input. Survey questions have been developed to ensure they extract informative views that can be gathered and analysed, in a way that will help inform the Public Spaces protocol. The consultation timetable for the Public Spaces protocol is outlined in Appendix 1, and will expected to be fully complete on 6 September 2016.

3.8 While the consultation on the public spaces protocol is taking place a number of practical approaches to the management of three high profile public spaces are being taken forward on a trial basis. The outcome of these trials will help inform the development of the PSP and will be included in the report to this Committee later this year.

George Street Summer 2016

3.9 This year, in April, the Council developed a trial approach to dealing with and assessing proposals for significant or large scale summer festival related events, seeking to occupy parts of the road space in George Street.

3.10 George Street's potential to be utilised as a civic space has been rigorously explored in the past two years through an Experimental Traffic Regulation Order (ETRO) process and place-making investigations. These experiments have shown the street's potential for more flexible use, and for the creation of a more pedestrian and cycle friendly street environment. The findings of these exercises, carried out for the Council by Ironside Farrar, are being reported separately to this same committee meeting. They indicate strong local stakeholder support for a flexible civic space, which can adapt to seasonal changes in use or activity and can address the changing needs of an evolving City Centre.

3.11 The George Street Summer 2016 trial approach comprises the use of a set of criteria, developed with input from a range of Council services, to assess the proposals put forward by event organisers and support the decision making process. The criteria are based on evaluation and feedback on the operation of George Street during the last two years' summer festival periods, and are included for information in Appendix 3. A small panel of Council officers across relevant

service areas was identified to carry out a thorough assessment of the content prior to recommending conditional occupation of the road for cultural events.

3.12 Whilst this year's trial criteria and assessment approach are primarily designed to help deliver clearer and more transparent decision-making in the interim period ahead of the PSP being finalised, they have also served to provide event promoters with a clearer understanding of what kind of uses are appropriate and welcome in the street during summer, and this has led to the cultural content of several proposals being refined as well as more tangible management changes being made.

3.13 A full evaluation of trial approach will be carried out in September, and will involve assessment panel members, senior Council officers, including Culture & Events officers, event promoters and local stakeholders. The results of the evaluation will be incorporated into the final report on the Public Spaces Protocol that will be presented to this Committee in the autumn of this year.

Grassmarket summer plans

3.14 In May this year, in response to the need for a more formalised approach to managing events taking place in the Grassmarket, the Council developed a very distinct set of trial summer arrangements. These seek to coordinate a wide range of controls and measures delivered by public sector services in partnership with the local Greater Grassmarket Business Improvement District (BID) team.

3.15 The Grassmarket is a unique public space within the city, with a narrow, historic 'market square' layout. A range of activities and street life reflect the immediate combination of residents, retail, hotels, hostel and short term accommodation, pubs, restaurants, shops and offices. A busy road runs through the Grassmarket, alongside a public space/piazza style area. The Greater Grassmarket BID is established to help drive up day time footfall to local business.

3.16 Grassmarket's public space area was completed in 2008, effectively transforming an area dominated by bus routes and car parking into a civic space for activities. In the year immediately following the completion of the public realm area, a management company was in place, to demonstrate the value of a managed approach to events in securing a vibrant and well used space. In more recent years, a combination of ad hoc bookings for licensed events such as markets, Council run events and BID events (run through a part-week public entertainment licence) have led to a less clear management picture. In addition, a range of informal activities such as busking are a feature of the area during summer. Whilst not all scheduled or even informal activities that take place in the area impact upon residential life, there is an acknowledgement that the cumulative impact of the many uses of the Grassmarket public space has gradually led to significant concern with a number of residents about quality of life.

3.17 The need to put in place some measures for the management of the public event space, to balance the needs of its users, and leads into the development of the PSP was identified at Council on 4 February 2016. Ahead of the 2016 summer

festivals period, trial arrangements have been outlined, which involve the Council, Police Scotland and the BID, to:

3.17.1 Provide better information on requirements for booking of events space;

3.17.2 Improve event booking processes;

3.17.3 Repair events infrastructure (power supply towers);

3.17.4 Seek ways to manage event related noise;

3.17.5 Implement more careful management of busking behaviours; and

3.17.6 Improve resident notification and communication.

3.18 The proposals cover a diverse range of service areas and seek to deliver a more coherent approach to managing activity in the area, agreed and delivered in partnership by all relevant stakeholders.

3.19 Careful evaluation of the trial arrangements in the Grassmarket will be carried out in September 2016, to determine the effectiveness of the approach, and the outcomes will help to inform the development of the PSParrangements for the Grassmarket. The evaluation approach will utilise broad stakeholder input as the trial arrangements seek to balance the opportunities that the Grassmarket provides for Edinburgh as a unique location for civic life and activity, with the need to preserve the 'liveability' of Grassmarket as a residential area.

Castle Street

3.20 In May 2016, work commenced on reviewing uses of the public realm area created in Castle Street. This work-stream is a carefully managed process of initially engaging local businesses and neighbouring residents to design a standard for more active use of the space, prior to reviewing the current licensing policy for the street by August 2016.

3.21 Castle Street is an example of a public space created through significant investment in public realm improvements, with a pedestrian friendly layout and use of high quality materials. However, the resulting remodelled space has been under used for the civic activities originally envisaged and is currently often used for opportunistic vehicle parking. Since its creation, the civic space on Castle Street has been used for predominantly street trading purposes. Issues surrounding the operational management of markets in 2010 resulted in the Council receiving a number of concerns from neighbouring businesses and residents. As a result, local consultation was carried out, the results of which were reported to Regulatory Committee at its meeting on 8 September 2014. This consultation highlighted some support for markets within the Castle Street area but that greater control over them was required. The consultation also highlighted areas of both general agreement and areas where a consensus could not be reached.

3.22 The current and undesirable use of the space as an informal parking area, and its under use as a successful public realm area reflect that there is now a pressing need to finally create a strong and successful space of the type originally aspired to.

3.23 The current work stream is required in order to revisit and evaluate current views on the use of the street with the intention to produce clarity on the purpose, acceptable uses and management arrangements for the area. Initial consultation will consist of a questionnaire for local stakeholders produced in conjunction with the Licensing section, and the approach for Castle Street will improve the customer journey by helping to inform a revised process for applications, and management of space, and directly feed into the protocol for public spaces.

Revised application and approval process

3.24 A review of current practices within the Council has identified four key pathways and processes which can be utilised for agreeing various uses of public space. An internal review of the various processes leading to booking of public space is planned, to ensure a more streamlined approach, which will help officers to manage the booking of public spaces. This process will sit alongside the consultation process and review of trial arrangements this summer.

4. Measures of success

4.1 Trial arrangements for George Street and Grassmarket will be fully evaluated to test the extent to which they have delivered an improvement or otherwise on previous arrangements. The evaluation will include criteria for identifying what progress has been made, if the desired outcomes of the trials were achieved, how practical the trial approaches have been to deliver, and whether the trials have improved the experience of external users and staff. Outcomes of the evaluation will be incorporated into the PSP.

4.2 A PSP will be produced, informed by the consultation and trial arrangements, and reported to Committee in late 2016.

5. Financial impact

5.1 The costs associated with the consultation approach outlined in Appendix 1 contained within the discrete budget for the City Centre Programme.

6. Risk, policy, compliance and governance impact

6.1 Overall, the development of a PSP seeks to help minimise financial and reputational risks to the Council. However as this is a high profile piece of work, involving trial arrangements in public spaces with a history of well publicised issues, there is an inherent risk to the Council's reputation throughout the process developing the Protocol. Also, the PSP has wide policy and operational implications across many Council service areas. For these reasons a specific risk register has been produced for the development of the PSP , which is regularly updated.

7. Equalities impact

7.1 An ERIA has been developed for this piece of policy work, and will be utilised, updated and referred to throughout the process of developing the PSP for Public Spaces. When, following consultation, the PSP is produced and reported to committee, any impacts, direct or otherwise, on any group of people with one or more protected characteristic, will be reported.

8. Sustainability impact

8.1 It is envisaged that the PSP will help the city to ensure its high quality environment and built and natural heritage are well cared for. It is expected that the PSP may also promote efforts to support and encourage use of the public transport network.

9. Consultation and engagement

9.1 In developing the PSP to date, ongoing dialogue and engagement with Grassmarket residents and BID have identified key issues and helped to inform thinking around the Grassmarket summer trial arrangements.

9.2 Engagement has been carried out via Essential Edinburgh and the George Street Traders Association to ensure there is a good degree of awareness of the trial arrangements in place for summer 2016 in George Street. The development of criteria for assessing proposals for the use of George Street this summer has involved consultation with the Conveners and Vice Conveners of Transport and Environment, Regulatory, Licensing Sub and Culture and Sport Committees, and the Councillors for ward 11 (City Centre).

9.3 A consultation process will be central to the development of the PSP and a number of key stakeholders have been made aware that the development is underway.

10. Background reading/external references

10.1 City Centre Public Spaces Manifesto Update (Report, 2 June 2015)

10.2 Licensing Policy Development – Street Trading – Castle Street (Report, 8 September 2014)

Paul Lawrence

Executive Director of Place

Contact: Anna Herriman, City Centre Programme Manager (acting)

E-mail: anna.herriman@edinburgh.gov.uk | Tel: 0131 469 3853

11. Links

Coalition Pledges	P24 Maintain and embrace support for our world-famous festivals and events P28 Further strengthen our links with the business community by developing and implementing strategies to promote and protect the economic well being of the city P31 Maintain our City's reputation as the cultural capital of the world by continuing to support and invest in our cultural infrastructure
Council Priorities	CP6 A creative, cultural capital CP8 A vibrant, sustainable local economy CP9 An attractive city
Single Outcome Agreement	SO1 Edinburgh's economy delivers increased investment, jobs and opportunities for all SO4 Edinburgh's communities are safer and have improved physical and social fabric
Appendices	1. Public Spaces Protocol - consultation plan outline 2. Public Spaces Protocol - list of public spaces identified as requiring guidelines for use 3. George Street Summer 2016 Guidelines 4. Previous Committee and Council decisions relating to the development of a Public Spaces Protocol

Appendix 1

Public Spaces Protocol - Consultation Plan outline

Methodology / process	Purpose	Target groups	Timescale
Desktop review of previous consultation	To identify key themes and issues identified in previous consultations which will help inform PSP consultation themes	To cover Edinburgh People's Survey, City Centre Vision, etc	May 2016
Focus Group research	To allow for in-depth exploration of aspirations for public spaces with various user groups / stakeholders of public space and help refine questions for survey.	Stakeholder groups from a range of sectors / industries including Heritage, Culture / Festival, Tourism, Business and Transport Local Representative or advocacy groups	June 2016
Joint consultation	To work alongside concurrent Planning consultation processes (Open Spaces Strategy and Public Realm Strategy) where these intersect with City Centre public spaces	General public Local representative groups	May – July 2016
Questionnaire and survey	To allow wider public input into the key consultation themes for the use of public spaces	General public	July 2016 to early September 2016

Local Stakeholder groups	To test specific ideas for individual spaces	Groups of interest (equalities groups, access panel, transport forum,) Local groups including, but not exclusively, Community Councils, Residents Groups City Centre Neighbourhood Partnership	Mid July to early September 2016
Desktop review of previous consultation	To identify key themes and issues identified in previous consultations which will help inform PSP consultation themes	To cover Edinburgh People's Survey, City Centre Vision, etc	May 2016
Focus Group research	To allow for in-depth exploration of aspirations for public spaces with various user groups / stakeholders of public space and help refine questions for survey.	Stakeholder groups from a range of sectors / industries including Heritage, Culture / Festival, Tourism, Business and Transport Local Representative or advocacy groups	June 2016
Joint consultation	To work alongside concurrent Planning consultation processes (Open Spaces Strategy and Public Realm Strategy) where these intersect with City Centre public spaces	General public Local representative groups	May – July 2016
Questionnaire	To allow wider public input into the key	General public	July 2016 to early

and survey	consultation themes for the use of public spaces		September 2016
Local Stakeholder groups	To test specific ideas for individual spaces	Groups of interest (equalities groups, access panel, transport forum,) Local groups including, but not exclusively, Community Councils, Residents Groups City Centre Neighbourhood Partnership	Mid July to early September 2016

Appendix 2

Public Spaces Protocol – Spaces identified as requiring further guidelines on use

Public Space in Scope of Protocol currently	**Ownership**	**Current uses (illustrative only)**
Grassmarket public events space	CEC	Market operators Events Tables and Chairs areas Marches and parades Promotional activity Festival related Public Entertainment
St Andrews Square Gardens	Private, CEC lease	Seasonal licensed events Market operators Licensed bars Council sponsored projects Concerts Festival related Public Entertainment
Festival Square	Private and public	Licensed events Screenings Market operators Licensed bars Council sponsored projects Concerts Festival related
St Mary's Cathedral front		Market operators Street trading
West Parliament Square	CEC	Seasonal events Market operators Public Entertainment

		Festival related
Wellington Statue	CEC	Street trading Unlicensed presence, e.g. newspaper stands, armed forces promotions Promotional activity
Mount precinct and Playfair steps	CEC	Council sponsored projects Market operators Festival related Licensed bars Public Entertainment
Castle Street	CEC	Market operators (Licensing conditions apply) armed forces promotions Promotional activity
Princes Street	CEC	Council promoted seasonal events Promotional activity Marches and parades (Jazz Festival)
Chambers Street	CEC	Council promoted events
George Street	CEC	Seasonal events Licensed bars (seasonal) Public Entertainment
High Street	CEC	Street Trading Seasonal events Marches and parades Promotional activity Public Entertainment
Hunter Square	CEC	Temporary Street Trading Council sponsored projects Market operators Festival related Public Entertainment

Hope Street	CEC	Public Art
Shandwick	CEC	Tables and Chairs
Castle Terrace (excluding car park area)	CEC	Market operators

Appendix 3

PLACE DIRECTORATE - CITY OF EDINBURGH COUNCIL

George Street: Guidelines for street occupation - summer 2016

Thank you for your interest in promoting an event during the 2016 summer festival period in George Street.

To help bring the cultural and economic benefits of its summer festivals into the New Town area without detriment to the quality of the area, this year the Council will consider events within the three western-most block sections of George Street only. (These areas can accommodate some form of temporary closure without significant disruption to travel in the city centre).

The Council is developing a protocol for the use of key public spaces in the city centre. In preparation for this, in 2016 we will use a simple process to assess and decide upon proposals that can go forward for the necessary permissions, permits and licenses. A positive assessment of any proposal ***does not*** mean any permission will be automatic.

*Please submit your proposal to John McNeill by **11 April 2016**, to allow proposals for the whole area to be considered simultaneously.*

2016 Criteria.
The following criteria (expanded on the next page) are based on evaluation and feedback on the operation of George Street during the last two years' summer festival periods, and should be used as a guideline for developing proposals.

1. Cultural offering
2. Balance of offering
3. Access for cycling, deliveries and emergency services
4. Management of the space
5. Support and contribute to the New Town and local business

2016 Process.
Proposals will be reviewed against the criteria by a panel of officers from relevant Council services, chaired by City Centre Programme Manager. A response will be provided to the event proposer as to whether their event does or does not sufficiently address the criteria.

Those that meet the criteria will be given confirmation that road occupation application can be progressed. Officers will check the practical deliverability of all proposals together, from a transport perspective.

Following road occupation process, any necessary licences, permits or consents will be obtained. It is expected that licence applications will include proof of permission to occupy the pavement/road. Any road permission granted would only relate to a temporary or occasional licence - no roads permission will be given where the business intend to submit a variation to an existing licence.

Final outcome will be provided by Thursday 21 April 2016.

Criteria	Against this criteria the proposal must, as far as possible, do the following:	Assessment
Cultural offering	- provide interest for a range of ages - have a thematic link to one of the festivals taking place in the city - encourage free / low cost participation - encourage enjoyment of George Street as one of the city's iconic streets	Fully met / Partially met / not met
Balance of offering	- ensure that proposal overall does not promote or rely upon consumption of alcohol above other (cultural) experiences - ensure that proposal does not replicate offering of other proposals along the street - show awareness of other proposals for George Street, Charlotte and St Andrews Squares - ensure proposals to expand existing businesses into public spaces involve some form of additional civic or cultural offering.	Fully met / Partially met / not met
Access for cycling, deliveries and emergency services	- maintain George Street's National Cycling route, in both directions, throughout the day - provide continuous access in one direction for deliveries from the close of the event until 10.00am (in the same or separate road space as cycling) - provide space inside the closure but outside the event arena at each end of the block for any late deliveries - provide approved access and working spaces for emergency services along the route and within events.	Fully met / Partially met / not met
Management of the space and event	- show consideration for how pedestrians and crowds will operate in the area (space for queuing and circulating) - include health and safety plans and consideration - show a clear understanding of the extend and use of space required for any plans / layouts - include dates and hours of operation - indicate which permissions, licenses, permits etc will be required to run the event (any road permission granted would only relate to a temporary or occasional licence) - include plans for maintaining a clean site	Fully met / Partially met / not met
Support and contribute to the New Town and local business	- demonstrate how the offering will support local business - evidence consultation with local businesses, residents, offices or representatives - indicate how parking (including that for disabled persons), taxi drop offs or similar will be facilitated - explain how proposals will minimise unwelcome impacts (unreasonable noise, strong smells, anti-social behaviour) - explain how proposals will positively enhance the area and its visual amenity (for example safe, neat stages, equipment, maintain key sightline)	Fully met / Partially met / not met

Appendix 4

Previous Committee and Council decisions relating to the development of a Public Spaces Protocol

11.1 A report to Transport and Environment Committee on 2 June 2015 considered a report on a City Centre Public Spaces Manifesto and agreed:

a) To note that a Public Spaces Manifesto (covering events and other uses) was required to provide clarity and certainty for event applicants, the Council and residents, businesses and other stakeholders, as a key part of the City Centre Vision and the long-term approach to management and use of civic spaces.
b) To recognise the balanced use of civic spaces in the West End, described in paragraphs 3.4 to 3.5 of the report by the Acting Directors of Services for Communities, as an example of good practice in managing civic spaces with stakeholders.
c) To approve the launch of a public consultation on the use and management of all public spaces in the city centre to inform a Public Spaces Manifesto.
d) To agree that trial arrangements for the use and management of Castle Street would be adopted during the consultation period (specifically between June 2015 and September 2016).
e) To note that the results of the trial in Castle Street and the findings of the public consultation would inform any other trial arrangements which could be required.
f) To note that a report on the findings and recommendations of the public consultation and Castle Street trial would be submitted to the Transport and Environment Committee in the Autumn of 2016.

11.2 In response to a motion from Councillor Mowat at the meeting of the City of Edinburgh Council on 4 February 2016 regarding management of the public space at the Grassmarket and the impact this was having on local residents, Council agreed:

a) To recognise the concerns from local residents in the Grassmarket on issues relating to the use of public space which they believed were leading to a reduced quality of life for residents and do not support the businesses in the area.
b) To note that it had been agreed to produce a Public Space Manifesto and this was currently in preparation.
c) To agree that, in relation to the Grassmarket, the Manifesto should attempt to include management of amplified noise, busking and the use of the infrastructure invested in for events rather than generators.
d) In the meantime, to ask officers to put in place arrangements in the Grassmarket, taking account of the above issues, for the Summer Festivals 2016.

Transport and Environment Committee

10.00am, Thursday, 7 June 2016

Forth Estuary Local Flood Risk Management Plan

Item number	7.7
Report number	
Executive/routine	Executive
Wards	All

Executive Summary

The Flood Risk Management (Scotland) Act 2009 (FRM Act), seeks to promote a proactive approach to Flood Risk Management.

The City of Edinburgh Council has been appointed as Lead Local Authority for the Forth Estuary Catchment Area. A Local Flood Risk Management Plan (LFRMP) is required for the Forth Estuary Catchment, which identifies areas vulnerable to flooding from all sources and potential mitigation actions. The LFRMP also identifies coordination and funding arrangements for programming and implementing actions in the six year cycle of the LFRMP.

Approval is sought to adopt and publish the LFRMP on 22 June 2016.

Links

Coalition Pledges	P28
Council Priorities	CP12
Single Outcome Agreement	SO1

EDINBVRGH
THE CITY OF EDINBURGH COUNCIL

Report

Forth Estuary Local Flood Risk Management Plan

1. Recommendations

1.1 It is recommended that the Committee:

1.1.1 approves the final draft LFRMP; and

1.1.2 agrees that authority is given to the Head of Planning and Transport to make any minor amendments.

2. Background

2.1 Scotland's approach to how flood risk is managed is changing due to the Flood Risk Management (Scotland) Act 2009 (FRM Act). The FRM Act aims to reduce the adverse consequences of flooding on communities, the environment, transport, cultural heritage and economic activity. More thought is to be given to alternative means of reducing flood risk by avoiding the likelihood of flooding through effective land use planning, maintenance and better control/management of run-off.

2.2 The Council has been working in partnership with the Scottish Environment Protection Agency (SEPA), Scottish Water and neighbouring local authorities to identify flooding from various sources and the impact of this flooding. This information was consulted on between 22 December 2014 and 2 June 2015. The findings were reported to the Transport and Environment Committee on 25 August 2015. SEPA built on this work and has now published the Flood Risk Management Strategy (FRMS) which is available on its website at http://apps.sepa.org.uk/FRMStrategies.

2.3 The Council is the Lead Local Authority for the area around the Forth Estuary. As lead authority the Council, must produce the LFRMP. The LFRMP will provide further information on funding and the timetable for delivering the actions identified in the strategy between 2016 and 2022. The FRMS and LFRMP will be updated every six years.

3. Main report

3.1 The Flood Risk Management Strategy is in three sections and provides:

3.1.1 background on the approach to flood risk management;

3.1.2 the causes and consequences of flooding, the agreed objectives and the actions that will be taken in areas considered to be potentially vulnerable to flooding; and

3.1.3 information on the sources of flooding, including surface water.

3.2 The LFRMP builds on the Flood Risk Management Strategy and provides more detail, particularly in relation to potential actions to mitigate the risk of flooding. The LFRMP is also in three parts and provides:

3.2.1 background information on the approach taken and the duties of organisations involved in managing flood risk and how this is delivered locally;

3.2.2 an overview and details of the goals and objectives and the actions to be delivered between 2016 and 2022; and

3.2.3 an Annex, which is the main section of the LFRMP, that details the causes and consequences of flooding in discrete areas with potential actions to mitigate.

3.3 There are a number of standard actions such as routine maintenance and providing an emergency plan/response and these are listed in Appendix A. There are also the following specific actions which may be progressed subject to funding:

3.3.1 Water of Leith Phase 2 Flood Prevention Scheme (currently under construction);

3.3.2 Coltbridge, Gorgie and Saughton Flood Prevention Works;

3.3.3 Niddrie Burn Flood Protection Study;

3.3.4 Water of Leith Siltation Study; and

3.3.5 Preparation of Surface Water Management Plans.

3.4 Surface Water Management Plans (SWMPs) will identify the most sustainable range of actions that will manage and reduce flood risk across the city. To complement the SWMPs an Integrated Catchment Study (ICS) is being undertaken in partnership with Scottish Water, East Lothian Council and Midlothian Council. The ICS covers the Seafield Drainage Operation area and models the interaction of sewers with other potential sources of flooding. It is important that the issue of surface water management is considered holistically to ensure that sustainable cost effective solutions are identified and the flooding is not merely moved to another area. The SWMPs will also detail how the mitigation measures will be delivered.

3.5 The Gogar Burn Flood Protection Study will be undertaken between 2022 and 2027 but this may be brought forward.

3.6 The LFRMP has now been developed and can be found at http://www.edinburgh.gov.uk/info/20045/flooding

3.7 A Summary of the LFRMP can be found in Appendix B.

3.8 It may be necessary to amend the LFRMP in the future to clarify issues or as further information becomes available. It should be noted that some of these changes may be minor or not relate to the City of Edinburgh Council. It would be of benefit if the Head of Planning and Transport was permitted to make or agree to such non-material changes and changes which do not impact on the Council's budgets. Further updates will be provided through Business Bulletins.

4. Measures of success

4.1 Sources of flooding and the areas at risk and level of risk are better understood.

4.2 Resources for flood prevention are effectively prioritised and targeted.

4.3 There has been effective partnership working with neighbouring local authorities, Scottish Water and SEPA.

5. Financial impact

5.1 The Convention of Scottish Local Authorities has now approved the recommendations for funding flood risk actions which are:

5.1.1 Of the capital funding available 80% will be directed to flood works and schemes;

5.1.2 The level of funding for works and schemes will be 80% contribution by the Scottish Government and 20% by the local authorities;

5.1.3 The remaining 20% of the capital funding available will be used to fund other actions outlined in the Strategy; and

5.1.4 This remaining 20% will be distributed proportionally based on the number of properties at risk of flooding in a given local authority area.

5.2 The Council has been informed by the Scottish Government that it is not eligible for further funding in relation to the Water of Leith Phase 2 Flood Prevention Scheme and Coltbridge, Gorgie and Saughton Flood Prevention Works. However the Council will receive a proportion of the 20% of the capital funding available to fund other actions outlined in the Strategy.

5.3 The national capital funding available for distribution is estimated to be of the order of £250m over the six year cycle that the LFRMP will be in place for.

5.4 It should be noted that the Council will fund the Water of Leith Siltation Study and the Niddrie Burn and Gogar Burn Flood Protection Studies from the Flood Prevention Revenue Budget.

5.5 The need for the delivery of individual actions in the LFRMP will be considered against all other capital and revenue priorities as part of future budget setting processes over the six-year flood risk cycle.

6. Risk, policy, compliance and governance impact

6.1 This approach to managing flood risk has identified possible solutions and should any major construction projects, such as future phases of the Water of Leith Flood Prevention Scheme be progressed, these will be reported separately and be subjected to Assurance Reviews by the Corporate Programme Office.

6.2 The LFRMP is a statutory requirement of the FRM Act. The inclusion of potential risk mitigation actions in the Plan does not commit the Council to delivering them.

7. Equalities impact

7.1 An engagement and consultation exercise was undertaken in developing the FRMS and this was reported to Committee on 25 August 2015. The key issues identified were:

7.1.1 Access to hard copy and other languages; and

7.1.2 Collation of hard copy responses with online responses.

7.2 Once published on the Council website hard copies of the LFRMP will also be made available at all of the Locality Offices, City Chambers and a number of libraries for a six-month period.

7.3 The hard copies will be available in plain English, with translation in whole or in part into other languages or Braille available on request.

7.4 A draft summary of the LFRMP is contained in Appendix B which will also be made available to the public.

8. Sustainability impact

8.1 The ethos of the FRM Act is to manage flood risk sustainably which requires a long term approach to be taken. It is necessary to improve the understanding of flood risk and its impacts before actions can be planned to manage flooding in a way that improves the environment, provides opportunities to restore rivers and coastlines and creates green spaces for everyone to enjoy. To take a sustainable approach to managing flood risk it is necessary to look at whole river or surface water catchments. A catchment approach ensures that flooding is tackled effectively and not moved to another part of the river or wider catchment area.

8.2 SEPA undertook a Strategic Environmental Assessment (SEA) to compliment the Flood Risk Management Strategy. The Council received confirmation from the Scottish Government (SEA Gateway) that as the LFRMP is considered to be consistent with the FRMS, no further assessment is required at this stage. If further consideration is required this will be undertaken at a project level.

8.3 The Council prepared a Habitats Regulations Appraisal (HRA) to ensure that the LFRMP will not adversely affect the integrity of Special Areas of Conservation and Special Protection Areas.

9. Consultation and engagement

9.1 A major public engagement and consultation exercise began on 22 December 2014 and finished on 2 June 2015.

9.2 Hard copies of information were made available at all of the Neighbourhood Offices, City Chambers, Waverley Court and at a number of libraries.

9.3 Scottish Natural Heritage was consulted on the HRA and their views have been taken into account.

10. Background reading/external references

10.1 Flood Risk Management (Scotland) Act 2009.

10.2 Town and Country Planning (Development Planning) (Scotland) Regulations.

10.3 Transport and Environment Committee 25 August 2015 – Flood Risk Management - Consultation and Prioritisation.

10.4 Flood Risk Management Strategy which is available at http://apps.sepa.org.uk/FRMStrategies.

10.5 Forth Estuary LFRMP SEA Screening Report and Responses which are available at http://www.gov.scot/Topics/Environment/environmental-assessment/sea/SEAG.

10.6 Habitats Regulations Appraisal.

10.7 Draft Local Flood Risk Management Plan which is available at http://www.edinburgh.gov.uk/info/20045/flooding.

10.8 Assessment and Inspection, Clearance and Repair schedule which is available at http://www.edinburgh.gov.uk/info/20045/flooding.

Paul Lawrence

Director of Place

Contact: Tom Dougall, Maintenance Manager

E-mail: tom.dougall@edinburgh.gov.uk | Tel: 0131 469 3753

11. Links

Coalition pledges	P28 – Further strengthen our links with the business community by developing and implementing strategies to promote and protect the economic well being of the city
Council priorities	CP12 – A built environment to match our ambition
Single Outcome Agreement	SO1 - Edinburgh's economy delivers increased investment, jobs and opportunities
Appendices	A - Standard Actions
	B - Draft Summary Local Flood Risk Management Plan

Appendix A

Standard Actions

Local Flood Risk Management Plan

There are a number of other actions identified in the FRMS and LFRMP which have not been detailed in this report which are:

1 Awareness raising;
2 Emergency plans/response;
3 Flood forecasting;
4 Maintain flood prevention schemes;
5 Maintain flood warning;
6 Maintenance;
7 Planning Policies;
8 Self help;
9 Site protection plans; and
10 Strategic mapping and modelling.

Appendix B

Summary of the Local Flood Risk Management Plan for the Forth Estuary

SUMMARY

Scotland's approach to how flood risk is managed is changing due to the Flood Risk Management (Scotland) Act 2009 (FRM Act). The FRM Act aims to reduce the adverse consequences of flooding on communities, the environment, transport, cultural heritage and economic activity. More thought is to be given to alternative means of reducing flood risk either by avoiding the likelihood of flooding through effective land use planning, maintenance and the better control/management of run-off.

The City of Edinburgh Council has been working in partnership with the Scottish Environment Protection Agency (SEPA) and neighbouring local authorities to identify flooding from various sources and the impact of this flooding. This information was consulted on between 22 December 2014 and 2 June 2015. The findings were reported to the Transport and Environment Committee on 25 August 2015. SEPA has built on this work and has now published the Flood Risk Management Strategy which is available on their website at http://apps.sepa.org.uk/FRMStrategies

In Edinburgh, approximately 6,600 residential and non-residential properties are at risk of flooding, with annual average damages of £8.5 million.

The City of Edinburgh Council is the lead authority for the area around the Forth Estuary and as lead authority it must produce the Local Flood Risk Management Plan (LFRMP) for this area. The LFRMP provides further information on funding and the timetable for delivering the actions identified in the strategy between 2016 and 2022. The Flood Risk Management Strategy and LFRMP will be updated every six years. The LFRMP can be found at:

http://www.edinburgh.gov.uk/info/20045/flooding

The LFRMP should be read alongside the Flood Risk Mangement Strategy. The LFRMP is also in three parts:

Part 1 provides background information on the approach taken and the duties of organisations involved in managing flood risk and how this is delivered locally;

Part 2 provides an overview and details the goals and objectives and the actions to be delivered between 2016 and 2022; and

Part 3 provides an Annex which is the main section of the LFRMP and this details the causes and consequences of flooding in discrete areas with potential actions to mitigate.

For priority areas (called Potentially Vulnerable Areas or PVA's) there is a short description of the causes and consequences of flooding; the agreed goals or objectives of local flood risk management; and the specific actions that will deliver these goals or objectives in the short to long term. These details are set out in the LFRMP. The actions, as they relate to Edinburgh, are summarised in the table on the following pages.

The boundaries of PVA's are governed by watercourse catchments and do not always correspond to local authority boundaries. The PVA's that lie partially or wholly within the boundaries of the City of Edinburgh are as follows:

Potentially Vulnerable Area (PVA)	**Name**
10/15	South Queensferry
10/16	Cramond Bridge
10/17	Granton
10/18	Water of Leith catchment
10/19	Braid Burn Catchment
10/20	Niddrie Burn / Burdiehouse Burn Catchment
10/21	Musselburgh
10/22	Lasswade, Penicuik, Dalkeith & Musselburgh
10/27	South Gyle, Broxburn and Bathgate

There are a number of standard actions such as routine maintenance and providing an emergency response. There are also the following site specific actions which may be progressed subject to funding:

- Water of Leith Phase 2 Flood Prevention Scheme;
- Coltbridge, Gorgie and Saughton Flood Prevention Works;
- Niddrie Burn Flood Protection Study;
- Water of Leith Siltation Study; and
- Gogar Burn Flood Protection Study (between 2022 and 2027)

Further information on the actions for Edinburgh is available in the table on the following pages.

It should be noted that all of the actions detailed in the LFRMP are subject to the necessary consents being granted and funding being made available. Funding is yet to be identified for Coltbridge, Gorgie and Saughton Flood Prevention Works.

ACTION	DESCRIPTION	WHO IS INVOLVED	START DATE	END DATE	NOTES
Water of Leith (Phase 2) Flood Protection Scheme	The Water of Leith (Phase 2) Flood Protection Scheme is currently under construction, scheduled to be completed by 2018. The scheme will protect Murrayfield and Roseburn from flooding from the Water of Leith.	The City of Edinburgh Council (CEC) Flood Prevention Team, CEC Water of Leith (Phase 2) Team	2015	2018	
Water of Leith Flood Protection Works Future Phases	Flood protection works have been proposed for Edinburgh to further reduce flooding from the Water of Leith. An updated economic appraisal has been undertaken on this watercourse and the proposed works will likely include Coltbridge, Gorgie and Saughton, subject to the availability of funding.	CEC Flood Prevention Team	TBA	TBA	Funding is not yet identified for this project.
Forth Estuary Flood Risk Management Strategy	The purpose of the Strategy is to identify flooding from various sources, its impacts, and outline action to address this flood risk. The Strategy is in three sections and provides: • background on the approach to flood risk management; • the causes and consequences of flooding, the agreed objectives, and the actions that will be taken in areas considered to be potentially vulnerable to flooding; and • shares the information on the sources of flooding, including surface water	Scottish Environment Protection Agency (SEPA), CEC, local authorities, Scottish Water	2016	2022	Consultation ended June 2015. New plan runs from 2016-2022 Interim progress report 2018/19

ACTION	DESCRIPTION	WHO IS INVOLVED	START DATE	END DATE	NOTES
Forth Estuary Local Flood Risk Management Plan 2016-2025	Delivery plan to address actions to reduce flood risk detailed in the Forth Estuary Flood Risk Management Strategy	SEPA, Scottish Water, CEC and 12 neighbouring local authorities	June 2016	2021	To be published 22 June 2016
Edinburgh and the Lothians Integrated Catchment Study (ICS) (linked with below)	To model the interaction between above and below ground water assets to establish where partnership working is, and will be, required.	Scottish Water	July 2013	2016	Use this study to produce a SWMP
Surface Water Management Plan (SWMP) (linked with the above)	To ascertain the risk of flooding when surface water, watercourses and sewers interact and to develop a strategy to reduce the risk resulting from the interaction between sewers and other sources of flooding	CEC and Scottish Water	2021	2022	The ICS will help inform the SWMP
Water of Leith Siltation Study	The study will establish flood risk in this area of the Water of Leith and make recommendations regarding dredging. The study will also identify various environmental constraints and regulatory approvals which will inform future coordination arrangements.	CEC, Forth Ports, and consultant	May 2016	November 2016	Approval of award contract to be sought in May 2016

ACTION	DESCRIPTION	WHO IS INVOLVED	START DATE	END DATE	NOTES
Niddrie Burn Flood Prevention Study	A flood protection study has been recommended for Niddrie Burn in Edinburgh to assess whether flood storage, modification of conveyance, installation / modification of fluvial control structures, flood defences and sediment management could reduce flood risk. The study will also consider the viability of property level protection. The study should take a catchment approach and consider the potential benefits and disbenefits and interaction between actions upstream and downstream. This study should also aim to improve gauging on the Niddrie / Burdiehouse Burn catchment in partnership between SEPA and the City of Edinburgh Council.	CEC, SEPA, and consultant	2017	2022	A programme has been developed to appoint a consultant to assess the need/location and design of a gauging station in 2016/17. Construction of gauging station in 2017/18. Flood study 2021/22.
Gogar Burn flood prevention study	A flood prevention study has been recommended for Gogar Burn in Edinburgh to assess whether direct flood defences and sediment management could reduce flood risk. The study should take a catchment approach and consider the potential benefits and disbenefits and interaction between actions upstream and downstream. This study should also aim to improve the accuracy of the flood mapping in the Gyle / Gogar Burn area.	CEC, SEPA, and consultant	2020	2022	

ACTION	DESCRIPTION	WHO IS INVOLVED	START DATE	END DATE	NOTES
Water of Leith Flood Protection Scheme	Continue to maintain the existing flood protection scheme	CEC	Ongoing	Ongoing	
Maintain the Water of Leith (Phase 2) Flood Protection Scheme in Murrayburn and Roseburn when completed in 2018	Reduce risk to community facilities and economic damages to properties in Edinburgh at Murrayfield and Roseburn	CEC	2018	Ongoing	
Braid Burn flood Protection Scheme	Continue to maintain the existing flood protection scheme, reducing the risk of flooding to homes and businesses along the Braid Burn between Redford Road and Portobello	CEC, Scottish Water, Network Rail, SEPA, Scottish Natural Heritage, and private landowners	Ongoing	Ongoing	
Greendykes and Nether Craigour	Continue to maintain the existing flood control structure, flood storage area and flood defences	CEC	Ongoing	Ongoing	
Flood warning system	Continue to maintain existing flood warning systems. Floodline will send a message by phone or text if a flood warning or flood alert has been forecast in your area.	SEPA	Ongoing	Ongoing	

ACTION	DESCRIPTION	WHO IS INVOLVED	START DATE	END DATE	NOTES
Coastal flood defences	Continue to maintain existing flood defences along the coast.	CEC, Scottish Water, Network Rail, Marine Scotland, SEPA, Scottish Natural Heritage, and private landowners	Ongoing	Ongoing	
Reservoir maintenance	Continue to maintain the reservoirs in the upper catchment of the Water of Leith to reduce peak flows and lower river levels downstream.	CEC	Ongoing	Ongoing	
Assessment and Inspection, Clearance and Repair	Local authorities have a duty to assess watercourses and coastlines and carry out repair works where such works would substantially reduce flood risk.	CEC, asset/land managers	Ongoing	Ongoing	Watercourses are inspected and maintained

ACTION	DESCRIPTION	WHO IS INVOLVED	START DATE	END DATE	NOTES
Emergency Response	CEC responsibilities may include activating flood defence systems, provision of sandbags and other flood prevention controls, road traffic management, closures and diversions, assisting with warning and alerting arrangements, contributing to media and public information strategies, establishing emergency rest centres for the care and welfare of persons evacuated or affected, coordinating the longer term recovery measures for rehabilitation of the community and restoration of the environment.	During severe flooding, CEC will work in partnership with the Emergency and Health Services, SEPA, Met Office, Scottish Water, Voluntary Organisations and other agencies to coordinate the response to the incident.			
Planning authority	Scottish Planning Policy and accompanying Planning Advice Notes set out Scottish Ministers' priorities for the operation of the planning system and for the development and use of land. In terms of flood risk management, the policy supports a catchment-scale approach to sustainable flood risk management and aims to build the resilience of our cities and towns, encourage sustainable land management in our rural areas, and to address the long-term vulnerability of parts of our coasts and islands. Under this approach, new development in areas with medium to high likelihood of flooding should be avoided.	CEC	Ongoing	Ongoing	Avoid an overall increase in flood risk

ACTION	DESCRIPTION	WHO IS INVOLVED	START DATE	END DATE	NOTES
Strategic Mapping and Modelling	Scottish Water will review the assessment of flood risk within the highest risk sewer catchments to improve knowledge and understanding of surface water risk	Scottish Water	2016	2021	Reduce overall flood risk
Awareness Raising	SEPA and the responsible authorities have a duty to raise public awareness of flood risk. Improved awareness of flood risk and actions that prepare individuals, homes and businesses for flooding can reduce the overall impact. From 2016 SEPA will engage with the community through local participation in national initiatives, including partnership working with Neighbourhood Watch Scotland. In addition, SEPA will engage with local authorities and community resilience groups where possible. Local authorities will be undertaking additional awareness raising activities. Further details will be set out in the Local FRM Plan.	SEPA, Scottish Flood Forum, community flood action groups and local authorities			The City of Edinburgh Council will engage at a project level when required.
Strategic Mapping and Modelling	SEPA will seek to develop flood mapping to improve understanding of coastal risk. The extent and timing of improvements will depend on detailed scoping and data availability. Where this work coincides with local authority studies, SEPA will work collaboratively to ensure consistent modelling approaches are applied.	SEPA			Reduce overall flood risk

ACTION	DESCRIPTION	WHO IS INVOLVED	START DATE	END DATE	NOTES
Strategic Mapping and Modelling	SEPA will seek to incorporate additional surface water data into the flood maps to improve understanding of flood risk. Approximately 2,600km² of improved surface water data is currently available within this Local Plan District.	SEPA			
Site Protection Plans	Site protection plans are developed to identify whether normal operation of a facility can be maintained during a flood. This may be due to existing protection or resilience of the facility or the network. Edinburgh Airport operates a site protection plan.	Edinburgh Airport			
Flood Forecasting	The Scottish Flood Forecasting Service is a joint initiative between SEPA and the Met Office that produces daily, national flood guidance statements which are issued to Category 1 and 2 Responders. The service also provides information which allows SEPA to issue flood warnings, giving people a better chance of reducing the impact of flooding on their home or business. For more information please visit SEPA's website.	SEPA, Met Office			
Self help	Everyone is responsible for protecting themselves and their property from flooding.	Property owners, businesses and residents			

Transport and Environment Committee

10:00am, Tuesday, 07 June 2016

Review of Scientific Services & Mortuary Services

Item number	7.8
Report number	
Executive/routine	
Wards	All

Executive summary

This report provides an update on work to investigate the feasibility of creating a shared Scientific and Public Analyst with other Scottish local authorities and of establishing a shared laboratory and mortuary facility with NHS Lothian at the Edinburgh Royal Infirmary BioQuarter site. The report seeks approval to take both of these pieces of work to the next stage.

Links

Coalition pledges	None
Council outcomes	CO10, CO15 and CO26
Single Outcome Agreement	SO2,

EDINBVRGH
THE CITY OF EDINBURGH COUNCIL

Report

Review of Scientific Services & Mortuary Services

Recommendations

It is recommended that Transport and Environment Committee:

1.1 Agrees in principle to the necessary actions being undertaken to investigate further the creation of a Scottish Shared Scientific Service, namely:

- Determining the full financial impact on each local authority partner; and
- Developing a detailed Business Plan for the new service.

1.2 Notes that the Council is participating in the Scottish Shared Service review programme, recognising that this does not commit the Council to joining a shared scientific service.

1.3 Agrees in principle to entering into an initial agreement with NHS Lothian to develop an outline business case for a shared Mortuary, Microbiology and other science laboratories at a new build site at the Edinburgh Royal Infirmary BioQuarter site.

1.4 Agrees to accept further reports on the outcome of the financial impact assessment of a Scottish Shared Scientific Service and the outline business case for the shared laboratory and mortuary facility in the Edinburgh BioQuarter.

Background

2.1 There are four local authority Scientific Services laboratories in Scotland, located in Aberdeen, Dundee, Edinburgh and Glasgow. The four laboratory services provide similar functions in support of Scottish local authorities' statutory duties and operational responsibilities. Services are also provided to commercial organisations and the public on a chargeable basis.

2.2 Scientific services are utilised by Environmental Health and Trading Standards services for routine surveillance testing and responding to emergency situations. Scientific services also provide support to other Council and public services, such as property, housing, health and safety, police and fire and rescue.

2.3 Scientific services undertake a range of sampling, chemical and microbiological testing relating to food safety and standards, agricultural materials (such as animal feeding stuffs and fertilisers), drinking water, recreational water, air pollution, environmental materials (such as soil, dusts), health and safety (such as asbestos) and consumer goods (such as toys, electrical goods, cosmetics).

2.4 In order to respond to regulatory demands to protect the health and safety of consumers, there is an increasing requirement for sophisticated testing, which requires specialised equipment and staff with specialist knowledge and expertise to undertake the testing, operate the equipment and interpret complex test results.

2.5 Scientific services are also operated by other public bodies, such as the Scottish Environment Protection Agency (SEPA), Scottish Water, Scottish Forensic Science Service and NHS hospitals. Many of these bodies are in the process of reviewing and rationalising their scientific services to achieve more efficient, economic delivery of services.

2.6 In 2004, after detailed work by consultants, the Lowenberg Report was published under the auspices of CoSLA with a proposal for a joint Scottish Scientific Service involving all four scientific services laboratories. However, the report lacked a clear business case and financial clarity and, after discussions between the four Chief Executives of the city councils operating the laboratories, the proposals were not implemented.

2.7 In recent years Edinburgh Scientific Services has increased it's customer base winning contracts from public and private organisations. Income growth was 10% in 2014, 21% in 2015 and 19% in 2016 with the service generating a significant surplus. The growth in business has taken the laboratory at Seafield up to capacity thus future growth opportunities may be restricted.

2.8 The City Mortuary which is now managed through Scientific Services is based in a building at the Cowgate that has reached capacity for safe storage of bodies. The building is approaching the end of its useful lifespan with some facilities no longer fit for purpose. Nationally the Crown Office Procurator Service is consolidating the mortuaries it uses for suspicious death which has resulted in bodies from Central and Fife regions being submitted to Edinburgh for post-mortem examination.

Main report

Scientific Services in Scotland

3.1 Currently, the majority of local authority public analyst services are provided by 4 laboratories operated by Aberdeen, Dundee, Edinburgh and Glasgow City Councils. Jointly these labs are responsible for providing food safety, environmental, and consumer protection related scientific services to the 32 Scottish local authorities and other public and private sector clients. There is a risk that the current model is no longer sustainable due to reduced spend by the local authorities and the likelihood of each local authority public analyst service having to compete against each other rather than working together in a collaborative manner. There is also increasing competition from private sector

providers. In order to protect the role of Scottish public analysts' services and deliver best value for the service users, a new model of service delivery requires to be developed.

3.2 An Outline Business Case (OBC) was prepared by the Improvement Service (IS), in conjunction with officers from Aberdeen, Dundee, Edinburgh and Glasgow City Councils, at the request of the Society of Local Authority Chief Executives (SOLACE Scotland). The OBC determined that there was a case for implementing a Shared Service Model and recommended that this was taken forward for further development through a more detailed Business Case, to be approved by the local authorities.

3.3 A draft Business Case for a single Scottish Shared Scientific Service has now been prepared, which provides a structure and business strategy for a single organisation that would deliver Public Analyst and other scientific services for the benefit of Scottish local authorities and public sector agencies.

3.4 The new organisation would be a partnership of Local Authority members and provide the framework to deliver cost savings back to its partners, with a strategy for growth through the development of strategic partnerships and service reform.

3.5 The objectives of the new organisation would be to deliver sustainable, high-quality scientific analysis and advice, which supports regulatory commitments, to ensure the safety and quality of food, water, consumer products, and the environment.

a) This will be achieved by integrating each organisation's capability to meet the needs of customers and stakeholders across Scotland. More specifically the new service must: provide the platform to follow a growth strategy;
b) provide value for money for its customers and stakeholders;
c) be flexible and proactive in meeting future customer needs;
d) have sufficient resilience for national and local 'incidents';
e) be based on the principle of having strong public sector science base and;
f) minimise the risk to current service provision.

Scottish Scientific Services Business Case

3.6 The key benefits of the proposed Shared Service are that it would be wholly owned by, and accountable to its local authority partners. The proposed structure of the Shared Service is for a 'dual' Limited Liability Partnership model, which would allow the new service to provide core services for its local authority members, whilst maintaining and developing existing and further business opportunities with the wider public and private sector markets.

3.7 It is anticipated by the consultants that the proposed service would deliver savings to its partners in the region of £1.4m over the first three years. The Business Case sets out a mechanism for returning around half of surpluses back

to the service's members through an annual rebate, based on how much each authority spent with the service in that year.

3.8 The model's savings are based on income from all the four laboratories. However, sensitivity analysis has been carried out, which determines that the service would be sustainable in the event of only three labs taking forward the proposal.

3.9 The proposed service would be committed to delivering best value analytical scientific services for its partners benefit. The primary objective of the service would be to deliver best value services back to its partners, whilst ensuring that an element of reserves is retained to further develop the service.

3.10 The rationale behind this model is that there is currently significant duplication between the four labs which results in an underutilisation of equipment and other resources. By aggregating samples, efficiencies can be achieved by improved throughput on equipment. This should also result in increased capacity to take on additional business.

Edinburgh Scientific Services

3.11 The current Scottish Scientific Services proposal submitted to SOLACE in February 2016 puts all surplus income (and losses, with Aberdeen and Dundee reported at best to be operating at breakeven) into a general pot and distribute the combined surplus to the 32 local authorities as a dividend. Edinburgh Scientific Services has undergone significant growth in the last 8 years moving from 18 staff to 50 staff and makes a surplus income. Whilst income has grown at Edinburgh Scientific Services the income for the other three Scottish laboratories have been flat or shrunk.

3.12 In meetings with the project consultants the Council has requested that it retain a significant portion of its surplus income rather than transfer it to the general national Scottish Scientific Services pot. Significant movement would be required during negotiations to make the proposal financially attractive for the Council.

Shared Laboratory and Mortuary with NHS Lothian

3.13 In parallel with the work on a Scottish Shared Scientific Service, discussions have also been taking place between the Council and NHS Lothian on a shared laboratory and mortuary facility in the Edinburgh BioQuarter. It was identified by Corporate Property Estates that sale of the Cowgate mortuary and Seafield laboratory could yield significant capital receipts which could be used to part finance a new joint facility which would benefit from shared utilities and communal areas.

3.14 In conjunction with Estates, sites at Shawfair, Riccarton and Bioquarter were investigated. BioQuarter was identified as the lead option and discussions took place with NHS Lothian, University of Edinburgh and Scottish Enterprise. The current and previous Chief Executives have met with NHS Lothian Chief

Executive to discuss the outline blue print for BioQuarter which may include a joint Council/NHS Lothian facility.

3.15 Working in partnership with the Council, NHS Lothian have produced a draft Strategic Assessment (Appendix 1) to assess the potential for greater synergies between Council Scientific Services and Mortuary Services and NHS Lothian Mortuary, Microbiology and other science laboratories at a new build site at the Edinburgh Royal Infirmary BioQuarter site. This work links in with the BioQuarter and East Wedge Masterplan(1).

3.16 This work shows significant potential for shared working between the Council and NHS Lothian to create a based locally regional public sector science hub, possibly as part of a Scottish Shared Scientific Service. A shared facility with NHS Lothian could also potentially realise efficiencies in investment in, or access to, expensive scientific testing equipment.

3.17 The Strategic Assessment for a shared scientific laboratory and mortuary has received support from senior management with NHS Lothian and the next stage would be the development of 'Initial Agreement' with the Council to develop an OBC with a view to the eventual development of a detailed business case for submission to the Scottish Government.

Conclusion

3.18 The Council's Scientific Services has been successful in both developing it's national reputation for providing high quality public analyst and laboratory services to a range of public and private sector organisations and in increasing it's income year on year in a competitive environment. However, the Service needs to consider its' future direction in the context of an increasingly competitive market, the prominence of the shared services agenda in the public sector and the need to be able to invest in or have access to modern laboratory facilities and scientific testing technology. Both the Scottish Shared Scientific Service and the shared laboratory and mortuary facility with NHS Lothian offer the potential opportunity to secure the future of a high quality public analyst and scientific service provision for the City of Edinburgh Council and other public sector partners. It is therefore proposed to take both these options to the next stage and to report back to committee on the outcomes.

Measures of success

4.1 Edinburgh Scientific & Mortuary Services are delivered in a sustainable way providing good customer service.

Financial impact

5.1 It is anticipated that £25,000 of professional and consultant fees as a pro rata contribution will be required to continue the two review process.

Risk, policy, compliance and governance impact

6.1 The information contained in this report is a review of scientific and mortuary services provision. This report does not impact on any existing policies and no risks have been identified pertaining to health and safety or governance. Further, there are no regulatory implications that require to be taken into account.

6.2 The report seeks to address storage capacity at the mortuary which is identified as a risk on the risk register.

Equalities impact

7.1 This report is a statement of facts regarding provision of Scientific & Mortuary Services in Edinburgh and does not propose changes to current policies or procedures. As such a full equalities impact is not required. The contents have no negative impacts on the Public Sector Equality Duty of the Equality Act 2010.

Sustainability impact

8.1 The content of this report is a statement of facts and does not in itself promote any environmental impact.

Consultation and engagement

9.1 A wide ranging consultation has taken place as part of the review with all 32 local authorities in Scotland, Scottish Government, Food Standards Scotland and SEPA.

Background reading/external references

http://www.edinburgh.gov.uk/download/meetings/id/43094/item_no_71_-_edinburgh_bioquarter_and_south_east_wedge_parkland_finalised_masterplan

http://www.edinburgh.gov.uk/download/meetings/id/38615/item_7_13-review_of_provision_of_scientific_services_in_scotland

Paul Lawrence

Executive Director of Place

Contact: Robbie Beattie Scientific & Environmental Services Manager
E-mail: robbie.beattie@edinburgh.gov.uk | Tel: 0131 555 7980

Links

Coalition pledges	None
Council outcomes	CO10 – Improved health and reduced inequalities CO15 CO26
Single Outcome Agreement	SO2 - Edinburgh's citizens experience improved health and wellbeing, with reduced inequalities in health.
Appendices	Appendix 1 CEC/NHS Lothian Strategic Assessment

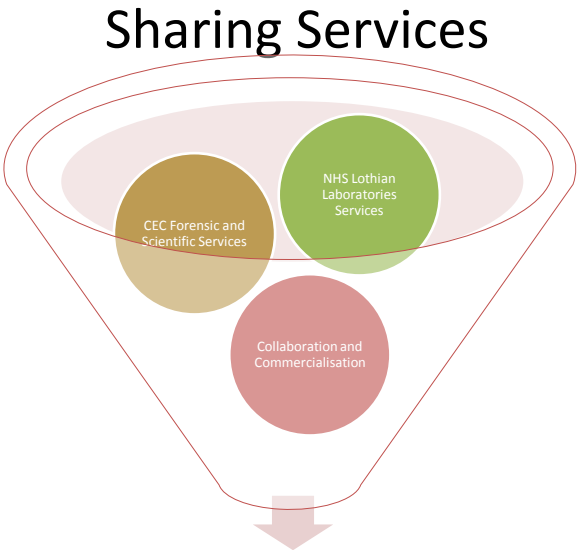
City of Edinburgh Council and NHS Lothian

A Shared Vision
Public Health Scientific Services Delivered by a National Flagship Life Science Campus at Edinburgh BioQuarter

Strategic Assessment
Draft

Index

DRAFT



EBQ shared services model

1 Executive Summary

Representatives from City of Edinburgh Council and NHS Lothian have met on a number of occasions in the past 12 months to discuss the emerging opportunities for collaboration and co-location of mortuary and scientific services and **creation of a shared life science campus**. These opportunities are especially important in the light of emerging local authority and health integration agendas and the Christie Commission recommendations. The current budget outlook also provides a strong driver to seek increased efficiency and effectiveness through joint working and sharing services to provide better patient and customer outcomes.

A number of key areas were identified where the potential for joint action can be explored. These include:

- Potential for shared scientific services
- Potential for shared mortuary services
- Commercial development of services
- Research and Development

It was agreed at the 18th November 2015 meeting that a draft Strategic Assessment document would be jointly authored by the in scope service groups and respective organisations.

In terms of geographical scope of these services NHS Lothian operates as a tertiary referral board providing analysis to 850,000 population of Lothian. It also accepts testing referrals for the whole of Scotland for specialist services and holds Service Level Agreements with a number of Scottish Health Boards. Work is also undertaken

for R&D commercial and CSO funded trials with an income of over £2.5 million annually.

The City of Edinburgh Council Scientific Service provides the statutory functions of Public Analyst, Agricultural Analyst and Food Examiner and other scientific services on a cost recovery basis to eight other Scottish local authorities representing 30% of the Scottish population: East Lothian, Midlothian, Scottish Borders, Highland, Orkney, Shetland, South Lanarkshire and West Lothian. The City of Edinburgh Council Mortuary Service works with the authorities in Central, Fife and Lothian & Borders

The Shared Vision

A national flagship life science campus at Edinburgh BioQuarter in partnership with the City of Edinburgh Council and NHS Lothian that delivers shared cutting-edge public health scientific services and drives novel research and development translating into healthcare quality improvements and economic benefits.

2 Strategic Context

City of Edinburgh Council (CEC)

Due to expansion of their services it has been recognised for a number of years that both scientific services and mortuary services have building capacity constraints. These issues were red flagged in an Internal Audit of corporate risk factors A feasibility study was carried out to look at options which included expanding the current footprints, leasing or purchasing properties on the open market in Edinburgh or building a fit for purpose replacement. The Edinburgh Scientific Services (ESS) laboratory at Seafield (700m^2) and mortuary at Cowgate (400m^2) are both without mortgage and the proceeds from their sale in the open market could subject to Council committee approval be used to part finance a new build construction.

It was expected that co-locating two or more CEC services on one site would reduce the number of buildings in the overall council estate and allow synergies through integrated services, use of common utilities, staff accommodation and reception areas. A CEC owned greenfield site was originally identified at BioQuarter next to the newly built NHS car parks facing onto Little France Road. This was an attractive option since construction cost would not involve land purchase and would move the services close to potential NHS partners. It was anticipated a building of 2,000m^2 would be suitable split as follows; laboratory space 1,000m^2, mortuary 700m^2 and office space 300 m^2. This would be expected to house 40 laboratory and associated staff, 5 mortuary staff and 20 other CEC staff requiring service linked office based accommodation.

Discussions with NHS colleagues about the proposal quickly identified there were local commonalities with NHS Lothian that would allow for a different type of vision to be created as an effective ongoing shared/parnership service.

Looking at a national agenda Scotland is renowned for its quality food production which contributes to economic development, the wellbeing of society and reduced demands on other public services. It is estimated that exports of Scottish food and drink has grown by 73% between 2002 and 2013 and directly employs around 113,000 people across Scotland.

In this context it is vital that the public sector is in a strong position to prevent or react to major incidents such as food authenticity scandals (e.g. Horsemeat) or an outbreak of Legionella. With regards to food, a series of national reports were commissioned (the Scudamore, the Elliot and the Jones reports), which concluded that:

- There should be a strong public sector science base;
- There should be a greater collaboration between public bodies, including rationalisation of laboratories;
- There should be creation of a modernised integrated Public Analyst/Scientific service comparable with Public Health England's microbiological laboratory network.

NHS Lothian

The strategic plan for Laboratory Medicine is based around the Laboratory Renew programme which has been ongoing since late 2011. This is a change management programme focussing on application of technology, consolidation of services and workforce planning.

Laboratory Medicine in NHS Lothian is arranged on 4 sites (RIE, WGH, SJH and RHSC) processing 13 million tests with a WTE of around 550. Space is at a premium on the RIE site and certain services are still operating over 2 sites (such as Histopathology).

As part of the Labs Renew strategy, Blood Sciences departments have been created at RIE, WGH and SJH. It is planned to re-provide RHSC at the RIE site in 2017. Microbiology services are still at RIE and SJH with a plan to automate and relocate to the RIE site. Pathology services are delivered from two sites (RIE and WGH) and there is little scope for additional efficiencies without consolidation. Gene Services also operate across two sites and from sub optimal accommodation. The capacity for growth or increased effectiveness is limited. Finally, NHS Lothian hosts the Forensic service at RIE but activity in that is undertaken off site in the Public Mortuary.

Identifying alternative sites for one or more of the services currently housed on the RIE site would provide wider opportunities for amalgamation of staff groups, equipment and services within Laboratory medicine. Furthermore, this approach would assist with the overall NHS Lothian site master planning process and pressures associated with availability of space in the acute hospital sites such as the

RIE. Limitations to the scope of change that can be achieved, such as the PFI arrangements at RIE, also need to be taken into consideration.

3 Overall Concept

The published Strategic Master Plan for the Edinburgh BioQuarter places certain constraints for development on the site. Discussions at initial meetings of the ad-hoc group working on this Strategic Assessment have concluded that a new build within the Edinburgh BioQuarter is likely to meet most if not all of the strategic aims from both CEC and NHS Lothian. This will also provide a level of assurance around efficient and effective use of services. It should be noted this is not an option appraisal.

The proposed shared building concept at Bioquarter will allow options for a shared or partnership service delivery model to be examined in more detail. It is anticipated that sharing services may open up expansion of services opportunities providing an East of Scotland science hub solution to NHS and Public Scientific services.

These opportunities are especially important in the light of emerging local authority and health integration agendas and the Christie Commission recommendations. The current budget outlook also provides a strong driver to seek increased efficiency and effectiveness through joint working and sharing services to provide better patient and customer outcomes.

The main concepts of the NHS and CEC strategic visions are to

- Combine services to increase efficiency, effectiveness and quality
- Provide better patient and customer outcomes.
- Reduce carbon, energy usage and waste
- Make effective use of floor space
- Provide suitable working environment and collaborative working space for staff
- Increase income/commercialisation and R&D profiles

4 Review of Progress to Date

There have been initial discussions From November 2014 to summer 2015 around scoping of the project. This included visits to the new mortuary and laboratory services building at Queen Elizabeth Hospital in Glasgow and a presentation from the design architects. Discussions then moved onto an examination of the strategic context and opportunities for sharing services. During Summer 2015 until the present date outline high level planning of building structure and size and continued discussion on levels of shared services have taken place. More detailed draft architect plans are now in preparation.

5 Description of In Scope Services & Sharing Opportunities

There are five sections to this document
Section A: NHS services – services are defined that would benefit from being together on one site
Section B: CEC services – services that may require to be maintained as standalone
Section C: Shared services – services may benefit from a shared service element

Section D: R&D opportunities - work that would benefit from an R&D perspective as a result of a combined service
Section E: Commercialisation opportunities

Section A – NHS Services

Histopathology

Histopathology in NHS Lothian is currently split between the RIE and WGH site – all of the sample processing is done at RIE but there is a significant footprint of Histopathology consultants and pre-processing done at WGH.

There are governance issues related to the movement of slides, tissues and blocks that can add delay and error to the current system. Effective working within the team of Histopathologists (36WTE including University of Edinburgh employees)

There is an opportunity for greater technical staff efficiency and consultant team working to be enhanced to reduce costs and turnaround of histological function.

The University of Edinburgh would be interested in investing in a human biofacility built around the mortuary/ human tissue laboratory facilities. While this would require additional space to be developed within the footprint there would be considerable added value with human tissue samples (from a range of clinical cohorts, some of which will be research consented post mortem material) being stored in an accredited environment and being used by local research groups. There may be an opportunity for NHS/CEC facilities to support academic facilities, and for new research equipment to be made available to NHS/CEC.

In this option a combined laboratory and consultant team could occupy a floor in any new building close to a combined mortuary facility to combine the storage, handling and processing of tissue material. The added advantage is that this would release space at WGH for use as clinical area and release space at RIE within labs for the predicted expansion of molecular diagnostics avoiding cost and patchy instrument and staff deployment.

Molecular Diagnostics/Genetics Services

A combined service for NHS Lothian would bring together molecular techniques from both the RIE site and the WGH into one building. This would enhance the use of the very similar and in some cases identical equipment, technologies and staff bases. This currently duplicated in places across NHS Lothian.

Section B – City of Edinburgh Scientific Services

Scientific Services undertakes a range of sampling, chemical and microbiological testing relating to food safety and standards, agricultural materials (such as animal feeding stuffs, fertilisers), drinking water, recreational water, air pollution, environmental materials (such as soil, dusts), health and safety (such as asbestos, legionella, radiofrequency emissions) and consumer goods (such as toys, electrical goods, cosmetics). Testing is carried out in support of the Council's statutory duties and operational responsibilities.

The Scientific Services laboratory is designated an Official Food and Feed Control Laboratory by the Food Standards Agency in fulfilment of its role under EU Regulation 882/2004, which harmonises food and feed controls across Europe. The Service is recognised by Scottish Government as an approved laboratory for testing drinking water. The Service also fulfils the statutory requirements to undertake asbestos-related inspection and testing functions.

The Service is accredited to ISO17020 and 17025 international standards for laboratory quality and competence. To maintain accreditation, the Service operates within a strict internal quality system and undergoes an annual 18 person-day, onsite inspection and audit by the United Kingdom Accreditation Service (UKAS), which is a Government appointed third party auditor.

The Service provides the statutory functions of Public Analyst, Agricultural Analyst and Food Examiner and other scientific services on a cost recovery basis to eight other Scottish local authorities: East Lothian, Midlothian, Scottish Borders, Highland, Orkney, Shetland, South Lanarkshire and West Lothian.

The service provides a sampling, testing and consultancy service to local and national businesses and private individuals. Several of these are contract won by competitive tender.

The service provides an auditing and testing service to the CEC Corporate Property and Housing functions of the Council to ensure that water supplied in 300+ council properties and rented accommodation complies with Health and Safety legislation and does not pose a Legionella risk. It also provides an asbestos surveying and air testing service to the Corporate Property function to ensure that council properties comply with Health and Safety legislation and do not pose an asbestos risk to users. The Service does similar work for Housing Property Services to ensure that the housing stock is safe for tenants and to protect workers engaged in refurbishment works, such as kitchen and bathroom upgrades.

A 24/7 scientific advisory service to assist Scottish Fire and Rescue Service eastern hub (Central, Fife & Lothian & Borders) in dealing with chemical incidents and suspected CBRN (chemical, biological, radiological and nuclear) incidents, as part of the National Government resilience programme.

Section C - Shared Services Opportunities

Mortuary Services

There is a requirement to have a respectful end of life care package within Hospital sites. This means that the storage of the deceased after death in hospital and the ability to view a body on site is essential. A single facility for post mortem processing and combination of CEC and NHS Lothian expertise is viewed by Forensic Pathology teams as a very useful collaborative approach to harness best value and provide workforce planning for the future.

The development of a single-site Mortuary which caters for all aspects of end-of-life care for the East of Scotland will enhance the reputation of both NHS Lothian and CEC. The new service will provide Scottish Government with a robust medico-legal facility that will improve the standard of service that COPFS are provided, both in the handling and storage of bodies, and in relation to the post mortem investigations

required. This will be of particular importance to Scottish Government, given the current ongoing criticisms of SFIU and their handling of death investigation across the country.

From a pathology perspective, the potential development of a forensic pathology 'centre of excellence' will increase the likelihood of long-term service provision and contract agreements, with increased possibilities of pathology recruitment from both within the UK and from overseas. At present, the service is under-staffed at a Consultant level throughout Scotland, and the pressure on those in post continues to increase as the demands of COPFS also increase.

Clinical Adjacencies

Forensic pathology services require not just post mortem examinations but access to support services. Currently post mortem CT imaging is done at RIE on selected cases, with bodies being transferred from CEC facility to RIE. In addition, histology services are mainly based at RIE site, as is clinical microbiology and clinical chemistry, with samples currently transferring between CEC mortuary and RIE. Co-localisation at RIE site would greatly facilitate sample processing.

Training

By developing a single mortuary facility with NHS/CEC/University support, there is a significant opportunity for cost recovery built around international training programmes in forensic pathology and forensic sciences. The service receives regular requests for training, funded by Governments mostly from middle and far East.

A single service would lead to a postgraduate MSc program, which would be extremely popular with overseas forensic pathologists in training, and which would benefit Edinburgh University in a number of ways including financially. There are opportunities for new and innovative methods of teaching being developed in a single-site facility.

Research

The development of a single-site would provide research opportunities, enhancing the reputation of both the forensic service and the University of Edinburgh/NHS Lothian, particularly as the involvement of molecular genetics in the development of significant disease becomes increasingly apparent.

Staffing

In this model, staff would be combined, but only those patients requiring post mortem processing would be moved to the new mortuary. This would allow for additional on site contingency body storage, shared equipment and a single management and quality system. The body store could be operated by non-pathology trained staff and the majority of relatives would view in the current hospital surroundings. This would represent a true rationalisation of mortuary processing provision across the city and beyond.

Major incident management

Allied to the improvement in quality of general service provision for Scottish Government, the development of a new large-scale mortuary facility will provide them with a further resource that can be used in the event of major incidents, similar to that already established at QERH in Glasgow. The development would be able to deal with the majority of incidents involving multiple fatalities, and would lend itself to the DVI (Disaster Victim Identification) approach to such eventualities that is now required when handling such an event. At present, there is no reasonable facility in the East of Scotland that could provide a robust response for anything other than a relatively small incident.

Current service footprint

NHS Lothian Mortuary

The NHS Lothian service consists of a single post mortem facility at RIE and an extensive network of body stores located at hospital sites.

A typical annual NHS Lothian post mortem work load is (2013-14 data)

Full adult	37
Limited adult	60
Paediatric	194
Brain	195
Referred brain	50
Total	**536**

NHS Lothian has Forensic services which are scheduled to move to plot Nine at BioQuarter in February 2016 consisting of ten staff including five consultant Forensic Pathologists and support staff.

City of Edinburgh Council Cowgate Mortuary

Currently NHS Lothian provides the forensic pathology autopsy service for the East Federation Death Investigation Unit of COPFS, which is delivered through the City of Edinburgh Council Mortuary on Cowgate. The current Crown contract agreement covers all Fiscal autopsies for Lothian and Borders, and all 'forensic' Fiscal autopsies for Central and Fife. Currently, about 1400-1500 actual post mortems are performed per year including 'view and grant' procedures. This equates to 1,700-1,800 cases per annum allowing for the twp doctor autopsy system. It is considered likely that NHS Lothian will be asked to consider absorbing all other Central and Fife Fiscal autopsies – an additional 500 to 600 cases annually i.e. a workload of more than 2000 post mortems per year

Combined Mortuary Annual Post Mortem Capacity Requirement

NHS Lothian	550
of which paediatric	200
City of Edinburgh	1450
Current Total	**2000**
Potential additional East Scotland Fiscal	600
Total Design Capacity Requirement	**2600**

Microbiology Services

NHS Lothian and CEC both provide microbiology services, albeit these are on difference scales of delivery. If space is made available with the RIE site due to relocation of other NHS services then it is possible that both microbiology services could work alongside each other, benefiting from NHS Lothian technology, supporting services such as microbiology automation and MALDi-TOF identification technology.

The interplay between food water and clinical microbiology would be greatly enhanced around disease control associated with some of the major pathogens such as E.coli O:157.

Access to molecular techniques

In a combined service it is very likely that the access to molecular techniques required by NHS Lothian and CEC would be able to be shared.

Whole Sequencing

The Cooperative of Zoonoses Experience and Expertise (CoZEE) group held a meeting in November 2014 where representatives from various parts of the food chain such as seeds, animal production (vets), food testing and clinical examination discussed next generation/whole genome sequencing. It was clear that CEC Public Analyst/Scientific Services were falling behind as a paradigm shift was underway in this space. Some of the recent work CEC has done with incident management teams involving microbiological contamination of water and compost has had remarkable input from whole genome sequencing. But that has taken up to 6 months due to lack of easy equipment access. Discussions with the Scottish E. coli reference laboratory after the E. coli O104 outbreak in Germany revealed there is now a significant 3 to 5% non E. coli O157 STEC/VTEC in faecal samples. The most likely scenario for infection is eating contaminated food. But the level of food testing has been negligible in Scotland until now with Real Time PCR testing in Edinburgh starting. There are obvious synergies to be found in shared equipment usage to better leverage good patient and customer outcomes.

This shared service would provide capability and resilience to deal with another horse meat authenticity incident. During the horse meat issue Scotland and the UK lacked an available sequencing capability with samples being sent to one of numerous NGS molecular centres in Germany. Food Standards Scotland have indicated they are supportive of creation of a joined up clinical and food centre of excellence in Scotland. In England PHE have oversight of the clinical diagnostic laboratories, Food Water & Environment (FWE) laboratories and reference facilities such as Colindale. But the Public Analyst food chemical testing service is separate from the Food Microbiology in England.

Procurement and Quality

NHS Lothian has access to nationally agreed high volume based contracts for microbiology and chemistry supplies. CEC working from a smaller volume based procurement strategy could take advantage of a superior pricing strategy.

Procurement does not limit itself to consumables. There are additional adjacencies to service contracts for routine laboratory equipment such as centrifuges, pipettes, freezers and fridges across all combined services.

In addition NHS Lothian has across all sites the Gael Quality Qpulse Quality management system which is expandable to other services. In addition CEC has a large knowledge base in UKAS accreditation and there is potential for sharing expertise in helping NHS Lothian achieve UKAS ISO15189 accreditation.

Shared Common Equipment

Autoclaves

NHS Lothian on the RIE site has a large modern autoclave facility with two $6m^2$ steam run autoclaves in a purpose built facility. This could obviate the need for the build of significant autoclave facilities in any new CEC building.

Electron Microscopy

NHS Lothian hosts an electron microscopy service which would be used by CEC for asbestos investigations who currently do not have this expensive technology. This would give greater public protection by identifying asbestos in difficult to test matrices or where asbestos is present at very low levels such as in some artex coatings.

Maldi-ToF technology

Availability of this technology on the campus would allow both services to identify organisms effectively to support their public health protection remits. Accurate and early identification of food pathogens is a key goal of Food Standards Scotland to protect public health and reduce the level of food poisoning.

Asbestos & Legionella Testing Services

Combining work on the same campus offers an opportunity for NHS Lothian to bring these services which CEC perform routinely back in house.

Section D – R&D opportunities

Histopathology and Molecular Diagnostics

The University of Edinburgh would be interested in investing in a human biofacility built around the mortuary/ human tissue laboratory facilities. While this would require additional space to be developed within the footprint there would be considerable added value with human tissue samples (from a range of clinical cohorts, some of which will be research consented post mortem material) being stored in an accredited environment and being used by local research groups. There may be an opportunity for NHS/CEC facilities to support academic facilities, and for new research equipment to be made available to NHS/CEC.

Section E – Commercialisation Opportunities

Both NHS Lothian and CEC provide microbiology services providing an opportunity to capitalise on joint working allowing CEC to expand microbiology services and testing onto a bigger commercial footprint. This will allow easier access to identification, PCR and automated microbiology facilities. For example Food Standards Scotland has a number of national sampling programmes ranging from £0.2m to £2.0m that could be accessed through joint working and collaboration. These arrangements may require setting up of a trading vehicle such as a Limited Liability Partnership (LLP) to address Teckal procurement issues.

DRAFT

Transport and Environment Committee

10am Tuesday 7 June 2016

Appointments to Working Groups, etc – 2016-17

Item number	7.8
Report number	
Executive/routine	
Wards	

Executive summary

The Transport and Environment Committee is required to annually re-appoint the membership of its working groups. The current memberships are detailed in the appendix to this report.

Links

Coalition pledges	
Council outcomes	
Single Outcome Agreement	

Report

Appointments to Working Groups, etc – 2016-17

Recommendations

1.1 To note that on the 15 March 2016 the Transport and Environment Committee agreed to the formation of the Transport Projects Working Group and the reconstitution of the Future Transport Working Group and the Leith Programme Oversight Group.

1.2 To appoint the Transport and Environment Committee membership of its working groups for 2016/17 as detailed in the appendix to this report.

Main report

2.1 The Transport and Environment Committee on 2 June 2015 appointed the membership to its sub-committees and working groups for 2015/16.

2.2 The Committee on 15 March 2016 approved the formation, remit and membership of the Transport Projects Working Group and the reconstitution of the Future Transport Working Group and the Leith Programme Oversight Group.

2.3 The Committee is requested to re-appoint the membership of its working groups for 2016/17.

Measures of success

3.1 Not applicable

Financial impact

4.1 Not applicable

Risk, policy, compliance and governance impact

5.1 Working groups are required to be appointed by the relevant executive committee.

Equalities impact

6.1 Not applicable

Sustainability impact

7.1 Not applicable

Consultation and engagement

8.1 Not applicable

Background reading / external references

Minute of the Transport and Environment Committee – 2 June 2015

Minute of the Transport and Environment Committee – 15 March 2016

Committee Terms of Reference and Delegated Functions

Andrew Kerr

Chief Executive

Contact Stuart McLean, Committee Clerk

E-mail: stuart.mclean@edinburgh.gov.uk | Tel: 0131 529 4106

Links

Coalition pledges	
Council outcomes	
Single Outcome Agreement	
Appendices	Current Membership of the Transport and Environment Committee's Working Groups etc

Current Membership of the Transport and Environment Committee's Working Groups etc

Active Travel Forum

1 Member (Convener of the Transport and Environment Committee)

Councillor Hinds

Active Travel Forum for Cycling

1 Member (Vice Convener of the Transport and Environment Committee)

Councillor McVey

Active Travel Forum for Walking

1 Member (Vice Convener of the Transport and Environment Committee)

Councillor McVey

Carbon, Climate and Sustainability Working Group

5 Members (Convener and Vice-Convener of the Transport and Environment Committee, 1 Conservative, 1 Green and 1 SLD)

Councillor Hinds

Councillor McVey

Councillor N Cook

Councillor Booth

Councillor Aldridge

Duddingston Village Traffic Working Group

5 Members (1 Labour, 1 SNP, 1 Conservative, 1 Green, 1 SLD and local ward members for the Craigentinny/Duddingston Ward)

Councillor Hinds

Councillor McVey

Councillor N Cook

Councillor Bagshaw

Councillor Aldridge

Councillor Griffiths (local Ward Member)

Councillor Lunn (local Ward Member)

Councillor Tymkewycz (local Ward Member)

Future Transport Working Group

5 Members (1 Labour, 1 SNP, 1 Conservative, 1 Green and 1 SLD)

Councillor Hinds

Councillor McVey

Councillor N Cook

Councillor Bagshaw

Councillor Aldridge

Local Access Forum

1 Member (Convener of the Transport and Environment Committee)

Councillor Hinds

Transport Projects Working Group

Leader of the Council (Chair), Deputy Leader of the Council, Convener of Transport & Environment Committee, Vice Convener of Transport & Environment Committee, Opposition Group Leaders, Opposition Transport Spokespersons

Councillor Burns

Councillor Ross

Councillor Hinds

Councillor McVey

Councillor Burgess

Councillor Edie

Councillor Rose

Councillor Aldridge

Councillor Bagshaw

Councillor N Cook

Tram All Party Oversight Group

10 members (Leader and Deputy Leader of the Council, Opposition Group Leaders, Convener and Vice-Convener of Transport and Environment Committee, Opposition Spokespersons of Transport and Environment Committee

Councillor Burns

Councillor Ross

Councillor Hinds

Councillor McVey

Councillor Aldridge

Councillor Bagshaw

Councillor Burgess

Councillor Edie

Councillor N Cook

Councillor Rose

Transport Forum

5 Members (1 Labour, 1 SNP, 1 Conservative, 1 Green, 1 SLD)

Councillor Hinds

Councillor McVey

Councillor N Cook

Councillor Bagshaw

Councillor Aldridge

Zero Waste Cross Party Cross Council Group

5 Members (1 Labour, 1 SNP, 1 Conservative, 1 Green, 1 SLD)

Councillor Hinds

Councillor McVey

Councillor N Cook

Councillor Booth

Councillor Aldridge

Transport and Environment Committee

10.00am, Tuesday, 7 June 2016

Public Utility Company Performance 2015/16 Quarter 3 (October, November and December 2015)

Item number	8.1
Report number	
Executive/routine	
Wards	All

Executive Summary

This report summarises the performance of Public Utility Companies (PUs) during the period October to December 2015 (Quarter 3), for the 2015/16 financial year.

The report comments on the performance and progress of the Roadwork Support Team (RST) including the additional Inspectors, employed on a temporary basis, to allow the Council to inspect 100% of PU reinstatements.

The report also details the proposals for managing future PU performance.

Links

Coalition pledges	P28 and P33
Council priorities	CP4
Single Outcome Agreement	SO4

EDINBVRGH
THE CITY OF EDINBURGH COUNCIL

Report

Public Utility Company Performance 2015/16 Quarter 3 (October, November and December 2015)

1. Recommendations

1.1 It is recommended that the Transport and Environment Committee:

1.1.1 notes the report and the arrangements for securing an improved level of performance from all Public Utilities;

1.1.2 notes the response to the question raised at the Transport and Environment Committee on 27 October 2015 to approach Scottish Government asking that consideration be given to increasing the fees for fixed penalty notices;

1.1.3 notes that at recent meetings involving All Party Council Members and officers, senior management representatives of the major Public Utility Companies had given assurances that their performance in Edinburgh would improve;

1.1.4 notes that disappointingly the latest performance figures do not demonstrate improved performance; and

1.1.5 instructs that a meeting of the Edinburgh Roadworks Ahead Agreement Working Group be arranged at an early date to consider further action required in relation to these performance levels, and also how best to progress the outstanding request that all Public Utilities sign up to the Edinburgh Roadworks Ahead Agreement

2. Background

2.1 The New Roads and Street Works Act 1991, as amended by the Transport (Scotland) Act 2005, gives statutory undertakers or Public Utilities (companies and private utility providers) responsibility for signing, lighting and guarding road works. The legislation also requires the road to be reinstated to prescribed standards upon completion of works.

2.2 The Transport and Environment Committee, at its meeting on 15 January 2013, agreed to receive quarterly Public Utility (PU) Performance Reports and instructed the Head of Transport to enhance the scrutiny and monitoring of all roadworks. The Committee also agreed to instruct the Head of Transport to take the lead in developing a revived Edinburgh Road Works Ahead Agreement (ERWAA).

2.3 This report provides an update on developments that have occurred during the three month period between October and December 2015.

3. Main report

Performance

3.1 The performance of each PU is monitored daily by the Roadworks Support Team (RST), with reports compiled on a monthly and quarterly basis. The result of this monitoring is discussed at bi-monthly liaison meetings held with each PU, on a one to one basis.

3.2 Where a PU fails to meet the specified performance standards, as defined in the appropriate Code of Practice, the following staged procedure should be used.

3.2.1 The Roadwork Authority issues a Notice of Failure to Achieve Performance (NFAP). This is the first stage of action in improving performance.

3.2.2 The undertaker responds with an Improvement Plan – Stage 1.

3.3 In the event that the PU does not achieve the required level of improvement, the following actions are taken:

3.3.1 the Roadwork Authority issues an Improvement Notice (IN); and

3.3.2 the PU responds with an Improvement Plan – Stage 2.

3.4 Within five days of receiving the NFAP, the PU must verify and analyse the defect data (gathered from inspections and performance information), to establish appropriate improvement objectives. The PU should then prepare an outline Improvement Plan, designed to achieve the objectives, and forward this to the Roadwork Authority.

3.5 Following implementation of the Improvement Plan, if it becomes clear after three months that no practical improvement is being achieved, other measures may need to be considered such as:

3.5.1 escalation of the Improvement Plan monitoring to achieve a step change in performance;

3.5.2 involvement of a more senior level of management within both the PU and the Roadwork Authority; and

3.5.3 following an appropriate grievance and dispute process, civil and/or criminal remedies.

3.6 Where improvements are not achieved following a Stage 2 plan, a report, containing all relevant evidence of the PU's failure to comply with its duties under the New Roads and Street Works Act, will be submitted to the Office of the Scottish Road Works Commissioner for information.

Inspections

3.7 The New Roads and Street Works Act 1991, as amended by the Transport (Scotland) Act 2005, makes PUs wholly responsible for the management of their roadworks. Councils, as Roadwork Authorities, are responsible for monitoring the performance of the PUs and are empowered to charge them for a number of sample inspections carried out to monitor the performance. The sample size that is currently chargeable is 30% of the total annual number of reinstatements. Other inspections, carried out routinely by the Roadwork Authority, or in response to reports from the police or members of the public, may also be carried out. The cost of these inspections falls to the Council, unless a defect is found.

3.8 The two areas that are inspected and monitored closely are PU reinstatements and PU defective apparatus (manholes, toby covers, valve and inspection/access covers).

3.9 Target inspections are the other inspections carried out. They involve the Council investigating all new reinstatements, or those still within their two year guarantee period.

3.10 The total number of all inspections carried out in Quarter 3 was 8,171, with the total for Quarters 1, 2 and 3 shown in Graph 3.10A. The numbers carried out in each month of Quarter 3 are shown in Graph 3.10B. The number of inspections carried out in Quarter 3 has increased by 114% from that in the same period in 2014/15. This is a direct result of the initiative to increase inspections and the subsequent recruitment within the Roadwork Support Team, for this purpose. The cost of this is fully offset by projected income from compliance inspections.

3.11 The average pass rate for inspected reinstatements was 80.3%, against a target of 90%, as shown in Table 3.11. This is a reduction in performance of 1.0% from Quarter 2, and a reduction of 6.7% since the end of 2014/15.

Sample Inspections

3.12 The total number of sample inspections carried out in Quarter 3 was 320, with the breakdown between each inspection type shown in Table 3.12.

3.13 The percentage pass rate for each PU, at the end of Quarter 3, is shown in Table 3.13 and Graph 3.13. The target pass rate for all PUs is 90%.

Target Inspections

3.14 The cumulative number of target inspections carried out in Quarter 3 was 2,108, with the breakdown between each inspection type shown in Table 3.12.

3.15 The number of inspections carried out in Quarter 3 shows an increase of 4,348 inspections, when compared to the number carried out in the same period in 2014/15, as shown in Graph 3.15.

Utility Defective Apparatus

3.16 The total number of outstanding defective apparatus at the end of Quarter 3 was 638, an increase of 152 on the previous quarter. A breakdown for each PU is shown in Table 3.16. There was a reduction in the number of outstanding defective apparatus of 5% when compared to the end of 2014/15.

3.17 The PU with the largest number of defective apparatus continues to be Scottish Water, with 483 items, as shown in Graph 3.17. This represents an increase of 110 defects since Quarter 2 and an increase of 21 defects since the end of 2014/15.

3.18 During Quarter 3, Scottish Power was the only PU that improved the number of outstanding apparatus defects. For comparison, the figures for the end of the last four years are shown in Table 3.18.

Utility Defective Reinstatements

3.19 At the end of Quarter 3, the total number of outstanding defective reinstatements in Edinburgh was 939. A breakdown for each PU is shown in Table 3.19 and Graph 3.19. Scottish Water continues to be the PU with the largest number of defective reinstatements although this number decreased by 7% on the previous quarter. These defects are discussed at the bi-monthly liaison meetings and proposals to remedy the backlog are included in their Stage 2 Improvement Plans.

Registration and Fixed Penalty Notices (FPNs)

3.20 All roadworks on public roads must be registered on the Scottish Road Works Register (SRWR).

3.21 PUs are required to record all information relating to the works they wish to undertake and works that are underway. Roads Authorities are also required to record all information on works they wish to carry out. Developers, and others wishing to occupy or carry out works on public roads, must first obtain consents (Road Occupation Permits) from the Roadwork Authority. The Roadwork Authority is then responsible for the registration of these works.

3.22 A comparison of the Council's registration failures is shown in Graph 3.22.

3.23 Failure to comply with the above requirements is an offence. PUs, and those working under Road Occupation Permits, that commit such an offence, can discharge their liability through the payment of a Fixed Penalty Notice (FPN). Currently the Penalty is £120, which is reduced to £80 if paid within 29 days. A breakdown of FPNs issued in Quarter 3 is shown in Graph 3.23.

3.24 The total number of FPNs accepted by PUs in Quarter 3 was 284. A further 111 FPNs were accepted by other agents in relation to Road Occupation Permits eg skips, scaffolding, etc.

Improvement Plans

3.25 Scottish Water, SGN, Scottish Power, Openreach and Virgin Media were served with a Stage 2 Improvement Notice on 8 June 2015. The Stage 2 Improvement Plans submitted and implemented by each PU were monitored for 12 weeks up to 31 October 2015. The changes made to working practices are a permanent change and continued beyond the end of the monitoring period. The performance data collected from Sample Inspections, used in the determination of the outcome of any improvement, was only available at the end of Quarter 3 (December 2015).

3.26 The pass rates for each of the five PUs with staged Improvement Notices are shown in Table 3.26.

3.27 The assessment covers the performance of each PU during the 12-week period of its Improvement Plan and their performance figures for the 12-month period from 1 October 2014 to 30 September 2015. It also considers the commitment from each PU to achieve the required improvement in performance and reduction in legacy defects.

Performance Monitoring

3.28 The figures and graphs referred to throughout this report are shown in Appendix A.

The Edinburgh Road Works Ahead Agreement (ERWAA)

3.29 A report outlining the new working arrangements for the ERWAA was submitted to, and approved by, the Transport and Environment Committee on 18 March 2014.

3.30 As requested at the Committee meeting of 27 August 2015, letters were sent to the CEO of each Public Utility Company inviting them to a meeting to discuss their performance and their concerns with signing the agreement.

3.31 At the time of writing this report, meetings have been held with Scottish Water, Openreach, SGN and Scottish Power. A further meeting with Scottish Water was held on 23 December 2015, to discuss the areas of the agreement it wished to amend prior to signing.

3.32 The meetings held to date have largely been productive with positive responses from each PU regarding its performance improvements. Each PU discussed its plans for the future including improving performance. As Scottish Water and SGN have the majority of apparatus in the roads and pavements, it was suggested that additional information is included in this report showing the proportion of defects against their total asset. It was agreed that this would be included in future reports.

3.33 CityFibre, SGN, Openreach and Scottish Water are the only PUs to have responded to date. CityFibre has confirmed that it is in favour of signing the agreement without any amendments. SGN has acknowledged its willingness to sign the agreement, subject to two areas of concern, which have been addressed and Scottish Water requested amendments to the agreement, which have now been made.

3.34 Scottish Water have not responded to requests from the Council, for confirmation of their willingness to sign the agreement since being issued with the updated version.

Response to Question raised at Previous Committee

3.35 A request was made, at the Transport and Environment Committee held on 27 October 2015, for Officers to approach the Scottish Government to ask that consideration be given to increasing the Fixed Penalty Notices.

3.36 Fixed Penalty Notices can only be applied to four sections of the New Roads and Street Works Act 1991. These are:

3.36.1 Failure to give advance notice of the work, Section 113;

3.36.2 Failure to issue a start date of the work, Section 114;

3.36.3 Failure to notify Emergency work, Section 116; and

3.36.4 Failure to notify of completion of work, Section 129.

3.37 These sections relate to the co-ordination of road works, as placed on the Scottish Road Works Register. Fixed Penalty Notices cannot currently be applied to poor workmanship or failed reinstatements.

3.38 A review is underway by the Scottish Government, relating to the functions of the Scottish Road Works Commissioner. A response from the Scottish Government has informed the Council that the subject of Fixed Penalty Notices has been raised with them by other Roads Authorities and through CoSLA. The Scottish Government has advised that this is something which may be looked at following the outcome and recommendations of the review. One of the areas which the review is focusing on is 'enforcement' relating to quality, which includes fixed penalties. At the time of writing this report the Scottish Government hopes to have the outcome of the review by April 2016. An update, if available, will be provided in the Quarter 4 report.

4. Measures of success

4.1 Improved performance in the key areas reported will be measured by greater public satisfaction with:

4.1.1 the planning, co-ordination and delivery of road works across the city;

4.1.2 the quality of information supplied to people who live in, work in or visit Edinburgh; and

4.1.3 the quality and longevity of PU reinstatements.

4.2 Public satisfaction will be measured by contacting residents in areas where a PU has completed a major scheme of work. Customer Satisfaction cards have not been issued during Quarter 3 owing to procurement issues with the contracted supplier however information will be provided in the Quarter 4 report.

5. Financial impact

5.1 The revenue streams associated with sample and repeat inspections of failed PU reinstatements exceeded the budget of £177,295 for Quarters 1, 2 and 3. The total revenue from the charges levied for these activities was £246,448.

5.2 The cost of employing the additional Inspectors, is currently fully offset by the revenue received from the compliance inspections.

6. Risk, policy, compliance and governance impact

6.1 There is a risk that the condition of the road network could deteriorate if the 100% inspection of PU reinstatements is not maintained. If 100% inspections are not undertaken, there is a risk that defects would not be found and responsibility for their repair would fall to the Council.

6.2 Where the Council has made significant investment in road improvements, there is a risk that the road network may deteriorate, following reinstatements that have not been carried out to the agreed standards.

6.3 There is a risk of reduced revenue, if the number of inspections is less than that estimated at the beginning of the year.

6.4 There is a risk of lack of improvement by poor performing PUs. This is currently being addressed by the use of formal Improvement Plans, as specified in Code of Practice for Co-ordination of Works in Roads.

7. Equalities impact

7.1 There are no equalities impacts arising from this report.

8. Sustainability impact

8.1 There are no sustainability impacts arising from this report.

9. Consultation and engagement

9.1 Individual Liaison meetings are held every two months with representatives from all of the major PUs. Specific performance issues and improvement requirements are discussed at these meetings.

9.2 Throughout the year the Council was represented at all relevant Committees (detailed below), as required within the Code of Practice for the Co-ordination of Works in Roads.

9.2.1 The Roads and Utilities Committee Scotland (RAUCS) where all Roads Authorities and PUs are represented together with representatives from Transport Scotland and the office of the Scottish Road Works Commissioner.

9.2.2 The South East of Scotland Roads and Utilities Committee (SERAUC) where representatives from the City of Edinburgh, Midlothian, East Lothian, West Lothian and Scottish Borders Councils attend, together with representatives from all PUs.

9.2.3 The Local Roads and Utilities Committee (LRAUC) is also known as the Local Co-ordination meeting. This includes representatives from every function and service within Services for Communities that have an involvement in roadworks or road occupation eg Lothian Buses, every Utility, Edintravel and the Tram Team.

10. Background reading/external references

10.1 Quality of Utility Company Reinstatements – Item 5.16, Transport and Environment Committee, 18 June 2012.

10.2 Code of Practice for Inspections", 3rd edition, approved by the Roads Authority and Utility Committee Scotland, November 2012.

10.3 Code of Practice for the Co-ordination of Works in Roads, version 1.0, April 2013.

Paul Lawrence

Executive Director of Place

Contact: Stuart Harding, Performance Manager

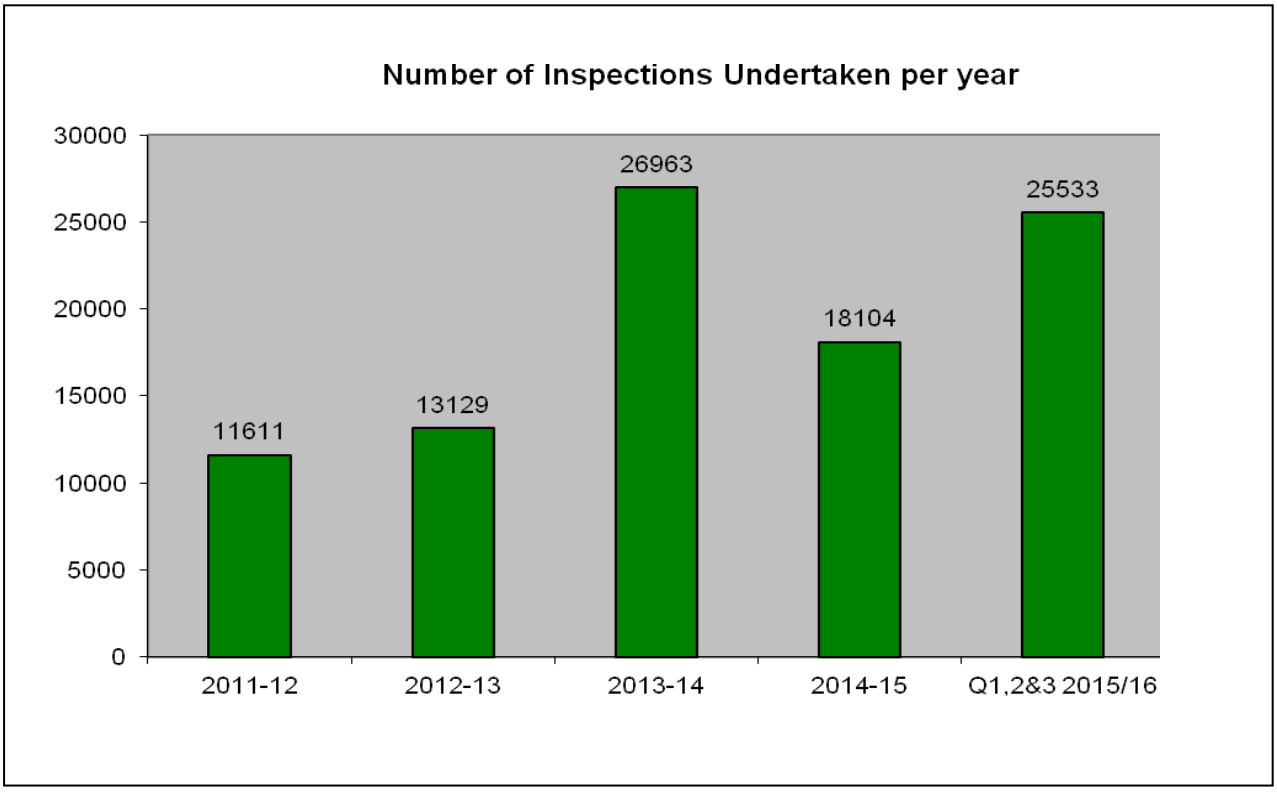
E-mail: stuart.harding@edinburgh.gov.uk | Tel: 0131 529 3704

11. Links

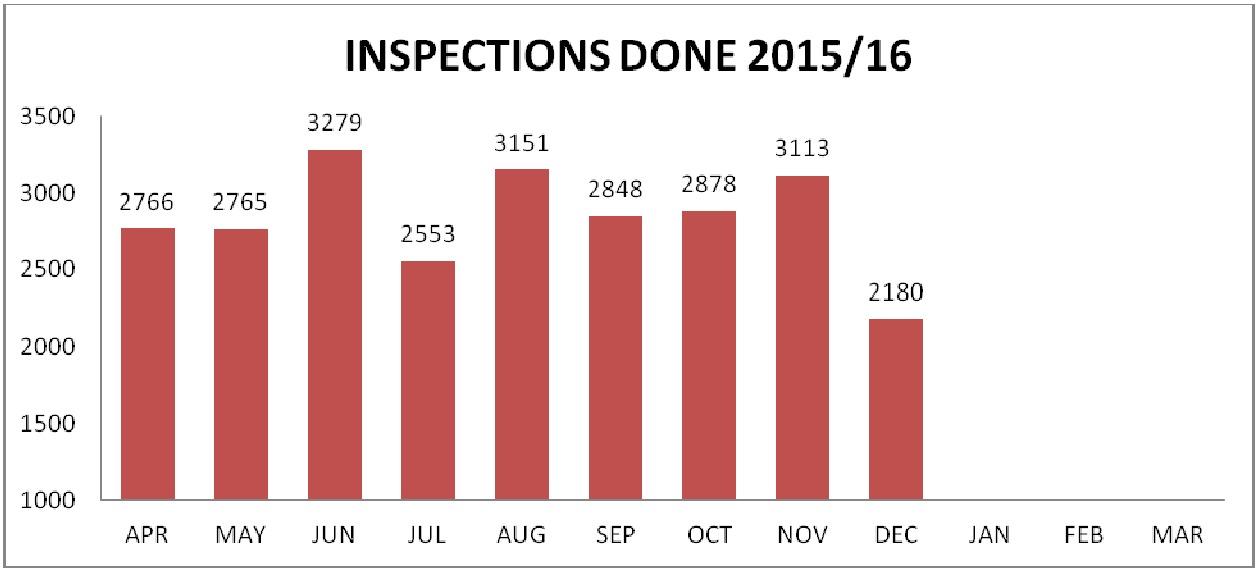
Coalition pledges	P28 - Further strengthen links with the business community by developing and implementing strategies to promote and protect the economic well being of the city. P33 - Strengthen Neighbourhood Partnerships and further involve local people in decisions on how Council resources are used.
Council priorities	CP4 - Safe and empowered communities CP12 - A built environment to match our ambition
Single Outcome Agreement	SO4 - Edinburgh's communities are safer and have improved physical and social fabric.
Appendices	Appendix A - Utility Company Performance Information 2015/16

APPENDIX A

Graph 3.10A



Graph 3.10B



In Quarter 3 there were 8,171 inspections carried out. The estimated target of 20,000 inspections has been exceeded this year, with 25,533 undertaken between April and December.

APPENDIX A

Table 3.11

Average pass rate for ALL PUs

	No of Failures	% Pass Rate
SAMPLE INSPECTIONS	79 / 320	75.3%
Category A	45 / 89	49.4%
Category B	18 / 115	84.3%
Category C	16 / 116	86.2%
TARGET INSPECTIONS	438 / 2108	79.2%
Category A	47 / 181	74.0%
Category B	222 / 987	77.5%
Category C	169 / 940	82.0%
DEFECTIVE REINSTATEMENTS	425 / 2158	80.3%

The target minimum pass rate for all PUs is 90%.

APPENDIX A

Table 3.12

Number of inspections for ALL PUs

TYPE	CATEGORY A	CATEGORY B	CATEGORY C	OTHER INSPECTIONS	TOTAL
	Inspections during the progress of the works.	Inspection within six months of the work being completed.	Inspection within three months of end of guarantee period.		
SAMPLE INSPECTION	89	115	116	-	320
TARGET INSPECTION	181	987	940	-	2108
DEFECTIVE APPARATUS	-	-	-	1261	1261
DEFECTIVE REINSTATEMENT	-	-	-	3548	3548
INSPECTIONS RELATED TO CORING	-	-	-	361	361
OTHERS	-	-	-	173	173
TOTAL	270	1102	1056	5343	7771

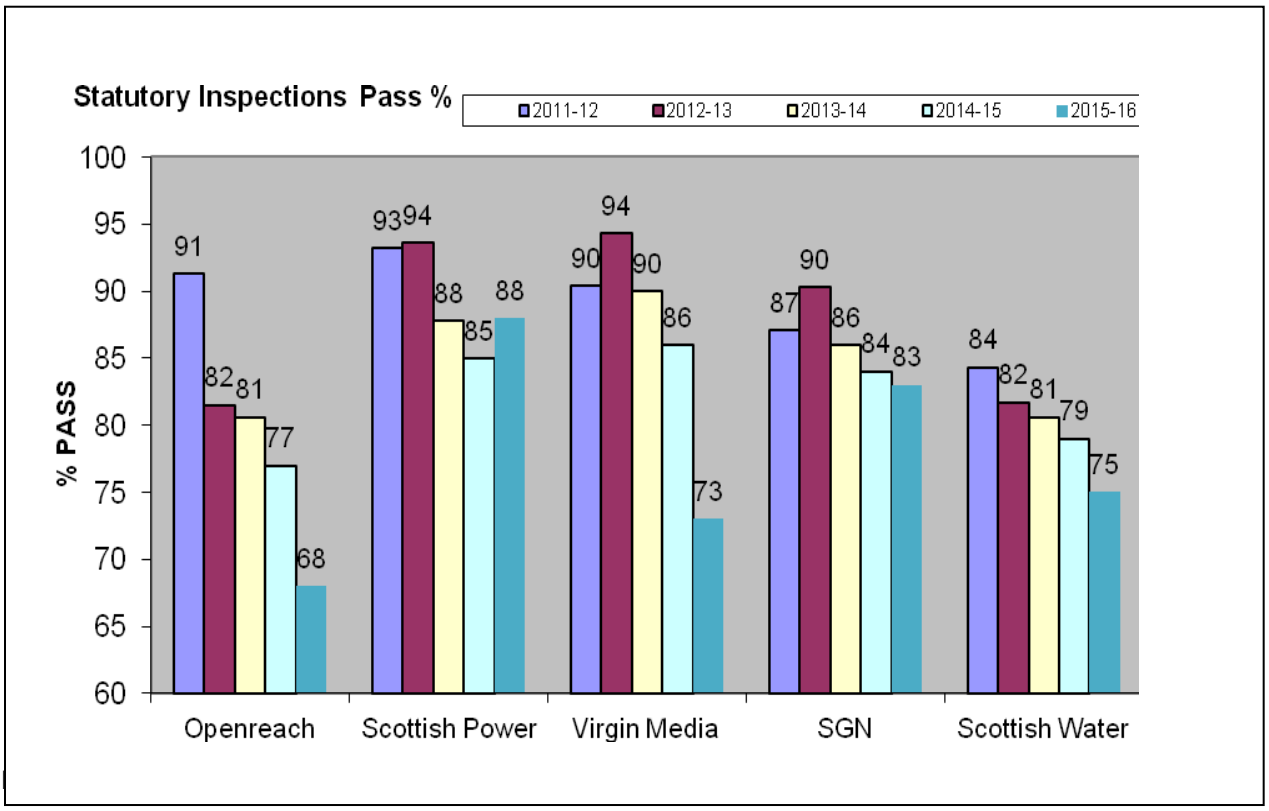
Table 3.13

The table below shows the average percentage pass rate for Sample Inspections for each PU over Quarter 3. The target minimum pass rate for all PUs is 90%.

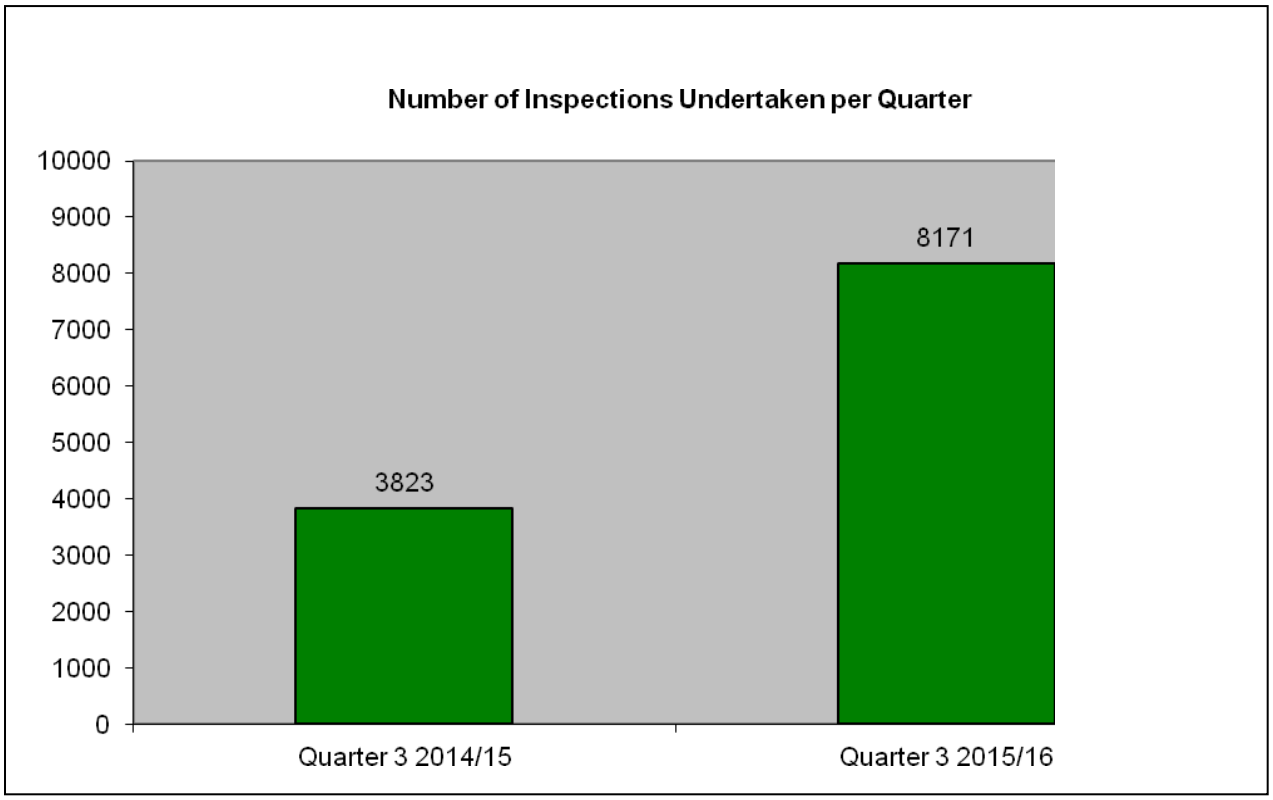
	Openreach	Scottish Power	Virgin Media	SGN	Scottish Water
Pass Rate	68%	88%	73%	83%	75%

APPENDIX A

Graph 3.13



Graph 3.15



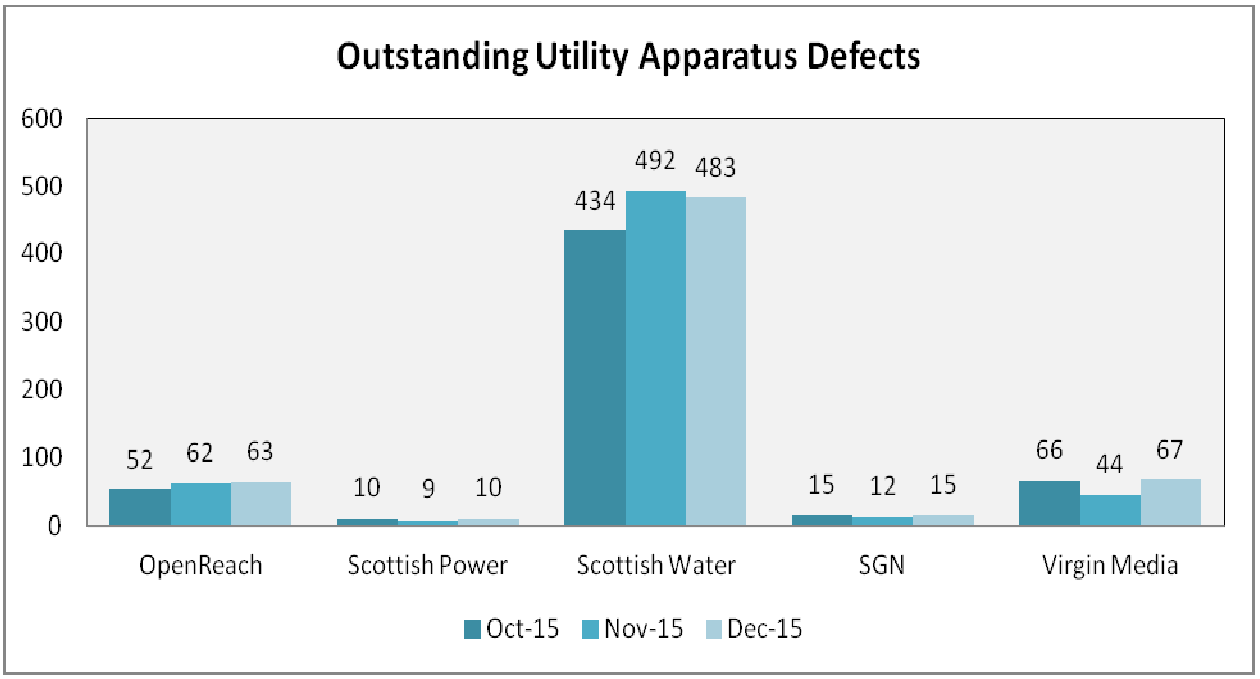
APPENDIX A

Table 3.16

The total number of outstanding Defective Apparatus for the last 4 Quarters is shown below.

Utility	Q4 (2014/15)	Q1 (2015/16)	Q2 (2015/16)	Q3 (2015/16)	Difference Q2 to Q3
SGN	21	19	14	15	1 (7.1%)
Scottish Water	462	333	373	483	110 (29.5%)
Openreach	144	36	37	63	26 (70.2%)
Scottish Power	26	14	11	10	-1 (-9.1%)
Virgin Media	20	58	51	67	16 (31.4%)
Totals	673	460	486	638	

Graph 3.17



The high number of outstanding defects for Scottish Water (at 483) is a long standing issue, which has been raised as a specific concern and included in their Stage 2 Improvement Plan.

APPENDIX A

Table 3.18

The table below shows the comparison of the numbers of outstanding defective apparatus for each PU over the past four years, measured at the end of each year.

PU	End of 2011/12	End of 2012/13	End of 2013/14	End of 2014/15	Q3 of 2015/16
Openreach	130	53	51	144	63
SGN	75	22	8	21	15
Scottish Power	47	8	5	26	10
Scottish Water	801	582	470	462	483
Virgin Media	93	27	19	20	67

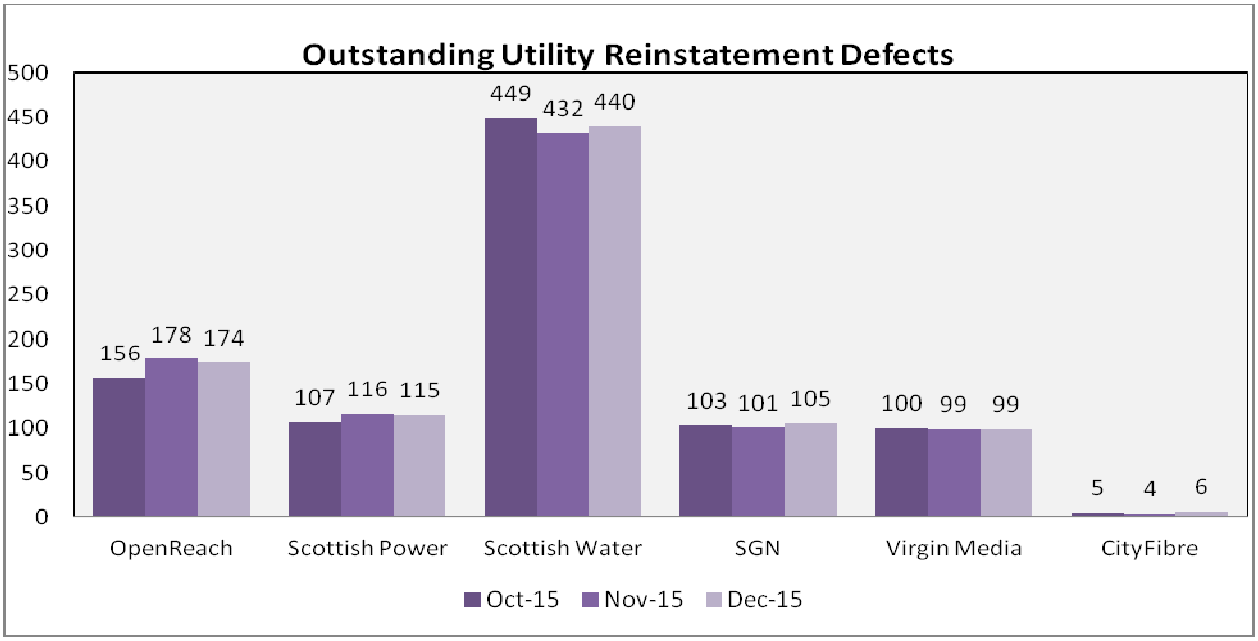
Table 3.19

The total number of outstanding Defective Reinstatements for each quarter, for each PU, is shown below:

Utility	Q4 (2014/15)	Q1 (2015/16)	Q2 (2015/16)	Q3 (2015/16)	Difference Q2 to Q3
SGN	168	172	113	105	-8 (-7%)
Scottish Water	390	527	473	440	-33 (-7%)
Openreach	106	135	135	174	39 (29%)
Scottish Power	98	108	110	115	5 (3%)
Virgin Media	62	82	104	99	-5 (-5%)
CityFibre	-	-	3	6	3 (100%)
Totals	824	1024	938	939	

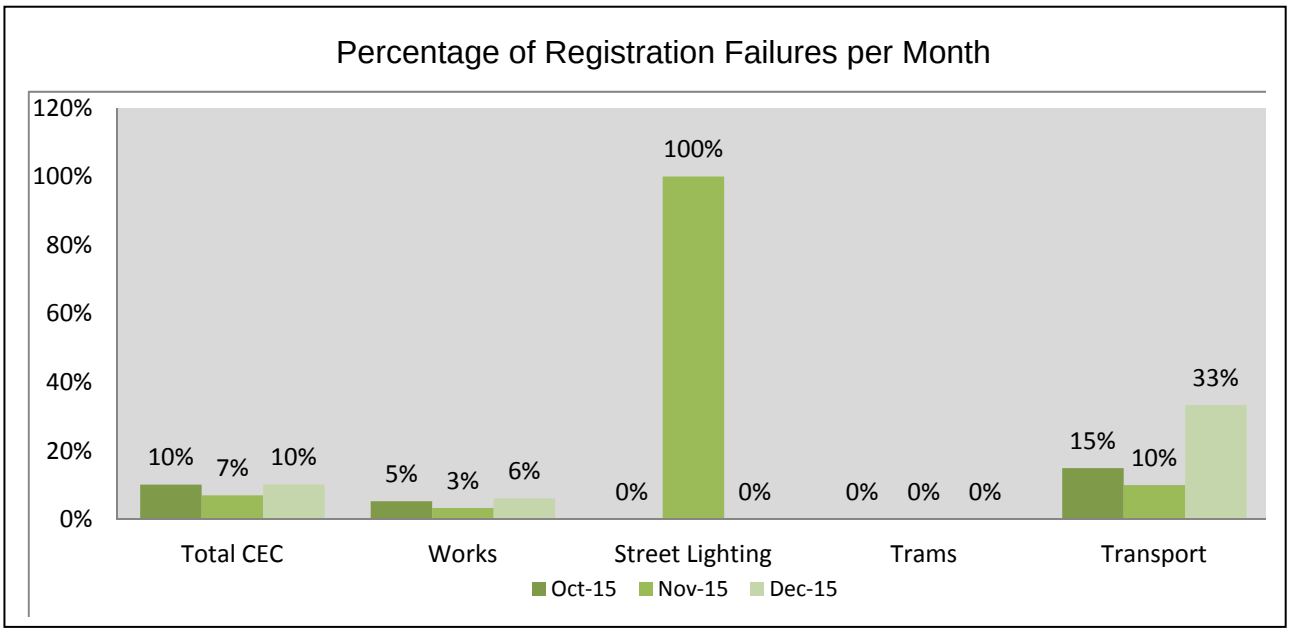
APPENDIX A

Graph 3.19



The number of outstanding defective reinstatements has increased slightly during Quarter 3.

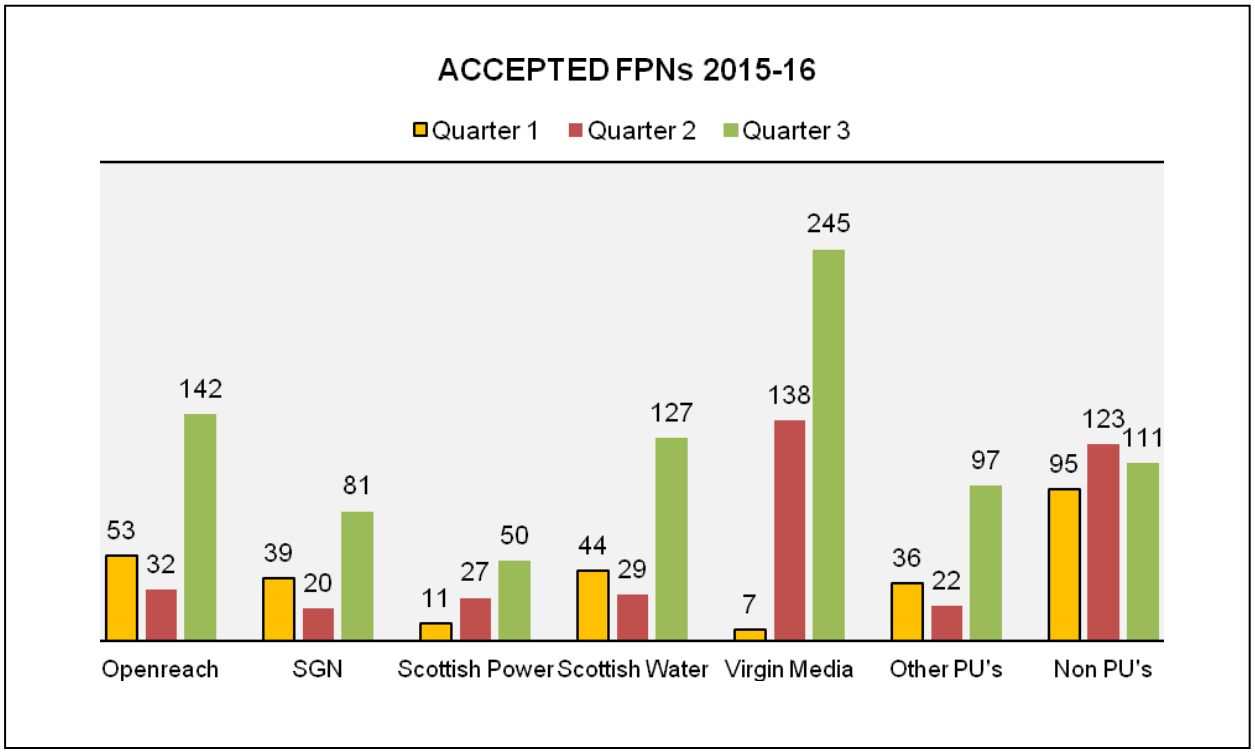
Graph 3.22



The average registration failure rate during Quarter 3 was 10%. The monthly and annual target is 8%. The failure rate, at the end of Quarter 3, is attributed poor communication from Contractors to Council Officers in relation to road work start and end dates. Street Lighting had 1 failure from 1 registration giving the 100% failure rate and was due to poor communication from a contractor. This has been raised with the contractor and has improved since the end of Quarter 3.

APPENDIX A

Graph 3.23



Virgin Media and Openreach were issued with the highest number of Fixed Penalty Notices in Quarter 3. This was due to their notices not being closed on time and/or no notice being received for their work. These recurring issues have been raised with them and the Council has received assurances that training will be carried out to address this matter.

APPENDIX A

Table 3.26

The percentage pass rate for each PU placed on to a Staged Improvement Notice.

Quarters used to gather performance information		Q 3-4 2013 & Q 1-2 2014	Q 1-4 2014	Q 3-4 2014 & Q 1-2 2015	Q 1-4 2015
Utility	Inspection Type	At Stage 1 Notice on 14 November 2014	At Stage 2 on 8 June 2015	At end of monitoring Period 31 October 2015	At 10 March 2016
Scottish Power	Sample A	78.9%	68.8%	72.1%	78.6%
	Sample B & C	91.6%	92.8%	92.1%	93.0%
Scottish Water	Sample A	81.0%	77.0%	74.2%	66.7%
	Sample B & C	82.0%	80.1%	77.4%	78.5%
SGN	Sample A	83.1%	80.6%	82.0%	85.7%
	Sample B & C	85.9%	85.6%	84.0%	80.5%
Openreach	Sample A	72.2%	47.8%	39.5%	48.2%
	Sample B & C	84.3%	80.7%	80.5%	80.5%
Virgin Media	Sample A	77.8%	63.6%	60.0%	55.6%
	Sample B & C	91.3%	87.3%	77.1%	78.4%

The Notice of Failure to Achieve Performance figures from the previous four quarters is used. Any failure rate, lower than 90%, resulted in a Staged Improvement Plan being requested. Scottish Power received an Improvement Notice for their Sample A failures only.

The target minimum pass rate for all PUs is 90%.

Transport and Environment Committee

10am, Tuesday, 7 June 2016

Landfill and Recycling

Item number	8.2
Report number	
Executive/routine	
Wards	All

Executive summary

This report updates the Committee on performance in reducing the amount of non recyclable waste sent to landfill and on increasing the amount of waste recycled for the period April 2015 to March 2016 (2015/16).

Total annual waste arisings decreased in 2015/16 by 1.2% compared to 2014/15.

The amount of non recyclable waste disposed of in 2015/16 decreased by 5.8% compared to the previous year. The tonnage of waste disposed of as landfill in 2015/16 was 114,543 tonnes, which is less than the Capital Coalition Pledge target of 118,000 tonnes and a 10.2% decrease on 2014/15.

The citywide recycling rate in 2015/16 was 42.0%, a 2.9% increase on the 39.1% recycled in 2014/15.

Links

Coalition pledges	P44, P49, P50
Council priorities	CP8, CP9
Single Outcome Agreement	SO4

EDINBVRGH
THE CITY OF EDINBURGH COUNCIL

Landfill and Recycling

Recommendations

1.1 It is recommended that Committee notes the contents of this report.

Background

Landfilled Waste and Recycling

2.1 Capital Coalition Pledge 49 outlines the Council's commitment towards increasing recycling levels across the city and reducing the proportion of waste going to landfill. This includes targets to reduce annual landfill tonnage to 118,000 tonnes and to increase the percentage of waste that is recycled to 50%.

2.2 Significant progress in implementing the changes required to deliver both service improvements and landfill savings have been made, including the implementation of managed weekly collections in September 2012, and the kerbside recycling redesign, which commenced in September 2014 and is now fully rolled out to all eligible households.

Complaints

2.3 At the meeting of the Transport and Environment Committee on 27 August 2013, members requested that the performance reports also include updates on complaints made about waste services.

2.4 There are 242,878* residential dwellings in Edinburgh which receive multiple refuse and recycling collections. On average there are approximately 480,000 collections a week. Current complaints targets are based on the number of collections carried out, but are not adjusted for seasonal variation.

2.5 The figures also include complaints that may be made in error, for example where a resident has not presented their bin and misses the collection or presents their bin on the incorrect day, and then contacts the Council to report a missed collection.

** source: Corporate Address Gazetteer*

Waste Arisings

3.1 The city generated less waste in 2015/16, with waste arisings reducing by 1.2% compared to 2014/15. Overall, 218,138 tonnes of waste was produced (Figure 1)

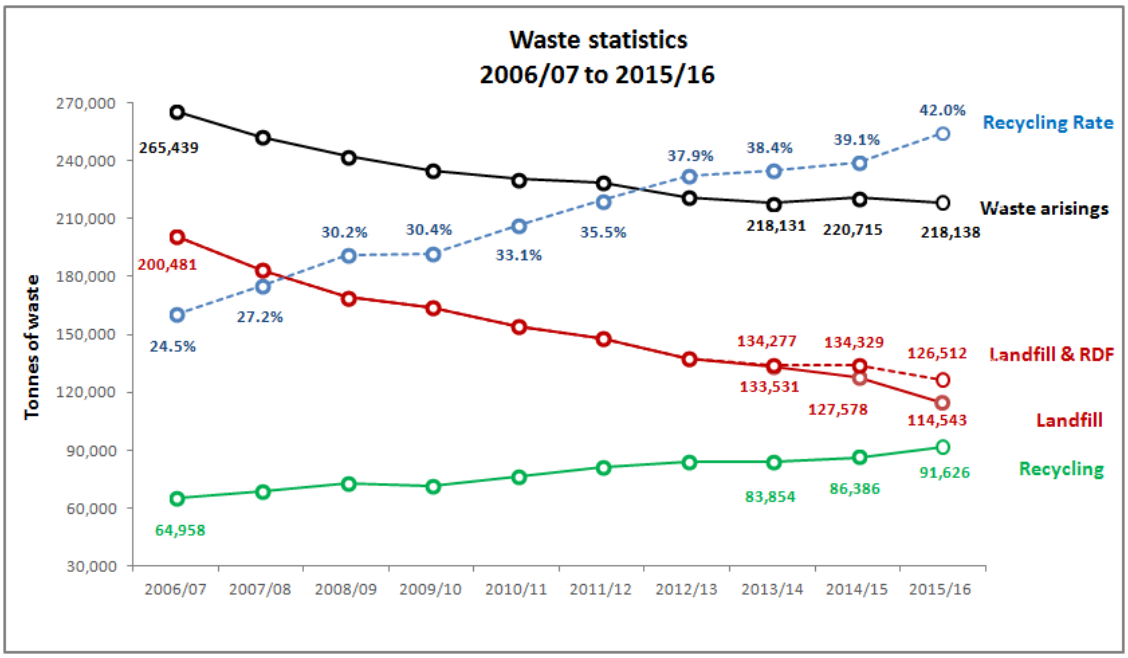


Figure 1 - waste trends 2006/7 to 2015/16

Non recycled waste

3.2 Waste that is put in landfill bins and containers is disposed of as landfill or diverted as refuse derived fuel (RDF). Waste disposed of as RDF, whilst included in waste arising tonnages, is not counted as recycling or landfill. Some of the waste collected at Community Recycling Centres that cannot be recycled is currently disposed of as RDF.

3.3 In total126,512 tonnes of waste was collected from landfill bins and containers (Table 1) in 2015/16 of which 114,543 tonnes of was disposed of via landfill and 11,969 tonnes diverted as RDF. This is 7,817 tonnes (5.8%) less than was disposed of in 2014/15 (Table 1). Capital Coalition Pledge 49 sets a target of reducing landfill tonnage to 118,000 tonnes this target was not only met but exceeded by 3,457 tonnes in 2015/16.

	Non recycled waste			Recycled waste		Waste Arisings
	Landfill tonnes	RDF tonnes	Total tonnes	Tonnes	Rate %	Tonnes
14/15	127,578	6,751	134,329	86,386	39.1%	220,715
15/16	114,543	11,969	126,512	91,626	42.0%	2178,138
Difference	-13,035	5,218	-7,817	5,240	2.9%	-2,577

Table 1 – non-recycled waste and recycling 2014/15 & 2015/16

3.4 At the meeting of the Transport & Environment Committee on 25 August 2015 members approved the decision to cease acceptance of commercial waste at Community Recycling Centres. This took effect on 23 October 2015. In the period November 2015 to March 2016, the landfill skip waste arisings at Community Recycling Centres reduced by approximately 1,500 tonnes over what had been forecast at the commencement of 2014/15.

3.5 The City of Edinburgh and Midlothian Councils are working together to deliver a sustainable solution for the disposal of non-recycled residual waste which will see the eradication of disposal via landfill by 2018. More information can be found at www.zerowastefuture.com.

Citywide recycling rate

3.6 The 2015/16 citywide recycling rate was 42.0%.against a Capital Coalition Pledge 49 target of 50%., This is a 2.9% improvement on the previous year (2014/15). In addition, 5,240 tonnes more waste was recycled in 2015/16 than was recycled in 2014/15 (Table 1).

3.7 Multiple recycling collections are provided in the city to cater for the differing needs of householders. A comparison of how each of the different recycling streams in the city contribute to the total citywide amount of recycling collected in March 2016 and year 2015/16 is detailed in Table 2. A breakdown of the recycling by collection stream is detailed in Figure 2.

	March 2015	March 2016	Change	YTD Apr - Mar (2014/15)	YTD Apr - Mar (2015/16)	YTD Change	
Recycling Stream	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	% change
Garden Waste - kerbside	1,117	1,594	**477**	22,152	22,664	512	2%
Community Recycling Centres	1,739	1,672	**-46**	21,769	20,310	-1,459	-7%
Kerbside Recycling - green bin & boxes	1,384	1,879	**495**	15,557	20,095	4,538	29%
Food Waste	527	830	**303**	5,815	8,769	2,954	51%
Recycling Banks (glass,paper,textiles,books)	591	453	**-138**	6,783	5,902	-881	-13%
Packaging bins - on street communal	233	436	**202**	3,590	4,112	522	15%
Other streams	412	315	**-97**	4502	4089	-413	-9%
Mechanised street sweepings	268	201	**-67**	3,255	3,131	-124	-4%
Paper - wheeled bins	176	97	**-79**	1,920	1,475	-444	-23%
Manual Street sweeping	69	90	**20**	1,043	1,079	36	3%
Total Recycling	**6,516**	**7,568**	**1,052**	**86,386**	**91,626**	**5,240**	**6.1%**
Recycling rate	**36.8%**	**41.9%**	**5.1%**	**39.1%**	**42.0%**		**2.9%**

Table 2 – recycling by waste collection stream

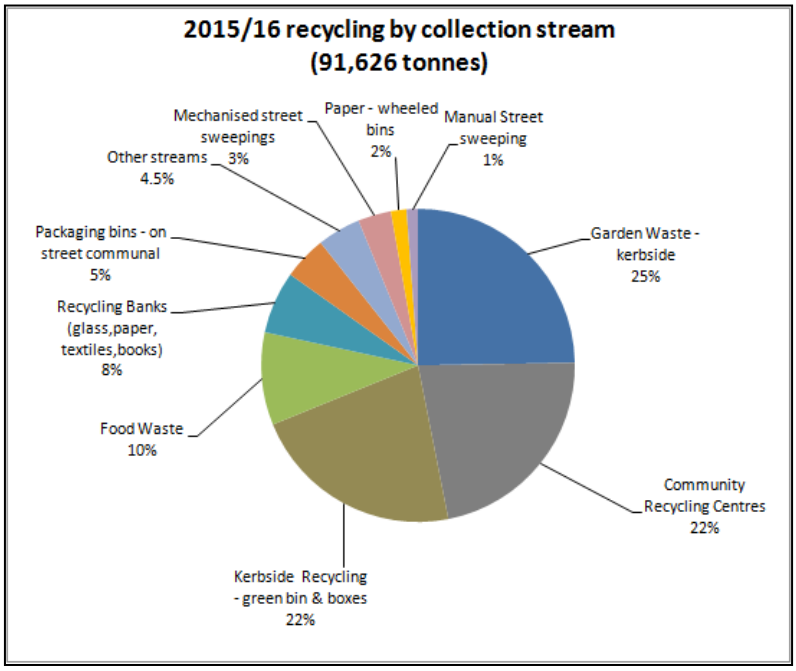
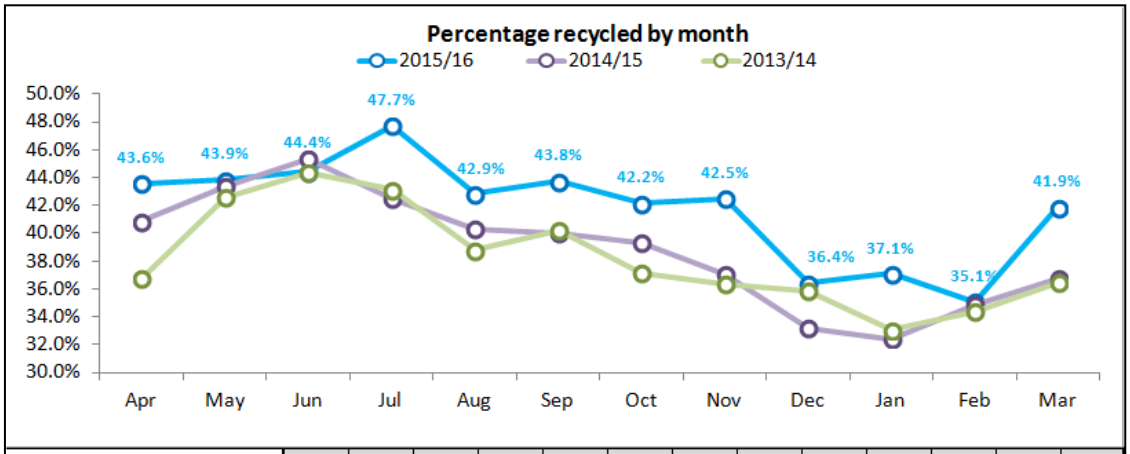


Figure 2 – total recycling by waste collection stream 2015/16

3.8 It can be seen in Table 2 that improvements have been achieved in both kerbside recycling and food recycling, with increases in tonnage compared to 2014/15 of 29% and 51% respectively. Other streams have experienced reductions, for example, the tonnage of recycled waste collected at the community recycling centres has reduced by 7% year to date. These reductions have offset some of the gains recorded in kerbside and food recycling.

3.9 A summary of the current and past recycling rate by month is detailed in Figure 3.



Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
2012/13	36.0%	40.3%	40.9%	41.4%	40.6%	42.2%	39.3%	36.3%	33.4%	33.1%	34.7%	33.9%	**37.9%**
2013/14	36.8%	42.6%	44.3%	43.1%	38.8%	40.2%	37.1%	36.3%	35.9%	33.0%	34.4%	36.4%	**38.4%**
2014/15	40.8%	43.4%	45.3%	42.4%	40.3%	40.0%	39.3%	37.0%	33.2%	32.4%	34.8%	36.8%	**39.1%**
2015/16	**43.6%**	**43.9%**	**44.4%**	**47.7%**	**42.9%**	**43.8%**	**42.2%**	**42.5%**	**36.4%**	**37.1%**	**35.1%**	**41.9%**	**42.0%**

Figure 3 – recycling rate by month

Recycling - New kerbside bin/box recycling service

3.10 All phases to roll out a new kerbside green bin and blue box recycling service (a replacement to the previous red and blue box service) have been successfully delivered. All eligible households in the city with a wheeled bin landfill service now have access to the new recycling service.

3.11 This is a major change to recycling provision in the city, as the new green bin/blue box service simplifies the recycling process for kerbside residents and increases the range of materials collected. As detailed in Table 2, the new service has had a positive impact on the overall citywide recycling rate, with kerbside tonnages increasing by 29% compared to last year.

3.12 In November 2015, prior to withdrawal of the service, the existing multi material box service accounted for 4% of the recycling collected at the kerbside and highlighted that the service was being used by a relatively small number of households. The 50,000 potential users (21% of total households) of the box service were located in flatted properties primarily serviced by on street communal landfill bins. Where properties did not have adequate on street recycling provision, bins have been supplied to provide on street facilities for the recycling of dry mixed recyclate (DMR) and glass. The range of materials that can be recycled in communal DMR bins has increased and mirrors that collected in the green recycling bin.

Enhancement to World Heritage Site recycling services

3.13 Householders in the World Heritage Site (modernising waste area) now receive a new enhanced kerbside recycling collection which commenced in late November 2015. Residents continue to use their existing red and blue boxes, but are now able to recycle the same mixture of materials that are accepted via the green bin/ blue box service, with the red box now mirroring the contents of the green bin. Residents present both boxes on the same day and receive a fortnightly collection.

Recycling – food waste

3.14 Large increases continue to be experienced in the tonnage of food waste, with 51% more food waste collected in 2015/16 than in 2014/15. Residents have re-engaged with the service, with increases in the tonnage of kerbside food waste recorded at each phase of the new recycling service bin/ box rollout (Figure 4).

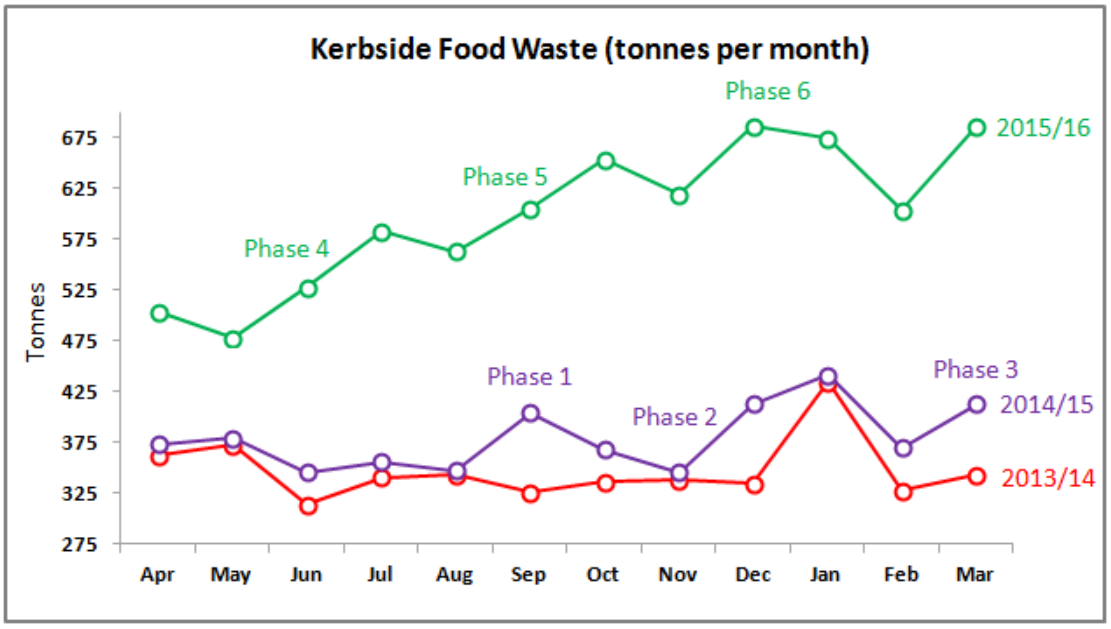


Figure 4 – kerbside food waste tonnages, April 2013 to March 2016

Complaints

3.15 Weekly complaint numbers since 2013 are detailed in figure 5 below.

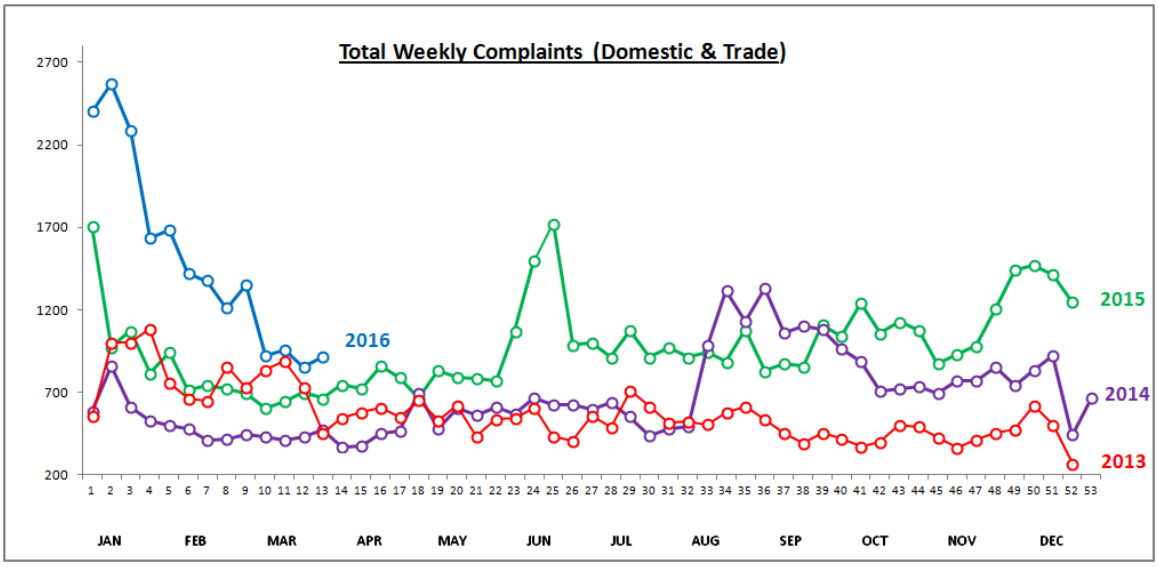


Figure 5 – weekly complaint number January 2012- March 2016 by month

3.16 On average to date (April to March), 1133 complaints a week were received to Waste Services. With approximately 480,000 collections a week, this translates to 0.23% of collections resulting in a customer complaint. The majority of complaints received were regarding the non-collection of waste (96% of complaints).

3.17 A breakdown of complaints regarding non-collection of waste in March 2016 by collection stream is detailed in figure 6.

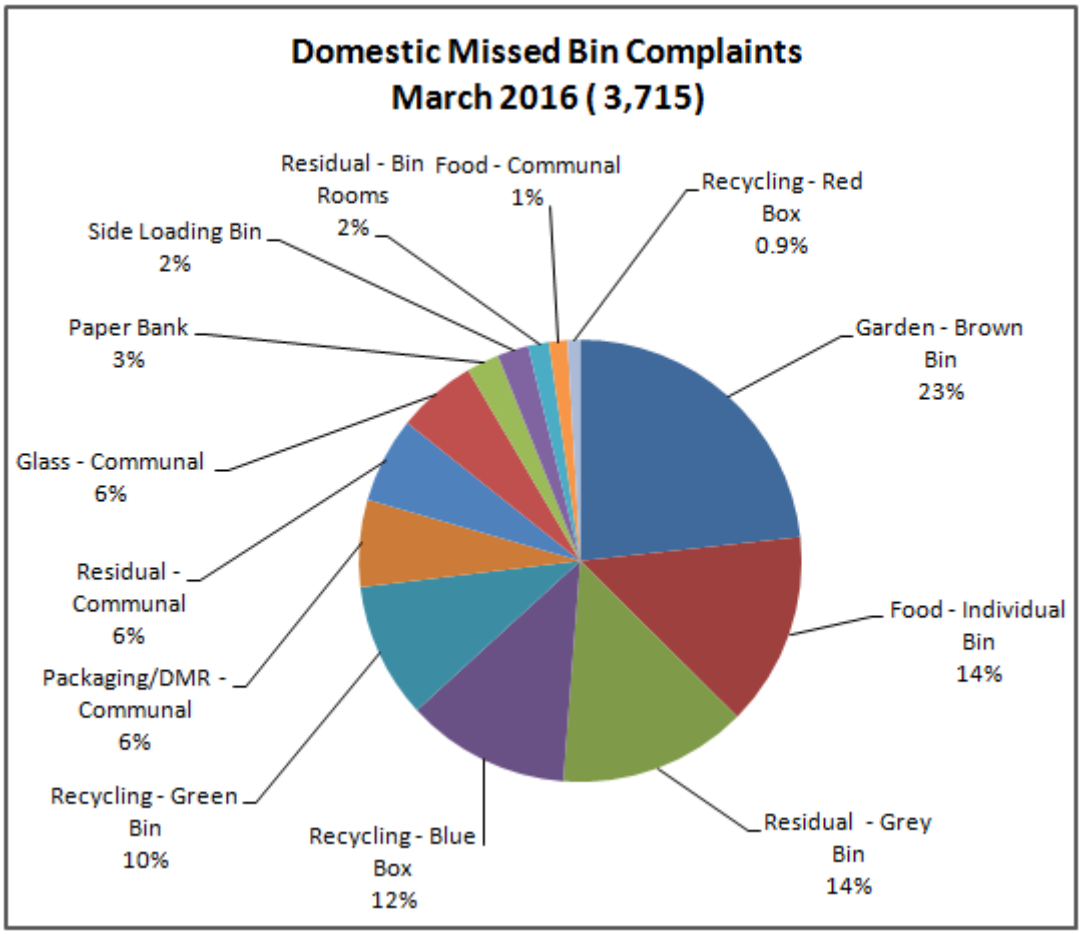


Figure 6 – complaint breakdown by collection stream (March 2016)

3.18 The new bin and box recycling service is having a positive impact on recycling tonnage in the city, with year to date kerbside recycling tonnages increasing by 29% as outlined in section 3.9. The citywide service change for some 140,000 wheeled bin households has, however, increased the number of complaints received each month regarding kerbside recycling. In 2015/16, 18,935 more missed collection complaints were recorded in 2014/15. Of these, increases in complaints regarding kerbside recycling (bin and box) services accounted for 71% of the increase (13,486 additional complaints).

3.19 Actions to address the increase in complaints regarding kerbside recycling and to reduce complaint levels across all collection services and provide consistent service standards have been put in place. These include the following:

3.20 Refuse staff are now working in one specific area alternating green bin recycling collections with grey general waste collections. This has allowed crews to improve their knowledge of their specific areas and the consistency of staffing has allowed a better insight to the needs of the customers in the area to be gained.

3.21 In addition, supervisors are now also working in a single area allowing them to build a more in-depth understanding of the customer's needs. They also now retain the same crews, which assists them in effectively managing the performance of individual staff.

3.22 As outlined in section 3.9, the service continues to experience significant increases in kerbside food waste, with tonnages in 2015/16 51% higher than the same period in 2014/15. Whilst this is positive for recycling, it places significant pressure on the largely fixed food collection routes, with vehicles requiring more trips to tip and, as a result, less time available for collections. New food routes to reflect increased participation have been designed and will be rolled out in the first quarter of 2015/16. Procurement of larger capacity food vehicles is ongoing with delivery of new vehicles anticipated in 2016/17.

3.23 Reporting missed collections via the council website, rather than phoning the contact centre, is becoming increasingly popular, with 36% of missed collection complaints recorded by residents in this manner in March 2016. Steps to improve the accuracy and validity of complaints received via the website are ongoing, as currently complaints received via the web include when residents have logged a complaint: multiple times, when scheduled collections are still ongoing, when it is not the collection day for the service and when bins have been tagged as contaminated.

Service Changes

3.24 As part of the approved budget for 2016/17, a number of changes are being made to waste collection services throughout the course of the year. These changes are detailed below:

- A re-routing exercise for residual waste bins, dry mixed recycling bins, food waste bins and glass recycling boxes for all individual households – May 2016.
- The cessation of trade waste collections for external customers – July 2016.
- Moving from a 2 weekly (in summer months) and 4 weekly (in winter months) garden waste collection service to a 3 weekly (all year round) – September 2016.

3.25 It should be noted that the approved budget assumed a move to a 4 weekly glass collection service. However, having undertaken modelling of potential efficiencies, officers are now confident that the same level of saving can be made whilst maintaining the existing 2 weekly glass collection service. As such, the planned change to 4 weekly collections will now no longer take place.

Measures of success

4.1 Achievement of the Council's targets for increasing recycling and reducing landfill.

Financial impact

5.1 At the meeting of the Transport and Environment Committee on 25 August 2015, members requested that overall disposal and landfill expenditure be included in future reports.

5.2 Non recyclable material was disposed of as refuse derived fuel (RDF) and as landfill in 2015/16. In addition, there are charges associated with transporting landfill waste by rail from the transfer station at Powderhall to the landfill site at Dunbar. Quarterly disposal expenditures for 2015/16, including a comparison with 2014/15, are detailed in Table 3 below.

5.3 The decreasing trend in non recycled waste outlined in section 3.3 is reflective of the reduction in waste monthly disposal costs observed in 2015/16. Taking into account the impact of indexation for inflation on the landfill contracts disposal costs for non-recycled waste are estimated to have reduced by £536,087 in 2015/16 compared to the previous year.

	2014-15					2015-16					
Disposal Costs	**Quarter 1 (Apr- Jun)**	**Quarter 2 (Jul-Sep)**	**Quarter 3 (Oct-Dec)**	**Quarter 4 (Jan-Mar)**	**Total Q1-Q4**	**Quarter 1 (Apr- Jun)**	**Quarter 2 (Jul-Sep)**	**Quarter 3 (Oct-Dec)**	**Quarter 4 (Jan-Mar)**	**Total Q1-Q4**	**Forecast Q1-Q4**
Refuse Derived Fuel (RDF)	£55,210	£168,940	£186,679	£592,557	£1,003,386	£682,390	£289,335	£252,878	£8,562	£1,233,165	£1,233,165
Landfill	£3,575,719	£3,693,154	£3,170,648	£3,326,398	£13,765,919	£2,858,095	£3,275,643	£3,044,740	£3,416,144	£12,594,622	£12,594,622
Freight / Haulage	£239,482	£274,379	£260,465	£257,337	£1,031,664	£204,138	£337,601	£346,365	£236,019	£1,124,123	£1,437,095 *
Total monthly disposal costs	**£3,870,411**	**£4,136,473**	**£3,617,793**	**£4,176,292**	**£15,800,969**	**£3,744,623**	**£3,902,579**	**£3,643,983**	**£3,660,725**	**£14,951,911**	**£15,264,882***

** forecast includes the proposed re-indexed contract handling fee which is currently being evaluated by officers.*

Table 3 -Disposal expenditure 2014/15 and 2015/16

Risk, policy, compliance and governance impact

6.1 The information contained in this report is a review of the current performance of landfill and recycling. This report does not impact on any existing policies and no risks have been identified pertaining to health and safety, governance or compliance. Further, there are no regulatory implications that require to be taken into account.

Equalities impact

7.1 The Council is meeting its public sector duty to advance equal opportunity for residents to recycle by using a range of communications methods. Written information is available through leaflets and electronic media. Road shows and door knocking visits provide face to face contact with residents and visits from recycling advisers are available on request. All material can be translated on request. Consultation was carried out via demographically representative focus groups and via on line and written questionnaires to ensure that a full and representative range of views were obtained. Assistance with the presentation of recycling and waste containers is available for those who require it to ensure

everyone has access to these services. The above has ensured that information is available for all within the equality and rights framework.

Sustainability impact

8.1 Increased recycling will help to divert waste from landfill and support the achievement of greenhouse gas reduction targets, and reductions in local environmental impact.

Consultation and engagement

9.1 The Community Engagement team have supported the implementation of all phases of the new bin/box recycling service. Communication materials were sent to all residents who were receiving changes to their recycling service in the final phase of the project.

9.2 The team have also worked with the Waste Strategy team to resolve and answer customer enquiries while residents adjust to the changes in service. Recycling Advisors have been assisting the team and have carried out visits to offer help and advice to residents.

Background reading/external references

10.1 The City of Edinburgh and Midlothian Councils are working together to deliver a sustainable solution for the disposal of non-recyclable residual waste which will see the eradication of disposal via landfill by 2018. More information can be found at www.zerowastefuture.com.

Paul Lawrence

Executive Director of Place

Contact: Andy Williams, Service Support Unit Manager

E-mail: andy.williams@edinburgh.gov.uk | Tel: 0131 469 5660

Links

Coalition pledges	**P44** – Prioritise keeping our streets clean and attractive **P49** – Continue to increase recycling levels across the city and reducing the proportion of waste going to landfill **P50** – Meet greenhouse gas targets, including national target of 42% by 2020
Council priorities	**CP8** – A vibrant, sustainable local economy **CP9** – An Attractive City
Single Outcome Agreement	**SO4** – Edinburgh's communities are safer and have improved physical and social fabric
Appendices	N/A

Transport and Environment Committee

10:00am, Tuesday, 7 June 2016

Cleanliness of the City

Item number	8.3
Report number	
Executive/routine	Routine
Wards	All

Executive summary

This report updates Committee on a range of performance measures, including LEAMs, CIMs and data from Confirm, concerned with the cleanliness of Edinburgh's streets and open spaces.

The citywide CIMS score assessed by Keep Scotland Beautiful in March 2016 is 71 with 93% of streets clean. Fourteen out of seventeen Wards achieved a cleanliness score of 67 or above, meeting the national standard for cleanliness. Five of those Wards achieved 72, or above, meeting the Council's high standard for cleanliness. Seven wards achieved a % clean result of 95% or above and out of those two achieved a 100% clean result. A total of 441,463 transects were surveyed during this assessment.

This report gives a summary of the work and initiatives being carried out by the Council's Neighbourhood Teams to improve cleanliness at a local level, as well as information on dog fouling statistics and initiatives across the city. It also provides information on citywide cleanliness initiatives; updates on the roll-out of the Council's new trade waste policy and the development of a citywide litter campaign.

Links

Coalition pledges	P44
Council outcomes	CP9
Single Outcome Agreement	SO4

Report

Cleanliness of the City

Recommendations

1.1 It is recommended that the Transport and Environment Committee notes the content of this report.

Background

2.1 A range of Performance Indicators (PI's) are used throughout the year to monitor the standard of cleanliness across Edinburgh's streets and open spaces. The PI's are taken at different times throughout the calendar year, and consist of Local Environmental Audit Management System (LEAMS - three surveys per year), Cleanliness Index Monitoring System (CIMS – four assessments per year), Confirm on Demand performance reports (monthly), Parks Quality Assessments (annually) and the Edinburgh People Survey (annually).

2.2 The statutory performance indicator LEAMS process is structured so that all authorities carry out exactly the same monitoring programme to allow for full comparison between the results obtained. The methodology changed in 2014/15 to include a 'perception' value, and all authorities are now carrying out surveys based on the new methodology. A representative from the City of Edinburgh Council attends the newly formed LEAMs steering group discussions which are coordinated by Keep Scotland Beautiful (KSB). A total of three surveys will cover a random sample of a minimum of 5% of streets and other relevant sites. Two surveys are completed internally and KSB carries out an annual validation survey which took place in March 2016. An annual report on the findings and results for each local authority is prepared by KSB.

2.3 CIMS is the method used by The City of Edinburgh Council to assess street cleanliness. KSB manages the CIMS scheme nationally and carries out four independent assessments each year. The City of Edinburgh Council CIMS targets for 2015/16 are a citywide score of 72, with a secondary target of 95% of streets surveyed as clean.

2.4 In March 2016, KSB undertook the latest CIMS independent assessment of Edinburgh's street cleanliness. Each assessment is a snapshot of the cleanliness of the streets, with a 50 metre transect surveyed from a random sample of 10% of the city's streets. Each transect is graded on the presence of litter on a scale from 'A' to 'D' as detailed in the Code of Practice on Litter and Refuse (Scotland 2006). The following photographs depict the visual impact of an 'A' to a 'D' grade street:

Grade A These areas have no litter or refuse on the street, on the pavement, in gutters or at back lines. There were 52 (12%) Grade A streets observed within the March 2016 assessment.

Grade B These areas are clean apart from a few small items of litter. There were 352 (79%) Grade B streets observed within the March 2016 assessment.

Grade C These areas show accumulations of litter at back lines, kerbs and in between parked cars. There were 29 (7%) Grade C streets observed within the March 2016 assessment.

Grade D Streets are visibly and obviously heavily littered, with significant litter and refuse items. There were 2 (1%) Grade D assessments observed in the March 2016 assessment.

2.5 The Confirm on Demand asset and works order management system enables a real-time two way flow of information and allows enquiries from the public to be directed straight to the Task Force workforce using smart phones and tablets. A performance and information framework has been developed which allows local issues and trends to be monitored and this information can be used in tandem

with CIMS results and resident surveys in order to manage resources and target campaigns.

2.6 Dog fouling is assessed using a variety of performance indicators, capturing information from different sources to provide a robust overview of those areas where there is a significant problem and the Council's response. These indicators include the number and distribution of dog fouling complaints received, the number of Fixed Penalty Notices (FPNs) issued for dog fouling, % of CIMS transects containing dog fouling and the annual Edinburgh Peoples survey results.

2.7 A Parks Quality Score is produced annually for each of Edinburgh's parks using the Green Flag judging criteria. The scores are compared to the Edinburgh Minimum Standard which has been developed to benchmark our parks and record how they are improving. A range of criteria is assessed including litter and dog fouling, which can provide data on the cleanliness of the city's parks.

Main report

Confirm on Demand data

3.1 The enquiries from the public logged onto the Confirm on Demand system in March 2016 are summarised in Tables 1 and 2.

Neighbourhood	Number of enquiries received	% of enquiries dealt within agreed timescale	CEC Target
City Centre & Leith	523	62%	85%
East	235	76%	
North	237	70%	
South	199	95%	
South West	424	87%	
West	189	89%	
Total	**1807**	**74%**	

Table 1: Number of enquires logged in each Neighbourhood in March 2016 and the % dealt with in agreed timescale.

3.2 Three neighbourhoods (South, South West and West) achieved the target of 85% for dealing with enquiries within the given timescales. Citywide the target was not met with 74% of enquiries being dealt within the given timescales.

3.3 The largest numbers of requests received were for litter (566 requests) and fly-tipping/dumping (559 requests).

Enquiry type	Number of enquiries received
Litter	566
Dumping/fly-tipping	559
Dog fouling	241
Street cleaning request	147
Bin full	42
Bin repair/replace/resite	37
Broken glass	35
Needles	34
Leaves	34
Dead Animal	33
Graffiti (non-offensive)	24
Spillage of fluids	22
Graffiti (offensive)	9
New bin request	8
Bonfire clearance	5
Public Conveniences (including cleaning, closures, repair and safety)	4
Clear up of Road Traffic Accidents	2
Weeds	1
Beach cleaning request	1
Total	**1808**

Table 2: Enquiries received by the public in March 2016

CIMS survey results

3.4 The results of the March 2016 CIMS survey are summarised in Table 3 below.

Neighbourhood	% streets clean	CIMS score	KSB Acceptable Target	CEC Target CIMS Score	CEC Target % Clean
City Centre & Leith	84	64	67	72	95%
East	96	70			
North	94	73			
South	95	69			
South West	97	78			
West	93	69			
City wide	**93**	**71**			

Table 3: Summary of March 2016 CIMS street cleanliness results

	Citywide score	
Survey date	**% streets clean**	**CIMS**
December 2014	96%	71
March 2015	98%	76
June 2015	95%	74
September 2015	93%	69
December 2015	97%	74
March 2016	93%	71

Table 4: Trend data for percentage of streets clean and CIMS score

3.5 Table 4 shows the CIMS scores and % streets clean scores from the past 5 surveys covering the period December 2014 to March 2016. CIMS scores can be influenced by the inclusion of a relatively small number of Grade C or D streets. However, the % streets clean figure shows the percentage of streets meeting Grade B or above and can therefore be viewed as a more accurate indicator to monitor the cleanliness of the streets throughout the city.

3.6 Fourteen out of seventeen wards achieved a cleanliness score of 67 or above, meeting the national standard for cleanliness. Five of those wards achieved 72, or above, meeting the Council's high standard for cleanliness. Seven wards achieved a 95% or above clean result and out of those, two achieved a 100% clean result. The source of 88% of the litter noted within the survey was pedestrian related.

3.7 The highest % of litter noted by type within the survey was smoking related litter, which was noted in 78% of the streets surveyed.

3.8 There were two D grade streets surveyed in the March assessment. One of these was in the North Neighbourhood (Ward 1) and the other two were located in the West Neighbourhood (Ward 4). These were due to accumulation of severe littering and fly-tipping.

City Centre and Leith Neighbourhood

Ward	% Streets Clean	CIMS Score
11	**87**	**64**
12	**88**	**65**
13	**76**	**63**
Overall	**84**	**64**

East Neighbourhood

Ward	% Streets Clean	CIMS Score
14	**95**	**71**
17	**96**	**69**
Overall	**96**	**70**

North Neighbourhood

Ward	% Streets Clean	CIMS Score
4	**94**	**71**
5	**94**	**75**
Overall	**94**	**73**

South Neighbourhood

Ward	% Streets Clean	CIMS Score
10	95	72
15	96	71
16	93	66
Overall	95	69

South West Neighbourhood

Ward	% Streets Clean	CIMS Score
2	96	84
7	92	65
8	100	87
9	100	74
Overall	97	78

West Neighbourhood

Ward	% Streets Clean	CIMS Score
1	94	70
3	90	69
6	92	68
Overall	93	69

Dog Fouling Framework and performance update

Dog Fouling Complaints

3.9 From 1 February 2016 to 31 March 2016 a total of 297 dog fouling complaints were received by the Environmental Wardens. This represents a 28% reduction compared to 2015 which recorded 417, and an increase of 6 complaints compared to the 291 received over the same period in 2014.

Dog Fouling Fixed Penalty Notices

3.10 During 1 February 2016 to 31 March 2016, a total of 14 FPNs were issued across all 6 neighbourhoods compared to the 16 issued in 2015, and 75 issued in 2014 over the same period.

South West Neighbourhood

3.11 The South West Neighbourhood operates a dog fouling tracking system, which assesses the impact of dog fouling on the environment in the area. It identifies and highlights areas which are most affected by dog fouling in the Neighbourhood and details action taken by the Environmental Wardens to reduce the number of incidents by way of patrols, public awareness and Fixed Penalty Notices (FPNs). Patrol times are staggered over the course of the day unless clients can provide specific times.

3.12 Throughout the months of February and March a total of 175 complaints were received in relation to dog fouling in the South West Neighbourhood. Three FPNs was issued in Stenhouse Drive, Slateford Road and Calder Park to persons witnessed allowing their dog to foul. A total of 326 patrols were carried out over the period.

West Neighbourhood

3.13 As the West Neighbourhood Team receive a high level of dog fouling complaints during the months of January, February and March every year, dog fouling initiatives were programmed in during these months to tackle the problem. High visibility patrols were carried out at 'hot spot' locations, along with signage being erected in areas identified through complaints/enquiries, and stencilling put on pavements affected by dog fouling. Unfortunately no FPNs have been issued to date for dog fouling as all owners on the dates patrolled were seen to pick up their dogs faeces. FPNs were however issued during these operations for littering, and unauthorised disposal of domestic waste. Patrols also identified fly tipped items to be removed, blocked drains and dog fouling which required to be cleansed. A reduction in fly tipped items at recycling points within the areas patrolled was noted.

Citywide and Local Action and initiatives

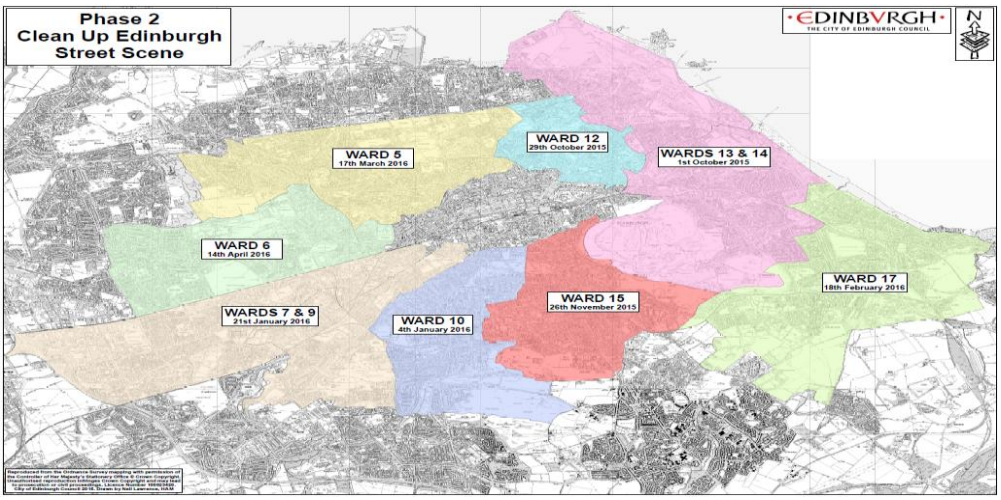
Citywide implementation of Trade Waste Strategy

3.14 Phase 2 of the Street Scene Project started in October 2015 and to date the new trade waste policy has been implemented in Wards 7, 9-15 and 17. A reduction of 80% in trade waste bins permanently stored on public land is expected. The project is running on time and due to be completed by the end of June 2016.

3.15 As well as making Edinburgh a cleaner, greener and safer city, in line with the Councils five-year strategic plan, the Street Scene project also serves to focus business owner's attention on the waste they produce and how they dispose of it. This has helped to contribute to an increase in recycling of commercial waste

across the city centre as reported by the 17 waste carriers operating in Edinburgh.

3.16 The Street Scene Project was acknowledged at the KSB annual Local Environmental Quality Network awards ceremony which took place in March 2016. The project was awarded a Local Environmental Quality Award in recognition of its efforts to improve Edinburgh's environment.



Map 1: Roll-out of new trade waste policy Phase 2

3.17 The Environment Service Support Unit in Waste Services is working closely with Neighbourhoods to tackle ongoing issues encountered as a result of changes to waste collection arrangements, such as bins left out on the street, contaminated and uncollected waste and overflowing bins. The Council's policy is that if the bin is contaminated it will not be collected by the recycling vehicle. However, the Council is looking at the processes which lie behind the policy to better manage these situations.

Local and national litter campaigns

3.18 The Council is currently developing a campaign to encourage behaviour change in relation to dropping litter, fly-tipping, dog fouling and other environmental anti-social behaviour. The focus of this campaign will be on promoting pride in our city. It is expected the campaign will be launched this summer.

3.19 The Council has joined forces with KSB and Hubbub and, with residents and businesses in the Grassmarket area, will trial new approaches to tackling litter and increasing civic pride through a project called 'Neat Street's.

3.20 The 'Neat Streets' project started on Villiers Street, Westminster, London in the summer of 2015. Hubbub trialled new approaches to tackling littering, using the latest thinking on behaviour change and awareness raising from around the world.

3.21 The first Neat Streets event took place in the Grassmarket during March, whereby residents and businesses were given the opportunity to highlight the

litter issues they are aware of in the area and comment on initial ideas on the types of interventions that could be used. The outcomes of this project will help the Council identify the best techniques to utilise in its citywide campaign.

3.22 The Council's Community Protection, Open Space Strategy and Communications Teams submitted an application to Zero Waste Scotland for their Litter Communications Fund in January. This funding was due to allow the Council to utilise communications materials that are specifically designed to target localised areas such as parks and beaches. However, the Council was informed in March that due to funding restraints at Zero Waste Scotland the project could not be funded in the 2015/2016 financial year. The Council awaits further updates from Zero Waste Scotland on when the funding stream will become available.

3.23 Work on the Council's litter strategy/action plan has continued since winter 2015. Research on litter projects and strategies throughout the UK fed into a draft document which was presented to frontline street cleaning, Community Safety and Environment staff in December 2015. Feedback has been incorporated into a strategy and action plan and has been sent to Zero Waste Scotland for input.

Community Clean Ups

3.24 Nearly 40 events have taken place already this year (up to March 2016), with more than 800 volunteers taking part. There are another 17 events planned, and more are being arranged every day. Task Force teams continue to provide support for these events by providing litter pickers, bags and uplifting litter and waste collected after the event. Waste Services Community Engagement Team also provides guidance, posters, certificates and support to those organising an event.

3.25 In February 2016, an Edinburgh resident and member of the Friends of Pentland Hills, received the prestigious Clean Up Scotland "Hero of the month" award in recognition of their persistent efforts to pick up litter in the Pentlands. The award is part of the national Clean Up Scotland campaign, organised by the environmental charity KSB.

Measures of success

4.1 To achieve the national standard of cleanliness CIMS score of 67 as a minimum in all areas.

4.2 To achieve a city wide CIMS score of 72.

4.3 To meet 85% of operational commitments within the given timescale.

Financial impact

5.1 There is no financial impact from this report.

Risk, policy, compliance and governance impact

6.1 There is no risk, policy, compliance or governance impact from this report

Equalities impact

7.1 The achievement of high cleanliness standards throughout the city fosters good relationships between the Council and residents through the provision of high quality services. It can also lead to safer routes free from potential obstructions and trip hazards for all pedestrians, particularly those with visual impairments.

Sustainability impact

8.1 All street scene waste is screened to remove recyclable materials prior to disposal, to reduce the amount of waste going to landfill. The current rate of recycling achieved from street scene waste is 30%.

Consultation and engagement

9.1 Where local anti-litter initiatives and projects are delivered, such as community cleans ups, we always seek to engage with local community groups and stakeholders to deliver a successful result.

Background reading/external references

www.keepscotlandbeautiful.org

2014 Edinburgh People Survey

Keep Scotland Beautiful Eco Schools

Zero Waste Scotland National Litter Strategy

Paul Lawrence

Executive Director of Place

Contact: Karen Reeves, Open Space Strategy Manager

E-mail: karen.reeves@edinburgh.gov.uk | Tel: 0131 469 5196

Links

Coalition pledges	**P44** - Prioritise keeping our streets clean and attractive.
Council outcomes	**CP9** – An attractive city
Single Outcome Agreement	**SO4** - Edinburgh's communities are safer and have improved physical and social fabric.
Appendices	**N/A**

Transport and Environment Committee

10.00am, Tuesday, 7 June 2016

George Street Experimental Traffic Regulation Order, Concluding Report and Design Principles

Item number	8.4
Report number	
Executive/routine	
Wards	11 - City Centre

Executive Summary

Between July 2014 and August 2015 the Council introduced an Experimental Traffic Regulation Order (ETRO) on George Street. This partially pedestrianised the street, introduced a cycle lane, and tested the transport implications and wider impacts of these measures on all users of the street and the surrounding area.

Quarterly public stakeholder meetings were held, and these sought changes to the trial layout where critical issues and solutions were agreed. An independent research company was procured to undertake 1,200 stakeholder interviews, capturing any seasonal differences and changes of sentiment during the year-long trial. These processes helped to build a spirit of engagement, trust and confidence in the process amongst a wide range of stakeholders, which had often held competing views about the best use of the street in the past. Once a level of confidence amongst stakeholders was established by the project, an independent firm of landscape architects, planners and civil engineers was procured, towards the end of the trial period, to develop a series of Design Principles for the long term layout of the street. This report provides the Committee with details of the trial outcomes and proposed Design Principles.

Links

Coalition Pledges	P24, P28, P31
Council Priorities	CP6, CP8, CP9, CP11, CP12
Single Outcome Agreement	SO1, SO4

EDINBVRGH
THE CITY OF EDINBURGH COUNCIL

Report

George Street Experimental Traffic Regulation Order, Concluding Report and Design Principles

1. Recommendations

1.1 It is recommended that the Committee:

1.1.1 approves the Design Principles contained in Appendix 1;

1.1.2 authorises officers to explore the most appropriate procurement options in order to expedite the delivery of these next design steps, securing best value for the Council and ensuring the appropriate design and technical expertise required, to develop the Design Principles into a Stage D design, that would be brought back to the Committee for approval as a proposed Traffic Regulation Order; and

1.1.3 notes the positive contribution that the trial approach brought to design discussions for this public realm project, specifically as a means of encouraging engagement from a wide range of stakeholders.

2. Background

2.1 On 29 April 2014, the Transport and Environment Committee approved an ETRO for George Street. This was to introduce a two-way cycle lane, to close part of the street to traffic, and provide extra space for pedestrians on each block.

2.2 The trial ran from July 2014 to August 2015. This provided the opportunity to learn from the experience of two summer festivals, and seasonal variations, in terms of footfall, the use of the street, perceptions of what had worked and what had not worked well, and impacts on the street and the surrounding neighbourhood.

2.3 The proposed layout was not promoted as a blueprint for the future of the street. It was based on the layout which stakeholders considered had worked well during a shorter trial during the 2013 summer Festival. Its purpose was to act as a starting point for a detailed design discussion, where a quarterly gathering of stakeholders would provide feedback, suggestions and learning from the trial layout, as a means of developing an appropriate, long term design for the street.

2.4 This project was the first time the Council had employed an ETRO as a design tool. To maximise the potential benefits from the trial, the Council needed to foster trust and engagement from stakeholders, which had previously expressed competing views on the preferred use or layout of the space.

2.5 The outcomes from the trial are outlined in detail in Appendix 1 (proposed Design Principles) and Appendix 2 (the research report), which were both signed off as an accurate and acceptable record by Stakeholder Groups representing a broad range of interests. Those two reports are appended in their original format. Section 3 of this Committee report also outlines learning points about the use of an ETRO as a design tool.

3. Main report

3.1 The George Street trial ran from July 2014 to August 2015. Before the street layout had been altered, the first action taken by the project was to procure an independent research company, in a competitive tendering process. George Street is a street where there are a multitude of different users of the space, who often consider they are competing with other users for priority. It was important for the Council to act as an impartial arbiter in the initial stages of the project, to build trust and confidence across all stakeholders in the trial and its decision-making process, and to generate the conditions where a shared agenda could emerge for everyone.

3.2 A core purpose of the trial was to establish an empirical, independent and credible evidence base from the outset. That then allowed discussion, suggestions, criticisms and decision-making to be made on an objective, not subjective, basis.

3.3 The trial had established a new, temporary layout for the street. Importantly, the trial arrangement was never promoted as a blueprint for the future layout of the street. Instead, the trial layout was presented as a starting point for a design discussion. It was intended to provide a baseline against which the stakeholder group could test out the strengths and weaknesses of the layout provided by the ETRO. The end goal of this process of trialling, testing and finessing was to help all stakeholders participating in the group to work towards an appropriate long term design for the street.

3.4 Without an ETRO trial, the risk was that the design discussion about George Street would have been reduced to a narrower question, where stakeholders would have a view on whether they preferred the new layout or the old layout. By using an ETRO to run a trial, and by holding quarterly stakeholder meetings, testing out different aspects of the street layout, and making changes on key learning points as the trial progressed, the nature of the discussion changed significantly. It moved away from the question of 'do you prefer this layout or that layout?' and became "what do we have to do together to achieve the maximum potential for this space?" A more forward-looking, shared agenda was then able to emerge around this question once trust and confidence in the trial process had been established.

3.5 Three aspects of the ETRO were central to establishing trust and confidence: the research package (which was independent and comprehensive); the quarterly stakeholder groups (where groups were able to see tangible results of their influence from an early stage); and the independence of the design process, led by Ironside Farrar.

3.6 Firstly, the research company, Research Resource, were contracted to undertake 100 interviews per month. Stakeholders wrote, finessed and signed off the initial questionnaire as a group. The questionnaire was available to be altered or finessed further at every quarterly stakeholders' meeting. This ensured that the questions being asked would reflect the interests and concerns of all stakeholders, with nothing missed out. Given the potential for mistrust or competition amongst different stakeholder groups, it was an important early gathering point where a more constructive forward-looking shared agenda and trust could begin to emerge.

3.7 The research company reported back on a quarterly basis to the stakeholder group. In doing so, the company was asked to send its quarterly update reports directly to stakeholders, unedited and without Council officials or Elected Members having sight of them in advance. That was important for trust within the stakeholder group. The research company's concluding report is attached to this report as Appendix 2. Given that it represents the views of 1,200 users of George Street during the trial year, it was a significant consideration in the development of the proposed Design Principles that are attached as Appendix 1.

3.8 The second aspect of the ETRO trial that helped to generate trust and confidence amongst stakeholders was the success and tangible influence of the Quarterly Stakeholder Group Meetings. A case study example is provided in Appendix 3 that outlines why the Stakeholder Group was important and influential during the ETRO.

3.9 The stakeholder group met every three months in the Assembly Rooms on George Street, with each meeting attracting a capacity audience that led to standing room only, such was the level of engagement, concern and interest in the ETRO and the long term design. The meetings were open to all, with no invitation required, and the group comprised a mixture of experts and locals, including:

- interested members of the public;
- Essential Edinburgh;
- New Town and Broughton Community Council;
- transport groups;
- public transport and taxi operators;
- Living Streets;
- the Emergency Services;
- cycling groups;

- the George Street Association;
- disability groups;
- Edinburgh World Heritage Trust;
- the Cockburn Association;
- tourism bodies;
- Elected Members; and
- officials from the Council's Planning, Transport, Local Neighbourhood, Economic Development, Events and Public Safety teams.

3.10 The work of the Stakeholder Group helped the project to conclude the types of circumstances where an ETRO trial can be a very effective design tool. It can be an effective design tool in a major or important civic space, which is a trafficked area, and which has a composite range of different stakeholders, which compete for priority within the space, where it can help to reach agreement on the best use and layout of the space in the long term.

3.11 The key to a successful ETRO outcome is to involve stakeholders in a meaningful way:

- to have stakeholders identify the issues that the trial will explore and test;
- to ensure the trial project receives sufficient authority and autonomy to allow it to act on any findings that emerge (such as the decking and marquees example in Appendix 3);
- to hold regular meetings of the stakeholder group, so that any learning is captured and identified regularly, ensuring any issues can be addressed in good time;
- to ensure transparency in the collection and presentation of data which improved trust and credibility within the trial; and
- to work with authoritative, independently-sourced empirical data, to ensure there is objectivity in the decision-making process.

3.12 Aside from the comprehensive independent research work and the success of the Quarterly Stakeholder Group, the third crucial element of the ETRO project, in terms of generating trust, a shared agenda and a forward-looking outcome from the trial, was the appointment of an independent design firm. Following a public procurement process, Ironside Farrar was appointed to direct the discussion towards generating Design Principles for the long term layout of the space.

3.13 Ironside Farrar drew heavily on the input that the 1,200 or more stakeholders had brought, as well as factoring in the wider City Centre Vision and the work of Jan Gehl Architects "Edinburgh - Public Space Public Life" which was published in 2011. Two further public design meetings, or charettes, were held where stakeholders had the opportunity to feed in their views directly to the design team. An independent and representative steering group was created to oversee Ironside Farrar's Design Principles work.

3.14 The steering group comprised the New Town and Broughton Community Council (2 representatives); Essential Edinburgh (1 representative); Cockburn Association (1); Edinburgh World Heritage Trust (1); George Street Association (1); and one representative each from the Council's Planning and Transport divisions. The group was chaired by the Council's City Centre Programme Manager, who had overseen the ETRO from the start, to provide continuity.

3.15 The steering group represented a wide range of interests and viewpoints, and it is encouraging to report that, after much discussion and finessing over time, the Design Principles were approved unanimously by that independent steering group. The Design Principles are contained in Ironside Farrar's report, which forms Appendix 1 to this report.

3.16 Ironside Farrar's report contains most of the learning, feedback and sets out a future strategic direction for the street. The street should be a world class space, using the highest quality materials that help reflect a distinctive Edinburgh quality. It recognises that the space has a multitude of uses, and these change seasonally throughout the year. It proposes that the layout of the public realm on George Street can and should be designed in a way that enables different uses at different times of the year, facilitating the summer and winter Festivals, which bring considerable attention to the street both nationally and internationally, but focussing on the needs of retail, hospitality, local residents and the transport network at other times of the year. Priority within the space should be given to pedestrians, then cyclists, then movement such as public transport and motorists, and servicing and maintenance functions.

3.17 There were a number of additional learning points arising from the trial for the Council that were not captured in Ironside Farrar's report, though. These are contained in Appendix 4, which outlines how an ETRO approach to key public realm decisions can result in a more efficient investment of time and resources for a council. It also details learning that emerged from the ETRO in relation to buses, the management of the street during Festival periods, street clutter, car parking revenues, traffic displacement, and the impact that an enlarged pedestrianised space had on increasing footfall and repeat visits to the space, as well as how it improved the safety of the space for businesses, residents, cyclists and pedestrians.

3.18 The precise layout and materials used in improving the street will be the subject of a detailed design, should Committee approve the Design Principles in Appendix 1 of this report. Further issues will be addressed at the detailed design stage, including the treatment of junctions, the statues, the symmetry of the street, how the street functions for those with a disability, car parking levels, loading and unloading facilities, servicing and maintenance, bus and taxi facilities, cycle facilities, motorcycle facilities and pavement widths.

3.19 Should Committee accept the recommendations in this report, an appropriate design resource would be procured to develop a detailed design for the future layout of George Street, using the Design Principles contained in Appendix 1 as a guidance. The detailed design would be brought to Committee in the winter of 2016/17 for approval. An approved design would be promoted as a Traffic Regulation Order. Officials will explore a wide range of potential sources of funding, and phasing options, for the delivery of the final design. These will be reported to Committee alongside the detailed design for the street.

4. Measures of success

4.1 A detailed design for the future layout of George Street will be brought to Committee as a proposed Traffic Regulation Order before February 2017.

4.2 The detailed design will reflect the Design Principles laid out in Appendix 1.

4.3 Future Experimental Traffic Regulation Orders undertaken in Edinburgh will draw upon the learning gathered from the George Street ETRO, outlined in this report and its appendices, as a means of engaging stakeholders in the design process.

5. Financial impact

5.1 Should Committee approve the Design Principles, attached in Appendix 1, and authorise officers to progress the procurement of a design team to develop these Design Principles into a Stage D detailed design that would be promoted as a Traffic Regulation Order (TRO), there would be a cost to the Council for that detailed design work.

5.2 It would be in a future report to Committee, containing the detailed design as part of a TRO, that Council officials would indicate the likely cost of implementing the scheme, and how that public realm project would be expected to be funded. Funding sources that will be considered include the Council's cycling budget, for the introduction of the cycle facility; the transport capital budget which is invested in the fabric of the city's public realm; plus a range of additional national and European funding sources including European Structural Funds, supporting Smart Growth and Sustainable Growth objectives; sources of finance that support developments in areas with important Heritage considerations, at local and national level, and as a centrepiece of the UNESCO World Heritage Site; as well as other appropriate public, private and third sector funding sources that may emerge in due course.

5.3 The ETRO trial was allocated a budget of £300,000. Three competitive tendering processes were undertaken. The research work was central to the project achieving its learning outcomes, and was allocated a maximum budget of £25,000. The contract awarded to Research Resource was for £12,000, which represented a considerable saving on anticipated costs. The independent design work was also allocated a maximum budget of £25,000, and the contract awarded to Ironside Farrar was for £21,649.90, which represented good value for money. The crucial research work from many local residents' point of view was the traffic counting in the New Town. This was procured competitively, in a public tender process, and local residents were then placed in charge of the locations of the electronic counting sensors and equipment. Clearview Traffic were awarded the contract for £15,230. The remainder of the budget was spent on the necessary paint, signage, rubber kerbs and barriers. Stakeholders had highlighted that it was important not to use metal Mills Barriers, as those are not appropriate for an attractive World Heritage Site space or to high end retailers or local residents. Instead, the project commissioned wrought iron planters, that were made in Edinburgh, by apprentices at the Inch Nursery, using recyclable materials, overseen by skilled craftsmen. The project spent its £300,000 budget, but has left a legacy of £50,000 worth of reusable materials for the Transport department in terms of kerbs and planters. The design process, traffic counts and research work have produced a valuable baseline of information on how people use Edinburgh city centre that the stakeholder group identified was not in place previously.

6. Risk, policy, compliance and governance impact

6.1 There is no significant compliance, governance or regulatory risk or implications expected as a result of approving the recommendations in this report.

6.2 The Design Principles report (in Appendix 1) and the independent research report (in Appendix 2) were both approved by an independent steering group and Stakeholder Group prior to inclusion in this report. They are considered, by a wide range of stakeholders, to be an accurate reflection of the ETRO trial, and of the discussion that has taken place in developing the Design Principles in Appendix 1.

7. Equalities impact

7.1 A full Equality and Rights Impact Assessment (ERIA) was carried out during the development phase of the project. This was an ongoing process and was revisited at each meeting of the quarterly Stakeholder Group.

7.2 Key considerations during the trial included ensuring that any rubber kerbs used, to separate parked cars from the cycle lane, contained white flashes so as to be sufficiently visible to ensure the safety of cyclists, car drivers and pedestrians.

7.3 All business owners who sought to animate the street space with decking and marquees were required to provide ramp access to and from the pavement.

7.4 Disabled parking access was provided on every block in the central reservation parking area. This area became the nearest part of the road network carriageway to the enlarged pedestrian area.

7.5 Two issues were recorded arising from this, and were addressed with disability groups. Firstly, during the trial the enlarged pedestrian space still carried the appearance of a road, as the trial did not change the levels or look of the former road carriageway. This was a source of confusion for some disabled drivers, which would have been greatly lessened if the newly-enlarged pedestrian area had been changed in appearance more. Given budgetary constraints that was not possible within the trial period, but as part of a long-term detailed design that issue would be successfully addressed.

7.6 The second issue was that the area that where vehicles were banned from was not entirely given over to pedestrians. The part nearest the central reservation (and nearest to disabled parking) was a two-way cycle lane. Anecdotally, the quarterly Stakeholder Group meetings were told this combination led to an increase in the number of conflict situations between cyclists and those with a disability, who were attempting to cross from the car parking area to the pedestrian space. A combined two-way cycle lane, located on one side of the street, has been ruled out as a design solution for George Street in the long run. The cycle facility will be laid out on a more conventional symmetrical basis of eastbound cyclists on the north side of the street and westbound cyclists on the south side, greatly reducing and mitigating the impact of this issue which was identified during the trial.

7.7 The contents, analysis or recommendations described in this report do not detract from the delivery of the three General Equality Duties or infringe upon any of the ten areas of rights.

8. Sustainability impact

8.1 The impacts of the design process and the ETRO trial in relation to the three elements of the Climate Change (Scotland) Act 2009 Public Bodies Duties have been considered during the trial period.

8.2 The ETRO encouraged a reduction in carbon emissions on George Street by reducing the number of cars on the street, and in encouraging public transport providers to use the spaces that were maintained for them.

8.3 The significant levels of engagement witnessed in the attendance levels at all of the quarterly Stakeholder Group meetings were encouraging, as the Council works to achieve a Sustainable Edinburgh through environmental good stewardship, building stronger communities, and reducing inequality.

8.4 There was a clear positive sentiment expressed by visitors to George Street within the findings of the independent research company, whose report is contained in Appendix 2. Figures recorded by electronic footfall counters on George Street show that, for the Februaries of 2014, 2015 and 2016, the greatest number of visitors to George Street during these years was in 2015, when the ETRO was in place and an extended space was given over to pedestrians. These figures appear to demonstrate that the trial on George Street contributed towards Edinburgh's prosperity and created a safer space for locals and visitors alike to enjoy.

9. Consultation and engagement

9.1 Stakeholder engagement was placed at the centre of the ETRO trial. A wide range of stakeholders, described in section 3 and in Appendices 3 and 4 of this report, were encouraged to give their views and to take control of key aspects of the testing and learning processes.

9.2 The collective Stakeholder Group met quarterly and set the questionnaire that would be asked of 1,200 users of the street. That ensured every angle that was important to the participating stakeholders was covered.

9.3 An independent research company was appointed by the Council, and reported into the Stakeholder Group, not to the Council. That meant the Stakeholder Group, which included members of the public as well as those from various interest groups, would receive the quarterly update report from the research company, at the same time as Council officials and Elected Members. There was no editing of information or checking of content prior to publication. This helped to generate trust and confidence in the trialling approach and the ETRO process as a credible, valuable design tool.

9.4 The reports by the independent research company (Appendix 2) and the Design Principles report by Ironside Farrar (Appendix 1) were both approved and signed off by the broad range of stakeholders, as an accurate reflection of discussions and a reflection of the many areas of design where agreement has now been fostered. For that reason both reports are attached and reproduced as Appendices to this report without undergoing any editing or alteration from the Council.

10. Background reading/external references

10.1 Building a Vision for the City Centre, Transport and Environment Committee, 19 March 2013

10.2 Building a Vision for the City Centre - Consultation Outcome, Transport and Environment Committee, 29 October 2013

10.3 George Street Experimental Traffic Regulation Order, Transport and Environment Committee, 29 April 2014

Paul Lawrence

Executive Director of Place

Contact: Anna Herriman, City Centre Programme Manager

E-mail: anna.herriman@edinburgh.gov.uk | Tel: 0131 469 3853

11. Links

Coalition Pledges	P24 – Maintain and embrace support for our world-famous festivals and events.
	P28 - Further strengthen our links with the business community by developing and implementing strategies to promote and protect the economic well being of the city.
	P31 - Maintain our City's reputation as the cultural capital of the world by continuing to support and invest in our cultural infrastructure.
Council Priorities	CP6 - A creative, cultural capital
	CP8 - A vibrant, sustainable local economy
	CP9 - An attractive city
	CP11 - An accessible connected city
	CP12 - A built environment to match our ambition
Single Outcome Agreement	SO1 – Edinburgh's economy delivers increased investment, jobs and opportunities for all.
	SO4 – Edinburgh's communities are safer and have improved physical and social fabric.
Appendices	1 - Design Principles for George Street (Ironside Farrar)
	2 - Concluding Report on Stakeholder Interviews During The George Street ETRO (Research Resource)
	3 - Case Study from Stakeholder Group
	4 - Learning Arising from George Street ETRO for the City of Edinburgh Council
	5 - Financial Impact of the ETRO Trial on Parking Revenues on George Street and Surrounding Streets
	6 - Traffic Counts on Heriot Row, Abercromby Place and Surrounding Streets During the George Street ETRO

GEORGE STREET

A Special Place

FINAL REPORT | MAY 2016

Ironside Farrar

Report prepared by:-
Ironside Farrar
111 McDonald Road
Edinburgh
EH7 4NW

For and on behalf of:-
The City of Edinburgh
Council

Document No. 8521
Report Issue : 3/ Final
25 May 2016
Author: JMF / JMP

Thanks are given to the Steering Group , for their help & support in preparing this report.

GEORGE STREET

Design Principles Study

Executive Summary

George Street forms a key axis within James Craig's First New Town Plan. The street has the potential and opportunity to re-establish its primacy as a destination within the city contributing more strongly to the city's economy, place quality and environment.

This report has been developed, with key city stakeholders and public input, to set key design principles to inform the future investment in public realm, its operation and management. This represents the first stage in developing design proposals that will support major public realm investment.

A shared vision is emerging through the engagement process that supports a transformation of George Street into a multi-functional space that can address the needs of the City's local residents, visitors and businesses and create a place of strong and distinctive appeal. This will enable:

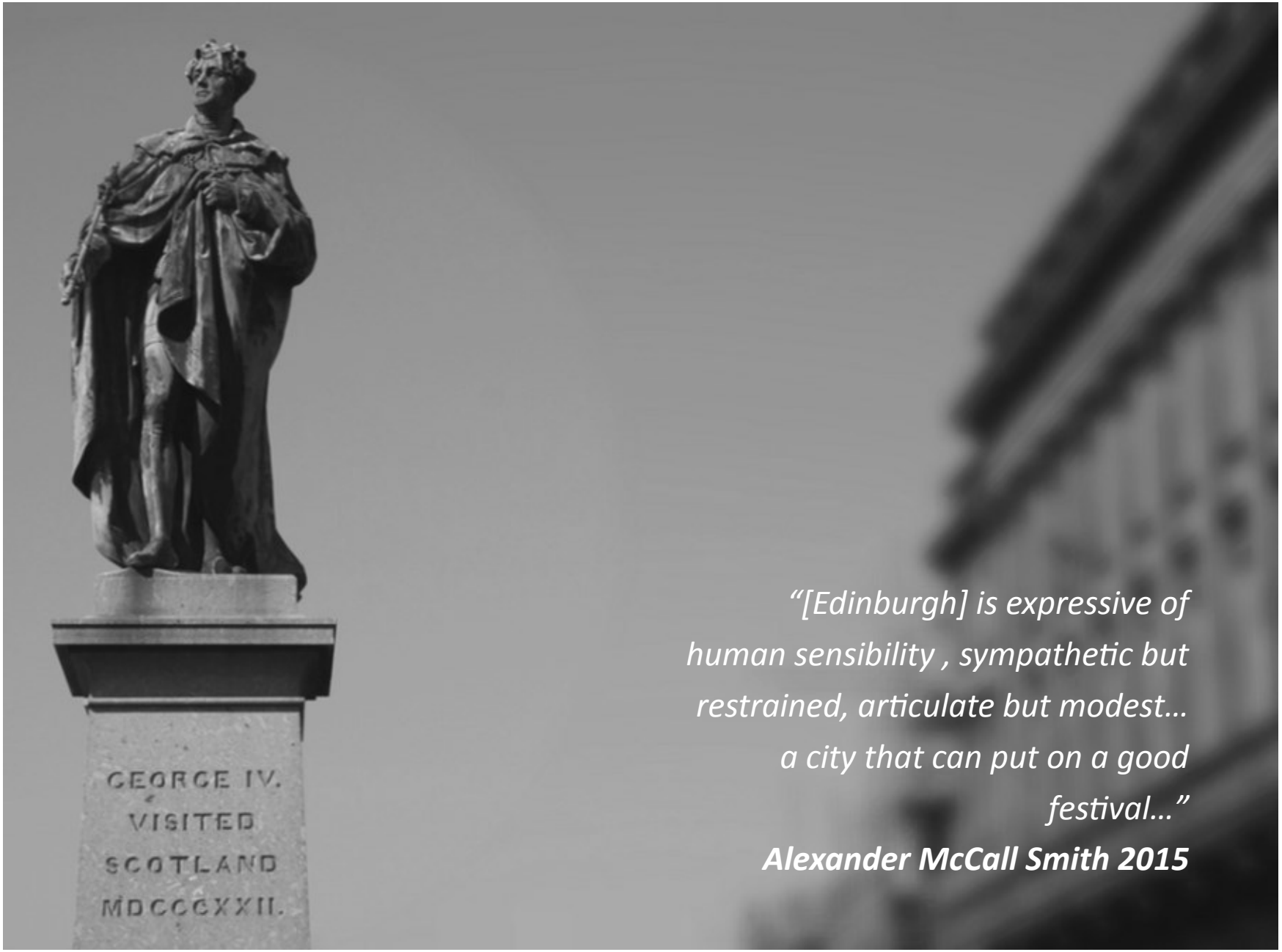
George Street to form the centrepiece of Edinburgh's civic street-space in a manner that celebrates its special qualities, re-establishes it's primacy within the New Town, and offers a dynamic animated and distinctive civic destination of world-class quality and appeal.

The design principles are essentially broad based. They reflect the need to respect the special qualities of place, enhance a unique internationally recognised built heritage and re-balance the role of the street in favour of pedestrians, cyclists and wider street experiences and activity.

A clear commitment is required fro CEC to progress this project. This should reflect best practice in place-making and create a new capacity within the street to build an appealing civic quality. This should seek to actively maintain vibrant mixed use activity (retailing / leisure/ residential/ hotels/ offices / services); support a dynamic street events programme; enable outdoor café culture and facilitate seasonality of use to ensure George Street as a destination expresses and celebrates the unique and distinctive personality of the city.

Delivery will require a phased approach in both funding, design, construction and future management. Implementation over a 6 year period may be anticipated with funds in the region of £26.4M- £28.6M (capital cost) required to support delivery.

There is significant work required to develop the illustrative principles of this report through a fully detailed and sequential design process, in which CEC are committed to continue a high level of engagement as the project moves forward.



"[Edinburgh] is expressive of human sensibility , sympathetic but restrained, articulate but modest… a city that can put on a good festival…"

Alexander McCall Smith 2015

Introduction

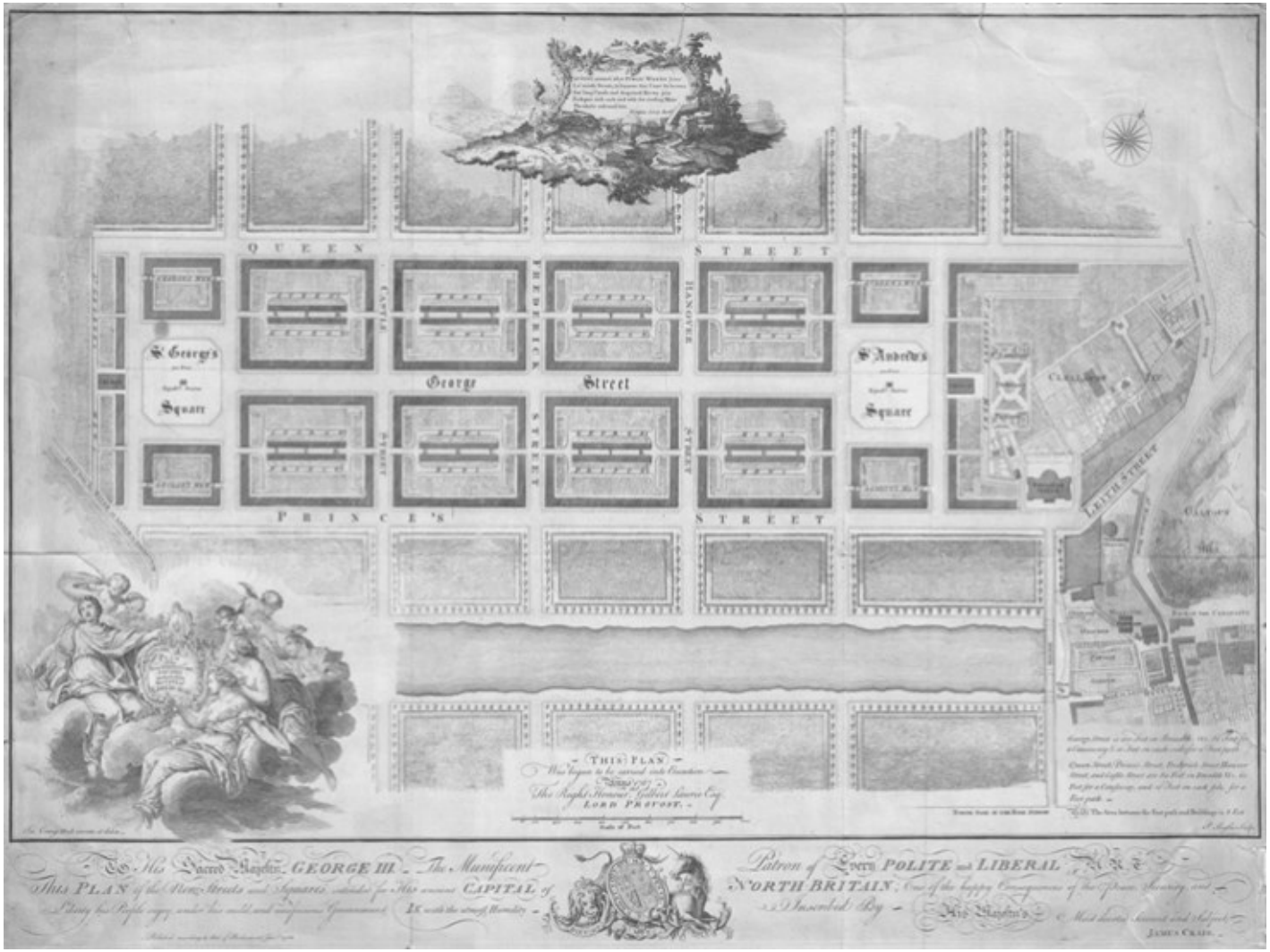
Key Summary:

- *City of Edinburgh Council commissioned study coordinated with Key Stakeholder Group*
- *Place-Making is seeking to define vision and design principles*
- *Advanced within a commitment to engagement and charrette style design workshops*
- *Promoting investment in George Street as a Special Place within the City*

The City of Edinburgh Council is seeking to establish design principles and options for George Street to shape the future place-making of George Street following the end of the year long (September 2014 – September 2015) Experimental Traffic Regulation Order (ETRO).

This Design Principles Study will establish and illustrate a range of design principles agreed by a Steering Group and through wider stakeholder engagement to guide the development of options and future detailed design of George Street. Engagement with stakeholders (residents / businesses / user groups) is a key part of the study.

The study is recognised as providing interim reporting and may be further developed or extended to develop a full 'George Street Design Brief' providing a full RIBA Stage C Conceptual Design for future design development.



In December 1767 James Craig went to London to seek the approval of King George III for the Edinburgh New Town Plan. The main streets were then named Princes, George and Queen Streets, and the smaller lanes Rose and Thistle Streets after the symbols for England and Scotland. The squares at either end of the plan were known as St Andrew's and St George's, which was later re-named as Charlotte Square after the Queen. Originally envisaged as a residential street George Street has evolved and changed to reflect changing needs and demands over time.

Place Context

Key Summary:

- *Prime street within the First New Town Plan and World Heritage Site designation*
- *World-class place quality, street and urban setting*
- *Edinburgh's 'prime' specialist retail, restaurant and evening economy destination*
- *A special place with significant potential to contribute to Edinburgh City Vision*

Edinburgh as Scotland's capital is inscribed as a World Heritage Site based on its historic Old Town and New Towns which are recognised as being of international importance. Edinburgh's New Town was first designed in 1767, and is the largest complete example of town planning from the Georgian period anywhere in the world. George Street is the key armature of James Craig's First New Town Plan connecting St Andrew Square and Charlotte Square.

George Street supports a wide range of City functions. It has a key role for residents, commerce, events and tourism and is a key element in the city centre movement network that supports active travel. It is an important 'destination' in the experience of the city and has critical economic, cultural, and functional roles that shape Edinburgh's national and international profile.

George Street is home to some of Edinburgh's highest quality retailing; restaurants, hotels and services. This mixed use balance of retail and dining is a significant part of place appeal; driving footfall and sustaining role as a key city centre destination. Planning Policy to retain quality retail alongside other uses will be critical in supporting destination development.

George Street needs to be considered within the context of Building a Vision for the City Centre (2013); the City Centre Pubic Realm Vision; Edinburgh Re-visited: Public Space Public Life (2010); Edinburgh Public Realm Strategy (2009); Old and New Towns of Edinburgh World Heritage Site Management Plan; forthcoming Public Spaces Manifesto and the lessons learnt from the George Street Experimental Regulation Order [ETRO] (2014)

SWOT Analysis

A SWOT Analysis was undertaken through the engagement and consultation to share a broad understanding of the strengths, weaknesses, opportunities and threats facing George Street. In summary these include:

Key Strengths

- backbone and the key axis of James Craig's First New Town Plan
- established partnership of public and private sector interests
- diversity of commercial activity including evening economy
- profile of the street – gateway / thoroughfare / destination
- mixed-use activity (retail / café / licensed leisure / hotels / offices / residential)
- well preserved and high quality historic architecture and statues – an exceptionally high quality built environment

Key Opportunities

- enable the street to function as a 'street piazza' and new vibrant city destination
- re-define the street around people
- ensure place that supports accessibility and mobility
- promote stronger commercial investment around premium mixed-use activity
- create a public infrastructure that is adaptable, welcoming and addresses user needs
- make street more inclusive, welcoming and safe for all users
- reinforce the historic qualities of the street and the hierarchy of the First New Town Plan

Key Weaknesses

- absence of clear vision and strategy for street as public realm
- lack of public investment
- constrained accessibility / mobility / poor user safety / legibility
- micro-climate and winter levels of activity
- levels of footfall / animation / activity / flexibility
- dominance of car
- poor quality paving and street clutter

Key Threats

- progressive loss of commercial investment to stronger locations
- reduced investment in building fabric / place quality
- adverse impact of St James Quarter (1.7 million square feet of mixed retail/leisure/ hotel & residential development / 1,600 parking spaces)
- reduced quality of user experience with resulting reduced footfall
- lack of recognition of capacity to enhance city / ad-hoc - low quality interventions

Key Findings

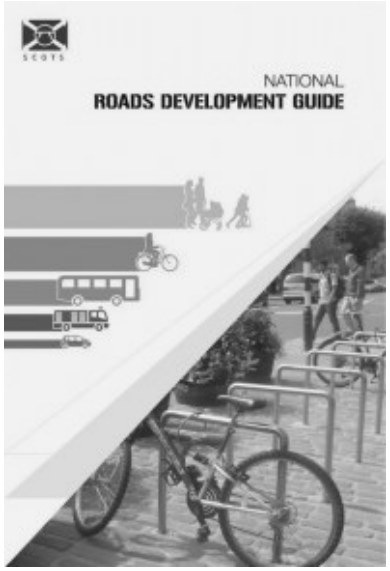
A review of earlier studies, consultations and engagement with varied stakeholders and evidence collected through the monitoring of the ETRO have highlighted the following:

Key Issues

- importance of developing Edinburgh's word-class profile
- embracing the international competitive city agenda, creating living streets and re-balancing core streets around people, active travel, leisure activity and events
- strengthening and enhancing the World Heritage site
- building definitive place quality and strong distinctive experiences that extend appeal, increase footfall, drive mixed-use commercial activity and enhance city centres

Key Needs

- re-balancing movement to favour people, place and active travel
- protecting and enhancing heritage quality and architectural setting
- supporting business activity and investment that flows from spending/footfall
- creating a more inclusive, safer pedestrian and cycle environment
- eliminating non-supportive place activity and through traffic
- supporting City Centre investment, economic activity and place appeal


NATIONAL
ROADS DEVELOPMENT GUIDE


Active Travel Strategy Guidance
July 2010
sustrans
TRANSPORT SCOTLAND
The Scottish Government


A Policy Statement for Scotland
designing streets


CREATING PLACES
A policy statement on architecture and place for Scotland
The Scottish Government

Key Trends

Creating Places; Designing Streets, and Place-making sets out the Scottish Government policy and guidance to promote place quality that confidently expresses Scotland's unique and special qualities and celebrates our heritage and opportunities for the future.

Cities and urban centres are changing. New urban thinking around people, environment active travel, lifestyle quality, heritage value and the support for low carbon futures and sustainable lifestyle choices are all important themes. In terms of trends George Street needs to consider:

- Re-thinking ideas about access and mobility within the City and support for active travel and cleaner, safer, more accessible and inclusive environments
- Increasing street dynamic that supports cafe-culture; al-fresco dining, events, street activity and the evening economy to enhance the experience of place
- Building broader partnerships of interests that collectively can sustain successful places and re-invest in the fabric, place quality and facilities that animate vibrant streets and places

Place as Destination

Café Culture

Animated Places

Active Travel

Evening Economy

Local Community

Public engagement event; initial consultation held at the Roxburghe Hotel, 3rd August 2015

Engagement

Key Summary:

- *Engagement and stakeholder participation supported through consultation*
- *Key user and interest groups involved in early objective setting*
- *Open public consultation held with 2 main events*
- *Well supported consultation has shaped a clear consensus around principles*

The City Council is committed to engagement in developing a vision and setting design principles for George Street. A number of existing stakeholder groups have a direct interest in George Street, these include:

Steering Group

A multi-disciplinary George Street Steering Group has been established with stakeholder representatives facilitating early contact and the participation of key user groups, local interests to assist in shaping principles and priorities. The Group is chaired by the City Centre Programme Manager.

Steering Group Representatives
The New Town & Broughton Community Council
The Cockburn Association
The City of Edinburgh Council (Planning & Transport)
Edinburgh World Heritage
Essential Edinburgh
The George Street Association

Wider Civic/User Interest Groups
Civic / Church / Public Services
Commercial & Business interests
Building / Land owners
Taxi / Public Transport operators
Disability Forums
Spokes / Sustrans / Living Streets
Public Interest Groups
Local residents

"Excellent consultation process", *says Ross Haston Managing Director at Hamilton & Inches, George Street,* ***"Engaging, well thought through & clearly interpreted. Well done to 'IF' team indeed!."***

Public engagement event; Emerging Principles held at Assembly Rooms, 2nd October 2015

Engagement & Consultative Meetings

A design workshop format with drop-in events has been developed to extend consultation and facilitate opportunity for stakeholders to express views, meet the design team and explore opportunities. The main events have been:

One-to-One Meetings:

- Essential Edinburgh
- The George Street Association
- Sustrans / Spokes / Living Streets Scotland
- The City of Edinburgh Council: Transport Policy and Planning Manager/ Strategic Planning Officer / Built Environment & Placemaking Manager

City of Edinburgh Council Member Briefing 25 Sept 2015:

- Cllr Hinds/ Cllr Perry/ Cllr Munro

Public Engagement Events:

- Initial Consultation Roxburghe Hotel 3rd August
- Emerging Principles Assembly Rooms 2nd October

Questionnaire / Consultee Inquiry

- 220+ Consultee points/issues/recorded notes and submissions

Stakeholder Engagements:

- Enterprising Edinburgh, AGM
- New Town & Broughton Community Council, Members Meeting
- The George Street Association General Meeting

Key Issues Raised through Consultation

Key Issues

- Quality/ Protection of heritage / Conservation
- Access / Connections
- Prioritisation of Users; Cyclist /Pedestrian/ Car Owner / Public Transport User
- Context / Significance of place
- Detail / Design direction

Secondary Issues

- Pollution
- Importance of Consultation

Strong Preferences

A broad range of views have been expressed., views include all sides of any issue :

- VISION: tradition/balance of life & business & visitors/unique civic quality
- ETRO: successful/ unsuccessful/ abandon/only suitable for festival/confusing
- PEDESTRIAN ACCESS: important/ widths satisfactory/not wide enough
- PUBLIC TRANSPORT: Prioritise/pick up points important/retain local buses
- MARQUEES: remove/eyesores/ visual clutter/unnecessary
- MOVEMENT : prioritise safe environments for cyclists & pedestrians
- VEHICLES: through route/no through route/more traffic/less traffic/ no traffic/
- PARKING: Retain/Not a priority/echelon best/motorbike/retain resident & disabled parking
- QUALITY: Civic quality/ natural materials/sustainable improvement / commercialisation detrimental/needs to offer quality / proper investment
- CYCLING : Segregate routes/ improve EW connections/conflict to pedestrians
- CONTEXT : consider wider area/critical connections / traffic model required / City needs to re-think City centre access
- TREES: trees /soften space/ leafy street/ trees like in European streets /not characteristic of New Town street design
- EVENTS: relief for St Andrew Sq. / inappropriate/ restrict Festivals.

George Street Vision

To transform George Street into the centrepiece of Edinburgh's City Centre civic street-space in a manner that celebrates its special qualities, re-establishes its primacy within Edinburgh's New Town and offers a dynamic, animated and distinctive destination of world-class quality and appeal.

Vision & Objectives

Key Summary:

- *Enhancements to George Street will be transformational re-establishing the primacy of the street within the First New Town Plan and respecting World Heritage Site designation*
- *With world-class place quality George Street can be recognised internationally as a unique civic destination of outstanding quality and appeal*
- *Protect the role of the street as the natural home of Edinburgh's premier specialist retailers and restaurants, and promote as a destination serving day and evening economies*
- *Dynamic, animated and distinctive, George Street offers potential to deliver Edinburgh City Vision*

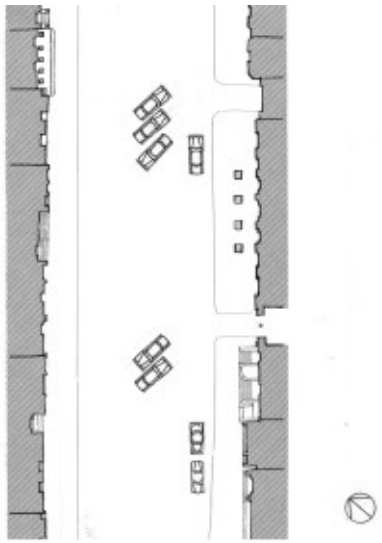
To secure the vision George Street will need commitment to new investment in the public realm; rebalanced transport movements to reduce traffic flows and support active travel; developed initiatives with partners that promote civic activity, street animation, café culture and events; and innovation around street management.

The over-arching objectives are to transform George Street to present and:

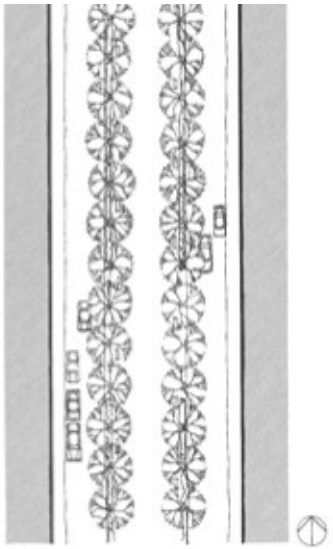
1. Celebrate a premium world-class street destination that captures the unique and special qualities of Scotland's capital city and First New Town animated through a contemporary street dynamic
2. Develop a premier civic, retail and leisure place that offers a distinctive appeal based on a special and distinctive quality of place, the quality of the offer and the animation created around its activity and attraction
3. Promote a key 21st century street offering connections (movement / active travel / digital / smart technology) that allow users to connect to civic infrastructures meeting modern lifestyle and business needs

International bench marking

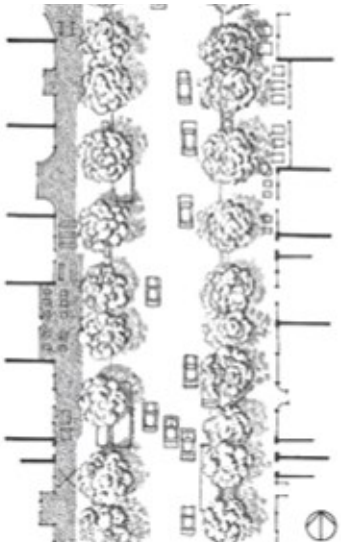
Benchmarking illustrates a range of streets, of similar scale/ proportion to George Street; all of which are recognised as being successful, of international importance and high standing. Whilst contexts are unique, their special qualities of place are relevant in so far as they all secure World Class streetscape.



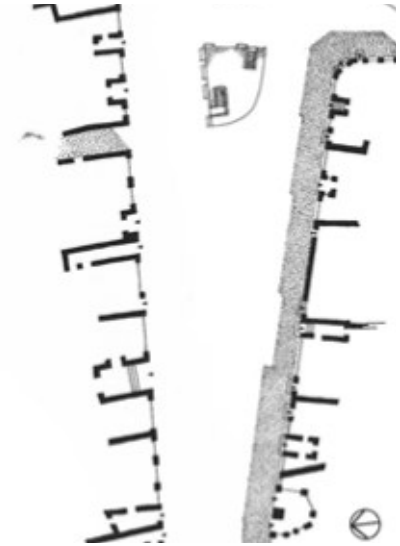
George Street



Las Ramblas



Boulevard Saint-Michel



Strøget

Transformed as a destination within the city, George Street will be a place that is:

- world-class and world renowned
- cherished for its special qualities, character and distinctiveness
- connected with the narrative of the New Town and the European Enlightenment
- where people meet / observe city life, have a coffee / al fresco lunch / do business / celebrate place / discourse and take time to experience and enjoy the city
- inclusive, accessible to all, safe, clean, diverse and adaptable

Transforming every-day, functional streets into special and unique public places requires engagement and skilled designers who are good listeners, good observers and advocates capable of addressing the conflicting wishes of stakeholders into a transformational vision that builds a changed perception of place and secures a new understanding of urban places.

Design Principles

Key Summary:

- *Design principles and conceptual Design Framework should be defined at outset*
- *Engagement and key stakeholder agreement should build an early, broad based consensus*
- *Place enhancement and respect for context will define the schemes distinctive character*
- *Outcomes will be strongly linked to Edinburgh City Vision*

To build world-class quality places design must address the need for a more people focussed, enterprising and appealing experience of the city. This requires a shift in understanding around movement priorities, contextual value and the role and value of civic space and public realm.

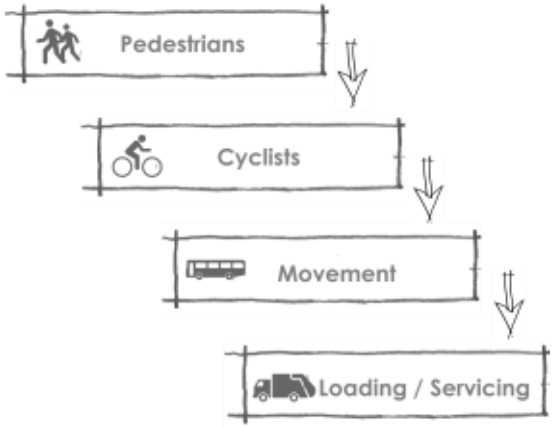
To secure transformational change the following design principles need to be developed within a structured design led process that is led by clarity of objectives and a quality of design response. The principles are:

Setting Priorities:

The Study has identified a range of aspirations, ambitions and user needs for George Street and these each have specific spatial requirements.

Priorities and the level of provision for uses differ across different stakeholder groups. Given all user needs can be accommodated the priority in forward planning and design should be to provide:

1. **High Quality Pedestrian Environment** that allows for safe access, comfortable movement and Outdoor Cafes / Dining
2. **Safeguards a quality dedicated Cycle Route** creating an east-west connection
3. **Provides access for Public Transport** / taxi's / Loading and Servicing
4. **Retains Short-Stay Parking** albeit with planned reductions and displacement to side streets



RESPECTFUL *to The SPECIAL QUALITIES OF PLACE*
Enhance the unique heritage, setting and quality of the street

- Unique and special setting and architecture
- Respect the symmetry and highlight defining elements of legibility
- Protect and enhance the historic value, legacy and character
- Celebrate and strengthen signature elements of the New Town Plan

ACCESSIBLE *for ALL*
Ensure accessibility and safety for all and promote active travel modes

- Place pedestrians first and create accessible, safe, barrier free streetscape
- Ensure street is well connected to wider networks across modes / users
- Reduce and manage parking to support/encourage vibrant street activity
- Prioritise walking, cycling, public transport and social activity

ADAPTABLE *going FORWARD*
Build a civic infrastructure that allows for future adaptation and change

- Address changing needs, seasonal needs and use
- Design for sustainable, resource efficient outcomes
- Build an infrastructure that offers long term adaptability and durability
- Promote phased delivery that allows for progressive change

ANIMATED *by ACTIVITY*
Secure activity through commerce, tourism and event management

- Ensure strong commercial/building interfaces contributing to street-life
- Encourage licensed pavement al fresco dining and café culture
- Create appeal in terms of place to engage, observe, dwell, enjoy
- Create a diversity of events / one-off activities / incidental animation

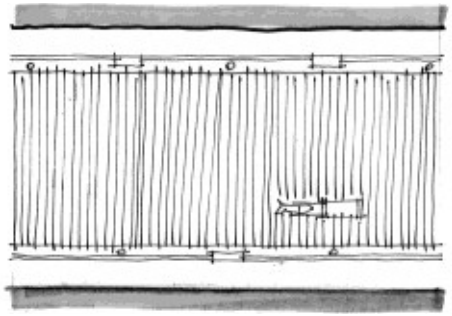
EDINBURGH *and WORLD CLASS*
Ensure streetscape protects & enhances the distinctiveness of Edinburgh

- Define a strong distinctive quintessentially Edinburgh image and identity
- Promote vibrancy in terms of contemporary European character
- Define highest quality streetscape standards & minimise clutter
- Develop street as a city destination

MANAGED *for SUCCESS*
Develop partnerships engage with stakeholders to build shared ambition

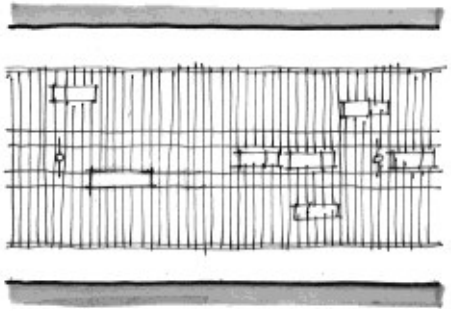
- Develop parallel programmes for animation, events and seasonal City Dressing
- Control Quality of ancillary elements through design & monitoring
- Ensure materials are durable, robust and offer long term durability
- Develop quality mechanism for maintenance and streetscape management

1820s



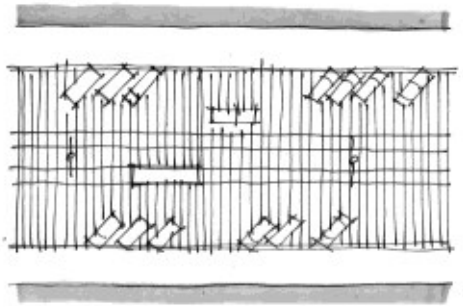
Simplicity of a wide street

1920s



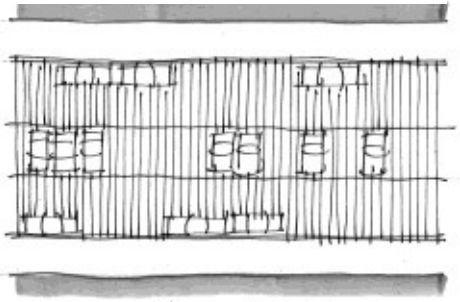
Trams along centreline

1950s



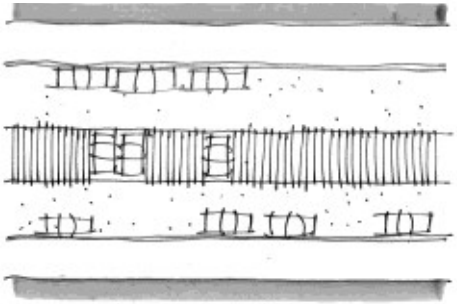
Trams with echelon parking to edges

1959



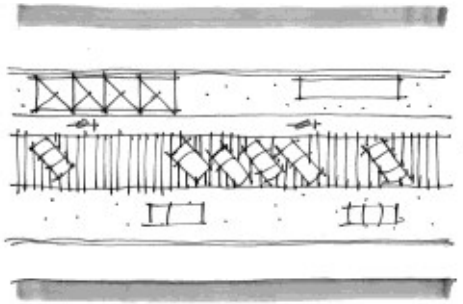
Trams replaced with central parking

1967



Resurfacing of carriageways

2015



Experimental TRO : symmetry is lost

Street symmetry

As the central axis of James Craig's symmetrical New Town Plan, George Street was designed with a strong sense of symmetry. The ETRO marked the first major move away from a symmetrical street arrangement.

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Special Qualities of Place

The truly unique qualities of the street must not be lost, key design objectives are structured around respecting and building upon place quality:

Symmetry Derived from Craig's initial plan; reinstate the clarity of simple street symmetry & alignment along a central axis.

Views & Vistas: Retain the deliberate framing of views & vistas & central position of statues within the street.

Proportion Reference the original 'grand proportion' of street width, wide generous street & narrow pavements along building edges

Identity: Retain classical grandeur and simplicity allowing architectural/place quality to shine through – avoid permanent street structures/ pavilions/ proliferation of elements contributing to street clutter

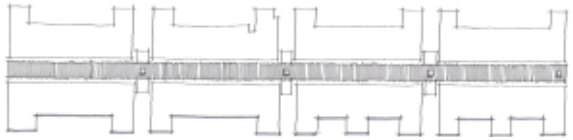
Street Form: A street which is subdivided into 4 equal' blocks', retain a consistent end-to-end sense of street continuity

Trees: Street trees not to be introduced, respecting essence of New Town Plan & clarity of built form which frames views and places vegetation carefully contained within the designed gardens/ set piece of both St Andrew & Charlotte Squares

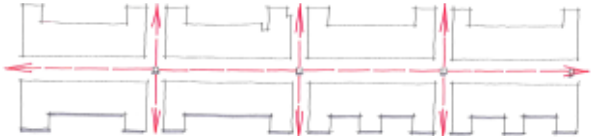
Materials: Use contemporary sandstone slabs, whin/basalt kerbs & road setts - referenced to original character of New Town streetscape materials palette, size & proportions

Climate: Respond to issues of aspect & climate, addressing the appeal of south facing aspect/ need for shelter/less appealing nature/ occasional benefit of shade

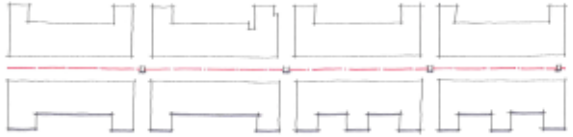
Integrity: Adopt a contemporary design approach avoiding a design pastiche, particularly important in lighting & street furniture.



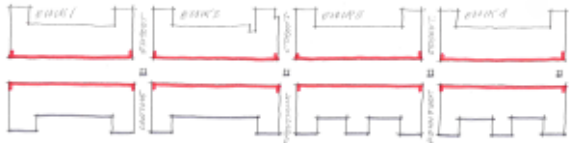
Reinstate Uniformity & Simplicity



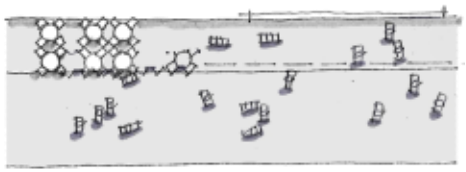
Retain Key View & Vistas

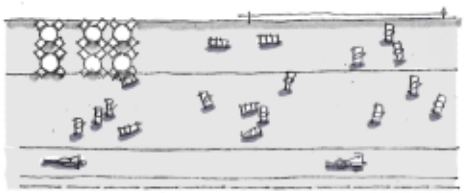


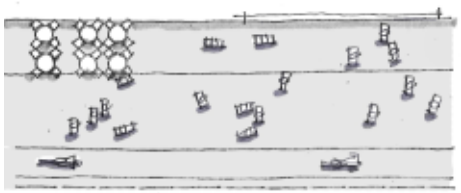
Retain Symmetry along Central Axis

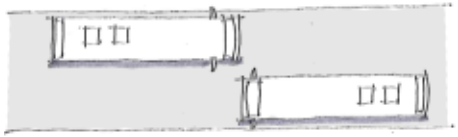


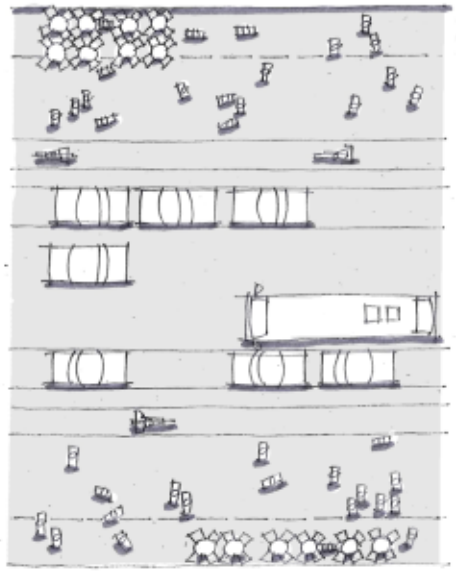
Retain Proportion & Street Rhythm

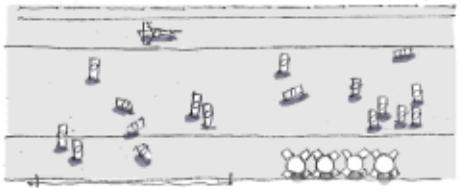


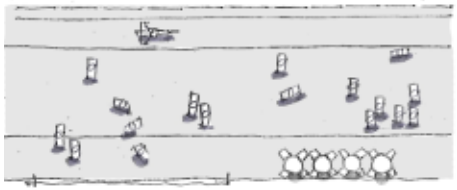










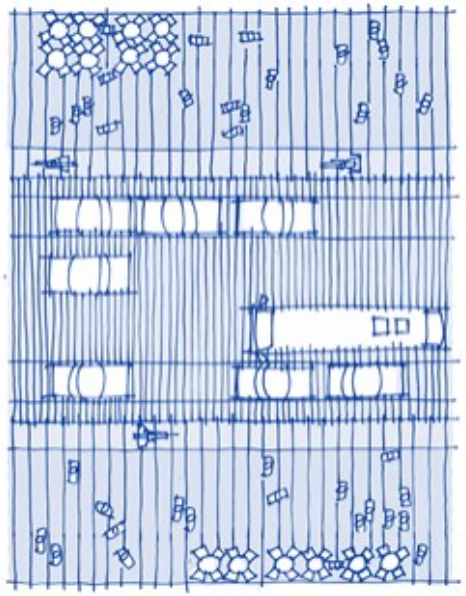


pedestrian + cyclist + carriageway + parking

Accessibility

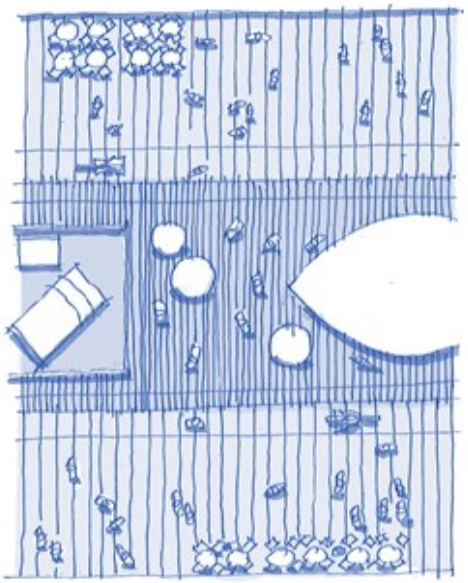
Design objectives seek to establish a new sustainable priority for access in support of the Designing Streets hierarchy. Realisation of this will be an evolving process. The delivery of 'shared space', whilst may become a long term outcome within the current road hierarchy, is not an early objective. Significant change in balance of use is required to realise, higher proportions of pedestrians & significant reduction to traffic is required to generate a place that can successfully operate in a truly shared sense. The following core principles have been established to inform the way forward:

Pedestrians	Increase 'pavement' widths to prioritise the needs of pedestrians & encourage higher footfalls. Greater pedestrian space alongside building facades, will provide safe walking zones supporting a mix of building edge activity & variable pace/ movement.
Cycling	Designated as a 'Quiet Route' a slow, safe family-friendly cycle route is required, located separate to traffic, without significant segregation, conflict with safety of pedestrians is to be avoided by discouraging cycle speeds. Improved connectivity into wider network will be necessary at both east & west ends of the street to support use & appeal
Public Transport	Not a key public transport corridor, a level of access to sustainable travel choice, either on George Street or accessible from adjacent streets will be retained
Taxis	Access is important to support activity, however an east – west through route is not recommended.
Servicing	Access during peak hours is to be discouraged through TRO restrictions, a long term return to rear property servicing (via lanes) is to be encouraged, supported by future policies restricting vehicle size within city centre environs. Restriction to servicing times (night time servicing) to be advanced as early measure.
Residents	On street access for residents will be required, the level of resident's parking is low and will be accommodated within future parking provision.
Private Cars	Accessibility and on street parking in current times is important to support business and activity, and to animate the street in quiet winter periods when footfall is low. However recognising a greater move towards/ advancement of future sustainable transport modes & technologies a programme to gradually reduce parking capacity is envisaged. Short term parking-neutral changes can be achieved through increasing parking capacity on adjoining cross streets to ensure the street remains well served with parking within walkable distances.
Blue Badge Parking	Providing fully accessible environments is important, access & parking for disabled users will be retained, location of ample designated parking bays will be accommodated.



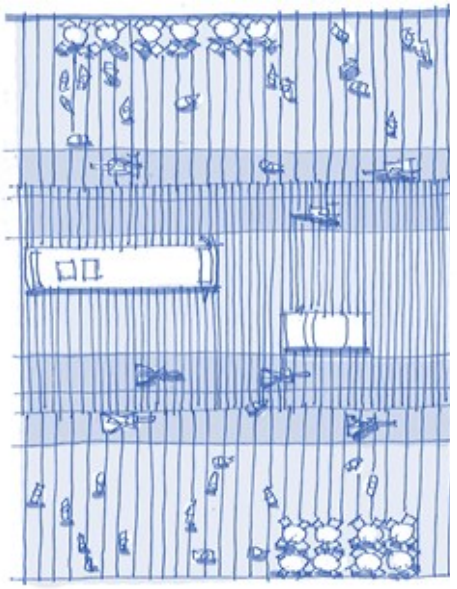
all users

30m wide street can accommodate all users and offer flexibility for future management



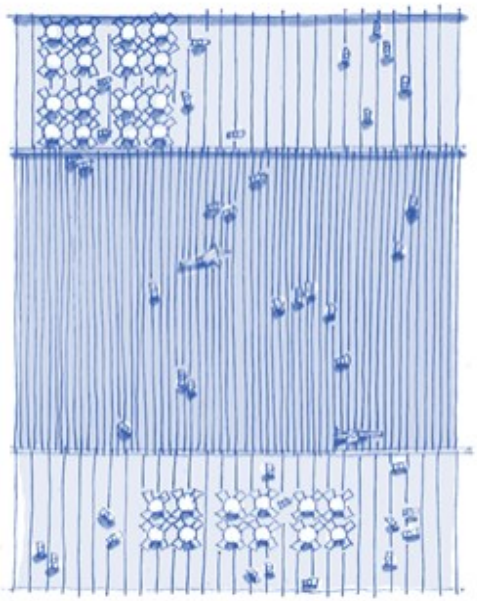
event space

Seasonal events can be programmed within the street whilst retaining pedestrian / cycle needs



reduced parking

Management of parking needs wider consideration with parking reduction offering a stronger, cleaner, safer environment



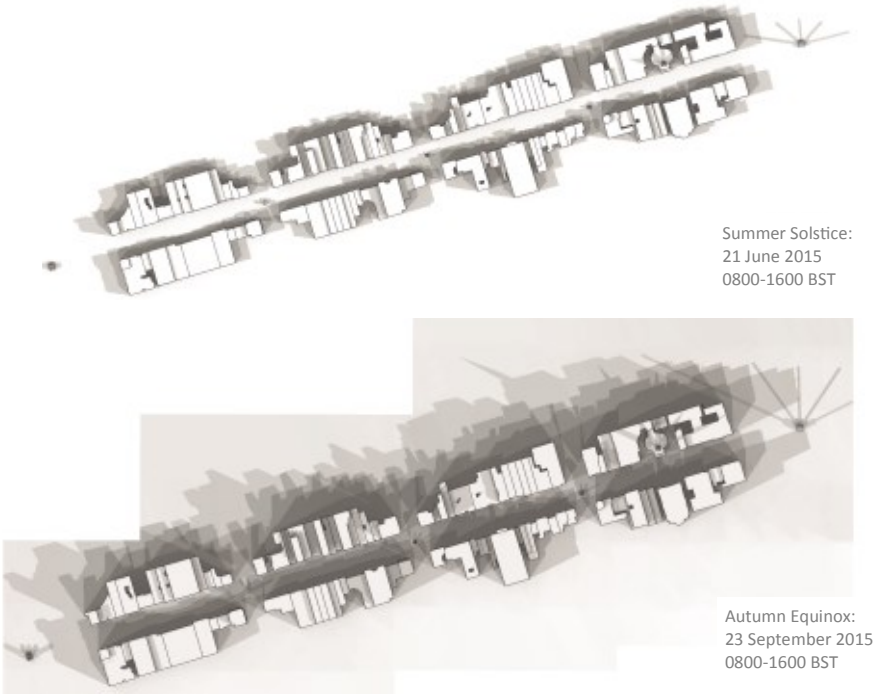
vehicular free

A pedestrian central space environment could be created as a temporary or permanent feature

Adaptability

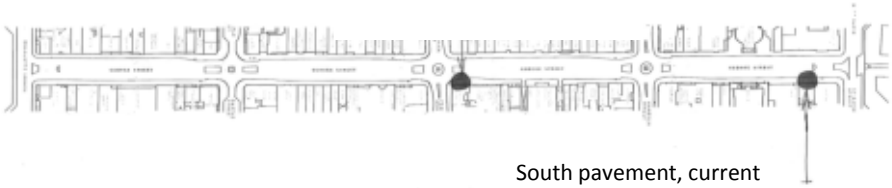
Investment in new public realm must seek to deliver an enduring infrastructure, with capability & durability to functioning for well over a 100 year lifespan. Future-proofed design, addressing flexibility, adaptation and robustness is paramount:

Flexibility	Basic infrastructure capable of addressing changing needs of an evolving city centre. Change can be accommodated and phased transition towards shared space/ pedestrianised space can be progressed as needs allow.
Seasonality	Seasonal use and activity varies greatly, temporary/ seasonal events will be accommodated through adaptations to street management & TROs and supported through simple, flexible approach to street design & layout.
Connectivity	Street pattern is fully integrated within surrounding network, providing flexibility in infrastructure and ability to accommodate changes to how network is used (closure on a block by block basis)
Parking	Layout, kerbing, surfacing and arrangement of on-street parking along carriageway edges will be such that seasonal/ incremental removal is easily achieved to offer fully useable quality streetscape integrated with & extending from the edges of existing 'pavement' areas.
Servicing	Construction and layout accommodates front servicing by large vehicles for as long as this continues, full emergency and maintenance access, without compromise to design ambitions
Efficiency	Future proof all existing and future utility needs to safeguard investment, investment in quality and highly durable materials and construction which are durable and minimise maintenance



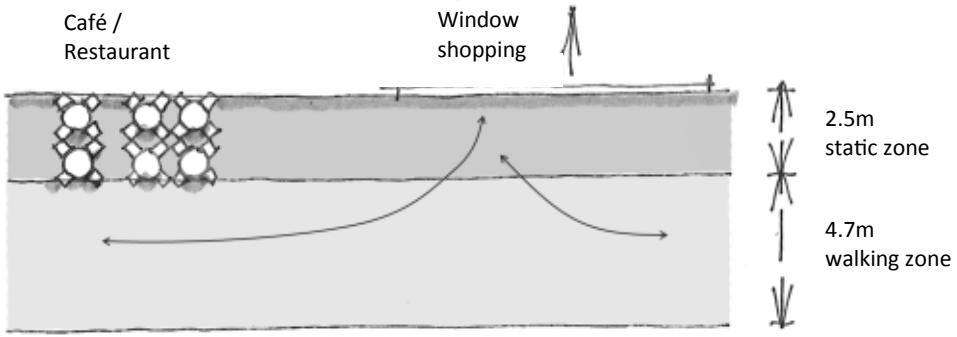
Northern (south facing) pavement open to sun throughout summer and for a large part of spring and autumn. Southern pavement is often in shade receiving solar gains only in the late afternoons of summer months

South pavement, current
Busiest footfall at
weekend: 1,100/hr



South pavement, current
Busiest footfall at
weekdays: 900/hr

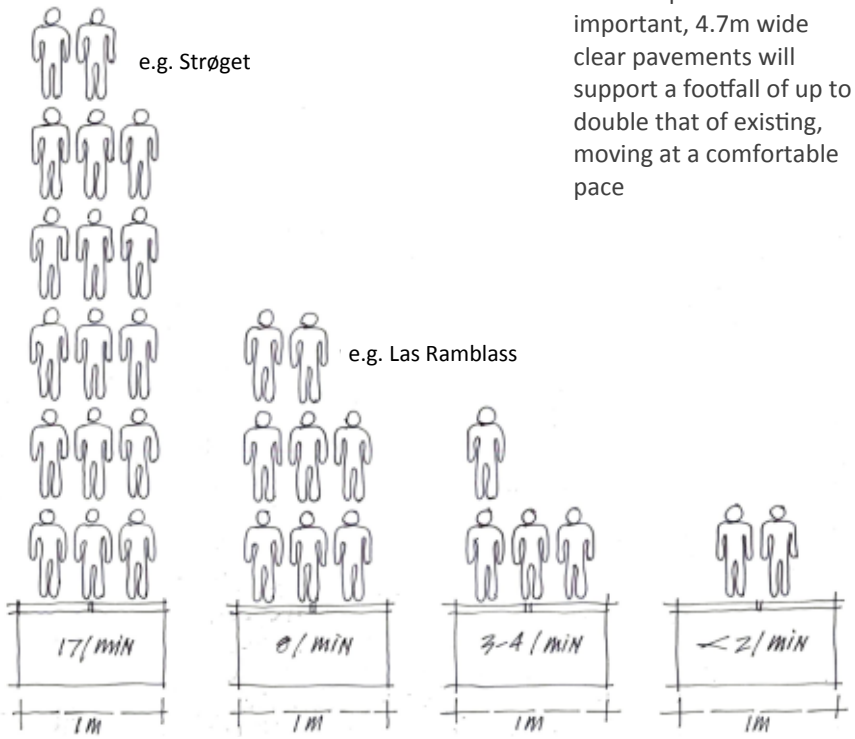
Footfall, street animation & café / al fresco dining are an increasing trend and require space



Pavement widths are critical in higher footfall areas to support mixed-use activities

street pace

- Width of pavement determines street pace
- Variable pace is important, 4.7m wide clear pavements will support a footfall of up to double that of existing, moving at a comfortable pace



High *Comfortable* *Not crowded* *Empty*

Animation

People are the lifeblood of our cities, we therefore need to place people at the centre of our design process:

Footfall	Increase pavement space, prioritise pedestrian access and connections to promote & encourage greater footfall, building on the trend established through the ETRO. Achieve pavement widths that will accommodate double the level of use within initial phase & build in capacity to incrementally extend pedestrian space as demand dictates.
Vehicles	Within periods of low footfall it is recognised that vehicle access will bring a level of animation & natural surveillance important to the vitality of the space, thus vehicle access will be retained as required to ensure a consistent level of activity & use.
Destination Building	Secure as Edinburgh's high-end retail & leisure destination and major civic space, quality of environment & street appeal will encouraging greater dwell time promoting the street as a place to shop, eat, meet, socialise and spend time in
Building Interface	Increase space for frontage activity and better access to/along building lines, create better indoor-outdoor interfaces to promote ease of commercial/ leisure use & activity
Events	Extend the city's limited outdoor venue offer, providing a fully serviced, accessible, easy to use & robust locus for events, design for segmental closure of street allowing for periodic event use and activity at a variety of scales.

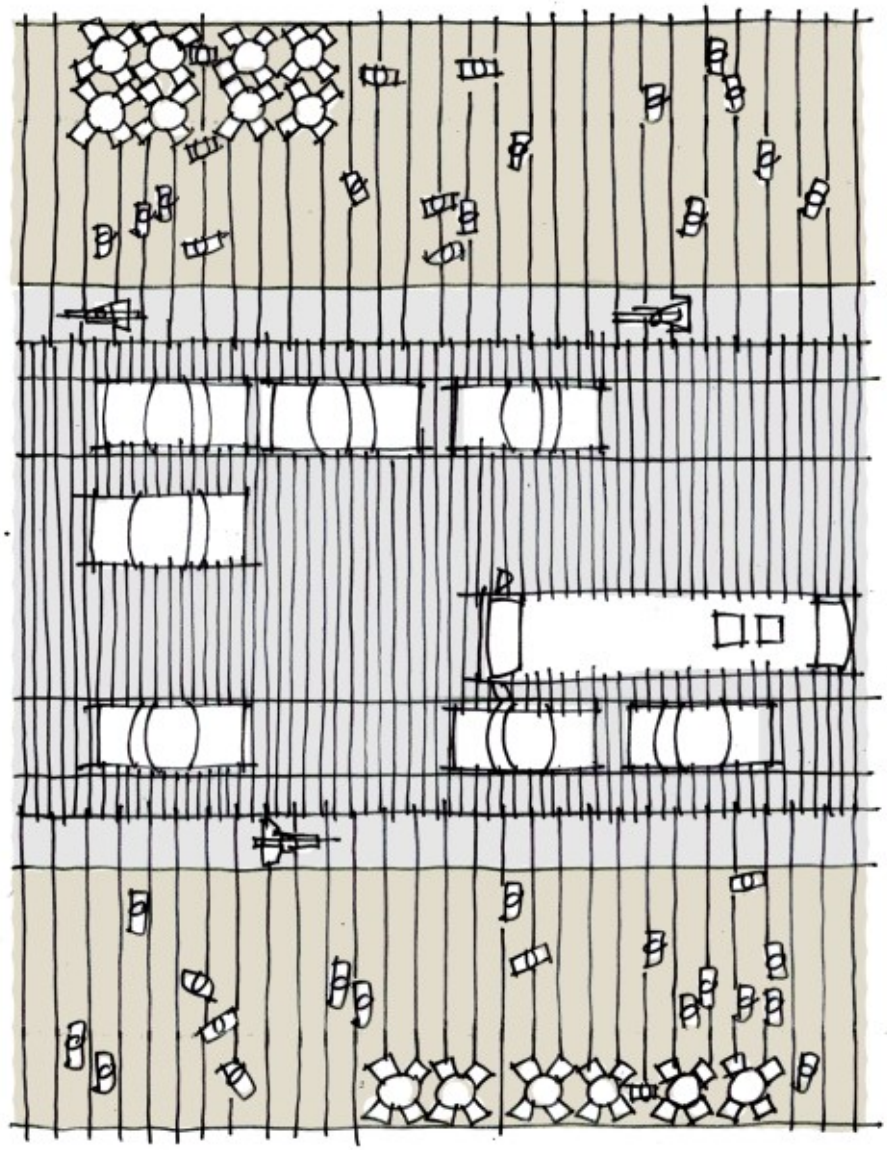
Edinburgh and World Class

We must treasure what is precious about George Street to deliver a public realm of exemplar quality:

World Heritage Site	Respect heritage and unique qualities of place, embracing the past and enhancing the future; ensuring form, character and detail of proposals are carefully reference to and developed within the spirit of Craig's street plan and the quality of the architectural setting; conserving, supporting and strengthening UNESCO WHS Status
International Quality	Benchmark with best of international street design, secure appropriate level of skills, investment, and workmanship to deliver proposals befitting one of Scotland's primary streets.
Contemporary	Secure contemporary street environment commensurate with highest of international standards yet retaining strong local reference, building on unique identity and expressing clear sense of place.
Sustainability	Adopt a fully sustainable approach supporting business, tourism, environmental, citizen and local resident issues. Continue to promote sustainable travel choices and progress through open engagement with all stakeholder, residents, community and citizens.
Ambition	Set the highest standards of design, skills and resources to secure quality outcomes which the city fully supports and can to be proud of.

Design detailing

Future design stages need to carefully consider how materials, levels and detailing support a simple mixed-use streetscape.



Managed for Success

Ensuring design quality is protected and maintained by careful control & consideration of ancillary operational street elements and all temporary/ short term/ seasonal interventions.

Quality Cleansing & Maintenance regime	Street cleansing regimes established to maintain street environment to highest quality; managed through regular programme of inspections, fully equipped and resourced response units operating to fast response times.
Controlling Clutter	Application of rigorous controls to minimise street clutter reducing/ restricting sign & lining requirements of traffic management (TROs), embracing innovative changes to public transport infrastructure—flexible bus stops (no shelters required) integrated street furniture systems (litter bins/ banners/ signage / IT)
Design Led animation & City Dressing	Adopting a design led—quality driven approach to all temporary streetscape elements (lighting/ banners/ shelters/ structures) incorporate discrete integrated power supplies/sockets/ support infrastructure into permanent works, improving quality & avoiding need for intrusive / poor quality temporary elements.
Quality Control Monitor	Adoption of quality control checking systems to review all temporary proposals prior to implementation

Design Recommendations

The Design Principles respond to key findings of engagement & contextual analysis, recognise and address special qualities of place to create appealing & liveable street. Balancing needs of all users whilst respecting historic context is fundamental to further development of design. The key elements can be summarised as:

- **Wider pavements**
  Extending symmetrically from building edges, both sides of street, to achieve widths of approx. 7.2m. Detailed widths will be addressed at future design stages based on user needs/ to ensure appropriate levels of use.

- **Reduced vehicular access & parking**
  Setted surfacing should be considered to induce low traffic speeds and discourage through traffic from using George Street. It will be important to maintain vehicle flow through the key north - south route along Hanover Street. **'**Carriageways' of at least 6.6m width should be provided to allow for 2 way traffic, with parallel parking zones aligned along both north and south edges in place of the current central parking.

- **Enhanced cycling**
  2m wide cycle routes separated from the carriageway located either side of street at edge of footway with 0.5m buffer offering protection alongside parked cars, with needs of pedestrian safety/ avoidance of conflict fully addressed.

- **Prioritised Junctions**
  Pedestrian & cycle movement along George Street prioritised at all north - south intersecting street junctions, in a manner which is compatible with maintaining vehicle flow through the key north - south route along Hanover Street. Detailed modelling & transport assessments will be required to address.

- **Promoted café / dining**
  Capacity for a 2.5m 'static zone' on pavements, immediately adjacent to building frontages, providing for easy to service on-street active use**.**

- **Retained public transport**
  'Carriageway' widths supporting two way bus access with 'on street ' bus stops as traffic calming measure. Non-stopping services are re-routed.

- **Progressive parking management**
  On street parking capacity reduced on a phased/ seasonal basis as capacity on nearby streets increases/ travel patterns evolve.

- **Adaptable & Flexible streetscape**
  Street furniture, road markings, low/no vertical edgings and surfacing designed & constructed for fully adaptable and interchangeable pedestrian/ cycle/ vehicle/ event use.

- **Accessible**
  Segregated movement, defined using 'urban braille' (texture & colour contrast) techniques provide a street which is safe & fully accessible, addressing the wide & varying needs of all users

- **Appealing & Safe**

  Furniture, lighting, materials & design detail developed to enhance place qualities and setting, night-time access considered to ensure high level of natural surveillance.

- **Animated**
  Seasonal change in access and management to ensure high levels of street footfall, activity & use are maintained through out the year (events/ cafes/ parking).

Illustration of Design Principles & Recommendations

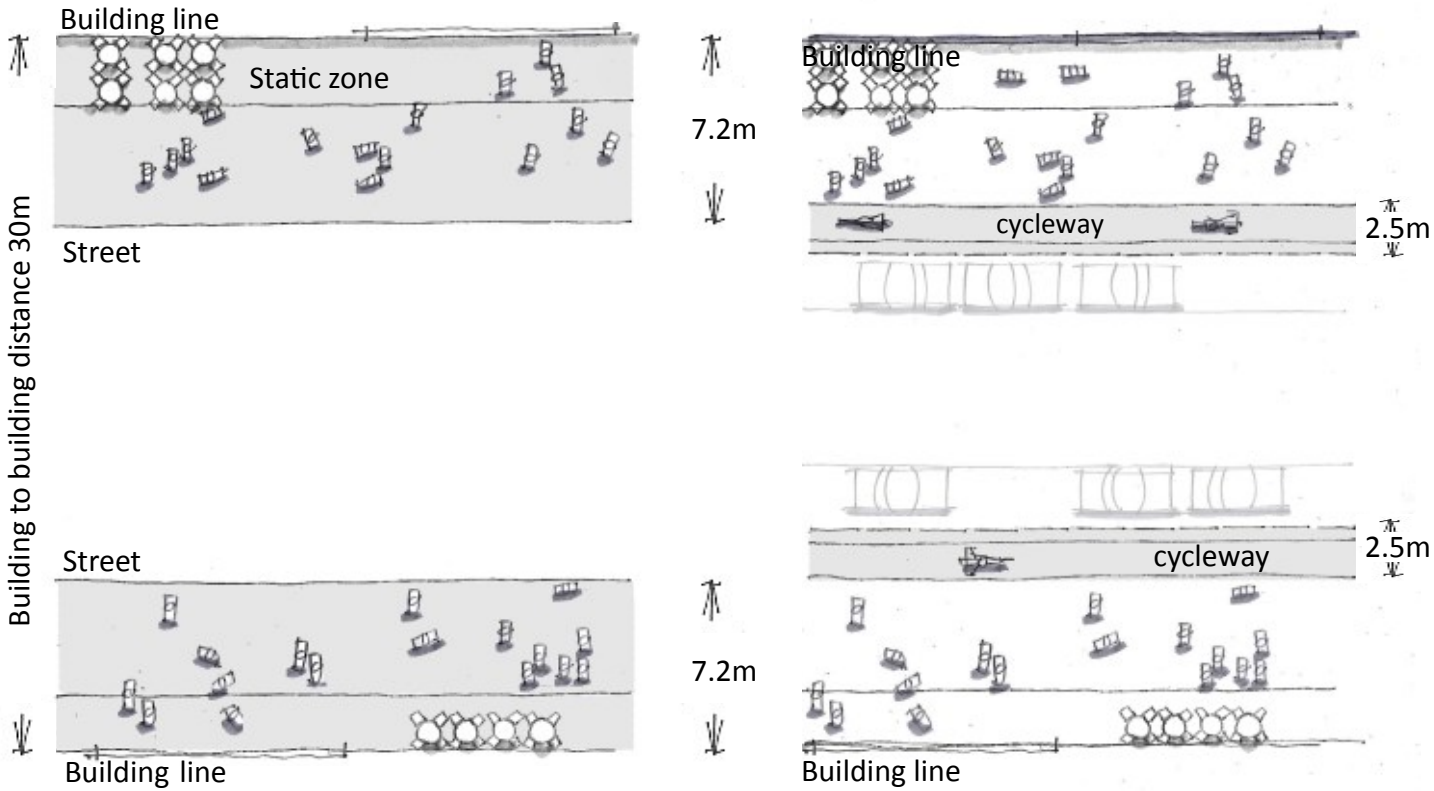
The engagement with the Steering Group, stakeholders and special interest groups have focussed on sketch material developed to illustrate the application of the Design Principles in the context of George Street.

We have sought to avoid developing either a theoretical / academic urban design study or a benchmark, international reference type study both of which have been considered and reviewed previously. Rather we have sought to develop and encourage debate around 'illustrative but realistic and deliverable concepts' that illustrate the principles and ensure a more informed debate.

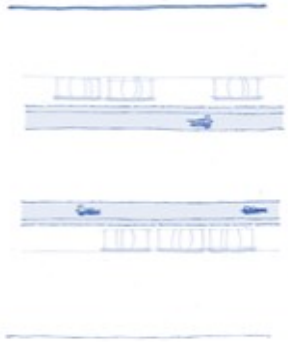
Much further work in survey & investigation, design development, engagement and dialogue is required to bring forward proposals for implementation.

Application of Design Principles

The following gives an illustration of the how principles might be applied, it is noted that these do not represent design layouts. Pavement widths will be increased , full details will be addressed at future design stages based on detailed review of all user needs. Cycle lanes, whilst separate, are not necessarily segregated, the level of definition and positioning all requires careful development. Road widths are to be determined in detail with CEC Transport. Kerbside parking/ blue badge parking/ loading/ bus stops to be developed to achieve high level of flexibility.



Edge of Footway
Cycleway
Option 1



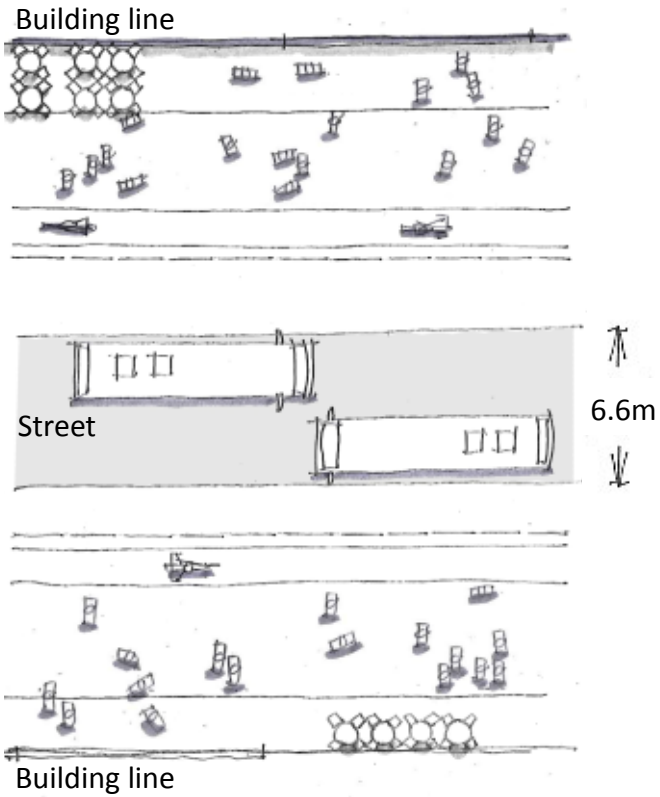
On carriageway
cycle lane
Option 2

pedestrian

Pedestrian pavements need to offer safe access and mobility and support both retail and restaurant / café activity. Footways of approx. 7.2m width should be slabbed

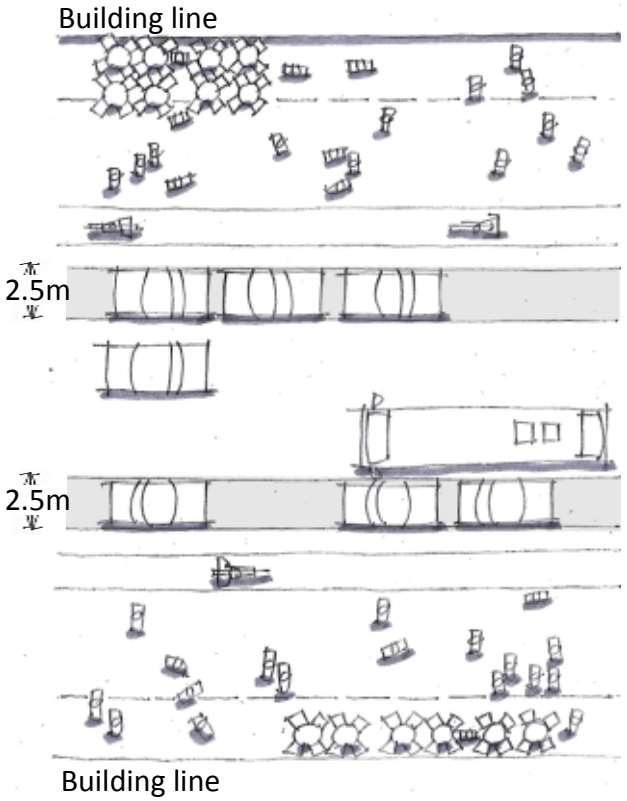
cyclist

Cycle provision needs to offer safe cycling environments for all within dedicated cycle routes. Options exist for cycle lane routing and require minimum 1.5m lane plus 0.5m buffer



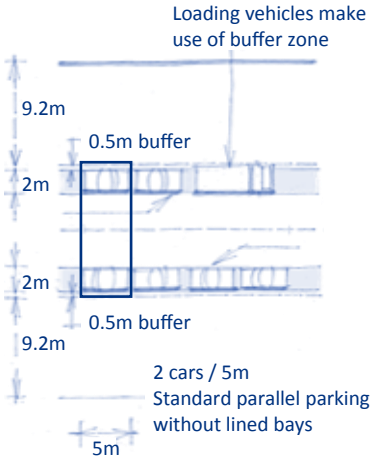
movement

Public transport and vehicular access needs to be retained to support servicing of the centre. Simple, legible two-way movement is proposed requiring a street width of 6.6m.

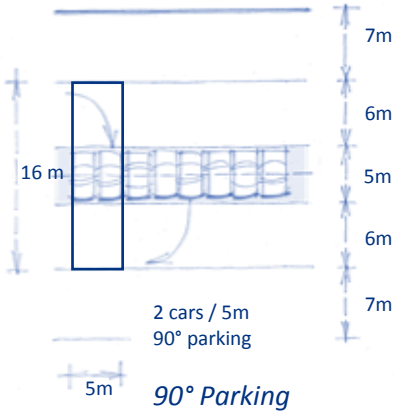


parking / waiting

Capacity exists for parallel parking within the street carriageway. Seasonally or reflecting wider policy, parking provision may be adjusted within street blocks. Flexible DDA parking and loading space will be required.



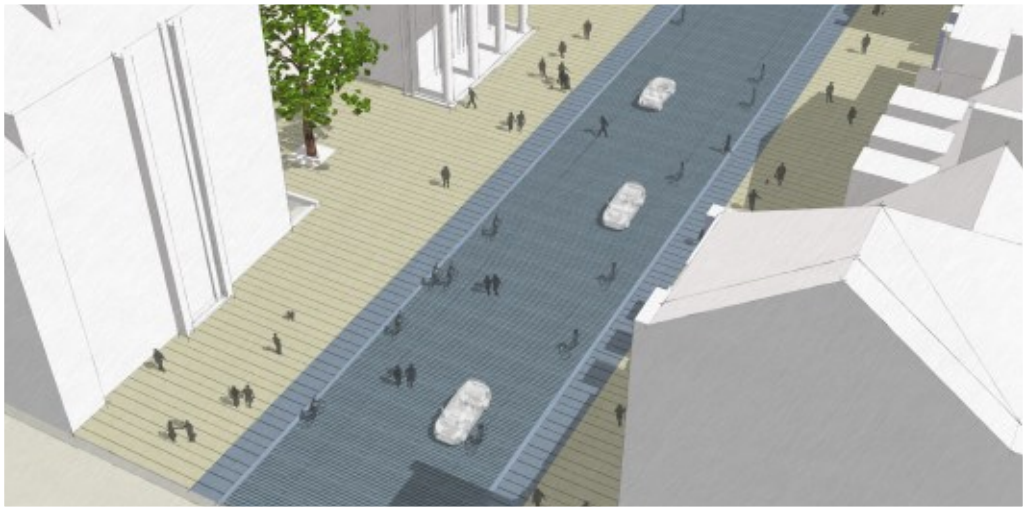
Parallel Parking
Road space / car = 29m²

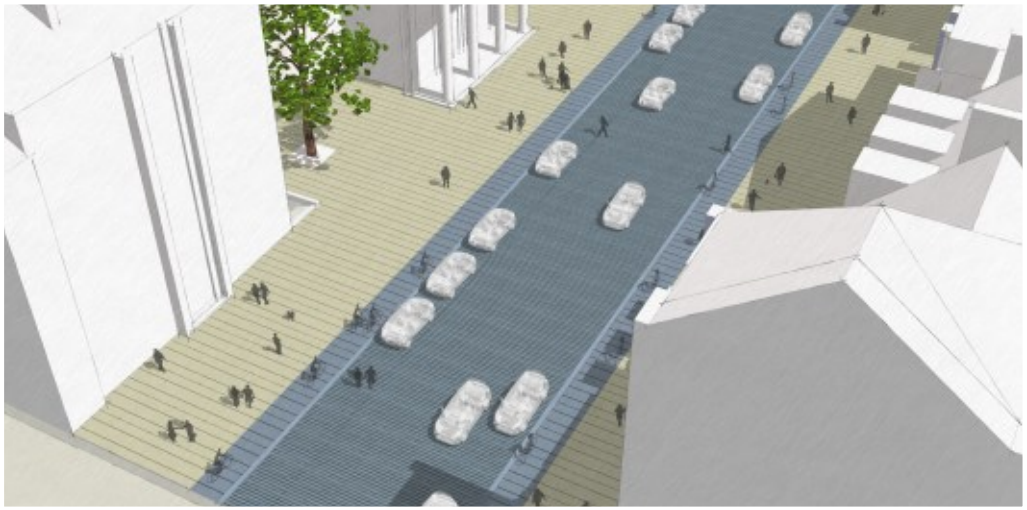


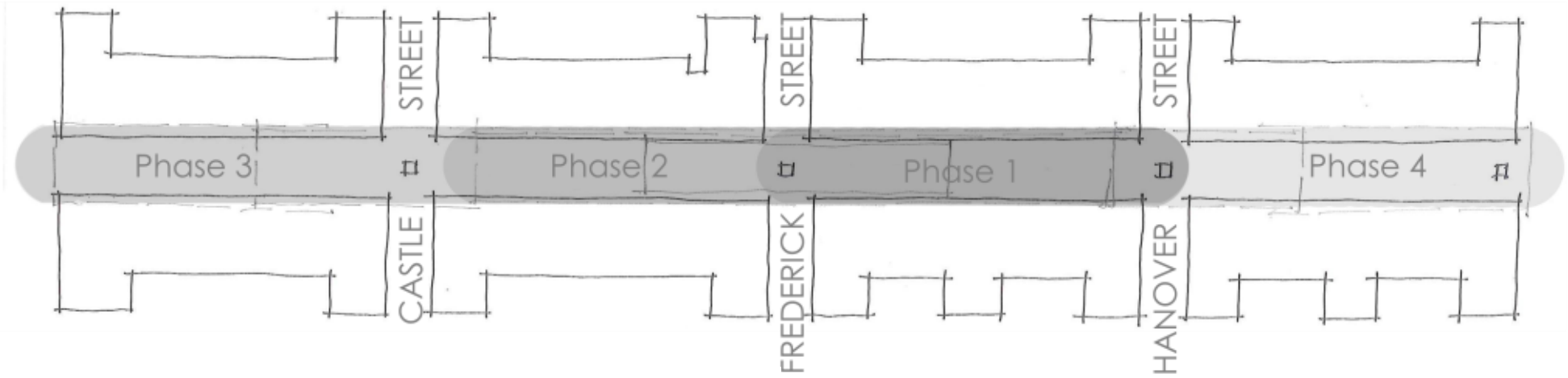
90° Parking
Road space / car = 40m²

The street can be designed to accommodate on street parking during early years until adjacent on street supply can accommodate, or until future travel patterns / modes reduces reliance on the private car/ demand for parking

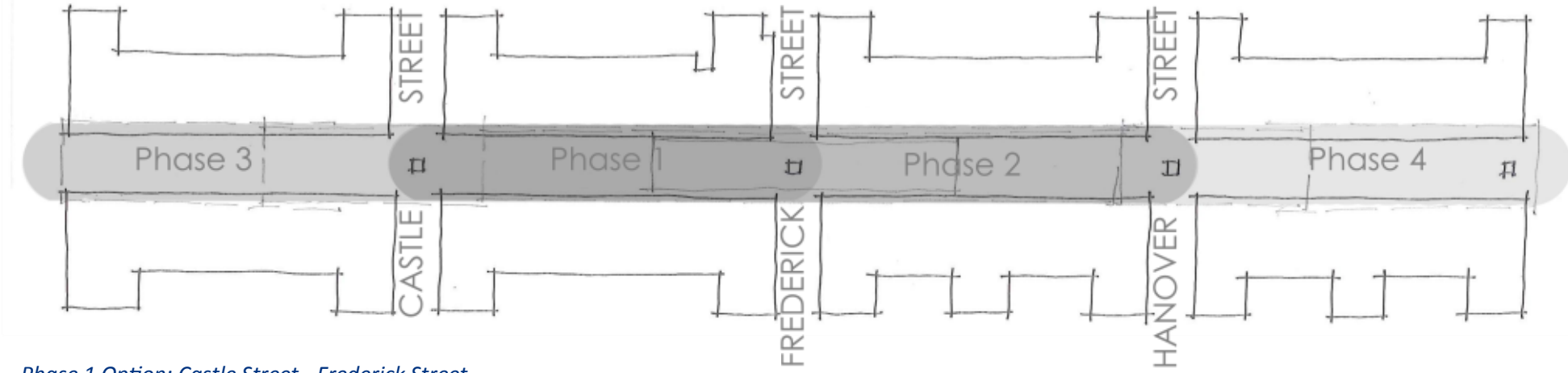
Emerging Ideas







Phase 1 Option: Frederick Street - Hanover Street including Assembly Rooms



Phase 1 Option: Castle Street - Frederick Street

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Delivery, Costs & Phasing

PHASING

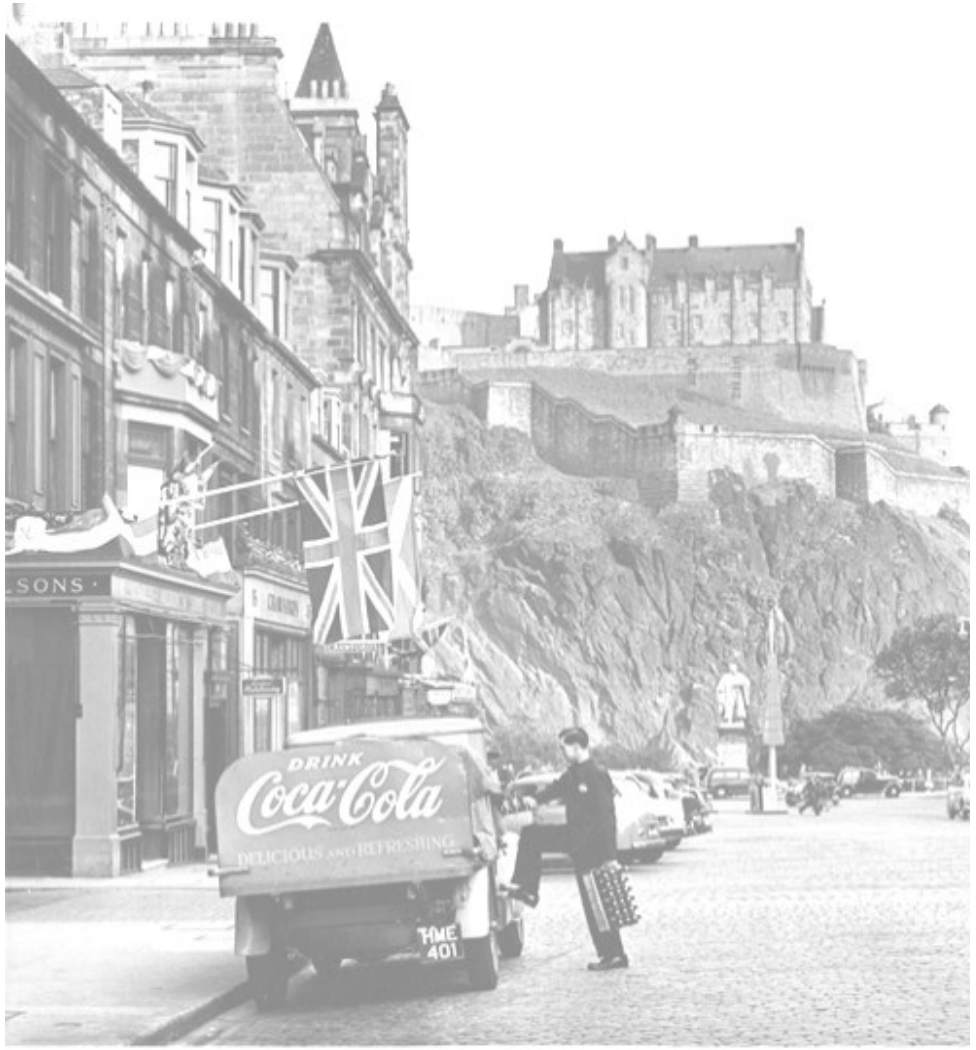
George Street Enhancement is a major scheme and would be a major investment for the City Council. The Strategy has reviewed two Phasing Options. These are high level delivery strategies that will require further dialogue with CEC Transportation / Planning and Project Delivery Team through the next stages of the project.

Stage 1: 2016
Advance Outline Design (RIBA Stage C+) Building on the principles outlined in this report to secure a scheme proposal that is technically robust and capable of assessment in terms of costs, risks, governance and delivery mechanism. This would include transportation modelling and conclusion of the network strategy for the central area.
This would inform strategy for delivery and confirm the eligibility of the scheme under the Edinburgh and South East Scotland City Regional Deal.

Stage 2: 2017
Promote orders and other necessary measures to implement a revised Traffic Management regime within George Street and associated route corridors that reflects the proposals for George Street and facilitates implementation. This would allow for early implementation of active travel / cycleway provisions as interim measures.

Stage 3: 2017
Develop Detailed Design (Stage E) and other essential studies and engagement activity to secure a detailed approval and consents for the scheme.

Stage 4 2018—2022
Final Design & Documentation, Procurement and Implementation of works delivered in phases to secure full completion of public realm works end-to-end by end 2022



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Hi -Level Budget Cost Provision

This George Street scheme is at a very early design assessment stage. Robust cost assessment would require a Stage C Outline Concept Scheme Design to allow cost budgeting; assess scope and forward contingencies and risks and provide a foundation for cost planning and phasing.

A benchmark cost assessment has been undertaken to set an informed budget.
This assesses the total order of capital cost at circa £26.4—£28.6 million funded by the public sector and considered to offer a potentially eligible strategic project within the Edinburgh and South East Scotland City Regional Deal.

Expenditure would be over a 6 year, 4 phase implementation programme with the main capital expenditure between 2018 and 2022

Note: * 2015 Unit rate of approx. £1,100/m2 is based on major City Centre public realm scheme outturn costs in Scotland (in quality natural materials). All costs should be verified as part of Outline Design development (Stage C)

Economic Benefits- GVA Contribution

The George Street scheme will act as a catalyst for investment across the City Centre securing additional visitor numbers, footfall, spend and associated investment and employment.

Total GVA benefits are considered to be substantial and although out with the scope of this design study should be advanced following Stage C Designs to assess economic value and capacity of the scheme to contribute to the city economy.

Economic impact (taking due account of deadweight, displacement and multipliers) and any best value and appropriate sensitivity analyses should be undertaken at this time.

Project Governance

The George Street design assessment is at an early stage. The Project Manager for this study has been the Town Centre Manager. No review has been undertaken on the governance and management arrangements. It is recommended that a Directorate and Senior Officer Manager is tasked with advancing the next steps to ensure that the project aligns with a wider programme of activity being delivered across the city.

City of Edinburgh Council

George Street ETRO Survey

September 2015

Prepared by:

Research Resource
17b Main Street
Cambuslang
G72 7EX

Contact: Lorna Shaw
E-mail:
Lorna.shaw@researchresource.co.uk

Prepared for:

City of Edinburgh Council
Waverley Court
4 East Market Street
Edinburgh
EH8 8BG

Contact: Ian MacPhail
E-mail:
Iain.macphail@edinburgh .gov.uk

City of Edinburgh Council

George Street ETRO Survey

Contents

Report written by: Rosemary Stafford

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Reviewed by: Elaine MacKinnon/ Lorna Shaw

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EXECUTIVE SUMMARY

INTRODUCTION

Research Resource were commissioned by the City of Edinburgh Council to undertake research into the George Street Experimental Traffic Regulation Order (ETRO) survey. A total of 1200 in street interviews were completed with visitors to George Street between September 2014 and August 2015,

In order to ensure that a sample of the full range of visitors to George Street was achieved, an average of 100 interviews completed each month, with interviews undertaken on different days the week (including weekends), different times of the day (including evenings) and spread across all 4 blocks of George Street. Respondents were stopped on a 'next to pass' sampling methodology. Minimum targets were set each month to ensure that the overall data could be analysed with confidence in terms of New Town residents, cyclists and drivers.

The key objective of the research was to understand visitors to George Street with the aim of providing information on:

- The profile and reasons for visiting George Street;
- The attitudes towards George Street generally;
- Visitor view on the ETRO changes specifically
- Thought on the future of George Street.

This executive summary details the key findings from the research.

VISIT INFORMATION

- The survey opened by asking respondents how frequently they visit George Street. Over 4 in 10 respondents (42%) visit George Street at least once a week, 23% visit George Street fortnightly or monthly and 35% visit George Street less than once per month.
- All respondents were asked where they had come from on their visit to George Street on the day of interview. The vast majority (65%) had come from their home, 23% had come from their work and 9% from a hotel.
- The main reasons for visiting George Street included browsing or window shopping (41%), non-food shopping (33%), dining or eating in a restaurant or bar (30%) and meeting friends and family (25%).
- When asked how long they intended to spend in George Street, 11% of respondents said they were just passing through, 37% were intending to spend less than 3 hours in the area, 37% intended to spend between 3 and 7 hours and 7% intended to spend 8 or more hours in George Street.

- In terms of the main form of transport used to get to George Street on that occasion, one in four respondents (25%) stated they travelled by foot, 24% travelled by train, 19% travelled by bus, 16% travelled by car, 11% travelled by bicycle, 4% travelled by tram and 2% travelled by taxi.
- The most commonly used parking locations for those travelling into the city centre by car were on George Street (38%), at the St James Centre (19%) and on Charlotte Square (17%).

PERCEPTIONS AND EXPERIENCE OF GEORGE STREET

- All respondents were asked to rate how important or unimportant various attributes were on their decision to visit George Street. For analysis purposes the proportion of respondents rating each of these aspects as very or fairly important and very or fairly unimportant has been combined. The most important attributes for respondents overall were identified as being:
    - The feeling of safety on George Street (98%);
    - The ease of access to shops or businesses (95%);
    - The quality or range of shops and businesses available (95%);
    - The ease of walking about on George Street (94%);
    - Cleanliness (93%).
- Following on from this, respondents were asked how good or poor they considered each of these aspects to be on George Street. For analysis purposes the proportion of respondents who rated these aspects as very good or good has been combined, as has the proportion of respondents who rated these poor or very poor. Overall, respondents rated George Street highly for the majority of aspects with satisfaction levels being highest regarding:
    - Feeling of safety (100%)
    - Quality and range of shops and businesses (99%)
    - Ease of walking about on George Street (98%)
    - Ease of access to shops and businesses (98%)
    - Accessibility and ease of movement for buggies or prams (97%)
    - Overall appearance and attractiveness (97%)
    - The range of activities available (96%).

    On the other hand, satisfaction was significantly lower with regards to:
    - The ease of parking (60%)
    - The amount of parking available (60%)
    - The availability of bike parking facilities (81%).

CYCLISTS

- The questionnaire included a section for only those who cycle on George Street. In terms of frequency of cycling, just under 9 in 10 respondents (89%) stated they cycled on at least a weekly basis.
- Four in ten cyclists stated that they now cycle more since the introduction of cycle lanes (40%), just 1% said they now cycle less and 59% said their cycling habits have not changed.
- In terms of how cyclists most commonly use George Street, over 6 in 10 respondents (61%) said they travelled along the length of George Street, 35% stated they simply cross over George Street as part of a longer journey and 4% said that this varies.
- Satisfaction with various aspects of the cycling experience on George Street was high with over 8 in 10 respondents being satisfied with:
    - Clarity of segregation of cycle and parking areas (82%);
    - Safety of the 2 way cycle lane (82%)
    - Feeling of safety when cycling along George Street (80%)

  On the other hand, satisfaction levels fell below 80% with regards to:
    - Feeling of safety at junctions/ intersections along George Street (78%);
    - Feeling of safety or the change from one side of the street to another for the 2 way cycle lane (74%);
    - Clarity for cyclists at junctions/ intersections along George Street (73%);
    - Clarity for cyclists of the change from one side of the street to another for the 2 way cycle lane (72%).
- Respondents were asked for their suggestions as to what they felt could be done to improve cycling on George Street. The majority of comments were regarding improvements to signage and road markings (30%), pedestrianising the whole area (23%) and for more bicycle parking facilities (18%).

PERCEPTIONS OF CHANGE IN GEORGE STREET

- Respondents were told that “A number of changes had been made to George Street on a trial basis including increased pedestrian space, a two way cycle path and a one way traffic system on George Street. These changes were all temporary are were being trialled until September 2015.” They were then shown a picture of George Street as was prior to the trial changes.

- The majority of survey respondents were of the opinion that these changes to George Street had improved the overall appearance of George Street (61%). On the other hand, 1 in 10 respondents (10%) felt the changes had made no difference, 9% felt the appearance had got worse and 20% were unsure.
- The main reasons given for feeling the appearance of George Street has improved was where respondents felt the area was now more attractive and a nicer place to visit (39%) or that there was now more space to walk or cycle and that there was now a more relaxed atmosphere (18%).
- Where respondents felt the appearance of the neighbourhood had got worse, this tended to be where respondents commented on traffic congestion and longer journeys as a result of the changes (31%), that the covered outside seating areas looked shabby or took up too much space (29%), where respondents preferred it the way it was before (28%) or where respondents felt the area looks unfinished or untidy (24%).
- Respondents were asked whether or not the changes to George Street have met the desired project outcomes. The majority of respondents were in agreement that the area is now more attractive (69%), there has been an improvement to pedestrian experience (64%), the changes encourage people to walk more (56%) and that the changes encourage people to spend more time in George Street (52%).
- Very few people disagreed that the project outcomes had been met with respondents being most likely to disagree that the area is now more attractive (13%) and 12% disagreeing that the changes have resulted in an improved pedestrian experience.
- With regards to the cycling outcomes the majority of respondents answered don't know for each of these. However, 38% were in agreement that the changes have resulted in an improved experience for cyclists (3% disagreement) and 34% were in agreement that the changes have encouraged people to cycle more (3% disagree).
- The vast majority of respondents (72%) were of the opinion that the changes to George Street have made no difference in the likelihood of them visiting George Street. More respondents said they were 'more likely' to visit George Street (22%) than were 'less likely' (3%).
- Over half of respondents (56%) were of the opinion that the changes to George Street have made their visit more enjoyable. On the other hand, 35% stated this has made no difference, 5% said the changes have made their visit less enjoyable and 4% were unsure.
- All respondents were asked for their suggestions in terms of what could be done to improve George Street. Over 6 in 10 respondents did not have any suggestions for improvement (62%) and a further 5% stated they preferred it the way it was. On the other hand, 4% said they would prefer the area to be fully pedestrianised, 4% said they would like to see landscaping improvements and 4% suggested affordable or more parking spaces.

- Just under two thirds of survey respondents said they would support or strongly support the idea of introducing pedestrianised spaces on George Street for seating, outdoor dining or cultural activities. On the other hand, 7% opposed or strongly opposed this, 19% neither supported nor opposed this and the remaining 8% were unsure.
- When asked about when pedestrianised areas should be made available on George Street, just under half of respondents (47%) said this should be all the time (permanent), 12% said in summer only, 8% said in summer and winter festivals and 6% said never.
- With regards to the availability of car parking on George Street, over 4 in 10 respondents (43%) felt it was very or fairly important that car parking continues to be available on George Street, 10% said it was neither important nor unimportant and 12% said it was very or fairly unimportant.

1. INTRODUCTION, BACKGROUND AND OBJECTIVES

1.1. Introduction

This report represents and discusses the findings to emerge from research commissioned by the City of Edinburgh Council on the George Street Experimental Traffic Regulation Order (ETRO).

1.2. Background

The City of Edinburgh Council is committed to improving the pedestrian experience in the city centre, as well as to promoting sustainable travel options such as walking and cycling. As part of this commitment, the Council installed increased pedestrian space, a two-way cycle path and a one-way traffic system on George Street on a time-limited trial basis.

The scheme was initially trialled for one month in August 2013, during the Edinburgh Festival. Subsequently, a design was worked up and approved as an Experimental Traffic Regulation Order (ETRO) at Transport and Environment Committee on 29 April 2014 to run a trial for 12 months, between Festival 2014 and Festival 2015. Installation work began on 25 June 2014, and was completed in time for the Festival in 2014.

During the trial, some businesses animated part of the newly-created space with decking, marquees, tables and chairs, introducing more of a café culture feel to the street. Car parking is being maintained during this trial.

As well as being a primary shopping street, with hotels, bars and restaurants, George Street is also a residential street. The aim of the trial is to improve the pedestrian experience for people who live, work, visit, shop, dine and travel on George Street.

One of the overriding aims of the design was for it to be safe, for cyclists, pedestrians, drivers, the visually-impaired, those with other disabilities, for businesses when loading and unloading and for local residents. The safety aspect will require to be tested and monitored throughout.

As an ETRO is time limited, only temporary materials could be used during the trial period. These include only rubber kerbs on parking bays, planters, paint and necessary street signage.

An ETRO provides a greater degree of flexibility than most other types of TRO. It allows for any issues that emerge during the trial to be analysed and addressed during the trial period, without having to wait until the end of the time period. As such, during this period, a monthly programme of research was carried out in order to inform the review and development of the ETRO.

Consultation took place with a wide range of interest groups before the trial arrangement was placed before Committee. These groups included local community councils, businesses, residents' groups, cyclist groups, Living Streets, taxi firms, bus companies, disability groups, the Edinburgh World Heritage Trust, Historic Scotland and the Emergency Services. These groups were then invited to form the stakeholder group that met in September 2014, December 2014 and March 2015. The stakeholder group, at these meetings, received presentations on the results of the visitor research for the preceding 3 months.

1.3. Objectives

The overarching aims of the visitor research were to understand: (i) what worked well; (ii) what did not work well; and (iii) if a more permanent scheme was to be taken forward what changes would people like to see to the street layout.

Specifically, the research sought to understand

- the impact of a semi-pedestrianised layout on the streetscape and attractiveness of George Street;
- understand where respondents travelled from, how they travelled to George Street, the purpose of their visit, and how important car parking or other transport alternatives are for people who use George Street;
- assessing the safety and effectiveness of the new transport arrangements, specifically the cycle lane arrangements, the parking arrangements, and layout of the pedestrian space, including for disabled groups;
- assessing if there is support for an emerging café culture;
- testing out views on if a more permanent public realm layout was desired.

It is against this background that Research Resource were commissioned to carry out research into the George Street ETRO Survey.

2. METHODOLOGY

2.1. Research method

The survey was undertaken utilising an in-street methodology with visitors to George Street. An interviewer led methodology, such as an in-street methodology, allows the interviewer to build up a rapport with the respondent, ensuring that the questionnaire is answered in full and allowing explanation of the necessity for asking personal data, providing high quality output and a positive interviewing experience.

Each month, interviewers were given a target of 100 interviews to achieve and this covered a total of 5 interviewer shifts with interviewers aiming to achieve 20 interviews per shift. Interviewers shifts were allocated to cover the four blocks of George Street (Block 1: Charlotte Square to North Castle Street, Block 2: North Castle Street to Frederick Street, Block 3: Frederick Street to Hanover Street and Block 4: Hanover Street to St Andrew's Square) and were designed to ensure coverage of daytime and evening shifts, and weekday and weekend shifts.

Furthermore, for each shift interviewers were given minimum quotas to ensure that within their 20 interviews they achieve at least:

- 2 interviews with new town residents;
- 2 interviews with cyclists
- 2 interviews with respondents who have driven into the city.

Thereafter, interviews were carried out using a next to pass sampling process at their specified location.

2.2. Questionnaire design

After consultation with City of Edinburgh Council, a draft survey questionnaire was designed in partnership between Research Resource and the City of Edinburgh Council. In designing the questionnaire it was essential that the survey should be no longer than 10 minutes to ensure that the survey was not overly onerous to deliver given the in-street methodology.

On creation of the draft survey a small pilot was undertaken to test the questionnaire to ensure that the survey was understood by the respondent as well as being easy to administer from the perspective of the interviewer. Additionally the pilot identified how easy or difficult it may be to meet the target quotas which have been established. Furthermore, it allowed us to highlight and understand George Street visitor reaction to the research and willingness to participate in addition to the ease with which respondents can spontaneously respond to the questions asked.

A report on the pilot was provided verbally to the City of Edinburgh Council and confirmed by email with any recommendations in terms of amendments to the questionnaire. The survey was then signed off by representatives at the City of Edinburgh Council in advance of fieldwork.

2.3. Sample size

In total, 1200 interviews were achieved to the survey. The following tables detail the response profile in terms of interviewer location, month, and day/ time of the week:

Interview profile by location	
Quarter	**No. of interviews**
Location Block 1 - Charlotte Square to North Castle Street	286
Location Block 2 - North Castle Street to Frederick Street	284
Location Block 3 - Frederick Street to Hanover Street	310
Location Block 4 - Hanover Street to St Andrew Square	320

Interview profile by month	
Quarter	**No. of interviews**
September 2014	100
October 2014	100
November 2014	100
December 2014	99
January 2015	100
February 2015	100
March 2015	100
April 2015	99
May 2015	101
June 2015	102
July 2015	100
August 2015	99

Interview profile by day of the week	
Quarter	**No. of interviews**
Monday	140
Tuesday	139
Wednesday	160
Thursday	141
Friday	141
Saturday	279
Sunday	200

Interview profile by time of the day	
Quarter	**No. of interviews**
Before 12pm	136
12pm-4pm	621
After 4pm	443

2.4. Interviewing and quality control

Prior to commencing with fieldwork, all interviewers working on the project received a formal briefing to ensure that they understood the purpose of the exercise and were fully aware of the requirements of the questionnaire and fieldwork programme. It also allowed interviewers to ask any questions that they may have and ensures consistency throughout the fieldwork process, even where the survey is being administered by a number of different interviewers.

All interviewing was undertaken by Research Resource's highly trained and experienced field force, all of whom are highly experienced in undertaking customer satisfaction surveys for Housing Associations and Local Authorities. A total of **10% of each interviewer's work was back checked to ensure that interviews have been completed accurately and in line with ISO 20252 standards.**

2.5. Presentation and interpretation of survey results

This report details the findings of the survey for City of Edinburgh Council overall. Survey data will be analysed and reported on in a number of ways including analysis of residents vs non-residents, for cyclists, car users, New Town residents, seasonality and by demographic. Where any particular trends or issues are found for any one key group, this is detailed in the survey report.

In reading this report, a number of points should be noted in relation to respondent characteristics:

Age and gender

The table below shows the age and gender profile of respondents to the survey. As can be seen below 45% of interviews were undertaken with males and 55% with females. With regards to the age profile of all respondents, 33% were aged 16-34, 43% were aged 35-54, 24% were aged 55 and over.

Age and gender profile			
	Overall	Male	Female
Base	1200 (100%)	540 (45%)	660 (55%)
16-24	10.4%	8.9%	11.7%
25-34	22.8	25.4%	20.8%
35-44	24.7%	22.4%	26.5%
45-54	18.3%	19.4%	17.4%
55-64	12.3%	10.9%	13.5%
65-74	9.1%	10.2%	8.2%
75+	2.1%	2.8%	1.8%
Refused	0.1%	-	0.2%

Disability

Overall, 5% of respondents to the survey had a disability. When considering these results it is also worth noting that as age increases, the proportion of respondents considering themselves to have a disability also increases. For example those aged 55 and over were significantly more likely to have a long term illness or disability (19%) than respondents aged 16-34 (0%).

Disability analysed by age				
	Overall	16-34	35-54	55+
	1200	399	516	284
Have a disability	5.1%	-	1.6%	18.7%
Do not have a disability	94.9%	100%	98.4%	81.3%

Home location

A geographical analysis has been undertaken on the basis of respondents' home location. As can be seen below 13% lived locally to George Street within the New Town area of Edinburgh, 41% lived elsewhere in Edinburgh, 13% lived in a surrounding local authority areas e.g. Fife, West Lothian, Mid Lothian, East Lothian and Borders, 22% lived elsewhere in Scotland and 12% lived outside of Scotland. Please note that for this question respondents were asked where they lived, and for example whether they self-identified with living in the New Town area.

Throughout the report analysis has been undertaken on the basis of Edinburgh residents (54%) compared to those who lived out with Edinburgh (46%).

Home location			
		No.	**%**
Edinburgh resident	Within New Town area	154	12.8%
	Elsewhere in Edinburgh	491	40.9%
	Total Edinburgh residents	**645**	**53.8%**
Non Edinburgh resident	Surrounding local authority	150	12.5%
	Elsewhere in Scotland	264	22.0%
	Outside Scotland	140	11.7%
	Total Non-Edinburgh residents	**554**	**46.2%**
Refused		**1**	**0.1%**

Transport type

In line with the objectives to the survey, transport is a key analysis variable for the City of Edinburgh Council and as mentioned earlier, minimum quotas were set for interviewers to ensure that a sufficient response was achieved for those who cycle or have driven into the city centre so that these two sub groups could be analysed with a high degree of confidence. As can be seen below the number of responses achieved for each of these two respondent categories exceeds the minimum targets that were set for the survey.

Transport type		
	No.	**% of overall response**
Cyclists	126	10.5%
Car users	191	15.9%

Please note that significantly more Edinburgh residents (18%) were cyclists than non-Edinburgh residents (2%). In terms of car usage those who lived elsewhere in Scotland were most likely to be car users (27%).

Seasonality

An important point in relation to the home location of respondents is the impact of Seasonality. Throughout the report analysis has been undertaken on the basis of each of the 4 seasons along with the results for August (the Festival month) being analysed separately. As can be seen in the table below, the geographical profile of respondents varies greatly during the festival month and in the summer months with more respondents being interviewed who are visiting George Street from outside of Scotland.

Season						
	Overall	Autumn (Sept 14 - Oct 14)	Winter (Nov 14 - Feb 15)	Spring (Mar 15 - May 15)	Summer (June 15 - July 15)	Festival month (Aug 15)
Base	**1200**	**199**	**399**	**300**	**202**	**99**
Within the New Town area of Edinburgh	12.8%	13.0%	11.5%	12.3%	14.9%	15.2%
Elsewhere in Edinburgh	40.9%	46.0%	42.9%	36.7%	41.6%	34.3%
Surrounding local authority areas	12.5%	14.0%	13.3%	11.7%	12.9%	8.1%
Elsewhere in Scotland	22.0%	17.0%	23.1%	27.7%	15.8%	23.2%
Outside Scotland	11.7%	9.5%	9.3%	11.7%	14.9%	19.2%

NB 1 respondent refused to give their home location

2.6. Report Structure

This document details the key findings to emerge from for the City of Edinburgh Council's George Street ETRO survey. The report structure is detailed as follows:

Chapter 3. Visit information

Chapter 4. Perceptions and experience of George Street

Chapter 5. Cyclists

Chapter 6. Perceptions of change in George Street

Appendix 1: Survey questionnaire

Appendix 2: Technical report summary

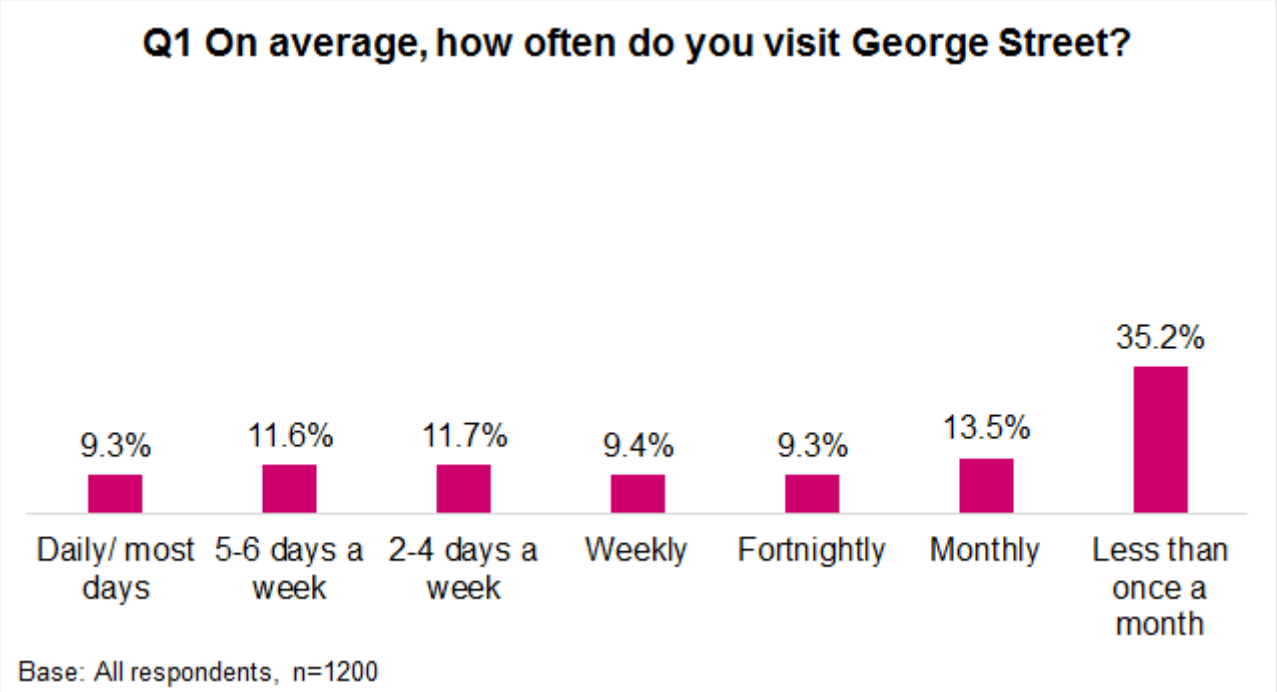
Appendix 3: Data tables

Appendix 4: Open ended responses

3. VISIT INFORMATION

3.1. Frequency of visiting George Street (Q1)

The survey opened by asking respondents how frequently they visit George Street. As can be seen in the chart below, over 4 in 10 respondents (42%) visit George Street at least once a week, 23% visit George Street fortnightly or monthly and 35% visit George Street less than once per month.



Further analysis of this question reveals frequent visitors to George Street (i.e. visit George Street on at least a weekly basis) were most likely to have the following characteristics:

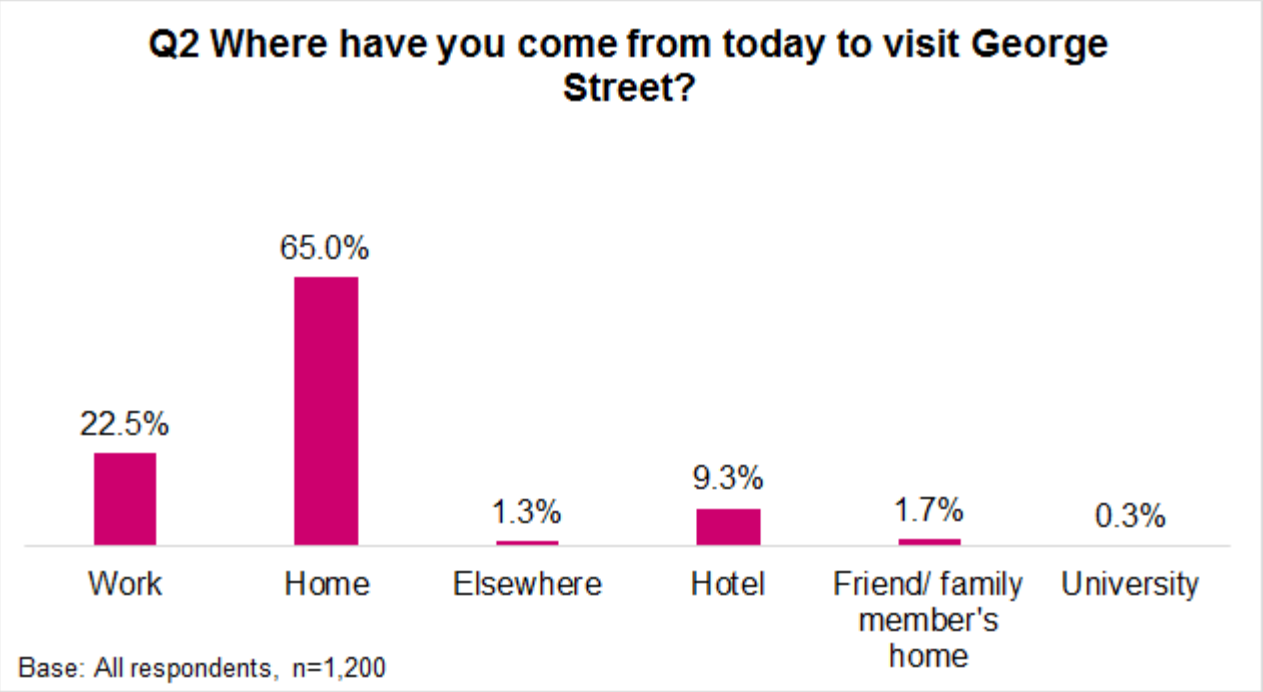
- Cyclists (89%)
- Lived in the New Town area (94%)
- Edinburgh residents (70%)
- Male (48%)
- Aged 16-34 (52%)
- Had visited George Street on the day of interviewing for the purposes of work (78%), food shopping (85%), personal business (66%)

On the other hand, those who said they visited George Street less than once a month had the following characteristics:

- Car user (42%)
- Non Edinburgh residents (67%)
- Aged 35 and over (38%)
- Had visited George Street on the day of interviewing for the purposes of sightseeing (95%), non-food shopping (52%), window browsing (54%) and dining (51%).

3.2. Start location (Q2)

All respondents were asked where they had come from on their visit to George Street on the day of interview. The vast majority (65%) had come from their home, 23% had come from their work and 9% from a hotel.



Further analysis by transport method reveals that car users were significantly more likely to have said they had come from their home (87%) than non-car users (61%). On the other hand cyclists were significantly more likely to have come from their work when visiting George Street (46%) than non-cyclists (20%).

Analysis by season indicates that during the autumn months (34%) respondents were more likely to have said they were coming from their work than in winter (23%), spring (18%), summer (20%) and during the festival month (17%). Respondents were also more likely to have said they had come from a hotel in the summer (16%) and festival month (14%).

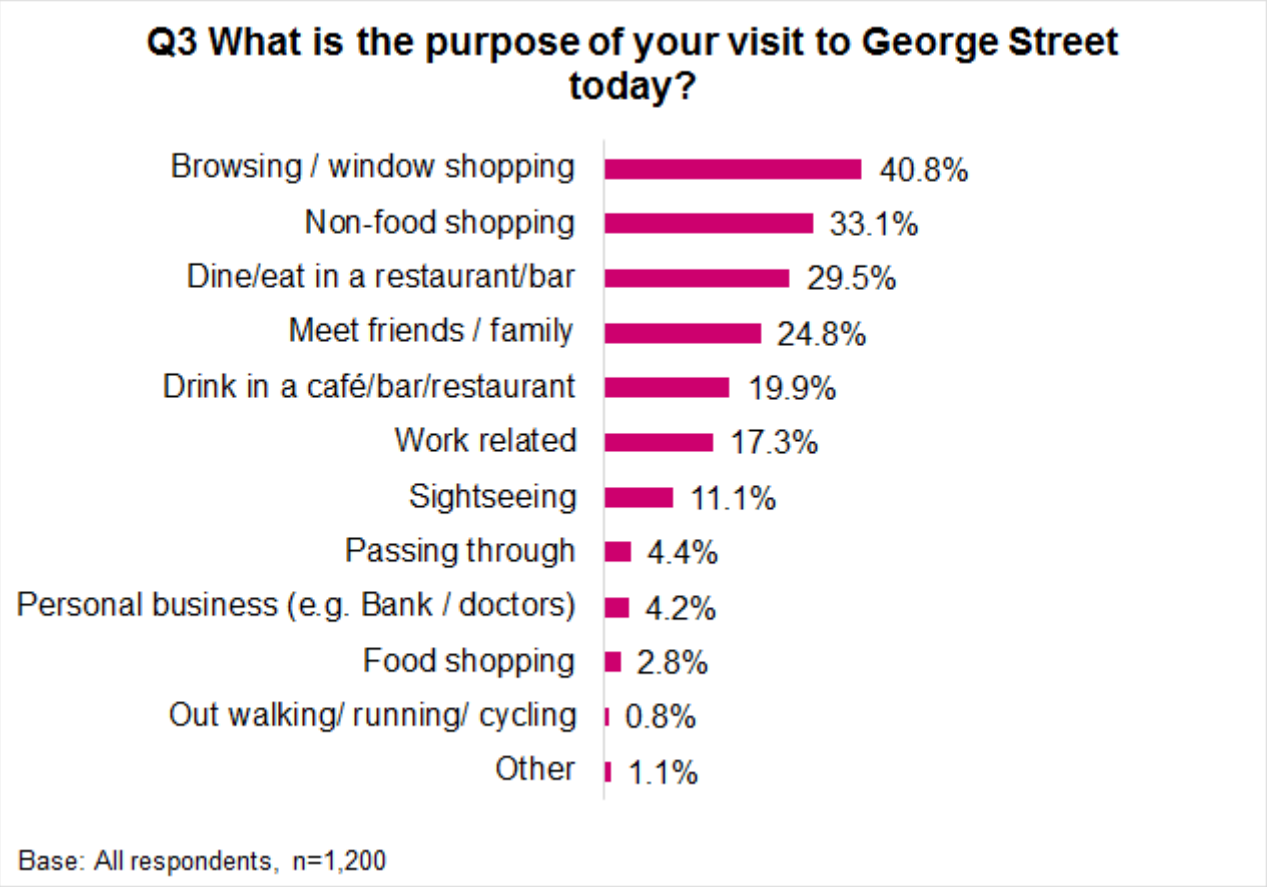
Edinburgh residents were almost twice as likely to have come from their work (29%) than non-Edinburgh residents (15%). Furthermore, non-Edinburgh respondents were significantly more likely to have come from a hotel (20%) than Edinburgh residents (0%).

Gender based analysis indicates that males were more likely to have come from work (28%) than females (18%). Females were more likely to have come from their home (69%) than males (60%).

Those aged 55 and over were significantly less likely to have visited George Street from their work (7%) and were most likely to have said they had come from their home (81%).

3.3. Purpose of visit (Q3)

The main reasons for visiting George Street included browsing or window shopping (41%), non-food shopping (33%), dining or eating in a restaurant or bar (30%) and meeting friends and family (25%).



The following points make reference to the specific characteristics of respondents who were significantly more likely to have said they were visiting George Street for each of these reasons.

- Those who had visited George Street for **non-food shopping** were most likely to display the following characteristics:
  - Car users (49%)
  - Non-Edinburgh residents (46%)
  - Female (39%)
  - Aged 35-54 (38%)

- Respondents who said they were visiting George Street for **browsing/ window shopping** were most likely to have the following characteristics:
  - Non-Edinburgh residents (60%)
  - Female (50%)
  - Aged 35-54 (46%)

- Those who were on George Street for **work related reasons** were most likely to have the following characteristics:
    - Cyclist (36%)
    - Edinburgh residents (21%)
    - Male (22%)
    - Aged 16-34 (27%)

- Where respondents said they were visiting George Street to have a **drink in café/ bar/ restaurant** were most likely to have the following characteristics:
    - Car users (38%)
    - Non-Edinburgh residents (38%)
    - Non-Edinburgh residents (24%)
    - Aged 55+ (37%)

- Respondents who said they were **passing through** George Street were most likely to be:
    - Cyclists (25%)
    - New Town residents (10%)
    - Edinburgh residents (8%)

- Those who were visiting George Street **to visit friends/ family** were most likely to be:
    - Female (28%)
    - Aged 55+ (37%)

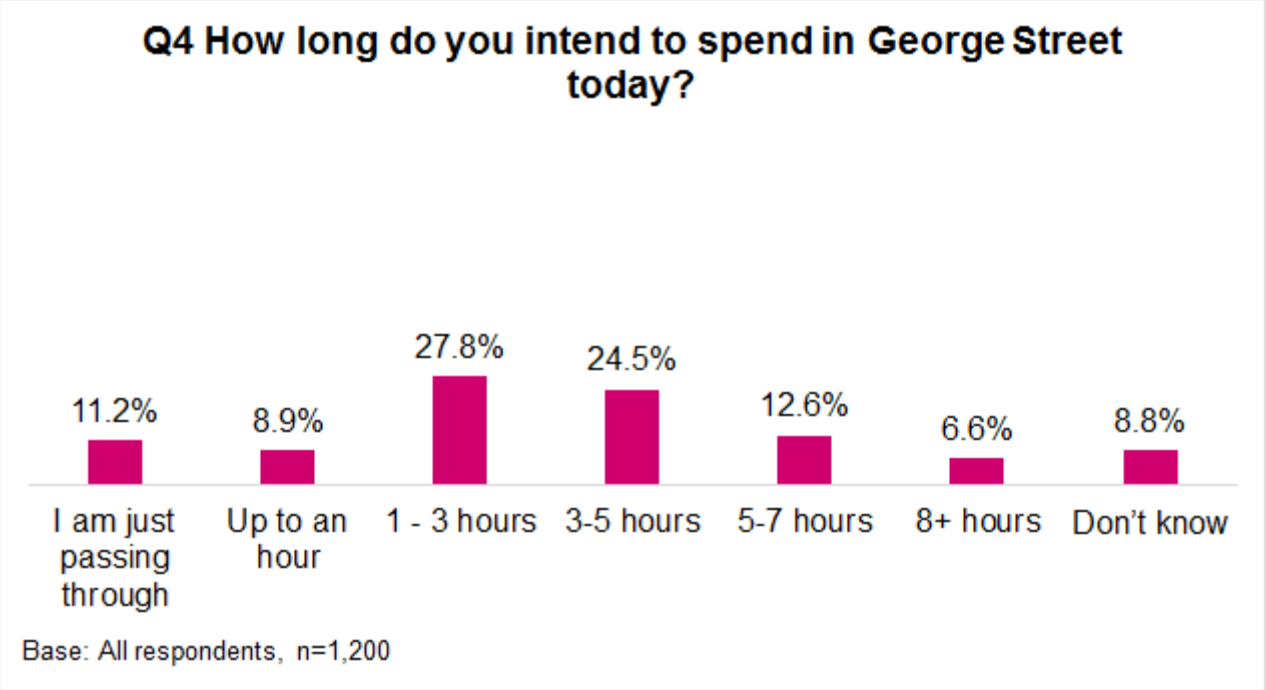
- New Town residents were most likely to be visiting George Street for **food shopping** (8%)
    - New Town residents (8%)

- Cyclists were most likely to be visiting George Street for **personal business such** as a bank or doctors appointment (13%).

- Non Edinburgh residents were significantly more likely to be visiting George Street for **sightseeing** purposes (23%)

3.4. Intended length of stay in George Street (Q4)

When asked how long they intended to spend in George Street, 11% of respondents said they were just passing through, 37% were intending to spend less than 3 hours in the area, 37% intended to spend between 3 and 7 hours and 7% intended to spend 8 or more hours in George Street.



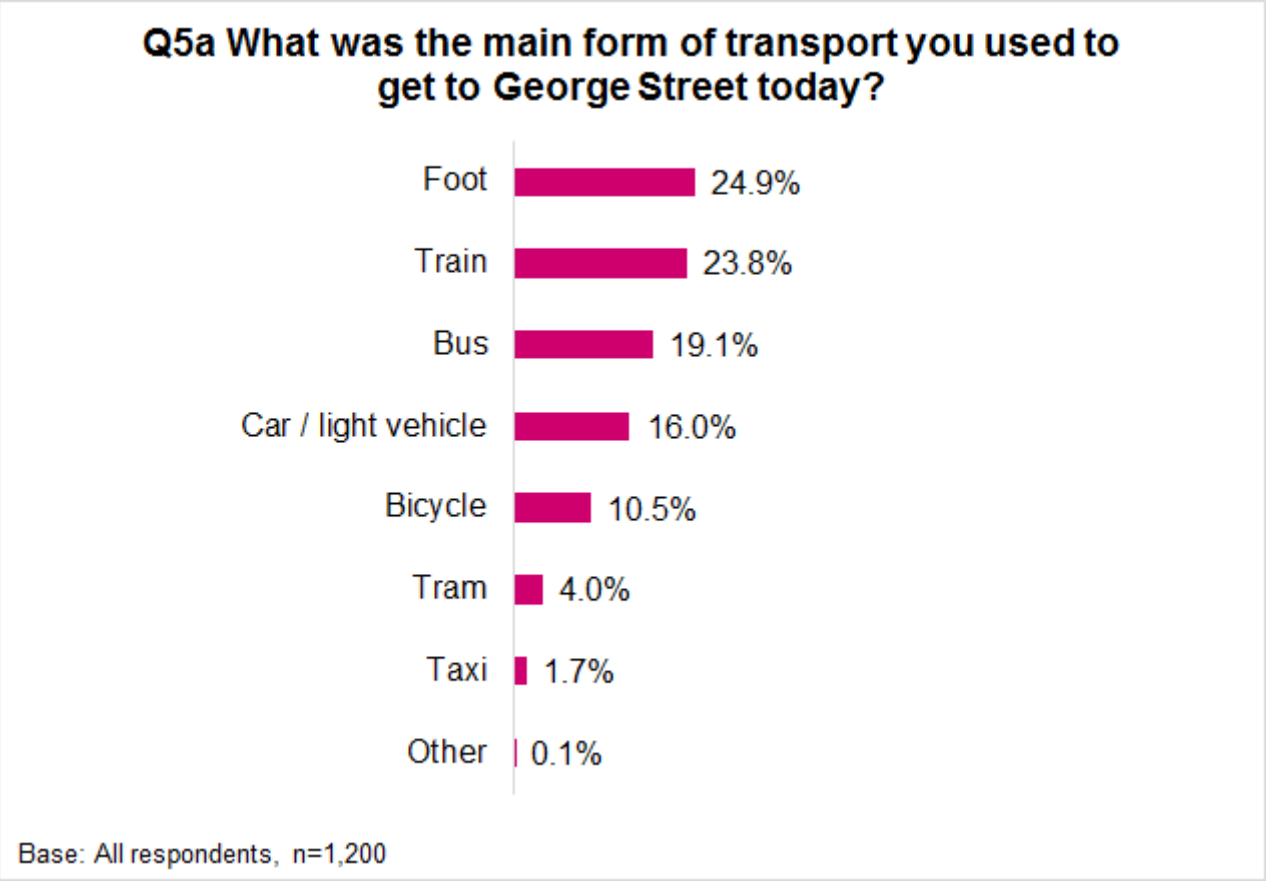
Those who were passing through were most likely to be:

- Cyclists (58%)
- New Town residents (25%)
- Interviewed during the festival month (16%)
- Edinburgh residents (18%)
- Male (17%)
- Aged under 55 (13%)

On the other hand, those who were intending to spend 8 or more hours were most likely to be interviewed during the summer months (11%) and aged 16-34 (11%).

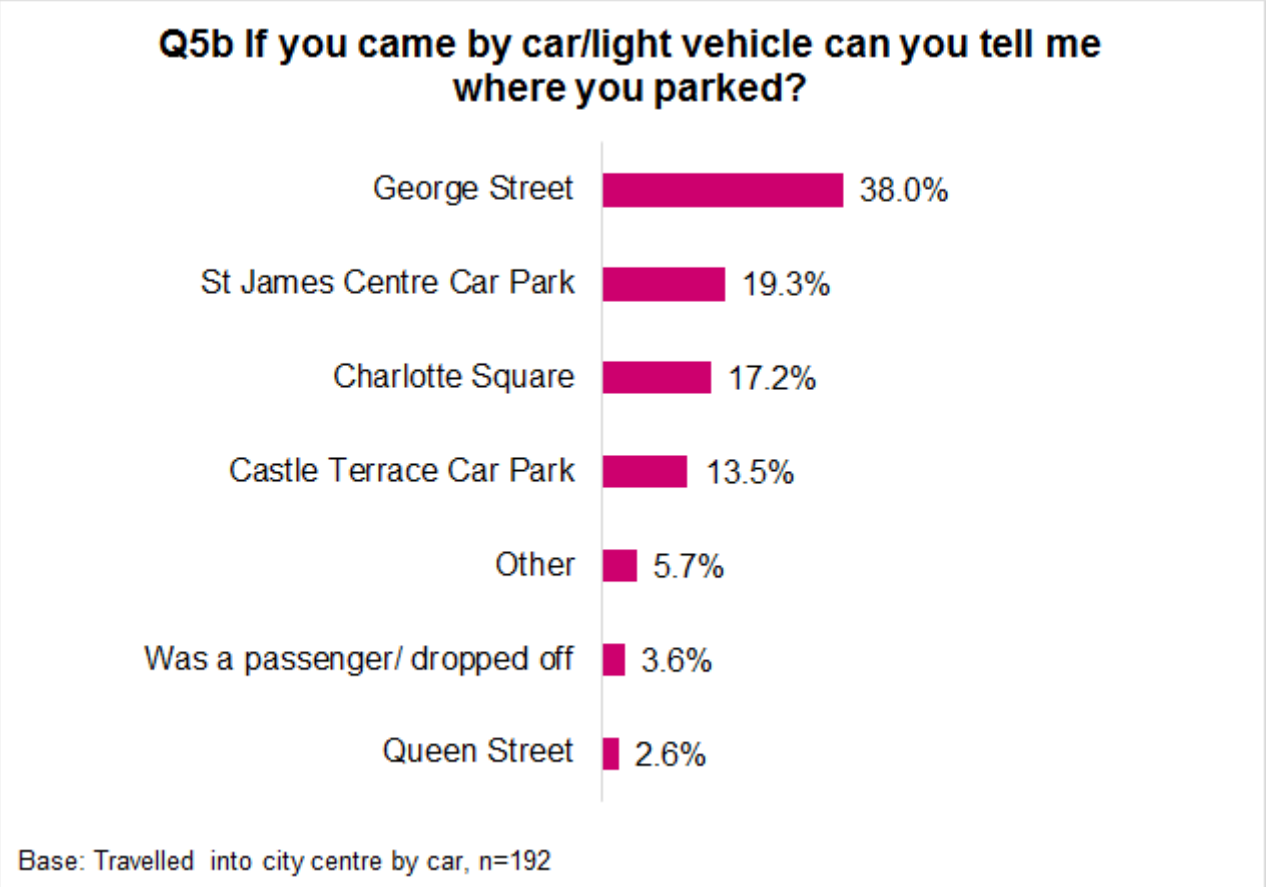
3.5. Main form of transport (Q5a)

Respondents were asked about the main form of transport they used to get to George Street on that occasion. One in four respondents (25%) stated they travelled by foot, 24% travelled by train, 19% travelled by bus, 16% travelled by car, 11% travelled by bicycle, 4% travelled by tram and 2% travelled by taxi.



3.6. Parking location (Q5b)

Those who had travelled by car or light vehicle to George Street were asked where they had parked. The most popular parking locations were on George Street (38%), at the St James Centre (19%) and at Charlotte Square (17%).

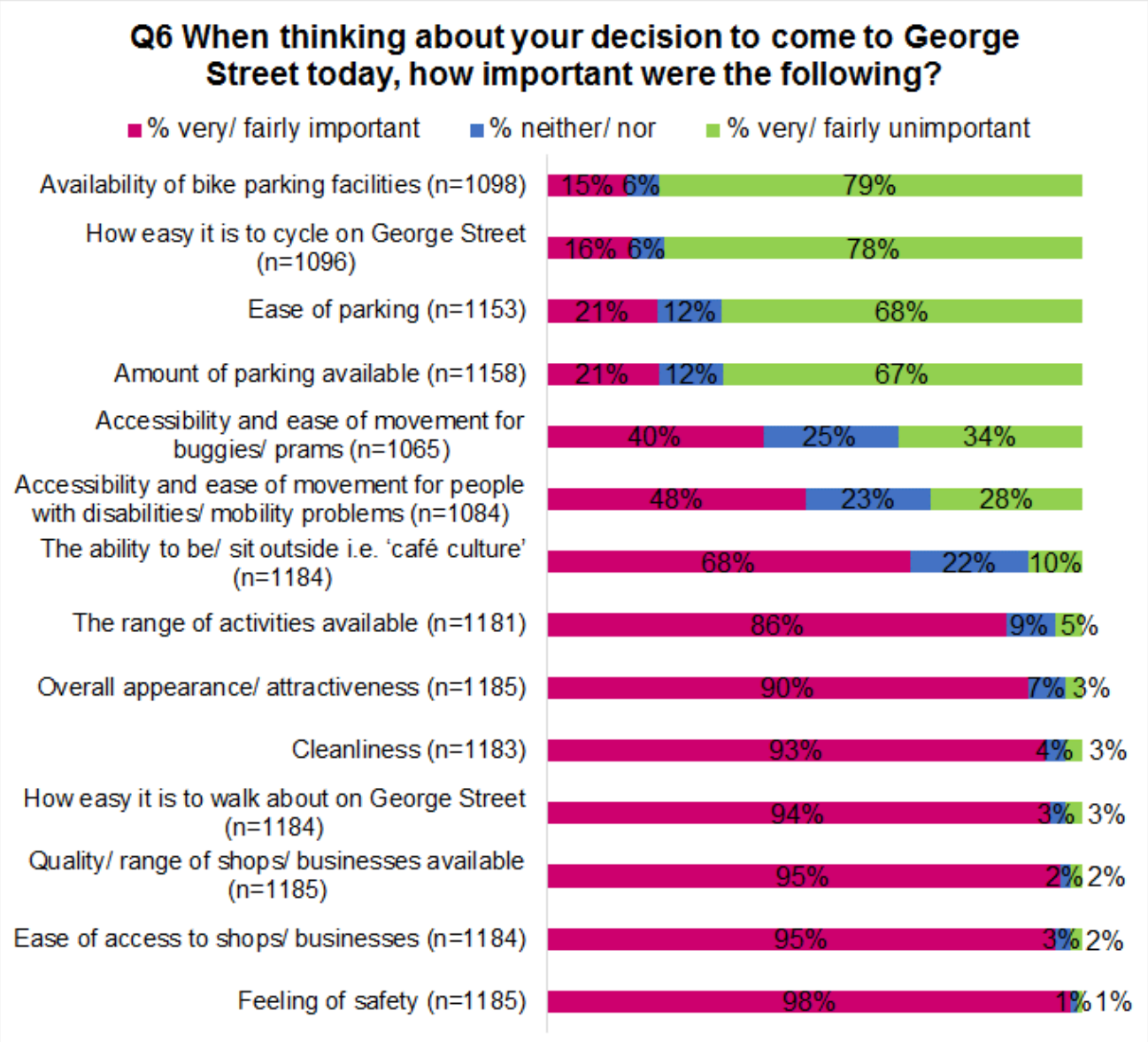


4. PERCEPTIONS AND EXPERIENCE OF GEORGE STREET

4.1. Visitor priorities (Q6)

All respondents were asked to rate how important or unimportant various attributes were on their decision to visit George Street. For analysis purposes the proportion of respondents rating each of these aspects as very or fairly important and very or fairly unimportant has been combined. The most important attributes for respondents overall were identified as being:

- The feeling of safety on George Street (98%);
- The ease of access to shops or businesses (95%);
- The quality or range of shops and businesses available (95%);
- The ease of walking about on George Street (94%);
- Cleanliness (93%).

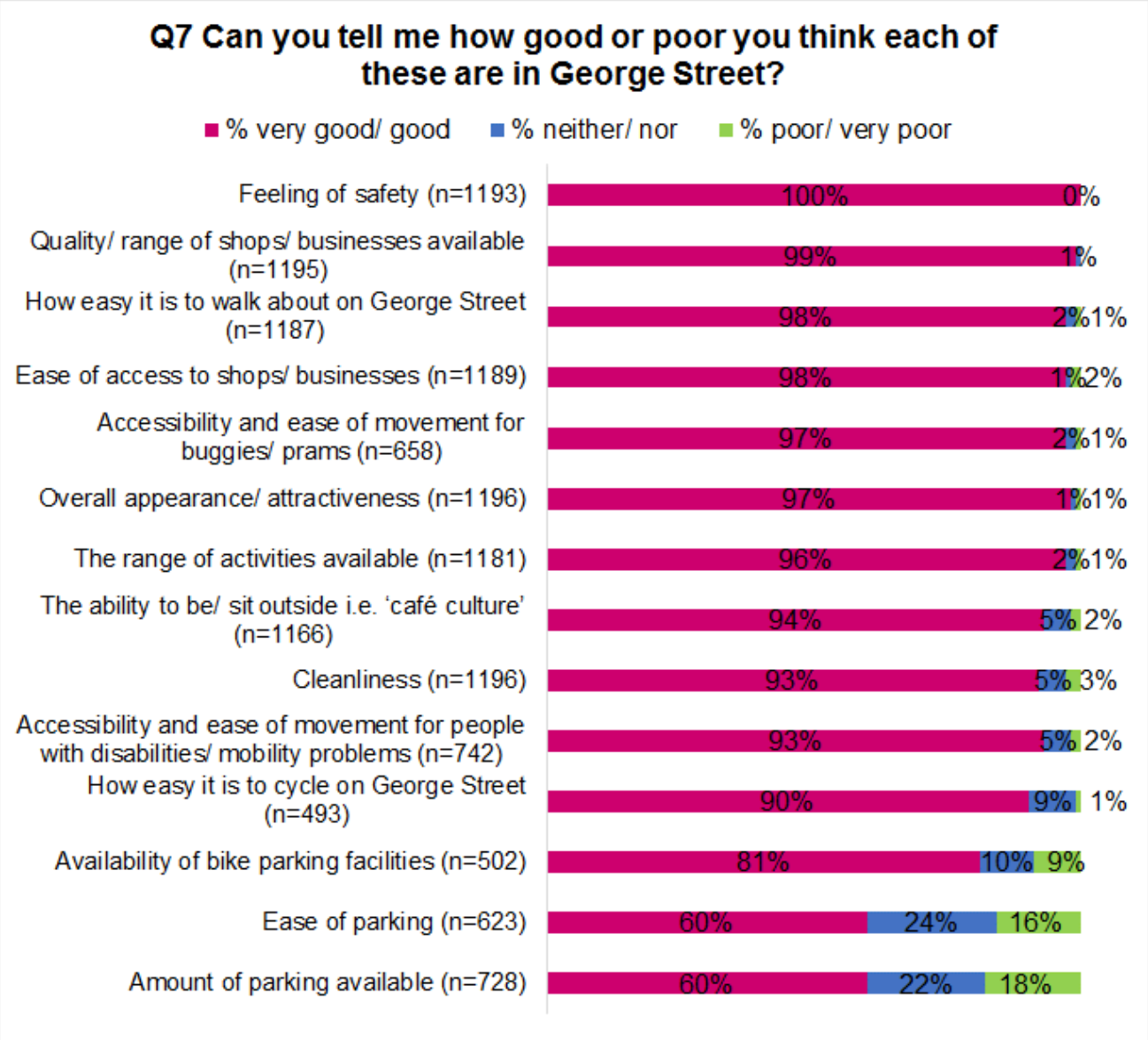


The diagram below shows any significant differences by various respondent characteristics, highlighting the key groups who were significantly more likely to have said any of these aspects were very or fairly important. For example, with regards to the overall appearance and attractiveness of George Street were most likely to live in surrounding local authorities or elsewhere in Scotland, female and aged 55 and over.

Overall appearance/ attractiveness	•Surrounding local authorities (93%), live elsewhere in Scotland (94%); female (94%); aged 55+ (94%).
Cleanliness	•Interviewed during the summer (98%); female (96%); aged 55+ (95%).
Amount of parking available	•Car user (86%); interviewed during the autumn (39%); live elsewhere in Scotland (27%); aged 55+ (31%).
Ease of parking	•Car user (87%); aged 55+ (32%).
Ease of cycling on George Street	•Cyclist (94%); New Town residents (22%); interviewed in Autumn (33%); Edinburgh residents (24%); male (23%); 16-34 (22%)
Availability of bike parking facilities	•Cyclist (90%); New Town resident (22%); Autumn (34%); Edinburgh residents (22%); male (22%); 16-34 (21%).
Ease of walking about on George Street	•New Town residents (98%); interviewed during the dummer (98%) and festival month (96%); female (97%); aged 55+ (98%).
Accessibility for people with disabilities/ mobility problems	•Car user (60%); New Town resident (56%); interviewed during the autumn months (71%); Edinburgh resident (52%); aged 55+ (66%); Have a disability (87%).
Accessibility for buggies/ prams	•Car user (51%); New Town residents (47%); interviewed during autumn (69%); female (43%); aged 16-34 (41%) and aged 35-54 (43%);
Ease of access to shops/ businesses	•Female (97%).
Quality/ range of shops/ businesses available	•Female (98%).
The range of activities available	•Interviewed during festival month (94%); female (89%).
The ability to be/ sit outside	•Interviewed in the Autumn (83%) and in Summer (85%); live outside of Scotland (76%); female (73%); aged 16-34 (73%);
Feeling of safety	•No significant differences.

4.2. Visitor satisfaction (Q7)

Following on from this, respondents were asked how good or poor they considered each of these aspects to be on George Street. For analysis purposes the proportion of respondents who rated these aspects as very good or good has been combined, as has the proportion of respondents who rated these poor or very poor. Overall, respondents rated George Street highly for the majority of aspects with satisfaction levels being highest regarding a feeling of safety (100%), quality and range of shops and businesses (99%), ease of walking about on George Street (98%), ease of access to shops and businesses (98%), accessibility and ease of movement for buggies or prams (97%), overall appearance and attractiveness (97%) and the range of activities available (96%). On the other hand, satisfaction was significantly lower with regards to the ease of parking (60%), the amount of parking available (60%) and the availability of bike parking facilities (81%).



An in-depth analysis has been undertaken for each of these aspects for each of these aspects. The diagram below shows any respondent groups for each question who were most likely to have rated each of these aspects as **very or fairly good**. For example, where respondents rated the overall appearance and attractiveness of George Street as very or fairly good they were most likely to be non-Edinburgh residents, female and aged under 55.

Overall appearance/ attractiveness	•Non-Edinburgh residents (99%), female (98%); aged under 55 (99%).
Cleanliness	•Non-Edinburgh residents (96%); aged under 55 (95%).
Amount of parking available	•Cyclists (71%); Non-Edinburgh residenst (67%); aged 16-34 (69%).
Ease of parking	•Non-Edinburgh residents (67%); aged 16-34; interviewed in Spring (67%), summer (69%) and during the festival month (67%).
Ease of cycling on George Street	•Interviewed during the spring (94%) and summer (94%); non-Edinburgh residents (94%); ahed 16-34 (93%).
Availability of bike parking facilities	•Non-Edinburgh residents (91%); aged under 55 (83%).
Ease of walking about on George Street	•Aged under 55 (98%).
Accessibility for people with disabilities/ mobility problems	•Interviewed during the summer months (97%); non-Edinburgh residents (96%); aged 16-34 (97%).
Accessibility for buggies/ prams	•Aged 16-34 (98%).
Ease of access to shops/ businesses	•No significant differences in overall satisfaction.
Quality/ range of shops/ businesses available	•No significant differences in overall satisfaction.
The range of activities available	•Interviewed during the festival months (100%);
The ability to be/ sit outside	•Non-Edinburgh resident (96%); aged 16-34 (97%).
Feeling of safety	•No significant differences in overall satisfaction.

A similar analysis has been undertaken on the basis of those who rated each of these aspects as **very or fairly poor**. For example, the proportion of respondents who rated the overall appearance and attractiveness of George Street as very or fairly poor was highest for those who were interviewed during the summer months and aged 55 and over.

Overall appearance/ attractiveness	•Interviewed in summer (5% dissatisfied); aged 55+ (4%).
Cleanliness	•Car users (7%); aged 55+ (6%)
Amount of parking available	•Car users (31%); interviewed during the winter (24%); aged 55+ (27%)
Ease of parking	•Car users (24%); aged 55+ (22%)
Ease of cycling on George Street	•No significant differences.
Availability of bike parking facilities	•Cyclists (21%); New Town residents (15%); interviewed during the summer (13%) and festival month (12%); Edinburgh residents (14%).
Ease of walking about on George Street	•No significant differences.
Accessibility for people with disabilities/ mobility problems	•Car users (4%);
Accessibility for buggies/ prams	•Car users (4%).
Ease of access to shops/ businesses	•Car users (4%); interviewed during the spring (5%).
Quality/ range of shops/ businesses available	•No significant differences.
The range of activities available	•No significant differences.
The ability to be/ sit outside	•Car users (4%)
Feeling of safety	•No significant differences.

4.3. Gap analysis (Q6/7)

To put the results into context a gap analysis has been undertaken to show the difference between how important the various attributes are for respondents visiting George Street and how satisfied respondents are with these attributes. By comparing importance and satisfaction scores gap analysis can be used to identify key priorities for improvement.

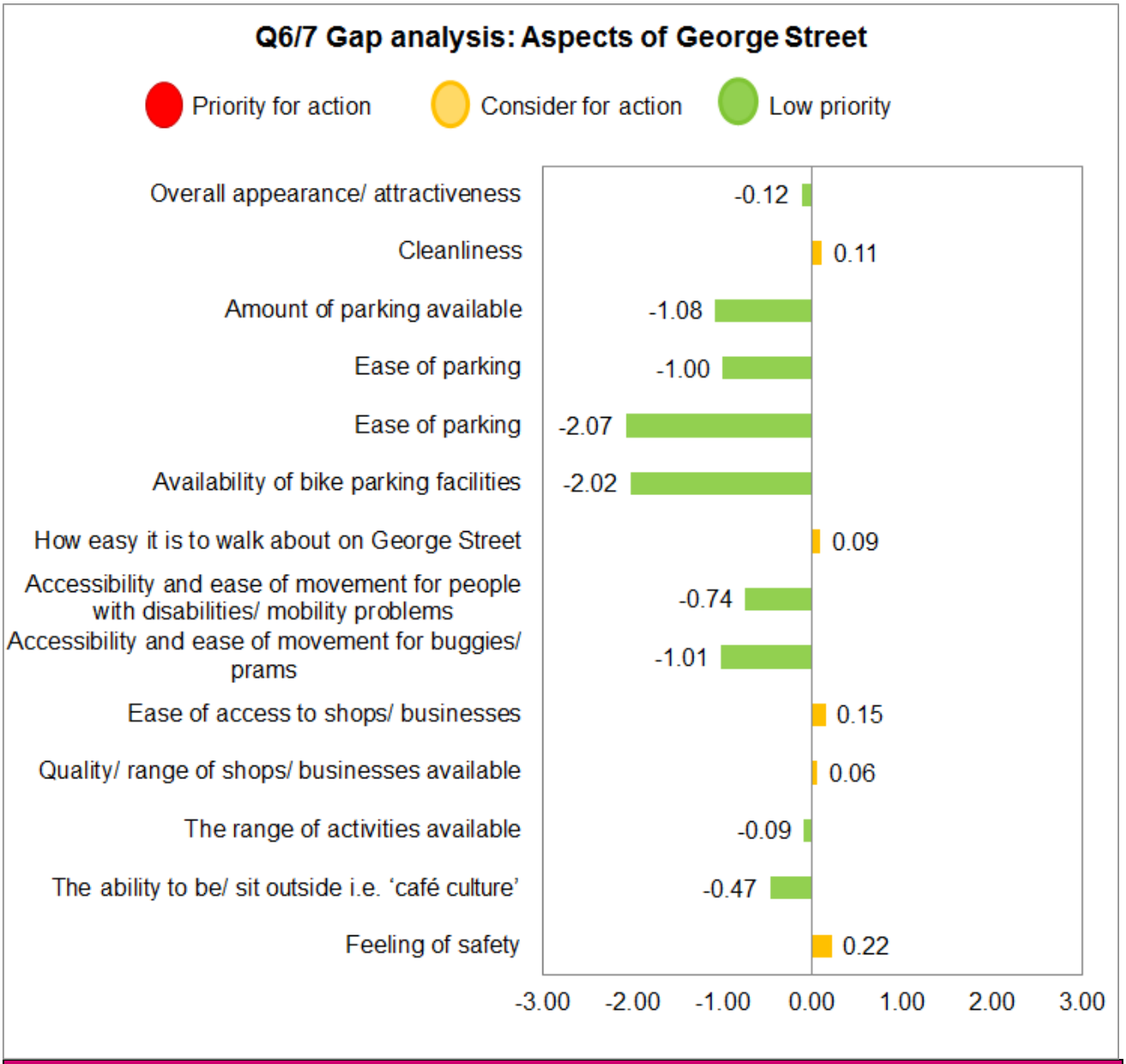
As detailed at 4.1 respondents were asked to rank how important various aspects of their visit to George Street were to them using a 5 point importance scale where respondents answered very important, this was given a value of 5, and where respondents said very unimportant this was given a value of 1. Respondents were also given the option to select 'don't know' if they were unable to express an opinion. Where respondents did express an opinion using the 5-point scale, a mean importance score was calculated for each result.

Respondents were also asked to rank how good or poor various aspects of their visit to George Street were, using a similar 5-point scale where respondents said each aspect was very good this was given a value of 5 and where respondents answered very poor this was given a value of 1. As with the importance questions, where respondents expressed an opinion using the 5-point scale, a mean satisfaction score was calculated for each result.

Gap Analysis is calculated by subtracting the mean score for satisfaction from the mean score for importance. The resultant 'Gap Analysis Score' therefore represents the difference between respondents' satisfaction with a particular aspect of the service and how important that aspect of the service is to them. In order to allow for valid Gap Analysis, it is necessary for the sample of respondents answering each 'satisfaction' and 'importance' question to be consistent i.e. those respondents who expressed satisfaction with a particular aspect of the service are then asked how important that aspect of the service is to them. For the purposes of this report it has therefore been necessary to filter out respondents who did not answer both the satisfaction and importance questions for each aspect of the service.

The findings of the Gap Analysis have been highlighted in a traffic light system where red indicates a priority for action. This has been allocated to a Gap score of 1 or greater. Amber indicates that this aspect should be considered for action and has been allocated to a Gap score of between 0 and 1. Green indicates low priority and has been allocated to negative Gap scores (where the mean score for satisfaction exceeds the mean score for importance).

As can be seen in the following chart, no areas have been identified as being priorities for action. However, the cleanliness of George Street, the ease of walking about on George Street, ease of access to shops and businesses, the quality and range of shops and businesses available and the feeling of safety were all areas which the Council should consider for action.

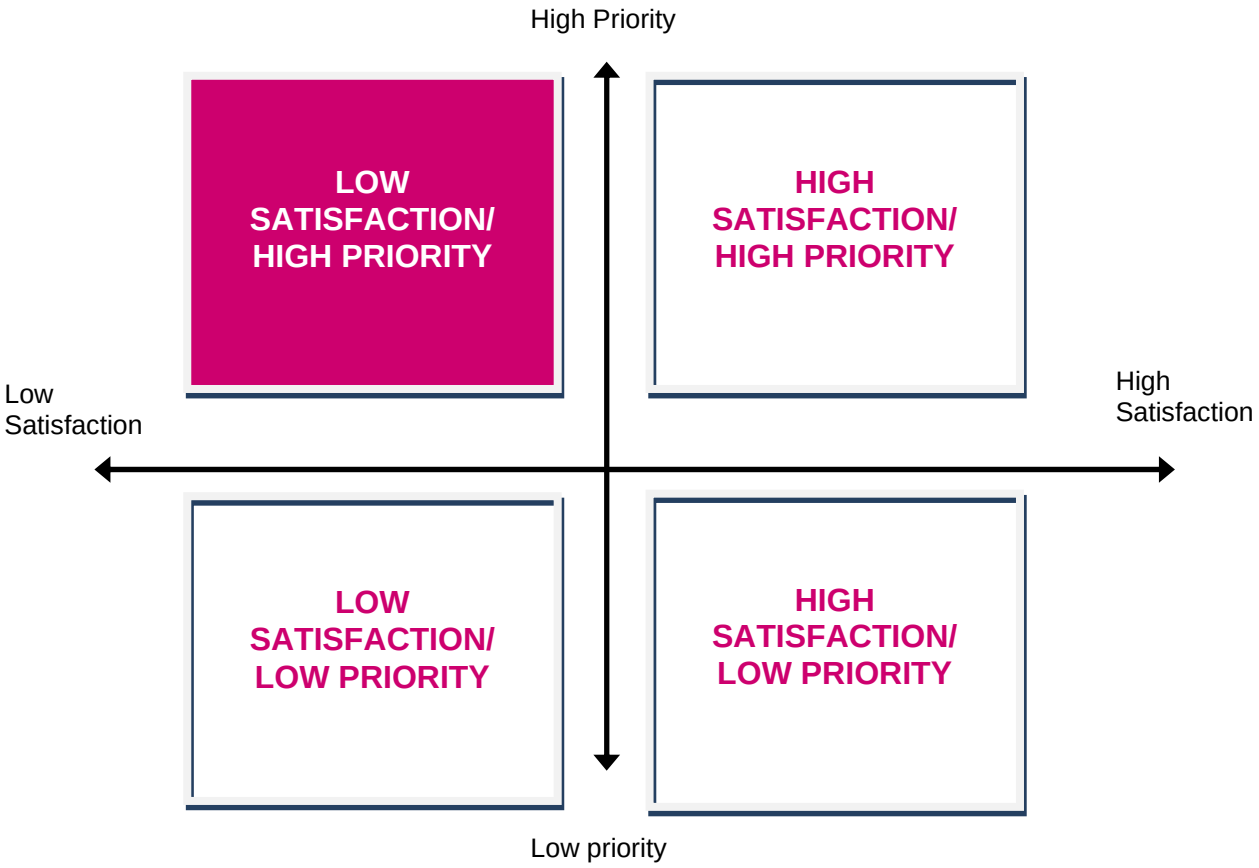


Gap analysis of various aspects of George Street

	Base	Mean importance	Mean satisfaction	Gap
Overall appearance/ attractiveness	1182	4.44	4.56	-0.12
Cleanliness	1180	4.57	4.46	0.11
Amount of parking available	712	2.60	3.68	-1.08
Ease of parking	609	2.73	3.73	-1.00
Ease of parking	484	2.45	4.52	-2.07
Availability of bike parking facilities	493	2.36	4.38	-2.02
How easy it is to walk about on George Street	1174	4.51	4.42	0.09
Accessibility and ease of movement for people with disabilities/ mobility problems	723	3.72	4.46	-0.74
Accessibility and ease of movement for buggies/ prams	641	3.56	4.57	-1.01
Ease of access to shops/ businesses	1176	4.58	4.43	0.15
Quality/ range of shops/ businesses available	1182	4.66	4.60	0.06
The range of activities available	1165	4.36	4.45	-0.09
The ability to be/ sit outside i.e. 'café culture'	1153	3.92	4.39	-0.47
Feeling of safety	1180	4.74	4.52	0.22

4.4. Prioritisation analysis (Q6/7)

In order to provide some sort of direction to the City of Edinburgh Council with regard to action planning, a prioritisation analysis was undertaken for the various aspects of George Street. The prioritisation analysis plots customers' view of the quality of these aspects against the importance of these aspects. These are then set upon a chart which comprises four quadrants, as shown below:

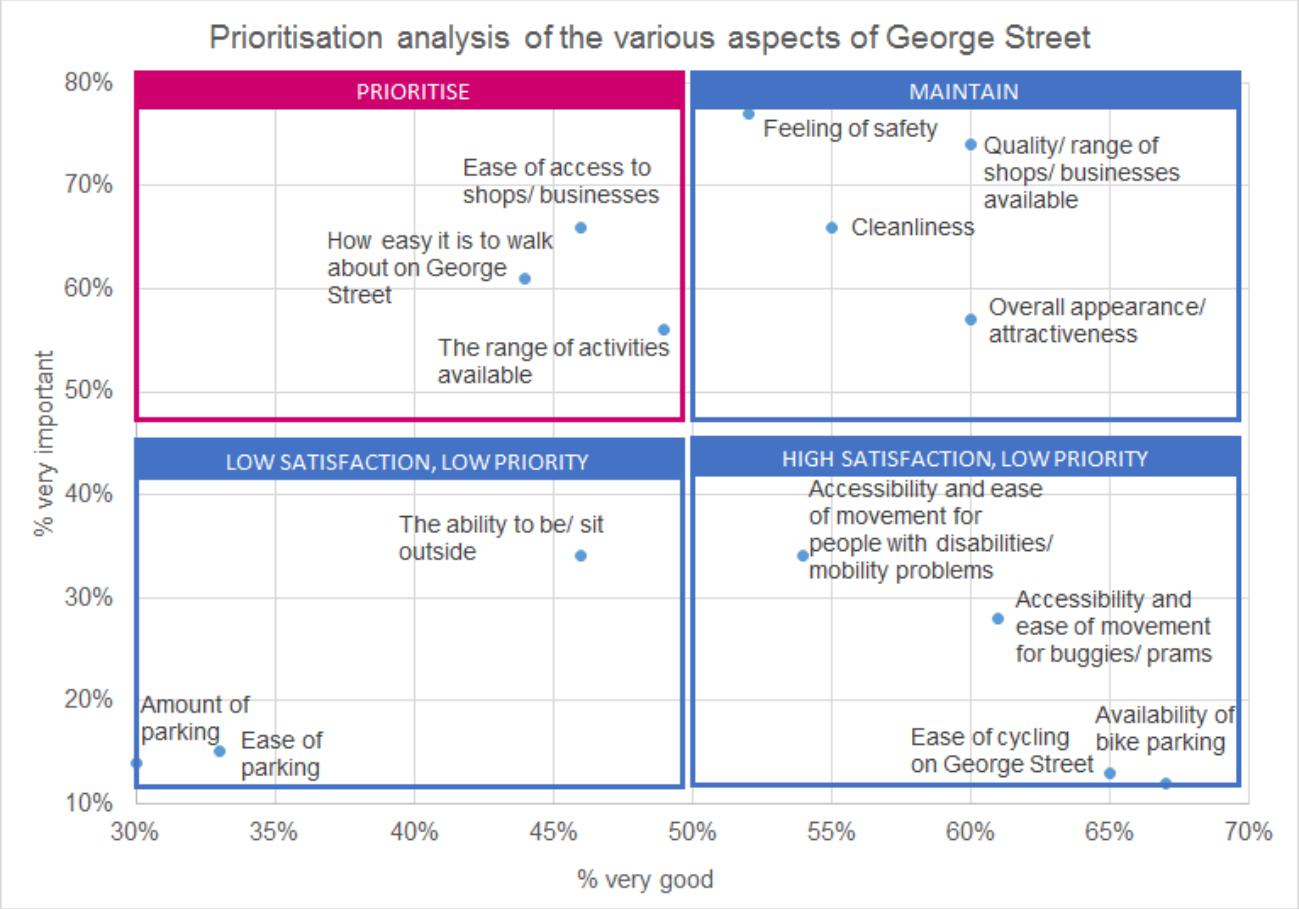


As shown, each box indicates a different level of priority and satisfaction. The top right box indicates high satisfaction, high priority, which is the most desirable box to be in. The bottom right box indicates low priority, high satisfaction. This is also a positive outcome and a position which City of Edinburgh Council should try to maintain. The bottom left box indicates low satisfaction, but also lower priority. It is naturally desirable to attempt to increase satisfaction, however if resources are limited, these are the areas which should be given lower priority.

Finally, the top left box indicates low satisfaction, high priority. It is within these areas that the City of Edinburgh Council should place resources and effort in terms of improvements. Increases in satisfaction in these aspects are likely to yield the greatest increase in customer satisfaction.

Prioritisation analysis has been undertaken utilising a list of aspects of George Street in terms of both importance and satisfaction. Within each of these categories, respondents were asked to rate their satisfaction on a 5 point satisfaction scale. For analysis purposes, the proportion of respondents who rated each aspects as 'very good' has been plotted against the proportion of respondents rating each aspect as 'very important'.

The following chart illustrates the outcomes of the prioritisation analysis for each aspect. As shown below ease of access to shops and businesses, ease of walking about on George Street and the range of activities available have all been identified as being areas of lower satisfaction and higher priority and areas that the City of Edinburgh Council may wish to consider when developing their future action plans.



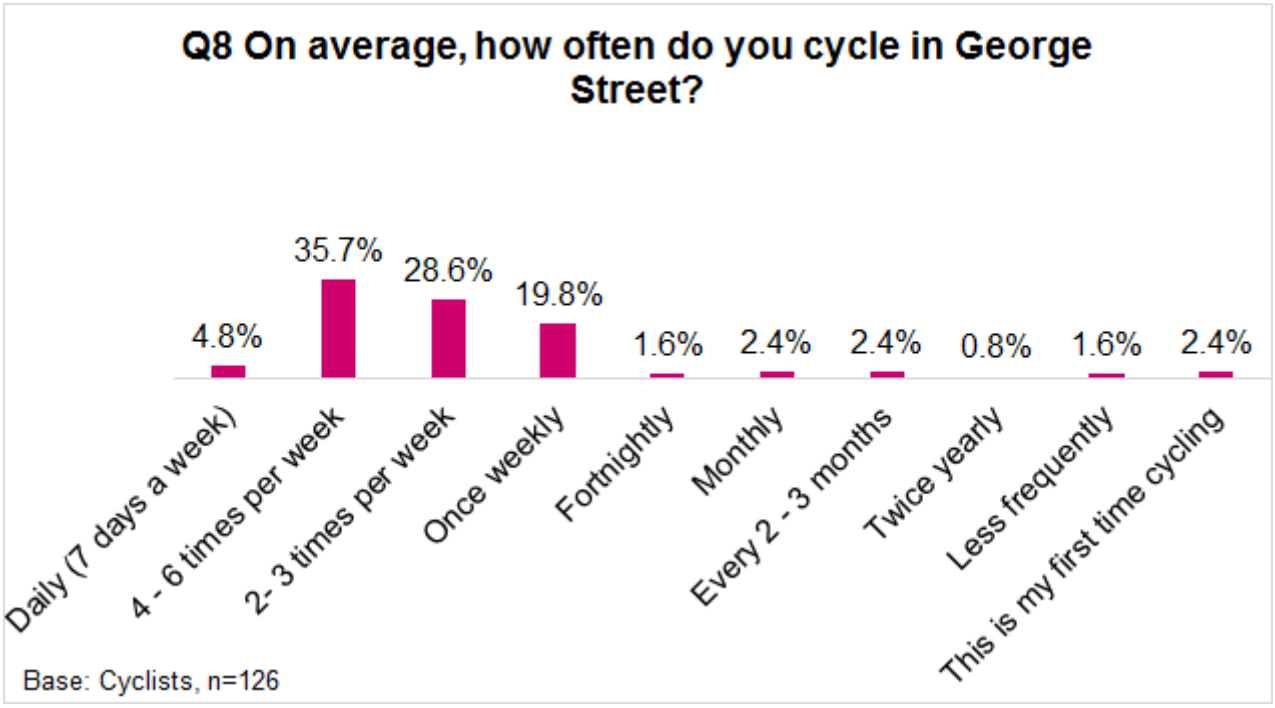
5. CYCLISTS

5.1. Frequency of cycling on George Street (Q8)

The questionnaire included a section for only those who cycle on George Street. In terms of frequency of cycling, just under 9 in 10 respondents (89%) stated they cycled on at least a weekly basis.

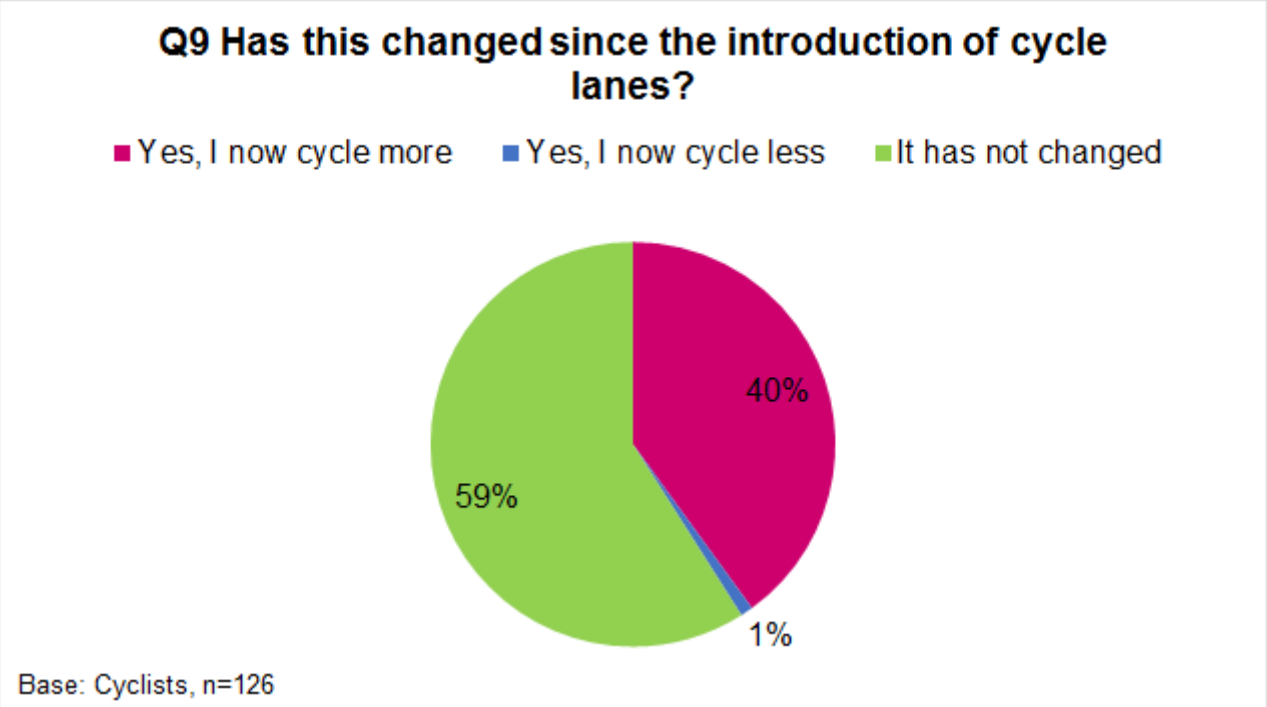
Respondents who were on George Street for work purposes (69%) were significantly more likely to have said they cycle at least 4 times a week than all other respondents (69%). On the other hand, those who were sightseeing were most likely to have said they cycle less frequently than once per month (67%).

It should be noted that the vast majority of cyclists are Edinburgh residents, therefore the results to this question, and subsequent questions asked of cyclists do not vary significantly by the home location.



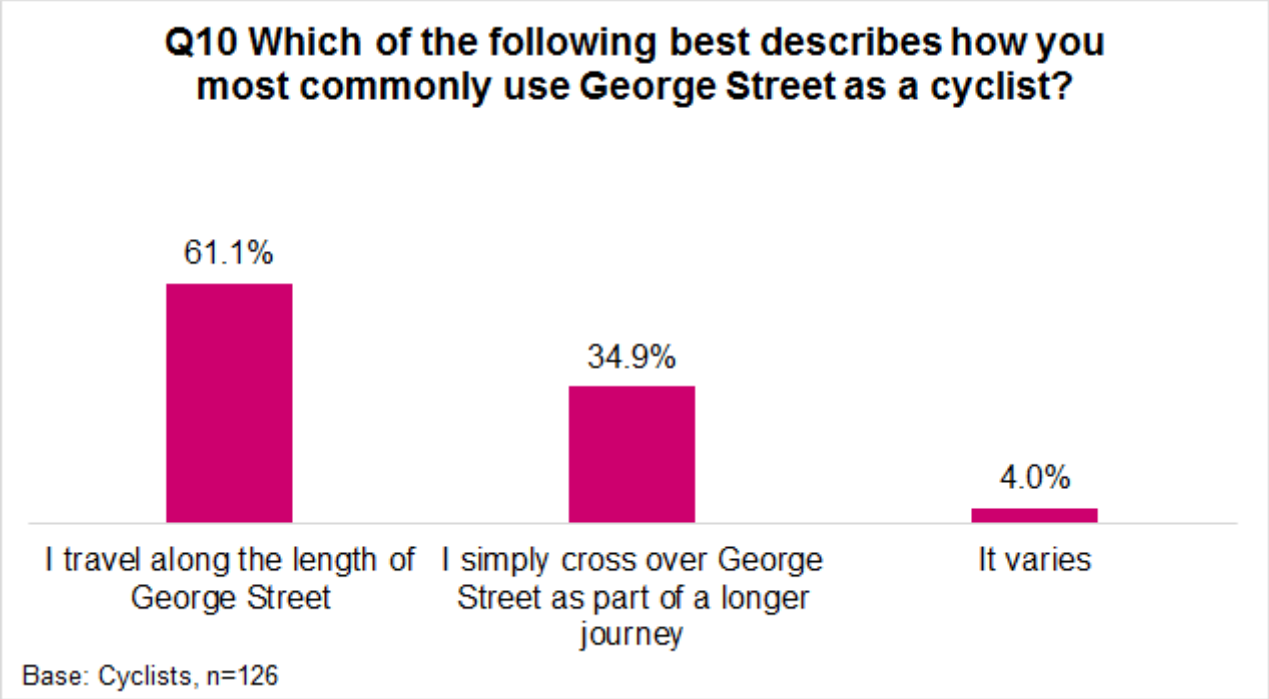
5.2. Change in cycling habits since the introduction of cycle lanes (Q9)

Four in ten cyclists stated that they now cycle more since the introduction of cycle lanes (40%), just 1% said they now cycle less and 59% said their cycling habits have not changed.



5.3. How cyclists use George Street as a cyclist (Q10)

In terms of how cyclists most commonly use George Street, over 6 in 10 respondents (61%) said they travelled along the length of George Street, 35% stated they simply cross over George Street as part of a longer journey and 4% said that this varies.



5.4. Satisfaction with various aspects of cycling experience on George Street (Q11)

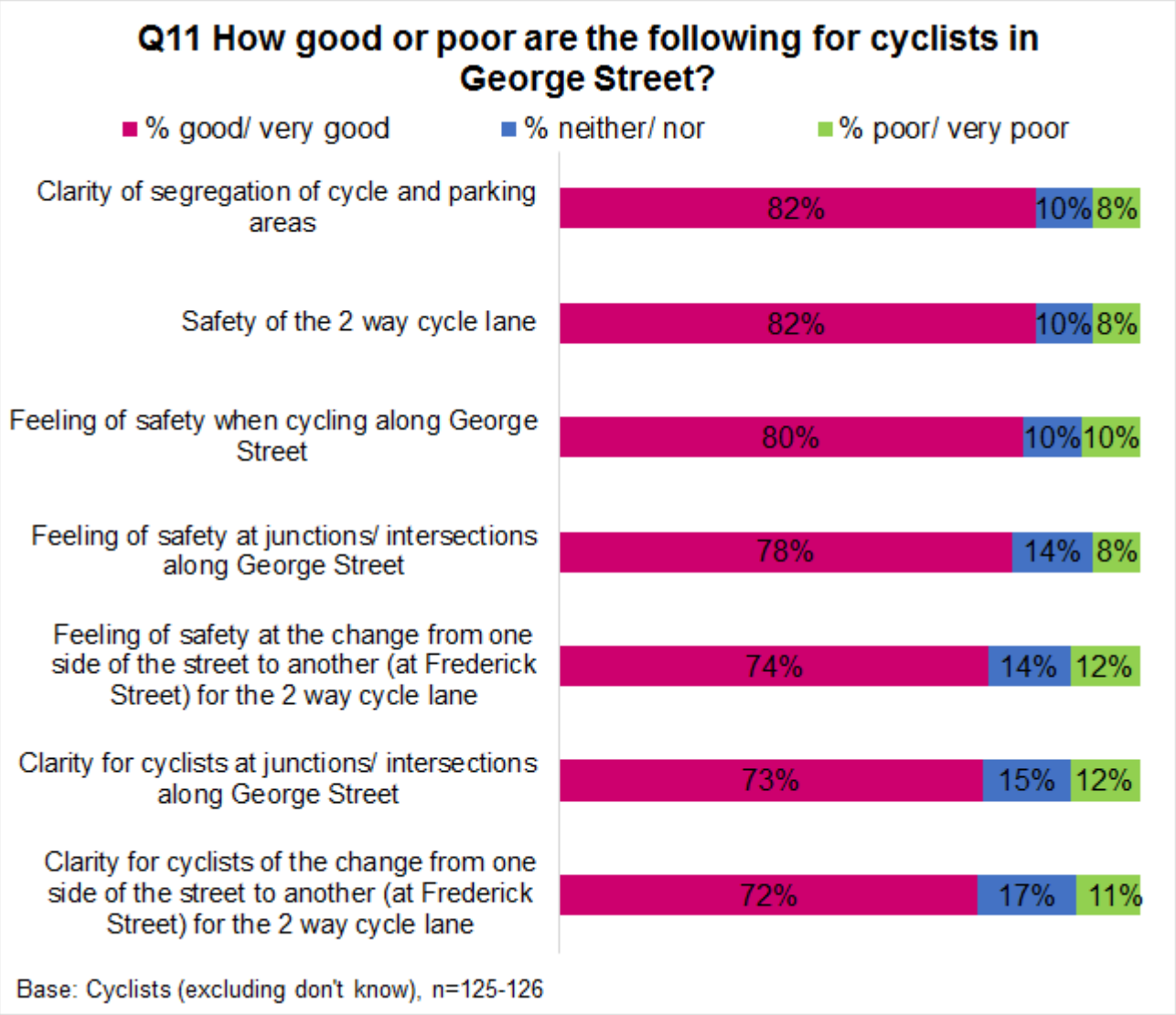
Satisfaction with various aspects of the cycling experience on George Street was high with over 8 in 10 respondents being satisfied with:

- Clarity of segregation of cycle and parking areas (82%);
- Safety of the 2 way cycle lane (82%)
- Feeling of safety when cycling along George Street (80%)

On the other hand, satisfaction levels fell below 80% with regards to:

- Feeling of safety at junctions/ intersections along George Street (78%);
- Feeling of safety or the change from one side of the street to another for the 2 way cycle lane (74%);
- Clarity for cyclists at junctions/ intersections along George Street (73%);
- Clarity for cyclists of the change from one side of the street to another for the 2 way cycle lane (72%).

Generally, cyclists interviewed during the summer months were most likely to be satisfied with these aspects.



Any comments provided by cyclists to this question were recorded verbatim and coded into common themes for analysis. Comments provided by cyclists tended to be regarding clarity of segregation of cycle and pedestrian areas (21%), where respondents comments on an improvement for cyclists travelling on George Street (19%) and where respondents said they were now used to the changes or frequently cycle on George Street (8%). A full list of the verbatim comments provided to this question can be found in the appendix.

Q11h Comments made regarding any of the above		
Base: Cyclists, n=126	**No.**	**%**
Clarity of segregation of cycle and pedestrian areas	26	20.6%
General feeling of improvement for cyclists	24	19.0%
Used to the changes now/ use it regularly	10	7.9%
Feeling of safety at junctions/ intersections along George Street	9	7.1%
Clarity for cyclists of the change from side of the street to another (at Frederick Street) for the 2 way cycle lane)	9	7.1%
Improvements to signage required in general	9	7.1%
Difficulty cycling when busy/ excess traffic/ only cycle when it's not busy	8	6.3%

Feeling of safety at the change from side of the street to another (at Frederick Street) for the 2 way cycle lane	7	5.6%
Now feels safer to cycle in Edinburgh/ George Street	7	5.6%
Clarity for cyclists at junctions/ intersections along George Street	6	4.8%
Clarity of segregation of cycle and parking areas	5	4.0%
Feeling of safety when cycling along George Street	5	4.0%
Safety of the 2 way cycle lane	5	4.0%
Would prefer cycle lanes to be all down the one side	5	4.0%
Outside seating areas too close to cycle lanes	5	4.0%
More cycle parking bays required	4	3.2%
Would prefer cycle lane to be on both sides	2	1.6%
Other	17	13.5%
No comments given	29	23.0%

5.5. Cyclist suggestions for improvement (Q12)

Respondents were asked for their suggestions on what they felt could be done to improve cycling on George Street. A total of 77 respondents provided suggestions to this question and these comments have been coded into common themes and listed in the table below. The majority of comments were regarding improvements to signage and road markings (30%), pedestrianising the whole area (23%) and for more bicycle parking facilities (18%).

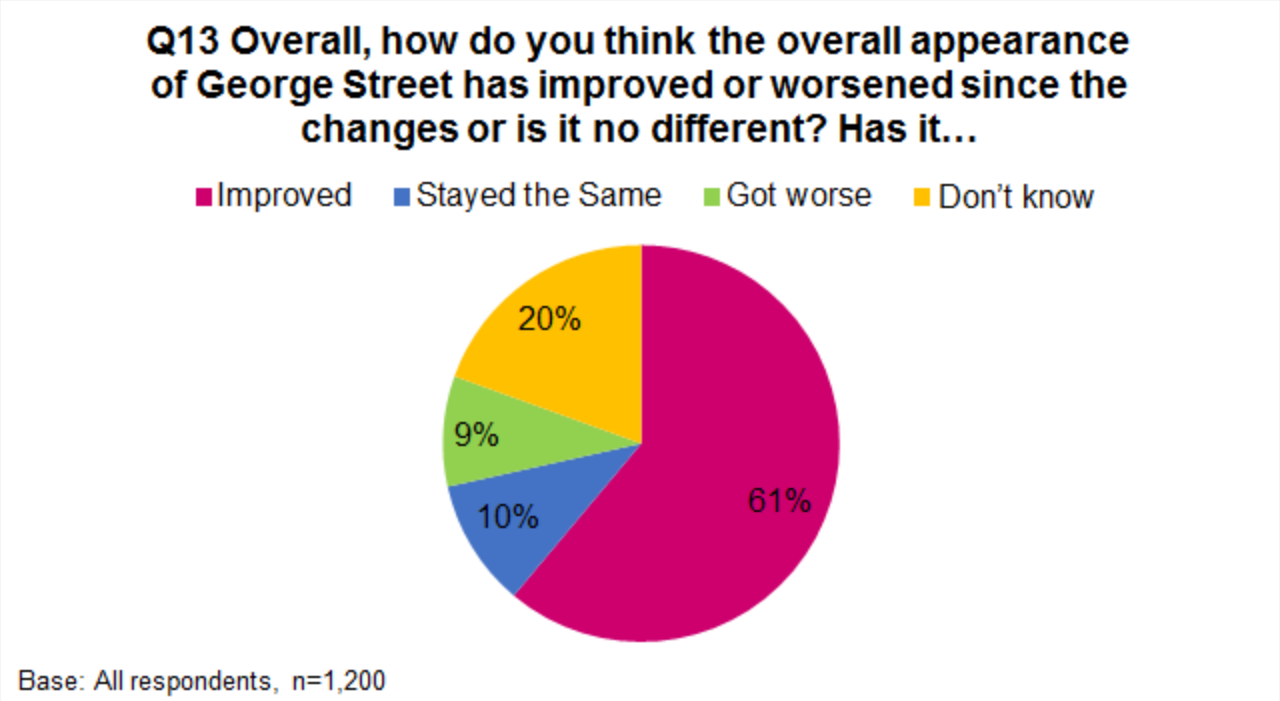
Q12 Do you have any suggestions for improvement on George Street for cyclists?		
Base: Gave suggestions, n=71	**No.**	%
Improvements to signage/ road markings/ make more noticeable/ colour coded	21	29.6%
Pedestrianise the whole area	16	22.5%
More bicycle parking	13	18.3%
Cycle lanes all on one side	8	11.3%
Lanes look shabby/ need to be maintained	7	9.9%
More space between tents/ seating areas and lanes	6	8.5%
Cycle lanes on both sides	5	7.0%
Should have consulted with cyclists prior to changes	5	7.0%
Make it permanent	5	7.0%
Pedestrians are a hazard for cyclists/ pedestrians are a problem	5	7.0%
Cycle lanes with kerb/ barriers to stop pedestrianise	4	5.6%
Everything looks temporary/ unfinished/ make decision whether to pedestrianise or not	4	5.6%
Lanes should flow the same as car lanes	3	4.2%
Take away car parking	3	4.2%
Wider lanes	2	2.8%
Other	6	8.5%

6. PERCEPTIONS OF CHANGE IN GEORGE STREET

6.1. Overall appearance (Q13/14)

A number of changes have been made to George Street on a trial basis including increased pedestrian space, a two way cycle path and a one way traffic system on George Street. These changes were all temporary are were being trialled until September 2015.

The majority of survey respondents were of the opinion that these changes to George Street have improved the overall appearance of George Street (61%). On the other hand, 1 in 10 respondents (10%) felt the changes had made no difference, 9% felt the appearance had got worse and 20% were unsure.



New Town respondents and those who lived in Edinburgh were significantly more likely to have given an opinion on the changes to the overall appearance with 71% of New Town respondents and 64% of respondents living elsewhere in Edinburgh stating the appearance or attractiveness of George Street has improved. These respondents were most likely to be of the opinion that the changes have worsened the overall appearance in George Street (both 14%).

Q13 Change to the overall appearance of George Street analysed by home location						
	Overall	New Town	Elsewhere in Edinburgh	Surrounding local authority	Elsewhere in Scotland	Outside Scotland
Base	**1200**	**154**	**491**	**150**	**264**	**140**
Improved	61%	71%	64%	73%	53%	43%
Stayed the Same	10%	9%	14%	11%	9%	2%
Got worse	9%	14%	14%	6%	4%	-

Don't know	20%	6%	9%	10%	34%	55%

In terms of seasonality, those who were interviewed in autumn (78%) and in summer (76%) were significantly more likely to have said the overall appearance of George Street has improved compared to those who were interviewed in winter (51%), spring (60%) and during the festival month (42%). However, please note that while those who were interviewed during the festival month were least likely to have said that the appearance of George Street had improved, they were also most likely to have said that they were unsure (30%) along with a high proportion of respondents during this month stating the appearance had got worse,

Q13 Change to the overall appearance of George Street analysed by seasonality						
	Overall	Autumn (Sept 14 - Oct 14)	Winter (Nov 14 - Feb 15)	Spring (Mar 15 - May 15)	Summer (June 15 - July 15)	Festival month (Aug 15)
Base	**1200**	**200**	**399**	**300**	**202**	**99**
Improved	61%	78%	51%	60%	76%	42%
Stayed the Same	10%	8%	14%	9%	5%	15%
Got worse	9%	3%	12%	11%	6%	12%
Don't know	20%	12%	24%	20%	13%	30%

Further analysis by transport method reveals that cyclists were significantly more likely to have said the changes to George Street have improved the overall appearance of the area (85%), while car users were most likely to have said the appearance has got worse (23%).

In terms of the demographic profile of respondents, females (64%) and those aged 16-34 (70%) were most likely to have the opinion that the changes have improved the appearance and attractiveness of the area. On the other hand, respondents aged 55 and over (21%) were most likely to have said that this has worsened.

All respondents who felt the appearance of George Street **had improved** were asked to provide more detail as to why they felt this way. The open ended comments provided to this question have been coded into common themes for analysis purposes. As can be seen in the table below, the main reasons for being of the opinion that the changes to George Street have improved the appearance of the area were where respondents felt the area was now more attractive and a nicer place to visit (39%), that there was now more space to walk or cycle and that there was now a more relaxed atmosphere (18%). A full list of the comments provided to this question can be found in the appendix.

Q14 If improved, why do you say this is the case?		
Base: Said appearance had improved, n=733	**No.**	**%**
Area looking nicer/ more attractive/ better place to visit	287	39.2%
More space to walk/ cycle	168	22.9%
Relaxed atmosphere	128	17.5%
Not as much traffic/ less congestion/ safer	102	13.9%
Like being able to sit outside	65	8.9%
Cosmopolitan atmosphere/ cultured	61	8.3%
Great facilities available e.g. shopping/ restaurants/ bars	56	7.6%
Can cycle safely/ easier to cycle/ good cycle lanes	52	7.1%
More people/ more of a buzz	50	6.8%
Nice landscaping/ plants etc	33	4.5%
Like the information boards	25	3.4%
Looks cleaner/ tidier	25	3.4%
Friendlier people/ user friendly	25	3.4%
Feels safer walking/ safer environment	22	3.0%
Great for tourism/ tourists	17	2.3%
Easy accessibility/ more accessible	17	2.3%
Traffic noise reduced/ is quieter	14	1.9%
Less fumes/ pollution/ cleaner air	13	1.8%
More families/ more child friendly	7	1.0%
Due to the one way traffic system	2	0.3%
Other	65	8.9%

Those who answered that the area was **looking better or a nicer place to visit** were most likely to be car users (51%), female (43%) and interviewed during the winter (46%) and in autumn (48%).

Respondents who were interviewed during the festival month were most likely to have made positive comments about the **landscaping** in George Street (21%).

Analysis by age reveals that respondents aged 16-34 were most likely to have said the area had improved due to there now being **a more relaxed atmosphere** (23%) and this was significantly more than those aged 35-43 (15%) and aged 55 and over (12%).

Almost all respondents who said that they **can cycle more safety** or commented on cycle lanes were cycling through George Street on the day of interview.

More respondents who were interviewed during the spring (33%) and summer (31%) cited that there is now **more space to walk or cycle**. Furthermore, non-Edinburgh residents were significantly more likely to have given this reason (29%) than respondents who lived in Edinburgh (18%).

Where respondents felt the appearance of the neighbourhood had **got worse**, this tended to be where respondents commented on traffic congestion and longer journeys as a result of the changes (31%), that the covered outside seating areas looked shabby or took up too much space (29%), where respondents preferred it the way it was before (28%) or where respondents felt the area looks unfinished or untidy (24%).

Q14 If got worse, why do you say this is the case?		
Base: Said appearance had worsened, n=108	**No.**	**%**
Longer journeys due to traffic congestion/ disruptions/ tailbacks/ jams	33	30.6%
Tents look shabby/ ruining the look of the street/ take up too much space	31	28.7%
Don't like it/ fine the way it was	30	27.8%
Area looks unfinished/ untidy	26	24.1%
Parking issues e.g. not enough/ too expensive to park	19	17.6%
Taking away history of George Street/ Edinburgh	13	12.0%
Outside sitting areas being unused	6	5.6%
Businesses losing money/ can't unload deliveries	5	4.6%
Cycle lanes not being used/ take up too much road/ causing confusion	5	4.6%
Not accessible for disables/ wheelchair users	2	1.9%
Taxis take longer/ can't get picked up/ dropped off where you want	2	1.9%
Other	14	13.0%

Car users were significantly more likely to have cited **parking issues** as their reason for feeling the appearance of the area had got worse (34%) than non-car users (6%).

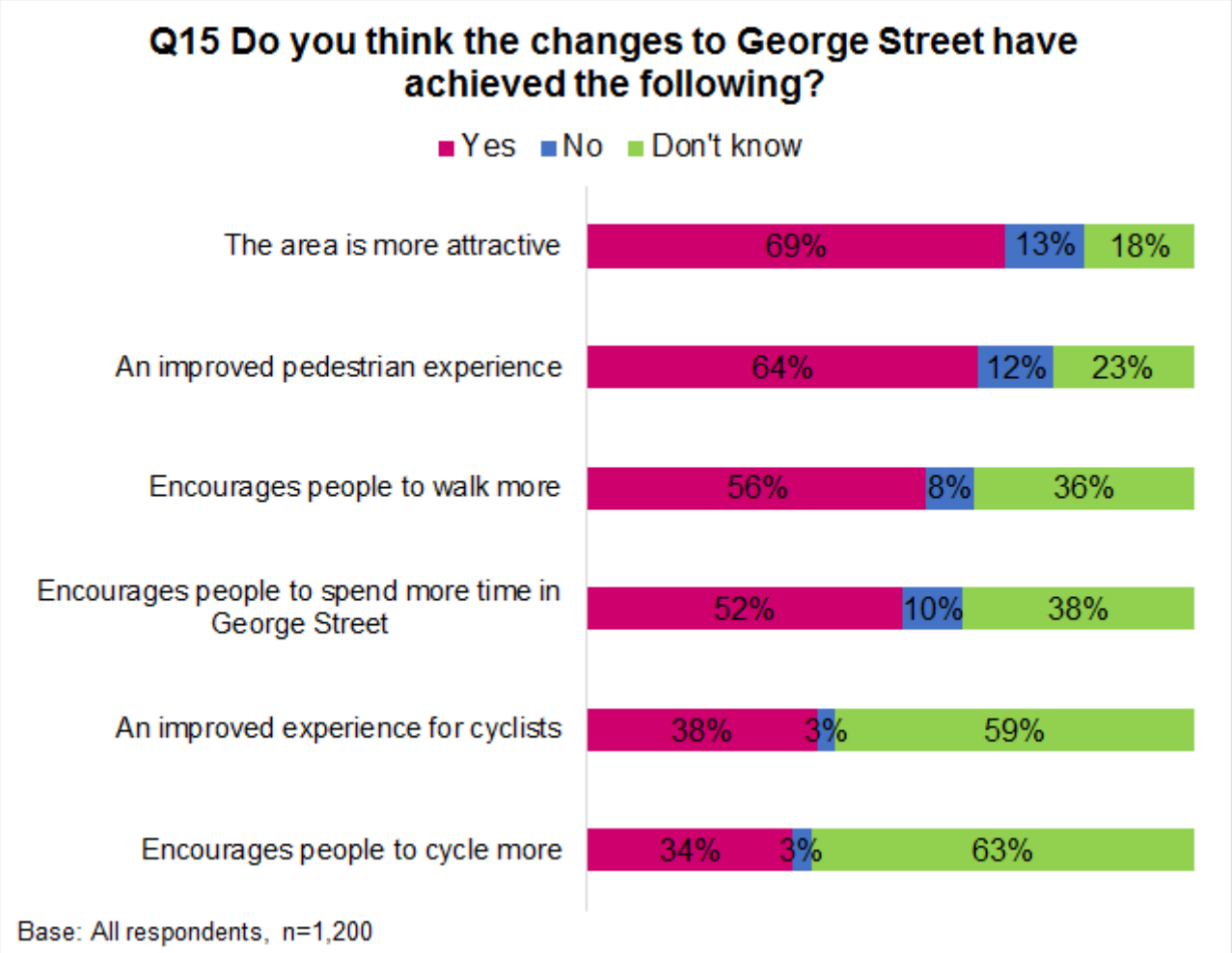
Females were more likely to have given the reason '**I don't like it/ it was fine the way it was**' (39%) than males (17%).

6.2. Achievement of project objectives (Q15)

Respondents were asked whether or not the changes to George Street have met the project outcomes. The majority of respondents were in agreement that the area is now more attractive (69%), there has been an improvement to pedestrian experience (64%), the changes encourage people to walk more (56%) and that the changes encourage people to spend more time in George Street (52%).

Very few people disagreed that the project outcomes had been met with respondents being most likely to disagree that the area is now more attractive and 12% disagreeing that the changes have resulted in an improved pedestrian experience.

With regards to the cycling outcomes the majority of respondents answered don't know for each of these. However, 38% were in agreement that the changes have resulted in an improved experience for cyclists (3% disagreement) and 34% were in agreement that the changes have encouraged people to cycle more (3% disagree).



The following points highlight the key differences in opinion for these statements when analysed by the various respondent characteristics.

The area is more attractive:

Where respondents agreed with this statement they were most likely to be:

- Cyclists (87%)
- Interviewed during the autumn (89%)
- Living in surrounding local authority areas (81%)
- Aged 16-34 (76%)

On the other hand, respondents who disagreed with this statement they were most likely to be:

- Car users (21%)
- New Town residents (21%)
- Interviewed during the festival month (24%)
- Aged 55+ (29%)
- Have a disability (41%)

An improved pedestrian experience:

Where respondents agreed with this statement they were most likely to be:

- Cyclists (80%)
- Interviewed during autumn (79%)
- Living in surrounding local authority areas (75%)
- Aged 16-34 (70%)

On the other hand, respondents who disagreed with this statement they were most likely to be:

- Car users (20%)
- New Town residents (19%) and those who lived elsewhere in Edinburgh (19%)
- Interviewed during the festival month (21%)
- Aged 55+ (26%)
- Have a disability (43%)

An improved experience for cyclists:

Where respondents agreed with this statement they were most likely to be:

- Cyclists (83%)
- Interviewed during the summer (57%)
- Surrounding local authority areas (53%)
- Aged 16-34 (42%) and aged 35-54 (45%)

The level of disagreement to this question did not vary significantly by the various respondent characteristics.

Encourages people to walk more

Where respondents agreed with this statement they were most likely to be:

- Cyclists (73%)
- New Town residents (64%), those who lived elsewhere in Edinburgh (61%) and in surrounding local authorities (65%)
- Interviewed during the summer (76%)
- Aged 16-34 (65%)

On the other hand, respondents who disagreed with this statement they were most likely to be:

- Car users (15%)
- Interviewed during the festival month (15%)
- Aged 55 and over (17%)
- Have a disability (25%)

Encourages people to cycle more

Where respondents agreed with this statement they were most likely to be:

- Cyclists (83%)
- Interviewed during the summer (57%)
- Living in surrounding local authority areas (46%)
- Aged 16-34 (39%) and aged 35-54 (38%)

On the other hand, respondents who disagreed with this statement they were most likely to be:

- New Town residents (5%)

Encourages people to spend more time in George Street

Where respondents agreed with this statement they were most likely to be:

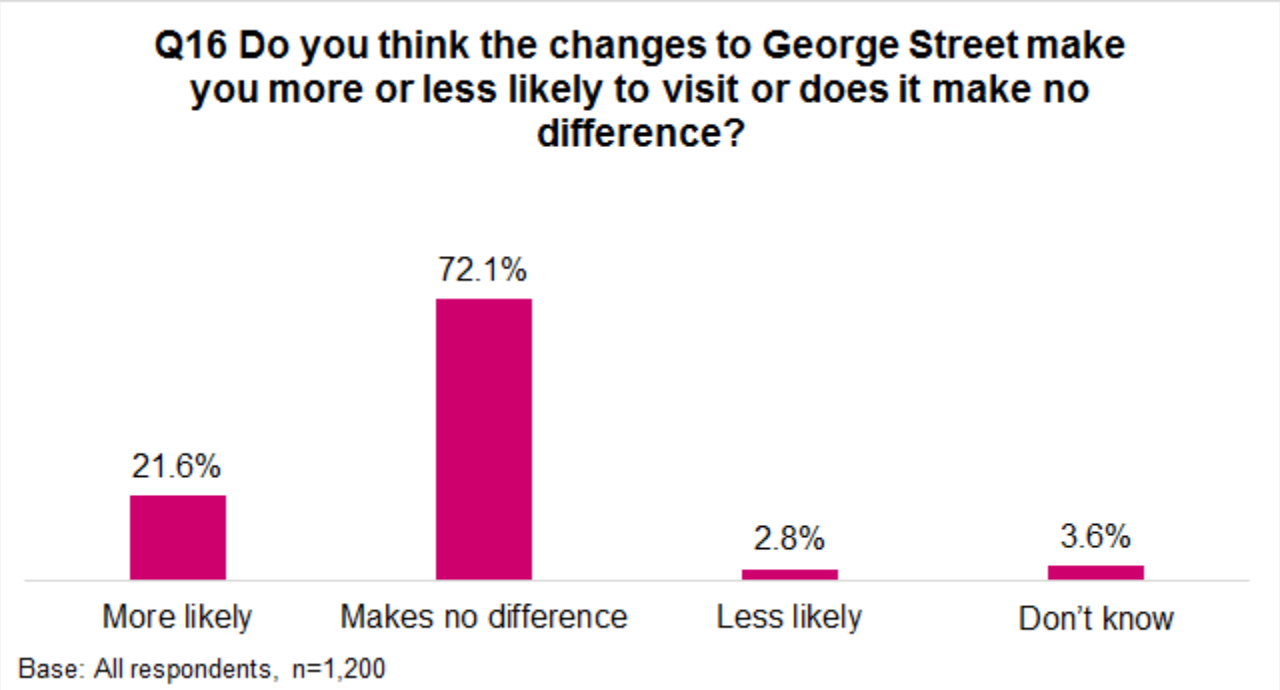
- Cyclists (71%)
- Interviewed during the autumn (75%) and in the summer (74%)
- Lived in surrounding local authority areas (64%)
- Aged 16-34 (59%)

On the other hand, respondents who disagreed with this statement they were most likely to be:

- Car users (20%)
- New Town residents (17%)
- Interviewed during the festival month (16%)
- Aged 55+ (20%)
- Have a disability (30%)

6.3. Impact of changes (Q16)

The vast majority of respondents (72%) were of the opinion that the changes to George Street have made no difference in the likelihood of them visiting George Street. More respondents said they were more likely to visit George Street (22%) than were less likely (3%).

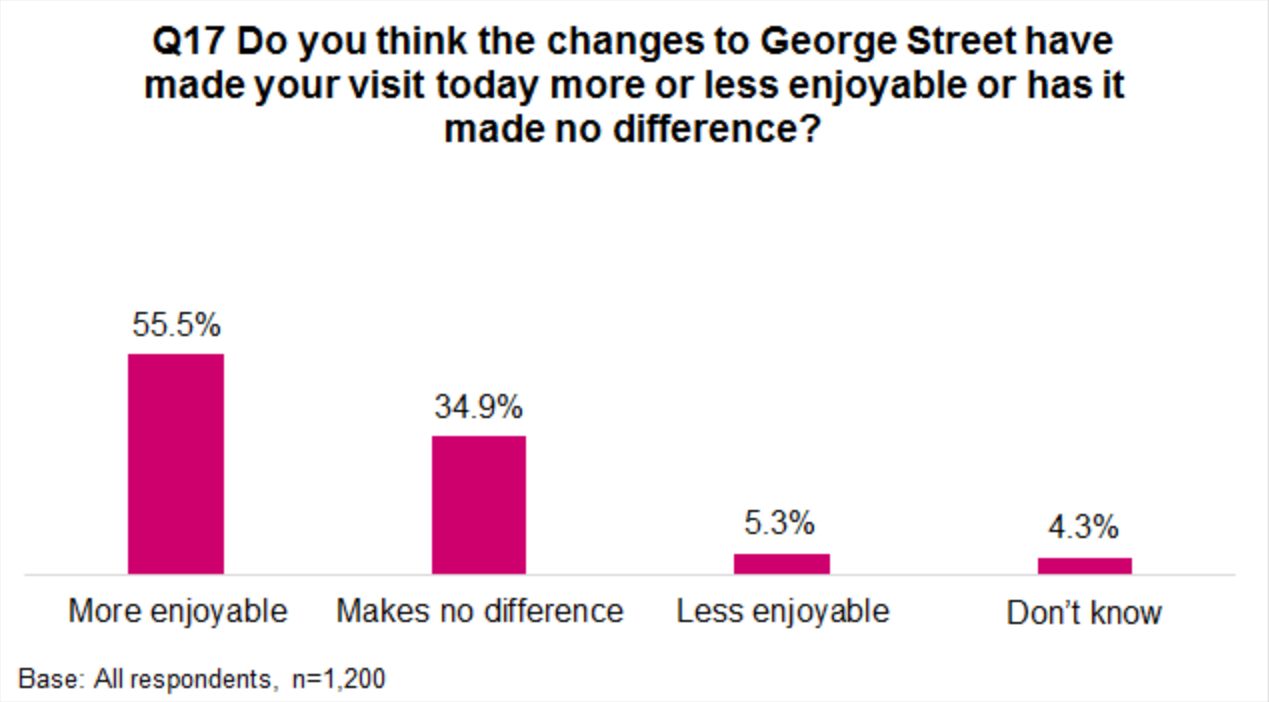


Those who said the changes to George Street would make them more likely to visit George Street were most likely to be cyclists (37%), Edinburgh residents (27%), interviewed during the autumn (37%) and aged 16-34 (27%).

On the other hand, those who said the changes to George Street would make them less likely to visit George Street were most likely to be car users (10%) and respondents aged 55 and over (8%).

6.4. Whether the changes have made visits to George Street more or less enjoyable (Q17)

Over half of respondents (56%) were of the opinion that the changes to George Street have made their visit more enjoyable. On the other hand, 35% stated this has made no difference, 5% said the changes have made their visit less enjoyable and 4% were unsure.



Those who said the changes to George Street had made their visit more enjoyable were most likely to be cyclists (71%), those who lived in surrounding local authority areas (65%), were interviewed during the autumn (70%) and summer months (68%) and were aged 16-34 (64%).

However, where respondents said the changes to George Street had made their visit less enjoyable this tended to be car users (16%), those who lived in Edinburgh (9%), were interviewed during winter, spring and during the festival month (all 7%) and were aged 55+ (14%).

6.5. Suggestions in terms of further changes or improvements to George Street (Q18)

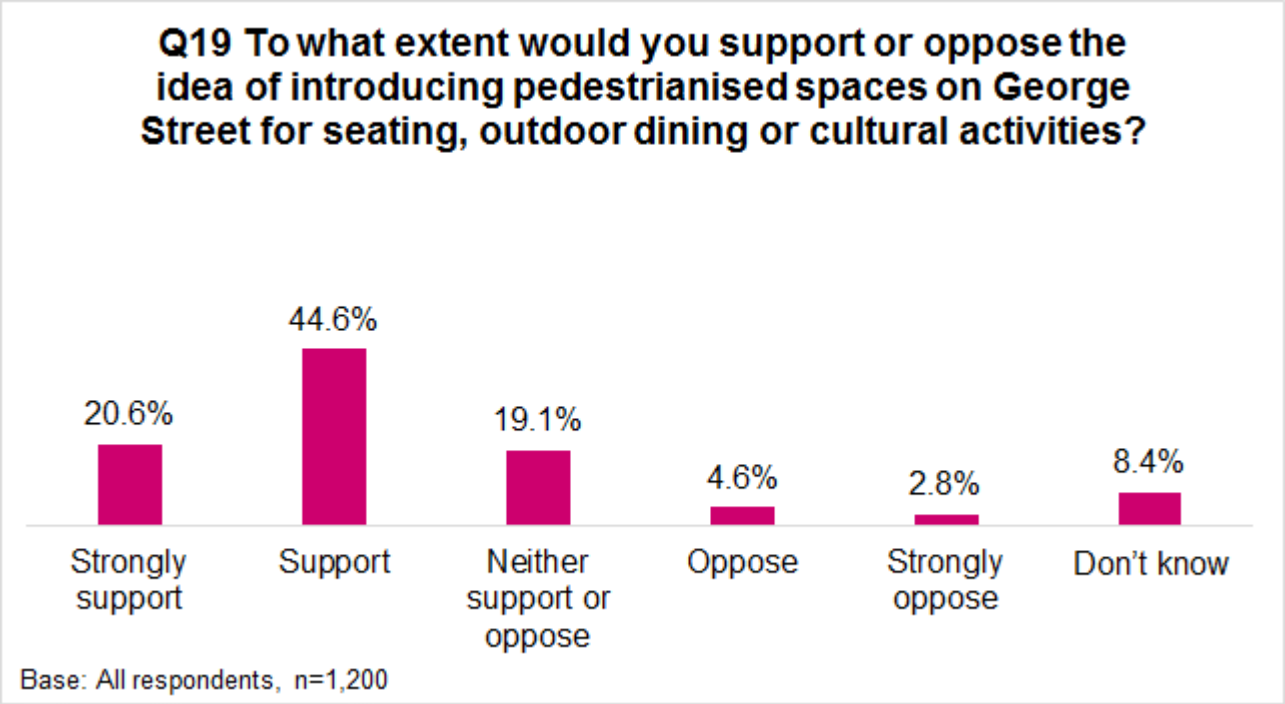
All respondents were asked for their suggestions in terms of what could be done to improve George Street. Over 6 in 10 respondents did not have any suggestions for improvement (62%) and a further 5% stated they preferred it the way it was. On the other hand, 4% said they would prefer the area to be fully pedestrianised, 4% said they would like to see landscaping improvements and 4% suggested affordable or more parking spaces. A full list of the open ended responses provided to this question can be found in the appendix.

Q18 Do you have any suggestions in terms of how George Street could be changed or improved?		
Base: All respondents, n=1,200	**No.**	%
No suggestions for improvement	747	62.3%
Preferred it the way it was	63	5.3%
Pedestrian only area	52	4.3%
Improved landscaping e.g. trees/ flowers/ street lamps	49	4.1%
Affordable parking/ more parking spaces	42	3.5%
Street entertainment e.g. street artists/ stalls	37	3.1%
Make changes permanent	36	3.0%
Keep the area clean/ clean up litter	36	3.0%
Keep improving it/ maintaining the changes	35	2.9%
Improve pavements	25	2.1%
Should only change in the summer or at festivals/ wasted in the winter	24	2.0%
Ban cars altogether	19	1.6%
Have more seating areas	16	1.3%
Keep traffic flowing/ don't have too many re-routes/ diversions	14	1.2%
Improved signage for pedestrians/ cyclists e.g. more noticeable/ colour coded	14	1.2%
Cycle lanes at the side of the road/ at each side	12	1.0%
More bicycle parking spaces	11	0.9%
More cafes selling coffee/ cakes	9	0.8%
More family friendly	8	0.7%
Improvements to outside restaurants, they can look a bit shabby	8	0.7%
Remove parking	6	0.5%
Cycle lane should be down the centre of the street	5	0.4%
More shops/ wider variety of shops	3	0.3%
Lower prices at bars	2	0.2%
Other	99	8.3%

Car users were significantly more likely to have suggested more affordable parking or more parking spaces (14%) than non-car users (1%).

6.6. Opinions on introducing pedestrianised spaces on George Street (Q19)

Just under two thirds of survey respondents said they would support or strongly support the idea of introducing pedestrianised spaces on George Street for seating, outdoor dining or cultural activities. On the other hand, 7% opposed or strongly opposed this, 19% neither supported nor opposed this and the remaining 8% were unsure.

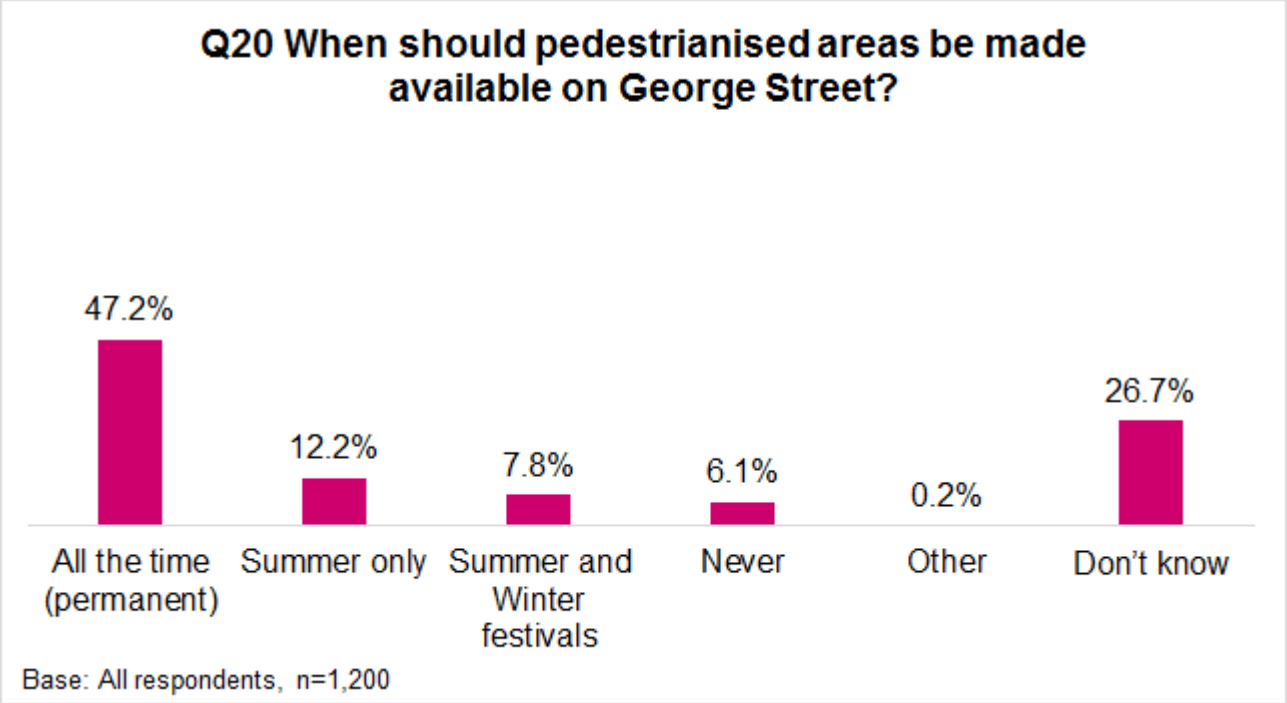


Most likely to support the introduction of pedestrianised spaces on George Street were cyclists (89%), those who live in surrounding local authorities (75%) and in all other areas of Edinburgh excluding New Town (70%), were interviewed in autumn (81%) and in summer (82%) and were aged 16-34 (75%).

However, those who were most likely to oppose this were car users (18%), New Town respondents (12%), respondents interviewed in winter (10%) and during the festival month (11%), males (9%), and those aged 55 and over (20%).

6.7. Opinions on when pedestrianised areas should be made available (Q20)

When asked about when pedestrianised areas should be made available on George Street, just under half of respondents (47%) said this should be all the time (permanent), 12% said in summer only, 8% said in summer and winter festivals and 6% said never.

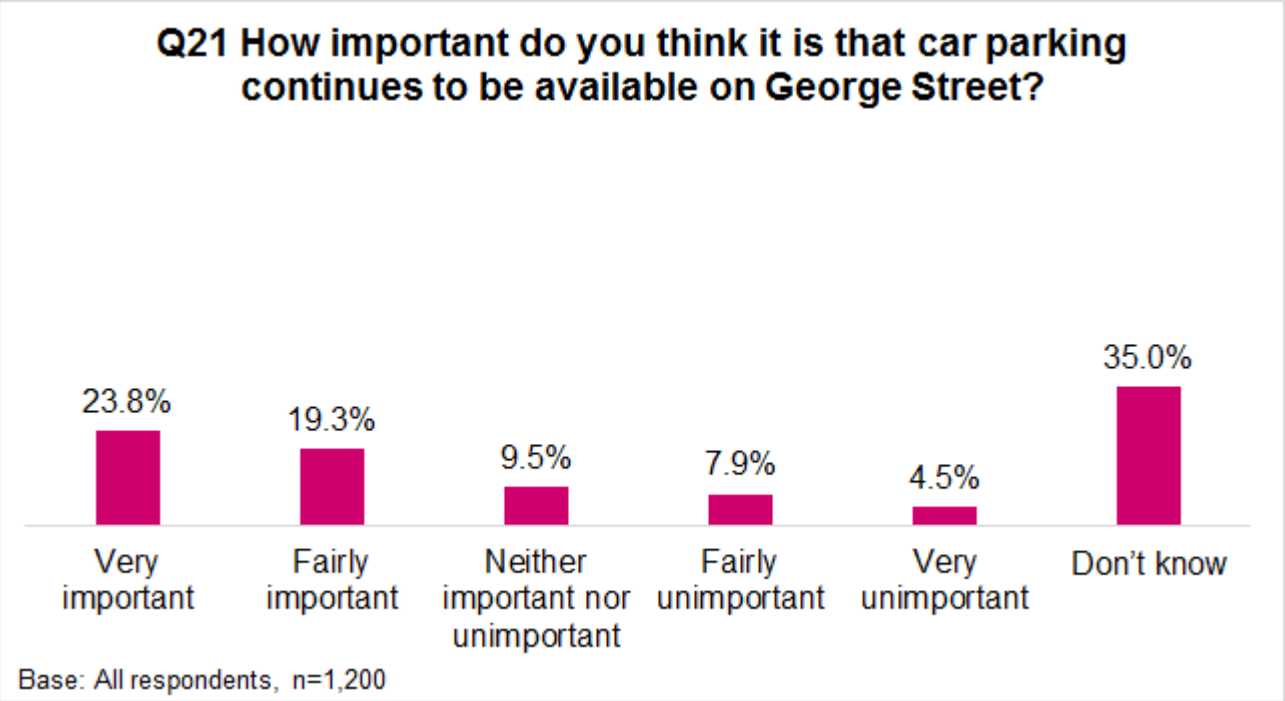


Those who were most likely to have said pedestrianised areas should be made available on George Street all the time were most likely to be cyclists (87%), those who lived in surrounding local authority areas (63%), respondents interviewed during the autumn (73%) and in summer (64%) and respondents aged 16-34 (55%).

On the other hand, respondents who said that pedestrianised should never be made available were most likely to be car users (15%), those who lived elsewhere in Edinburgh (10%), were interviewed during the festival month (11%) and were aged 55+ (18%).

6.8. Views on the availability of car parking on George Street (Q21/22)

With regards to the availability of car parking on George Street, over 4 in 10 respondents (43%) felt it was very or fairly important that car parking continues to be available on George Street, 10% said it was neither important nor unimportant and 12% said it was very or fairly unimportant.



Those who were most likely to have said that it was important that car parking continues to be available on George Street were car users (85%), interviewed during the autumn (51%) and were aged 55 and over (56%).

Those who were most likely to have said that it was unimportant that car parking continues to be available on George Street were most likely to have been cyclists (39%) and were interviewed during the summer (20%).

Edinburgh residents were significantly more likely to have given an opinion on this (i.e. fewer respondents answering don't know) and therefore had a higher proportion of respondents stating this was important (47%) and that it was unimportant (17%) than non-Edinburgh respondents (38% stated important and 7% stated unimportant).

Appendix 1: Survey questionnaire

Project number	**P668**
Project name	**CEC George Street ETRO Survey**

Respondent name **Record in capitals**																			
Address **Record in capitals**																			
Postcode **Record in capitals**																			
Telephone Number																			

[INTERVIEWER: CLOSE INTERVIEW BY READING OUT STATEMENT]
"Thank you very much for your help. Can I assure you once again that the information you have given will be treated as absolutely confidential and will only be used for the purposes of genuine market research."
INTERVIEWER DECLARATION:
I declare that this interview was carried out according to instructions, within the Market Research Society's Code of Conduct, and that the respondent was not previously known to me.

Interviewer No:		**Name:**	
Questionnaire No		**Signature:**	
On quota:		**Date:**	
Edited by:		**Duration**	
Backchecked by:			

Date: WRITE IN DD/MM/YY FORMAT	
Time WRITE IN HH:MM FORMAT	

Location	Location Block 1 – Charlotte to Castle	1
	Location Block 2 – Castle to Frederick	2
	Location Block 3 – Frederick to Hanover	3
	Location Block 4 – Hanover to St Andrew Square	4

Quota:

	Tick if in quota
New Town Resident	
Cyclist	
Car user (driven to city centre today)	

INTERVIEWER - READ OUT:
"Good morning/ afternoon/ evening. I'm _____ from Research Resource. I am conducting a survey on behalf of the City of Edinburgh Council with users of George Street. I wonder if you could spare a few minutes to answer some questions - your answers will, of course, be treated with the strictest confidentiality. In particular, your personal details will not be passed to any third party".

YOUR VISIT TODAY

Q1 **On average, how often do you visit George Street?**

Q2 Where have you come from today to visit George Street?

Work	1
Home	2
Elsewhere (please specify)	3

Q3 **SHOWCARD** What is the purpose of your visit to George Street today? **CODE ALL THAT APPLY**

Food shopping	1
Non-food shopping	2
Browsing / window shopping	3
Work related	4
Personal business (e.g. Bank / doctors)	5
Dine/eat in a restaurant/bar	6
Sightseeing	7
Meet friends / family	8
Drink in a café/bar/restaurant	9
Other (**please specify**)	10

Q4 **SHOWCARD** How long do you intend to spend in George Street today?

I am just passing through	1
Up to an hour	2
1 – 3 hours	3
3-5 hours	4
5-7 hours	5
8+ hours	6
Don't know	7

Q5 **SHOWCARD** What was the **main** form of transport you used to get to George Street today? ONE ONLY

Car / light vehicle	1	**Ask Q5b**
Bus	2	Go to Q6
Train	3	
Foot	4	
Bicycle	5	
Motorcycle	6	
Taxi	7	
Tram	8	
Van/HGV	9	
Other (specify)	10	

Q5b **If you came by car/light vehicle can you tell me where you parked?**

George Street	1
St James Centre Car Park	2
Castle Terrace Car Park	3
Charlotte Square	4
Other (please specify)	5

PERCEPTIONS AND EXPERIENCE OF GEORGE STREET TODAY

Q6 **SHOWCARD - TICK START AND ROTATE ORDER When thinking about your decision to come to George Street today, how important were the following?**

		Very important	Fairly important	Neither / nor	Fairly unimportant	Very unimportant	Don't Know
A	Overall appearance/ attractiveness	1	2	3	4	5	6
B	Cleanliness	1	2	3	4	5	6
C	Amount of parking available	1	2	3	4	5	6
D	Ease of parking	1	2	3	4	5	6
E	How easy it is to cycle on George Street	1	2	3	4	5	6
F	Availability of bike parking facilities	1	2	3	4	5	6
G	How easy it is to walk about on George Street	1	2	3	4	5	6
H	Accessibility and ease of movement for people with disabilities/ mobility problems	1	2	3	4	5	6
I	Accessibility and ease of movement for buggies/ prams	1	2	3	4	5	6
J	Ease of access to shops/ businesses	1	2	3	4	5	6
K	Quality/ range of shops/ businesses available	1	2	3	4	5	6
L	The range of activities available	1	2	3	4	5	6
M	The ability to be/ sit outside i.e. 'café culture'	1	2	3	4	5	6
N	Feeling of safety	1	2	3	4	5	6
O	Clarity of segregation between cycle and pedestrian areas						

Q7 **SHOWCARD – TICK START AND ROTATE ORDER Can you now tell me how good or poor you think of each of these are in George Street?**

		Very good	Good	Neither / nor	Poor	Very Poor	Don't Know
A	Overall appearance/ attractiveness	1	2	3	4	5	6
B	Cleanliness	1	2	3	4	5	6
C	Amount of parking available	1	2	3	4	5	6
D	Ease of parking	1	2	3	4	5	6
E	How easy it is to cycle on George Street	1	2	3	4	5	6
F	Availability of bike parking facilities	1	2	3	4	5	6
G	How easy it is to walk about on George Street	1	2	3	4	5	6
H	Accessibility and ease of movement for people with disabilities/ mobility problems	1	2	3	4	5	6
I	Accessibility and ease of movement for buggies/ prams	1	2	3	4	5	6
J	Ease of access to shops/ businesses	1	2	3	4	5	6
K	Quality/ range of shops/ businesses available	1	2	3	4	5	6
L	The range of activities available	1	2	3	4	5	6
M	The ability to be/ sit outside i.e. 'café culture'	1	2	3	4	5	6
N	Feeling of safety	1	2	3	4	5	6
O	Clarity of segregation between cycle and pedestrian areas	1	2	3	4	5	6

CYCLISTS ONLY [OTHERS GO TO Q13]

Q8 On average, how often do you cycle in George Street?

Daily (7 days a week)	1
4 – 6 times per week	2
2– 3 times per week	3
Once weekly	4
Fortnightly	5
Monthly	6
Every 2 – 3 months	7
Twice yearly	8
Less frequently	9
This is my first time cycling	10

Q9 Has this changed since the introduction of cycle lanes?

Yes, I now cycle more	1
Yes, I now cycle less	2
It has not changed	3

Q10 Which of the following best describes how you most commonly use George Street as a cyclist? [TICK ONE ONLY]

I travel along the length of George Street	1
I simply cross over George Street as part of a longer journey	2
Other (please specify)	3

Q11 **SHOWCARD How good or poor are the following for cyclists in George Street?**

		Very good	Good	Neither / nor	Poor	Very Poor	Don't Know
A	Clarity of segregation of cycle and parking areas	1	2	3	4	5	6
B	Feeling of safety when cycling along George Street – ie interaction with pedestrians and cafes during the length of each block & with traffic & people at junctions	1	2	3	4	5	6
C	Safety of the 2 way cycle lane	1	2	3	4	5	6
D	Feeling of safety at junctions/ intersections along George Street	1	2	3	4	5	6
E	Feeling of safety at the change from one side of the street to another (at Frederick Street) for the 2 way cycle lane	1	2	3	4	5	6
F	Clarity for cyclists at junctions/ intersections along George Street	1	2	3	4	5	6
G	Clarity for cyclists of the change from one side of the street to another (at Frederick Street) for the 2 way cycle lane	1	2	3	4	5	6

INTERVIEWER: CAPTURE ANY COMMENTS MADE REGARDING ANY OF THE ABOVE, PLEASE NOTE BELOW REFERRING TO THE LETTER OF THE STATEMENT THEY MADE COMMENT ON

Q12 Do you have any suggestions for improvement on George Street for cyclists?

PERCEPTIONS OF CHANGE IN GEORGE STREET

Q13 **[**SHOW PICTURE OF BEFORE IN GEORGE STREET] A number of changes have been made to George Street on a trial basis including increased pedestrian space, a two way cycle path and a one way traffic system on George Street. These are currently temporary and are being trialled until September 2015. Overall, how do you think the overall appearance of George Street has improved or worsened since the changes or is it no different? Has it… **[INTERVIEWER: NB IF RESPONDENT STATES SOME ASPECTS HAVE IMPROVED AD SOME WORSENED, CODE BOTH AND ASK FOR SPECIFICS RE WHAT HAS IMPROVED AND WHAT HAS WORSENED]**

Improved	1	*Go to Q14*
Stayed the Same	2	*Go to Q15*
Got worse	3	*Go to Q14*
Don't know	4	*Go to Q15*

Q14 If improved or worsened why do you say this is the case?

Improved	
Got worse	

Q15 **Do you think the changes to George Street have achieved any of the following?**

		Yes	No	Don't know
A	The area is more attractive	1	2	3
B	An improved pedestrian experience	1	2	3
C	An improved experience for cyclists	1	2	3
D	Encourages people to walk more	1	2	3
E	Encourages people to cycle more	1	2	3
F	Encourages people to spend more time in George Street	1	2	3

Q16 **Do you think the changes to George Street make you more or less likely to visit or does it make**

no difference?

More likely	1
Makes no difference	2
Less likely	3
Don't know	4

Q17 **Do you think the changes to George Street have made your visit today more or less enjoyable or has it made no difference?**

More enjoyable	1
Makes no difference	2
Less enjoyable	3
Don't know	4

Q18 Do you have any suggestions in terms of how George Street could be changed or improved?

Q19 **To what extent would you support or oppose the idea of introducing pedestrianised spaces on George Street for seating, outdoor dining or cultural activities?**

Strongly support	1
Support	2
Neither support or oppose	3
Oppose	4
Strongly oppose	5
Don't know	6

Q20 **When should pedestrianised areas be made available on George Street?**

All the time (permanent)	1
Summer only	2
Summer and Winter festivals	3
Never	4
Other (please specify)	5
Don't know	6

Q21 How important do you think it is that car parking continues to be available on George Street?

Very important	1

Fairly important	2
Neither important nor unimportant	3
Fairly unimportant	4
Very unimportant	5
Don't know	6

Q22 Thinking about parking in more detail, which of the following comes closest to describing your view? [ONE ONLY]

Car parking should stay as it is just now	1
Car parking on George Street should be reduced with replacement parking provided on Castle Street and Frederick Street nearby	2
Car parking on George Street should be removed with replacement parking provided on Castle Street and Frederick Street nearby	3
Car parking on George Street should be reduced with no replacement parking provided	4
Car parking on George Street should be removed with no replacement parking provided	5
Don't know/ no opinion	6

ABOUT YOU

Q23 **Gender**

Male	1
Female	2

Q24 **Which of the following age bands do you fall into?**

16-24	1
25-34	2
35-44	3
45-54	4
55-64	5
65-74	6
75+	7

Q25 Do you have a long term illness or disability which impacts on your day to day activities?

Yes	1
No	2

Q26 Can you please confirm your postcode?

Q27 Is that….? [INTERVIEWER READ OUT]

Within the New town area of Edinburgh	1
Elsewhere in Edinburgh	2
Surrounding local authority area e.g. Fife, West Lothian, Borders	3
Elsewhere in Scotland	4
Outside Scotland (please state which country)	5

Q28 **We will be holding discussion groups to talk about the changes to George Street in more detail. These will about 90 minutes and will be held in a central Edinburgh location. The dates and times have not yet been agreed. Participants will receive a £20 incentive for taking part and to thank you for your time. Even if you say yes now, you can say no later. Would you be interested in being contacted to receive some more details about this?**

Yes (Collect telephone number for contact)	1
No	2

THANK AND CLOSE

Appendix 2: Technical report summary

TECHNICAL REPORT SHEET – QUANTITATIVE RESEARCH

Project number	**P668**
Project name	**City of Edinburgh Council George Street ETRO Survey**
Objectives of the research	A key objective of the trial, and requirement of the project funding, was to undertake a robust evaluation and monitoring programme. The results of this evaluation and monitoring will provide conclusions on the success of the project. These will, in broad terms, ask three questions of the trial: (i) what worked well; (ii) what did not work well; and (iii) if a more permanent scheme was to be taken forward what changes would people like to see to the street layout.
Target group	Visitors to George Street, Edinburgh.
Target sample size	A target of 100 interviews each month from September 2014 to August 2015, equating to 1200 overall in total.
Achieved sample size	1200 interviews were achieved.
Date of fieldwork	Fieldwork was undertaken between September 2014 and August 2015.
Sampling method	Furthermore, for each shift interviewers were given minimum quotas to ensure that within their 20 interviews they achieve at least: ■ 2 interviews with new town residents; ■ 2 interviews with cyclists ■ 2 interviews with respondents who have driven into the city. Thereafter, interviews were carried out using a next to pass sampling process at their specified location.
Data collection method	All responses were recorded on a paper questionnaire and the data entered into a survey analysis package by a team of data processors.
Response rate and definition and method of how calculated	Not applicable.
Any incentives?	Not applicable.

Number of interviewers	5
Interview validation methods	A total of 10% of each interviewer's work was back checked to ensure that interviews have been completed accurately and in line with ISO 20252 standards.
Showcards or any other materials used?	Yes, showcards used as per the questionnaire.
Weighting procedures (if applicable)	Not applicable.
Estimating and imputation procedures (if applicable)	Not applicable.
Reliability of findings	Not applicable.

Appendix 3: Data tables

Q6 – Importance of various aspects on decision to visit George Street (don't know category excluded)

Q6 When thinking about your decision to come to George Street today, how important were the following?						
Respondents	**Base**	**Very unimportant**	**Fairly unimportant**	**Neither/ nor**	**Fairly important**	**Very important**
Availability of bike parking facilities	1098	52.8%	26.0%	6.0%	2.6%	12.5%
Ease of parking	1096	52.0%	26.2%	6.2%	2.2%	13.4%
Ease of parking	1153	41.3%	26.4%	11.6%	5.8%	14.9%
Amount of parking available	1158	40.8%	26.2%	12.1%	6.5%	14.4%
Accessibility and ease of movement for buggies/ prams	1065	16.5%	17.9%	25.4%	12.0%	28.1%
Accessibility and ease of movement for people with disabilities/ mobility problems	1084	14.9%	13.6%	23.3%	14.2%	34.0%
The ability to be/ sit outside i.e. 'café culture'	1184	3.0%	6.8%	22.0%	34.0%	34.1%
The range of activities available	1181	2.5%	2.6%	8.9%	30.4%	55.6%
How easy it is to walk about on George Street	1184	1.3%	1.8%	2.6%	33.1%	61.2%
Quality/ range of shops/ businesses available	1185	1.1%	1.0%	2.4%	21.4%	74.1%
Ease of access to shops/ businesses	1184	1.0%	1.2%	2.5%	29.4%	65.9%
Overall appearance/ attractiveness	1185	0.4%	3.0%	6.7%	32.5%	57.5%
Cleanliness	1183	0.4%	2.1%	4.0%	27.6%	65.9%
Feeling of safety	1185	0.2%	0.7%	0.8%	21.8%	76.5%

Q7 Satisfaction with various aspects of George Street (don't know category excluded)

Q7 Can you tell me how good or poor you think each of these are in George Street?						
	Base	Very unimportant	Fairly unimportant	Neither/ nor	Fairly important	Very important
Ease of parking	623	3.0%	13.2%	23.6%	27.6%	32.6%
Amount of parking available	728	2.7%	15.7%	21.6%	30.1%	29.9%
Availability of bike parking facilities	502	1.0%	8.0%	10.0%	13.7%	67.3%
How easy it is to cycle on George Street	493	0.8%	0.4%	9.1%	24.7%	64.9%
Overall appearance/ attractiveness	1196	0.3%	1.2%	1.2%	37.2%	60.2%
Ease of access to shops/ businesses	1189	0.2%	1.5%	0.6%	51.4%	46.3%
Accessibility and ease of movement for buggies/ prams	658	0.2%	0.9%	2.4%	35.4%	61.1%
Accessibility and ease of movement for people with disabilities/ mobility problems	742	0.1%	1.8%	4.7%	38.9%	54.4%
The range of activities available	1181	0.1%	1.0%	2.5%	47.5%	48.9%
Quality/ range of shops/ businesses available	1195	-	-	0.6%	39.6%	59.8%
Feeling of safety	1193	-	-	0.3%	47.6%	52.1%
Cleanliness	1196	-	2.8%	4.7%	37.2%	55.4%
The ability to be/ sit outside i.e. 'café culture'	1166	-	1.5%	4.6%	47.6%	46.2%
How easy it is to walk about on George Street	1187	-	0.5%	1.9%	53.3%	44.3%

Appendix 4: Open ended responses

Other comments captured regarding the various aspects of George Street:

- *Would be better if cycle lane was on each side, make it safer.*
- *Not had any problems. Easier to cycle in George Street, feel safer.*
- *Pedestrians stray to cycle lanes, oblivious of our presence. Have had several near misses (accidents) as a result. Have to cycle around the 'pop-up' restaurant extensions in the street. This can be unsafe and also lengthens my journey time along the street.*
- *Frequently help foreign cyclists to understand the signage. They could be made clearer/ earlier to prepare them for the changes.*
- *Not sure how to access from Charlotte Square, this can be confusing. Can be a problem at times since pedestrians constantly stray into cycle lanes. Dangerous when prams and small children wander ahead of adults.*
- *Should have cycle lane on both sides.*
- *The signage and paintwork is poor. The fact you have to change over is a pain.*
- *With just being on one side, pedestrians don't always notice you and get a bit scared. There's still work ongoing so you're on and off your bike quite a lot.*
- *Cycle lane on one side.*
- *Having to change sides is a nuisance. Pedestrians walk over and go in lanes, they don't care.*
- *Regular cyclists can follow the signs with ease but I don't know about novice cyclists. I think it may be difficult for them changing from one side of the street to the other.*
- *Definitely has improved for cyclists.*
- *I'm fine with it now because I do it all the time, but the change from one side of the road to the other was very confusing at first and will be for new users to the road.*
- *Cycle lanes are welcome and I think they've done a good job to accommodate everybody.*
- *I've been cycling for years and it is getting safer, although I'm a little apprehensive about the trams.*
- *Cycling in Edinburgh is getting better.*
- *No worse or better than any other cycle lanes.*
- *No consideration is given by pedestrians/ motorists. They think cyclists are a nuisance. Can be quite daunting during busy times.*
- *Pedestrians always walk on cycle paths. They show no consideration to cyclists.*
- *No difference from any other cycle lanes. Depends on cyclists themselves whether confident or not.*
- *It is getting safer because pedestrians are beginning to understand what it means and keeping it clear. During the festival it was so busy pedestrians used the cycle lanes as footpaths.*
- *Roads are improving everywhere for cyclists and Edinburgh as a whole have great improvements.*
- *I've had no problem, good experience.*
- *Lanes are not big enough, pedestrians keep walking on them. Having to change sides is silly, hasn't been thought about thoroughly enough.*
- *No comment.*
- *Happy with the changes, makes it safer.*
- *No issues.*

- *Pedestrians are worse than cars, they think they can walk where they like.*
- *Lanes are a little tight and too close to outside seating cafes. I don't cross over lanes; I just stay on the one lane all the way down. Too much hassle.*
- *Pedestrians take no notice of cycle lane and walk over it, even when cyclists are on it. Traffic is backed up a lot down towards Queen Street. It is hard to get through traffic sometimes. No signage informing of change over.*
- *Only just started cycling so can't comment. I only do it when it's not so busy.*
- *Only issue is pedestrians walking over lanes and surfacing of lanes in places.*
- *You don't feel safe when cycling at times because people walk over the lanes crossing over to the other side of the street. Is not good for inexperienced drivers.*
- *No issues.*
- *Need cycle signs. No one takes notice of lanes. Crossing over at busy roundabout makes no sense at all, not safe for drivers. Would cycle more.*
- *If I didn't feel safe I wouldn't cycle. There is not enough signage and information letting people know about this. Some of the junctions are heavily congested due to traffic re-directed on side streets.*
- *No consideration by pedestrians. Silly that you have to cross over at a busy junction, only cycle at weekend when it's less busy.*
- *Loose stones on cycle lanes. Pedestrians walk over lanes; take no notice even when you ring your bell. Lanes are obscured by tents. Best if it was all on one side.*
- *Much better now.*
- *It's much better to be able to cycle but clarity of lanes could be better. Not as good as other cycle paths.*
- *Okay now that I am used to the route. Be better if all on one side.*
- *Experienced cyclist so I don't find any real issues. Outside seating areas are too close to cycle lanes and not enough bike parking facilities.*
- *No issues. Better place to cycle now I know what I'm doing.*
- *Not enough space between outside restaurants, too close. Pedestrians just walk over lanes, no consideration. Busy at junctions, but same everywhere. Not enough bike parking.*
- *No issues, big improvement to George Street.*
- *Not enough signage for pedestrians and cyclists regarding lanes. Pedestrians just walk over lanes and take no notice of cyclists.*
- *Such a difference. Makes cycling to work more enjoyable.*
- *Not enough parking facilities. It took me a while to be comfortable cycling on George Street, find it easier now I know what I am doing.*
- *Better cycling experience.*
- *Good cycling experience.*
- *I'm comfortable cycling here.*
- *I brought my bike today because it's good to cycle in Edinburgh (all over Edinburgh) compared to other places.*
- *Travel all the time so know it like the back of my hand.*
- *Think it's all well signposted. It's consistent throughout Edinburgh.*
- *None.*
- *I've been doing that so long I can do it with my eyes shut.*
- *Edinburgh city is improving cycling facilities in general all round.*
- *Pedestrians are always on their phones, not looking. They are more of a hazard than cars.*
- *I'm not the most confident of cyclists, so the more cycle lanes the better.*

- *None.*
- *It is much better now. Less congested as there are fewer cars.*
- *Dangerous at times, goes against traffic. Lanes are not clear enough and obscured. Not enough signs.*
- *Happy with changes, whole concept is a positive idea from Edinburgh Council. Need to keep up with other tourist attractions.*
- *Don't think they've done enough research into cycle lanes, should have spoken to cyclists first. I cycled before lanes were introduced and see no benefit at all of the lanes I don't cross over. Just use length of street.*
- *Can be quite busy and if you're not an experienced cyclist, you could get stressed. Should be one cycle lane down the whole street.*
- *Can get really busy as peak times and very daunting. So much traffic is coming through side streets. There isn't enough signage and pedestrians don't show any courtesy. Changing over is pointless, most cyclists don't change over.*
- *Better than it was, more signs now. Pedestrians take no notice of cyclists, walk over lanes. Outside seating areas too close to lanes. Junctions are dangerous.*
- *Very happy with changes. Much more cyclist and pedestrian friendly.*
- *None.*
- *Edinburgh overall is catering to cyclists.*
- *Fewer cars, no need except for disabled people. Public transport is second to none in Edinburgh.*
- *No cars at all would be safer.*
- *Going from East to West roundabout, round it to go straight through is not clear and unsafe. Post invisible, not well thought through. West End of George Street is not effective lane.*
- *Too many zebra crossings.*
- *Lanes should flow the same as cars, confusing for cyclists and pedestrians. Too many pedestrian crossings. Need more traffic lights.*
- *No issues or concerns. Cycle more now.*
- *Don't feel safe enough at busy times. Spit you out at junctions where traffic doesn't normally emerge. It's fine if you're an experienced cyclist.*
- *Used to it now so no concerns. Only cycle at weekends when it is quieter. Not keen on signage and no entry boards, tacky and poor looking. Makes it look temporary and unfinished.*
- *Area has progressed with trial. More signs needed, however the boards get in the way as they are too clumpy and leave little space. It's calmed down now, was a nightmare at first. Bus drivers and cyclists know what they are doing now.*
- *Pedestrians walk over lanes and don't care about cyclists. At busy periods, junctions can be too much. Need to be experienced cyclist for this.*
- *Only cycle at weekends or holidays, not cycled during busy periods. Lanes are a little narrow. Boards are an eyesore and all over the place.*
- *Ideal for cyclists.*
- *I am used to it I could do it with my eyes shut. Definitely safer for cyclists now.*
- *Although changeover at Frederick Street is clearly signed, I still feel unsafe crossing at this point. Car users/ busses don't pay enough attention to cyclists here.*
- *Not aware until today that the cycle lane was 2 way. Always travel in one direction only along the street. Will now use it more often in both directions.*
- *No complaints.*

- *Feel safer now than at the beginning, know what I'm doing now and pedestrians are more aware of lanes now.*
- *Use entire length of street and be aware that people walk into cycle lanes because they feel safe in the side of the street without vehicles.*
- *No comments, short of time.*
- *Have to be very careful, aware of public and vehicles crossing here, compared to the relaxed ride elsewhere on the street.*
- *Need more cycle parking bays? This would be easily achieved by removing a couple of car parking spaces at several points in the street and replacing with up to 8 cycle bays, in each case.*
- *Yes, catering for more cyclists. There is no reason for cars in Edinburgh City, except for disabled.*
- *I'm that used to it, I do it without thinking.*
- *No problems.*
- *The change to the other side of the street could be confusing for cyclists who don't know the area.*
- *No complaints now I have worked it out.*
- *Clarity of segregation of cycle and pedestrian areas is difficult to understand. Not quite sure of the 2 way cycle lane, stay in one lane.*
- *Lights system - cars and cycles at the same time is poor.*
- *None.*
- *It can get really busy. It's a little daunting at first. Changeover can be risky.*
- *Changes are good. Very positive way forward for cyclists.*
- *I don't give it much thought, but I'm pleased with the route.*
- *No issues.*
- *I don't even think about it now.*
- *I use it regularly so I'm familiar with it.*
- *Cycle lanes have confused and created dangerous situations for cyclists, pedestrians and motorists.*
- *North Castle Street junction is a little confusing first time round.*
- *Any improvement for cyclists is a step in the right direction.*
- *It has improved.*
- *The 2 way lanes are fine once you get used to them. Initially it was a little confusing, with some cyclists using them and others not.*
- *No issues.*
- *Not enough room/ space. Lanes aren't too busy. The more you use it, the easier it becomes.*
- *No complaints.*
- *No complaints. Family cycle.*
- *The lanes aren't clear enough, pedestrians walk all over them. The junctions are safe enough.*
- *I didn't like it at first but now I use it and I feel more confident.*
- *Too much furniture outside, seating areas take up too much space. Signs are always in the way, must be better signs.*
- *No issues now. Didn't like it at first as hard to get used to. Fine with it now.*

Q12 Do you have any suggestions for improvement on George Street for cyclists?

- *Would be better if cycle lane was on each side, make it safer.*
- *Make it on both sides and pedestrianise whole area.*
- *Clear divisions between pedestrian and cycle path areas. Bright coloured paint and cats eyes (green/ red/ yellow) which cannot be easily missed on the road. Signs to both pedestrians and cyclists to keep to their separate areas. Kerb stones at either side of path so that pedestrians need to change street level when walking to remind them they are out of their area.*
- *More obvious lines between cyclists and pedestrians, they just walk into cycle paths. More cyclists parking and signposted earlier to allow cyclists to factor this parking into their plans. High level and clear visibility bike signs would be good at parking spots all along the street.*
- *Stop pedestrians moving into cycle lanes by keeping separate e.g. barriers. During festival time bars popped up in cycle lane and no re-direction for cyclists, left to navigate around tented bars and stray into traffic which is unsafe.*
- *Cycle lane on both sides.*
- *If it's all pedestrianised then there should be cycle lanes on both sides. It can be quite daunting depending on traffic flow.*
- *The cycle lanes look shabby. They need a bit more thought put in to them and need looked after. They should pedestrianise the whole area as it's really confusing at present.*
- *Keep lanes clean and maintain them. Cycle lane on one side.*
- *Signs stating rules for cycle lanes. Cycle lane all on one side. Keep lanes clean.*
- *No, I think they've done the best they can.*
- *Maybe cycle lanes only with barriers up each side so pedestrians won't use it on both sides of the street, one way up and one way down. This gives clear boundaries between pedestrians and cyclists.*
- *Apart from banning all cars, I think it works as it is.*
- *No, I think they've done the best to accommodate everybody.*
- *No! Don't like the crossover. Cyclists get it but pedestrians don't.*
- *Make sure lanes are properly maintained, including signage. Surfaces become over used.*
- *It's not really the lanes themselves, as they are clear to cyclists. It's other people that are the problem.*
- *More signage and cycle lane all on one side as it's confusing.*
- *Possibly asking cyclist opinions before setting them up.*
- *No, they've done the best they can.*
- *Wider lanes. Clearer signage. Cycle lane all on one side.*
- *Don't know what else they could do.*
- *No, I drive as well so I understand sometimes you need a car but Edinburgh City is no place for it.*
- *No, they've done a good job.*
- *No! Problems with cycle lanes are everywhere. Just need to get on with it.*
- *More signage. Cycle lane down one side. No need for being pedestrianised during winter time as outside restaurants aren't used as much.*
- *Don't know how to solve that problem as it always happens on cycle lanes.*
- *Should have spoken to cyclists before implementing change.*
- *Should have consulted with cyclists prior to starting.*
- *Pedestrianise whole area, no point half and half.*

- *Make it pedestrianised.*
- *Positive cyclists - profile cycling. Links aren't as good as they could be, not as good as other cycle paths.*
- *Maintain lanes and more signage.*
- *More signage and clarification between lanes. Paint them so they are more noticeable.*
- *Cycle lanes need to be colour coded so they are more noticeable to pedestrians.*
- *Make it permanent.*
- *More signage and pedestrianise whole area.*
- *Make it permanent.*
- *More bike parking facilities.*
- *No, it's fine. I'm happy with the changes.*
- *No, I think they've got the balance right.*
- *Not sure, this is the first time I've been by bike but it's been great. We've parked up here for an hour or two.*
- *I cycle everywhere so I would be very happy with no cars in Edinburgh City centre but I realise that doesn't suit everywhere.*
- *No not really.*
- *No, I think they've got a good balance and are not excluding drivers.*
- *None.*
- *No, think they have the right balance.*
- *Car free. I love cycling where there are no cars.*
- *Lane down one side of street and whole area pedestrianised.*
- *More bike parking facilities.*
- *Lanes are too close to restaurants (tents). There is no point in doing something half heartedly, do more research.*
- *Either pedestrianise whole area or don't, it doesn't work. Causes more traffic congestion in other streets, which don't have cycle lanes.*
- *Clearer signage. Whole area pedestrianised. Lane on one side of street and maintain lanes.*
- *More lanes and more noticeable, colour coded. Take away parking, make pavements bigger and have outside seating areas on pavements.*
- *Make it permanent.*
- *The right balance has been reached.*
- *Pedestrians are less careful than drivers.*
- *Even less cars would be great.*
- *Would like to attend focus group and provide feedback.*
- *Flow same as vehicles. Colour coded lanes.*
- *Lanes should flow the same as cars, confusing for cyclists and pedestrians. Too many pedestrian crossings. Need more traffic lights.*
- *Allow cyclists to flow freely down both lanes, or just one lane for cyclists.*
- *Proper signs. More parking facilities for bikes. Bit more space between tents and lanes.*
- *Get rid of temporary fixtures and make cycle lanes permanent. More bike parking facilities.*
- *More parking facilities. Make whole thing pedestrianised. Take away boards, put proper signage in. Paint lanes so they are more noticeable. Everything looks temporary, needs to be done properly.*
- *Looks unfinished. Decide whether or not to make it permanent. It's confusing at the moment.*
- *No, think it's safe for cyclists as it is.*

- *Pedestrians are more of a hindrance than cars. They think because it is car free they can walk along and sometimes you are travelling at speed.*
- *Stop parking at normal lanes at left hand side of road please (cars park here and shouldn't). Roundabouts are dangerous for cyclists. Changing from one side of road to another at Frederick Street.*
- *Cyclists and cyclists who are also car users are 2 different groups, they think differently as to whether the area is safe or not. Cycle lights on traffic lights would be a good idea. Don't go further; half length of street is enough. Park bike and browse in shops.*
- *No, think that it's really good that they're trying to make it cycle friendly.*
- *Not really. Think it should stay like this, no point in going back.*
- *Separate pedestrians/ cyclists by a kerb so that pedestrians are aware of a different 'zone' when they have to step over the kerb/ stone/ line.*
- *Lane wide enough for cyclists. Could give more signage to pedestrians to indicate cycle lane. Run on cycle path - safe, when not on bicycle. Could encourage more people to use lane (in front of car bays) to run along street.*
- *More cycle parking bays along length of street.*
- *Cyclist/ pedestrian clarity. Pedestrians treat entire side of street as their own. Need increased awareness of cyclist usage, for concern of both parties.*
- *No, the balance is good.*
- *No, happy as it is.*
- *Make it completely car free.*
- *No, it's fine as it is.*
- *More bike parking facilities.*
- *Make decision to pedestrianise or not. City isn't built for both.*
- *Take away parking for cars and provide more cycle parking.*
- *More bike parking facilities.*
- *Make it all on one side of the street, too complicated crossing over.*
- *More bike parking facilities.*
- *Simplification with regards to traditional highway code rules.*
- *More designated cycle areas.*
- *Pedestrians are more of a hindrance than cars. Cars know the rules of the road, walkers don't.*
- *No, I think they've got a fair balance.*
- *More parking facilities. Lanes could be maintained more. A little cluttered with signs at each end.*
- *The lanes need to stand out more and the signs get in the way at the end of lanes.*
- *More bike parking facilities. Make lanes more noticeable. Less furniture as it is cluttered.*

Q14a Reasons given for feeling the appearance of George Street has got better

- *Don't know.*
- *Much nicer shopping experience. Would be good in nice weather to sit outside and eat.*
- *Makes it easier to cycle around.*
- *Looks better, cleaner.*
- *More cultured, vibrant and busier.*
- *More people and definite buzz about the area.*
- *Enjoy visiting area more, especially on nice days. Great to be able to sit out.*
- *Whole area is more attractive, better buzz. Spend more time eating/ drinking after work.*
- *Dining facilities and area looks better/ vibrant.*
- *Looks better. Feels easier to visit, less stressful.*
- *Much nicer place to visit. Great to sit out when it is sunny.*
- *Easier to cycle and good cycle routes. More cosmopolitan.*
- *Area looks nicer. Outside areas are good.*
- *Safer to walk about. Relaxed atmosphere.*
- *Used by families more than other areas. Nice to see prams/ buggies moving at a leisurely pace along the street.*
- *Far more cosmopolitan atmosphere. More young people and families around. More walkers and cyclists relaxing in bars/ cafes.*
- *Easier to walk along street. Far more pleasant than Princes Street, too many 'down market' shops there now and too congested.*
- *Like the walk along the street, more relaxed compared to Rose Street or Princes Street.*
- *Like the 'people mix' of the street, nice experience just to walk along. Prefer the buzz as Princes Street and Queen Street are too quiet/ boring.*
- *Easier to walk along with pram/ buggy. Feeling of safety with children, don't watch them as much as they run ahead.*
- *Aware of more space to walk freely, without bumping into other pedestrians.*
- *More relaxed experience of walking along the street, it's quieter.*
- *Far more relaxed, cosmopolitan atmosphere in the street and the city in general.*
- *More people walking and cycling on George Street. More continental atmosphere in the street, people sitting/ eating outside which is nice.*
- *Places to cycle away from trams and buses in Princes Street. Feel more relaxed as a cyclist on George Street.*
- *I like safe cycling, so the one way traffic system has improved my cycle experience in this area of the city.*
- *One way traffic system has made the street much more pedestrian friendly; don't check each way anymore to see what traffic is coming my way. Also less fumes/ pollution.*
- *Kerb stones no longer thought about. Just move along the road freely. Aware of more families walking in the street with prams, this is nice.*
- *Feel more relaxed walking from one end of the street to the other. Less noise from buses and cars, aware of cleaner air.*
- *Can be dropped off/ picked up by friends in a car but then feel relaxed walking along the street. Don't need to walk far with high heels on at night. Quality of the restaurants/ bars is good but prices are high.*

- *Pedestrian friendly. Leave work for breaks and enjoy standing in the street and watching passers-by. They are more relaxed, not dodging traffic or running across roads as in the past.*
- *Paving improved! Pavement itself (surface) unchanged but feeling of more space to walk/ move around without trying to avoid prams/ wheelchairs.*
- *Not as much car pollution. Used to be busy but notice the difference, much quieter now.*
- *Can spend whole day in one street shopping, when visiting bar/ restaurants. Don't need to be squashed on Princes Street or shout to friends above the traffic noise elsewhere in the city.*
- *Looks nicer and is quieter. Nice feeling. Relaxing to walk.*
- *Looks a lot nicer, cosmopolitan.*
- *Looks better, more up to date. Nicer place to visit.*
- *More places to sit and eat.*
- *Easier to visit, not as congested.*
- *Availability to sit outside. Nicer.*
- *Much nicer place to go for drinks/ dinner.*
- *Looks better, less stressful and got a buzz about it.*
- *Looks a lot better, come here more now for food and drink.*
- *Love the boards that they've put up. Much better feel to the area, it is busier.*
- *Looks better although restaurants outside could be better looking.*
- *Easier to cycle, not as much traffic. Good having cycle lanes.*
- *Great when weather is good, more cultured. Love street information and not as much traffic.*
- *Changes are really good. Great being able to sit outside. Less traffic. Busier, nicer and vibrant.*
- *Cleaner, more information. Pleasant experience.*
- *There is a buzz about it, especially when weather is good. More attractive.*
- *Nicer, cleaner and looks better. You want to spend more time here.*
- *Safer, less traffic. Information boards are really good.*
- *Better place to come to, more to do/ look at.*
- *Nicer, busier, more atmosphere/ buzz about area.*
- *More buzz, better for young people.*
- *Feels more cosmopolitan, trendy.*
- *Looks cleaner, better to walk about. Not as much traffic.*
- *More people, more buzz.*
- *More of a buzz about it. Nicer place to spend time.*
- *Make it look more permanent.*
- *A lot nicer, better place to come and visit.*
- *Better buzz, busier.*
- *Looks nicer, better feel and vibe about the area.*
- *Easier to visit, better facilities. Cycle lanes good.*
- *Whole place looks and feels better.*
- *Nicer, cleaner and great being able to sit outside in good weather.*
- *More socialising.*
- *Looks better, it's colourful and bright instead of dull and dreary.*
- *I have noticed a big difference since my last visit. The place looks fab and there's a buzz about the area.*

- *I can see an improvement, there's a more relaxed cultured atmosphere.*
- *It looks cleaner. The boards with information and history are a great idea.*
- *I have always loved George Street, it's much better than Princes Street. It's cleaner, busier and there's more to see and do.*
- *It's busier with more people walking. There's more stuff to look at and to do. I'm not too keen on cycle lane being on one side.*
- *It definitely looks better. Cycle lanes are a good addition. Makes it easier to travel but could still be improved.*
- *The atmosphere and buzz. It's cleaner. If the above changes were made it would be a lot better.*
- *Great atmosphere. It's bustling with people and buskers/ music. It's vibrant and a great area.*
- *It's nice and more attractive/ pleasant. It's great to sit outside and enjoy food and wine.*
- *It was always nice but parking is easier now. It feels safer and the whole area looks great with information, history boards and plants.*
- *Not sure it just seems better. It's less stressful and there's more buzz.*
- *I don't know. It's nicer and cleaner. The pop-up restaurants are great.*
- *I can notice a difference. The area gets better every time I visit.*
- *Its appearance has definitely improved. There's more of an atmosphere and it's more relaxing.*
- *It's less hassle. It's better without so much traffic. There's a great atmosphere - it's charming and alive.*
- *More to do and look at. Able to sit outside in restaurants in good weather.*
- *Place was looking run down before. It's brought life back into it again.*
- *Cleaner/ nicer and more attractive.*
- *Lovely/ attractive and better atmosphere.*
- *Vibrant scenery with flowers and boards.*
- *More of a buzz. Cycle lanes are good but could be better.*
- *More enjoyable. I like the history/ information boards.*
- *Makes you want to come and sit and relax.*
- *More buzz and more to see and do.*
- *Looks better.*
- *Area looks nicer. However, cyclists show no consideration for pedestrians.*
- *More festive, less boring looking.*
- *Too many cars in the city, it's gridlocked. Nice to walk about without the fear of being run over.*
- *From an aesthetic point of view, it looks great.*
- *It looks great and has a relaxed atmosphere. A festival feeling.*
- *More accessible to everybody. Good bike parks and looks great.*
- *Much more accessible and easy to move around.*
- *More space.*
- *Looks more spacious.*
- *Much better for dining and shopping.*
- *It looks nicer as it is now. It is easier to get about.*
- *It looks great and I love sitting outside.*
- *More space to walk about.*
- *Just looks better.*

- *No need for cars in the city centre. Public transport is excellent in Edinburgh.*
- *Feels much more cosmopolitan.*
- *Feels a nice place to be, more relaxed atmosphere.*
- *Cycle lanes are welcomed everywhere.*
- *It looks better.*
- *It's more like Rose Street now and the shelters are great. Creates a great atmosphere.*
- *Just looks nicer.*
- *I like the feel and the atmosphere of the place. I was here during the festival and I loved it here.*
- *Just looks better.*
- *Just looks lovely now.*
- *Much easier to get about.*
- *Just like the look of it.*
- *Less cluttered looking.*
- *More cosmopolitan looking.*
- *A lot more space to move about.*
- *More relaxed and not expecting cars to back out on you from the middle of the street.*
- *Just looks a lot nicer.*
- *I don't drive so I'm not bothered, it looks great though. A few people have been moaning about it but I think it looks much better.*
- *Nice feel to the place.*
- *More accessible.*
- *Good to visit. A lot less traffic and more relaxed atmosphere.*
- *Much better for getting around on foot. Don't know how drivers feel though.*
- *I think cars should be barred from the city centre, unless for disabled or deliveries. Public transport is excellent here so heading in the right direction.*
- *Easy to get up and down now.*
- *I love the conservatories outside, especially in this rain.*
- *Just love it. The outside dining is perfect for watching the world go by. Hopefully it's warm enough in winter.*
- *Definitely looks better. Parking anywhere in Edinburgh is a hassle, so it makes no difference here.*
- *Looks great and more pleasant to walk about, especially at weekends when it is so busy we need the space.*
- *More choice and I like sitting outside.*
- *Improved for walking, shopping and looks better.*
- *Looks better and easier to get around.*
- *It looks nothing like the picture, much more modern.*
- *Better for walking about.*
- *More spacious.*
- *Great for tourists and a day out.*
- *More going on, a lot more space.*
- *Eat out areas look good and information/ history boards are a nice touch.*
- *Busier and more of a buzz. Easier to cycle.*
- *Area looks more up to date. It looked old and boring before.*
- *Couldn't offer anything further.*

- *Appearance is better and calmer.*
- *Area is more stylish, attractive and cultured.*
- *More to look at, more cultured and vibrant. Nice atmosphere.*
- *Nice place to visit, friendly and buzzing. Better relaxed atmosphere.*
- *More vibrant and cultured. Flowers all along are great.*
- *You can see the difference. It looks cleaner and more to see and do.*
- *Not sure, it just is. Visit more now for social reasons.*
- *Cleaner and more cultured. Looks great. Not as manic with traffic now.*
- *Visit a lot more now. The place was looking tired/ dated. A lot more buzz/ excitement about it now.*
- *Calmer. More appealing, vibrant.*
- *It looks better but not happy with the cycle lanes.*
- *More relaxing/ calmer. Fresh/ vibrant place to visit now.*
- *Looks cleaner. Can tell effort has been put in to make it look nicer.*
- *Has needed this for ages. Makes the place look more interesting, looks alive again.*
- *I spend more time here after work now. Just seems more inviting.*
- *Fresh, nicer and interesting.*
- *More to look at. Cultured. Nice to be able to sit out if you want.*
- *Better place to visit, more up to date looking.*
- *Looks fantastic, more upmarket looking.*
- *Don't know, can see a difference though.*
- *Cleaner. Plants and boards are good. Looks great.*
- *It definitely looks better and has created a good atmosphere at festival time.*
- *Feels safer and less congested.*
- *Just looks so much more spacious.*
- *Spacious. More cosmopolitan. Ideal meeting place. Love the glass houses, watching the world go by.*
- *I live relatively close by so the less cars in the city the better. Makes for a more pleasant atmosphere.*
- *Good feel to it. It is very pleasant to walk about in, especially on nice days like these.*
- *Just looks better.*
- *Room for more people.*
- *Better feel to it and easy to cross roads etc.*
- *I've always liked George Street but now it feels much more spacious. There's no need for cars in an area like this.*
- *Very modern and up to date looking.*
- *Cleaner, stylish looking.*
- *I like the glass restaurants.*
- *Very modern looking, a welcoming feel.*
- *Think it looks better with all the cars gone.*
- *Looks less grey, brightens it up.*
- *Looks great, better without cars. There are plenty of car parks.*
- *Better, I like it and shops aren't too expensive.*
- *Cultured, vibrant. More of a buzz about the place.*
- *Relaxing, calmer and vibrant.*
- *Has improved look of area. More cultured, cosmopolitan.*

- *Such a big difference, it looks fabulous. Much better to go shopping, want to spend more time here.*
- *Better atmosphere, great during festival time as whole place is bouncing.*
- *More attractive looking, cleaner, inviting.*
- *Looks good. Ability to sit outside and relax. Very chilling.*
- *Looks better, more to look at. Plants/ boards make it greener and more interesting.*
- *Nicer experience, not so much traffic. Pop up restaurants, good to be able to sit and watch people.*
- *Looks great. Plants and boards make it more scenic.*
- *Calmer, not as much traffic. Less stress although causes lots of chaos elsewhere.*
- *Feel safer cycling and feel there are many more cyclists now.*
- *Safer to cycle.*
- *Very pleasant coming here now. Often meet friends here now as it's more convenient for us all.*
- *Easier to move through.*
- *Looks more upmarket.*
- *Great, love the atmosphere.*
- *I would never bring my car to Edinburgh, there is no need and it feels good not dodging traffic.*
- *Looks nicer, more room to walk.*
- *No need for cars in Edinburgh city centre. Public transport is second to none.*
- *More spacious.*
- *Good atmosphere especially on a nice day.*
- *I like the wider pavements.*
- *Looks much better, more space and good atmosphere.*
- *I'm quite happy you can't park here. I like the feel of it and there is plenty of parking elsewhere, albeit too expensive.*
- *On a nice day it's great, I was here at the festival and it's good. You can't feel the change on a day like this.*
- *Easy to ride and park. Just much easier.*
- *Much more space and less congested.*
- *Fewer cars. Public transport is excellent in Edinburgh. There is no reason for cars, unless you are disabled.*
- *Looks much better. People are not all fighting for spaces and not congested with cars.*
- *Not as hectic.*
- *Just looks much better, less cluttered.*
- *Love the glasshouses, even in this weather.*
- *Looks great.*
- *More spacious.*
- *Information/ history boards are a great thing. Plants are ok, although are looking shabby now.*
- *Looks great. The dome is fantastic. More effort is put into the area.*
- *Area looks good, especially at night time. Feel safer walking through.*
- *Doesn't look as dull.*
- *Better atmosphere. Great at night when you can spill out onto the roads and not have to worry about traffic.*

- *So different from a couple of months ago. More to see and much calmer/ relaxed.*
- *Appearance it a lot better.*
- *Looks good just now with all the lights, very festive. Still lacks atmosphere though.*
- *Better atmosphere. Nicer to look at.*
- *More attractive, especially just now - very festive.*
- *Cleaner. Not so many people drive here now so it's easier to get parked.*
- *Really did need something done, it was dull and boring. Now livelier looking and attractive now.*
- *Much better place to go shopping/ dining. Not so good for traffic jams though.*
- *Looks good, but still lacks something. Don't know what though.*
- *Visit more as it's more relaxing and peaceful without horns beeping, angry drivers.*
- *Always loved George Street but improvements have made it look even better.*
- *Cleaner. More things to look at. Nice to have facility to sit outside.*
- *Although it looks better, could have spent a little more money on it. Looks dated and shabby.*
- *Was great when it first started. It will be fantastic when summer comes again.*
- *Getting there but still needs some work.*
- *Can see changes, they are trying. It was really good during the summer but now seems to be like it was before.*
- *More attractive. Great place for socialising.*
- *More of a buzz about the place, safer to walk about.*
- *Looks great.*
- *Much more attractive looking, nice to see more greenery.*
- *Looks better.*
- *Can see what they're trying to achieve and reasons why but they have a long way to go.*
- *Looks cultured/ vibrant. More European.*
- *More attractive than last time. Festive, more calm as not so much traffic now.*
- *Place is fantastic looking. It needed refreshed as it was dull and boring looking. Not good for businesses as they can't get deliveries as easily.*
- *Big difference since last year. Only problem is it took forever to get here due to traffic.*
- *Fantastic place to visit. Can see the difference in the street.*
- *Appearance is much better; tents aren't the best as they look temporary. Glass structures would be better.*
- *Vibrant, cultured and more European.*
- *Looks better, more effort put into it.*
- *More of an atmosphere instead of being dreary.*
- *Looks better. Could be maintained better though.*
- *Looks good, can see a big difference. Don't know if motorists would agree though.*
- *More attractive. It was nice at the end of summer, vibrant.*
- *Always a nice place to visit, but trees and information boards make it look better.*
- *Looks better and user friendly.*
- *More effort has been put in to make it look good.*
- *Looks better.*
- *More relaxed atmosphere.*
- *Much better now, nicer place to visit.*
- *Greater sense of space.*
- *Accessibility is better.*

- *More attractive.*
- *More relaxed and friendlier, particularly when weather is better.*
- *Calmer, great for cyclists (husband cycles).*
- *Looks better.*
- *Great outdoor seating. Can relax and watch world go by. Good to attract tourists.*
- *Looks good, but some outside seating looks poor. Information boards and greenery are good.*
- *Looks more attractive, particularly during festival times.*
- *Changes are marvellous.*
- *Better place to walk and cycle. Less stressful and more relaxing.*
- *Looks better, less boring.*
- *Great idea, lovely place to visit.*
- *Ability to sit outside is good, although not used very much at the moment. Will be excellent in the spring/ summer.*
- *Done very well with improvements.*
- *Vibrant. Outside seating is great addition. More to look at.*
- *Good idea. No real impact on work.*
- *Great for tourists.*
- *Less traffic. More places to sit outside, good in summer.*
- *Looks good. Less traffic and feels safer.*
- *Caters for everyone and great for tourism.*
- *Looks great. Can relax, drink and eat whilst watching people.*
- *Easier to cycle.*
- *Much better for pedestrians and cyclists. Option to eat outside is good. Not as much parking though.*
- *Better for tourists, more informative. Information about history of George Street and buildings is excellent. Will be great when weather improves.*
- *Better for cyclists. More to see and more options. Is very cosmopolitan.*
- *More variety of things to do. Looks more attractive.*
- *Great big difference. Lots of praise from customers.*
- *More choices. Improved look of street. Not getting full benefit of changes though.*
- *More cosmopolitan. Great for tourists.*
- *Looks good.*
- *Looks better. Ability to sit outside in summer will be good.*
- *More options. History/ information boards are worth reading. Plant pots are a nice touch.*
- *More cycle/ pedestrian friendly.*
- *Big improvement to George Street.*
- *Much better. Looks good and more options.*
- *Plant pots and information boards are a nice touch.*
- *George Street was dull and tired looking. This has brought it back to life again.*
- *Car free. Business is good. Less stressful. Long way to go to make it European though.*
- *Looks a little better. Long way to go though.*
- *Cycle lanes and less traffic.*
- *More European looking. It is livelier and fresher. More for tourists to see/ look at.*
- *Improved for cyclists, I now cycle more as I know where I'm going.*
- *Looks fabulous.*

- *Much calmer and relaxed. Can walk about more freely. Great for tourists.*
- *More to look at. Great for tourists. Information boards are a great idea.*
- *Street looks better, more effort made to it. However, taxis can't always drop you where you want to go or pick you up.*
- *Improving every time I come. Not had the full benefits of outside restaurants yet.*
- *Calmer, not as much traffic. Can see it being a good place to be during the summer.*
- *Less busy, especially during tourist season. However there's too much congestion for driving.*
- *More cosmopolitan.*
- *Looks more vibrant. More to look at e.g. information boards. Nice place to visit.*
- *It looks better but more could be done. Is not finished yet.*
- *Love the outside cafes and restaurants, great for people watching.*
- *Definitely nicer to look at and healthier to be in.*
- *Fewer cars, more suited to walking about.*
- *It's great, good atmosphere. Well laid out.*
- *Better for moving around, my wife is disabled and the pavements are better.*
- *Looks less busy, more relaxing.*
- *Generally a nice place to visit. Just pleasant to walk about.*
- *Not so cluttered looking.*
- *Easier to get about, a lot less traffic.*
- *A great place to come at night. I think it looks great at night time, especially on weekends.*
- *Less busy, as a cyclist you know where the traffic is coming from.*
- *Room for everybody. It's clearly posted for cycling which is the way forward.*
- *Like the idea of less traffic however a lot of rubbish has not been collected or gathered up.*
- *More space for walking but there's too much congestion and there is a problem with rubbish uplifts. Cafes and bars using other people's bins are causing problems.*
- *Looks better, easier to get around. Don't think it's as busy since the changes.*
- *I like the look of it; I don't drive so I don't care about car parking.*
- *Looks better, easier to get around.*
- *It's now a great meeting place as you feel as though you're sitting outside but sheltered against the weather.*
- *More cosmopolitan, it suits Edinburgh although I have never seen anybody in the glass cafes.*
- *A lot less congested and safer. Making full use of the street.*
- *More spacious, safer to walk about in.*
- *Prefer it. Transport system is great in Edinburgh, really not much need for cars unless you are disabled.*
- *I like the glass bars, especially during the festival or on nice days.*
- *Always liked here anyway, it's more spacious I suppose.*
- *Prefer pedestrian areas, more spacious. It feels safer and looks better.*
- *There's a lot less traffic and cycle lanes are more defined.*
- *Cycling in general is improving all the time.*
- *Less traffic, easier to get about.*
- *Cleaner, fresher environment. Safer to walk in relaxed manner/ browse.*
- *Walking and cycling is so much quieter now. A more pleasurable experience.*

- *More footfall! People would search it out and use it if they can walk in a safe area and relax in "clean" air.*
- *More relaxed atmosphere to walk around a pleasant area of the city centre (as tourist).*
- *Less busy. A nicer place to walk (compared to Princess Street).*
- *Looks nicer with more pedestrians rather than cars. Cleaner air quality.*
- *More relaxed atmosphere.*
- *Less traffic, more people. Safer environment for them to relax and walk around, especially families.*
- *Like the new outdoor cafes.*
- *Like the new atmosphere the street cafes give to the area.*
- *Less traffic, more space.*
- *I love the look of it. It reminds me of being on holiday.*
- *Much easier to get about, especially with a pram.*
- *Looks better, more roomy and less congested looking.*
- *Much less traffic, more room for cyclists.*
- *More spacious, less cluttered looking.*
- *Wider, safer feeling.*
- *More pleasant to shop in. Relaxed, not so busy with traffic.*
- *Just more pleasant, easier to walk about.*
- *You can walk more freely, more places to stop and sit.*
- *Less traffic. I never use the cafes here so it doesn't affect me. They're too expensive.*
- *More cosmopolitan that goes with the type of shops available here.*
- *I don't know how well the cafes are used in the winter but they're great for the festival.*
- *Looks nicer. Sometimes you just need to bring the car and the parking is limited.*
- *Easier for cyclists, more space.*
- *Definitely looks better, not so congested.*
- *Improved for walking and night life. You don't need a car in Edinburgh.*
- *Just very pleasant to visit. Clean, looks good.*
- *More spacious, great for walking about.*
- *More relaxing, more in tune with Edinburgh and how I think of it.*
- *Less traffic.*
- *A great place to socialise, although it always was. It now has a more European feel to it, especially in summertime.*
- *More to visit and not dense with traffic.*
- *More modern looking and less busy.*
- *Less traffic and pleasant to sit in, even in bad weather.*
- *It's not as busy looking, more pedestrian friendly I would say.*
- *Looks double in size, you can appreciate how wide it is.*
- *Less traffic and more pleasant to visit.*
- *More room and feels safer.*
- *Safer for cyclists.*
- *Better all round for pedestrians and cyclists. Plenty of public transport in the city.*
- *Looks nicer for tourists, especially during the festival.*
- *It's improved for pedestrians, but if I had brought the car I don't know if I would be saying that.*
- *Less cluttered looking.*

- *A nice place to spend hours and great for socialising.*
- *The fewer cars in the city the better. Have a good public transport network.*
- *More pavement space, nice to move about in.*
- *Hard to say today, but in the summer it's great. More continental looking.*
- *Looks better. Calmer and more chilled.*
- *More attractive and friendlier. More to look at, good for tourists.*
- *Looks fantastic and friendlier.*
- *It's a good start but I think they have some way to go to really achieve what they want.*
- *Looks better. Easier to walk about. Calmer and more cosmopolitan.*
- *Happy with changes, whole concept is a positive idea.*
- *Trying to achieve cafe culture but done it at wrong time. No point during winter, you can't get the benefits. Reserve opinion until Summer.*
- *Greenery, plants are good. Like information boards.*
- *Like greenery and cafe culture idea, but tents look shabby and uninviting.*
- *More thought put into it, like the concept of it. Looking forward to seeing what it's like in the summer.*
- *Idea is there but long way to go. More greenery.*
- *Area looks more attractive, was very boring before.*
- *A lot more spacious.*
- *Easier to get about and more relaxed.*
- *Very spacious.*
- *A nice street to be in, good for shopping and socialising.*
- *Looks a lot cleaner.*
- *Relaxing/ calmer. More to look at. Makes it more interesting.*
- *More European and good for tourists. More choice, user friendly.*
- *Easier to walk about. Peaceful/ calmer. Flowers and information boards good touch. Ability to sit outside and enjoy the sunshine.*
- *Looks nicer and calmer. Better place to visit.*
- *Is okay, can see reasons for it. Didn't get benefit during the winter. Hopefully people will make use of it now.*
- *Moving forward with the times. More cosmopolitan. Good cafe culture.*
- *More pedestrian friendly. Able to sit out and enjoy the sunshine.*
- *Looks good, friendlier and inviting.*
- *A pleasure to be in. Feels good and easier to get around.*
- *Looks great, especially on a day like today as everybody's out.*
- *More spacious, better for me because I'm disabled.*
- *For the amount of people here, you would need that space.*
- *Much more space, pleasant to be in.*
- *Less congested looking.*
- *More space for pedestrians. Nicely set out.*
- *Much more attractive, fitting for Edinburgh.*
- *Just much more pleasant to go through.*
- *Less congested.*
- *I love the glass houses, something different.*
- *Easier to get by.*
- *Easier to get about and a safer environment.*

- *More relaxed and a nicer place to visit.*
- *Better looking than before.*
- *Better atmosphere now.*
- *Obvious improvement visually.*
- *A more relaxed feel to it.*
- *Much better, less cluttered looking.*
- *Easier to get about, more spacious.*
- *Nicer feel to it. On a good day, it's ideal to just sit here watching the world go by. No point in that with heavy traffic.*
- *Safer to walk about in, especially when it is this busy.*
- *From the picture, it's a big improvement. Just a nice street to visit.*
- *More cycling and pedestrian friendly.*
- *Looks more spacious and less cluttered.*
- *Easier to get around.*
- *More pleasant to sit around in.*
- *Easier to get about now.*
- *Wider looking and more space.*
- *Looks nicer and has a safer feel to it.*
- *Good feel to it. Great atmosphere.*
- *Looks very good. Nice place to spend the day.*
- *Looks less cluttered.*
- *Looks better but not as convenient when you need to bring the car.*
- *More spacious and cosmopolitan looking. Creates a good, cafe culture.*
- *More pleasant to visit on days like these. I used to go to Rose Street but prefer here now.*
- *Good vibe to it and less cluttered with cars.*
- *A nice atmosphere.*
- *More spacious.*
- *Nice place for sitting in and staying a while.*
- *Less traffic and pollution.*
- *Looks better and cleaner.*
- *Plants/ greenery/ boards are good. User friendly.*
- *Looks better and more European.*
- *Nicer and feels safer to walk around.*
- *Looks better. Flowers are nice.*
- *Lot more choice and pedestrian friendly.*
- *Better to cycle, more friendly. Looks better.*
- *Relaxing and less stressful. Looks better.*
- *More attractive. More cosmopolitan. Good cafe culture.*
- *Place looks better and pedestrian friendly.*
- *Better atmosphere. Looks good and choicer.*
- *Looks better.*
- *Positive for cyclists. More enjoyable now.*
- *Not keen on tents as they take up too much space. Do like the changes though.*
- *Good changes. More attractive and nice greenery.*
- *Can see benefits of cafe culture and more chilled. Relaxing atmosphere.*
- *Seems more vibrant/ pretty.*

- *More attractive and laid back. Easier to walk about.*
- *Better atmosphere. More options and friendlier.*
- *Definitely has a better feel and look to the street. Calmer and better atmosphere.*
- *Looks good. Like the fact you can sit outside in the sunshine after work.*
- *User friendly and more vibrant. Good atmosphere and more chilled. Cafe culture.*
- *Looks more European and user friendly.*
- *Looks better, was very dated and boring before. City Centre needs this, particularly during festival period.*
- *Looks better and safer to walk in.*
- *Nice to see changes being used, a lot more cyclists and customers eating outside. Better atmosphere.*
- *More cosmopolitan, moving with the times.*
- *More attractive. Better place to visit.*
- *Good for summer, can sit in sun and relax.*
- *Outside seating is great, can watch what's going on. Less stressful with limited traffic.*
- *Can see benefits now outside areas are being used. More options and more chilled.*
- *More relaxing and more to look at.*
- *Looks less congested.*
- *A lot less traffic about. Feels safer.*
- *Safer and more pleasant to be in. Easier for people with prams etc.*
- *Safer for everybody.*
- *More spacious and great to spend time in.*
- *Just looks better. Nice eating areas.*
- *Better without all the traffic.*
- *More continental.*
- *Fewer cars.*
- *More spacious.*
- *Easier to get about.*
- *Good place to watch the world go by.*
- *More space and pleasant to sit in.*
- *A nicer place to shop because of less traffic.*
- *Easier to get about and more upmarket.*
- *Looks better and people spend more time here, especially on good days.*
- *Very much improved. Less congested so healthier and more pleasant to sit in.*
- *Pedestrianised makes me feel safe/ relaxed. Like wide street space, easy to move around and pass people safely.*
- *Like atmosphere in street. Like ability to browse/ window shop in an upmarket area, without the hustle and bustle of Princes Street feeling.*
- *More relaxed experience taking pram into street. It's quieter.*
- *More space for families with children in prams.*
- *More relaxed in street while using pram. Can put child out of pram on occasions and don't feel unsafe doing so.*
- *Far easier to travel length of George Street and much faster.*
- *Less likely to get hassle from pedestrians. They respect the cyclist due to road markings.*
- *Easier to move around street, from one end to the other. More space available, less crowded than other areas, such as Princes Street.*

- *More relaxed atmosphere. Not conscious of looking both ways as often when crossing over road/ junctions. Child friendly.*
- *Would appear to be more pedestrian orientated now, compared to in the past. Good for walking and relaxing in the area.*
- *Looks less busy than in the past, more space for pedestrians and less for vehicles. This seems to be a good idea.*
- *Like new street layout with cafes, very continental atmosphere.*
- *Quieter area to wander along at our own pace.*
- *Improved since last visit. Now aware of clear diversions in street for pedestrians/ cyclists and aware of feeling more relaxed on this side of the street.*
- *Quieter, safer street to walk along since last visit. Able to relax, admire the skyline more and take in the ambient nature of the area.*
- *Pedestrian and people friendly feeling in street now. Nice, light and spacious feel to it.*
- *Quiet area compared to Princes Street. Like this area to walk along, don't bump into people. There is more space.*
- *Improved in summer, especially at book festival time. Far more relaxed atmosphere in the area, especially in the evenings.*
- *Easier to walk about. Calmer. Looks fresher and more up to date, rather than boring.*
- *More European.*
- *Looks more attractive.*
- *Starting to see benefit now it's summer. Seemed a waste in winter, outside areas weren't used.*
- *Moving forward with changing times. Looks better and more inviting. Good for tourists.*
- *Looks nicer and cleaner.*
- *Changes are positive, need to move forward. Place looks more cosmopolitan and is much better to walk about in.*
- *More attractive. More to see and more options.*
- *Plants/ information boards good for tourists, more effort. Looks more European and cafe culture.*
- *More spacious and becoming.*
- *Nicer, more relaxed place to spend time since my last visit to Edinburgh (before current changes).*
- *Nice area which represents Edinburgh as a historical city very well.*
- *Much quieter, calmer street than in the past. Much more pleasant place to walk/ browse.*
- *Nice, relaxed atmosphere in area.*
- *Much quieter area and a much safer area to cycle than alternative routes such as Princes Street, which is chaotic.*
- *Much nicer place to cycle, run and visit than in the past.*
- *Much more relaxed environment since pedestrianised on one side of street.*
- *Much nicer environment along the length of the street. Feels quieter, even when busy.*
- *Like layout of street. Much more pleasant shopping, walking and browsing experience than in the past.*
- *Much more relaxed place to walk/ visit especially compared to the buzz of Princes Street.*
- *Less traffic, so there is more space for cyclists and pedestrians to relax and enjoy using the street.*
- *Like the ambience of the street. A much more relaxed and pleasant place to be now since pedestrianised at one end.*

- *Standard of outlets - keep upmarket. More shops rather than offices now - gives a consumer friendly feel rather than a business orientated feel to the area.*
- *More relaxed and friendly environment. More continental feel about street - like it a lot.*
- *Much quieter, safer place to ride to work. Encourages increased use of bicycle.*
- *Much more pleasant and safer experience using area to travel to/ from work daily. Encourages me to cycle in city centre and leave car at home.*
- *Like the new layout, much safer and more relaxing space to spend time in the city centre.*
- *Less cluttered, safer, nicer environment, especially on nice days like this.*
- *You can come here for a day out now. Much less fumes when you're sitting out in the sunshine.*
- *A great atmosphere on days like this, which is spoiled when there is too many cars.*
- *Much more spacious.*
- *Better to visit. Safer to walk about.*
- *Just looks better overall.*
- *More continental and pleasant looking.*
- *Easy to walk around in.*
- *More pleasant to look at and be in.*
- *Looks a lot better and less pollution.*
- *More rooms in general and much less congested.*
- *More pleasant to visit.*
- *A nicer feel to it.*
- *Much easier to access the shops.*
- *Certainly looks better, but I don't live here so I don't know how inconvenient it is.*
- *More upmarket feel to it.*
- *Anything that makes cycling easier and safer is welcome.*
- *Feels safer.*
- *Less cluttered.*
- *More spacious.*
- *It's like a different place. Definitely enhanced the street.*
- *Much more spacious. Makes it enjoyable to sit in.*
- *A lot better, free to move around.*
- *More spacious.*
- *A pleasant street to visit and relax. Can spend much more time here now.*
- *More cafe culture.*
- *Easier to get about and more spacious for cyclists.*
- *Better to sit around and people watch.*
- *Generally looks better and safer to visit.*
- *I know for some it's a nuisance not bringing the car, but it's much better for everyone else.*
- *We don't need all these cars; the transport system is more than adequate.*
- *Better to visit, especially on days like these. This is when you really appreciate it.*
- *Lets people spend more time here and enjoy it.*
- *Much better to be in, not so many car fumes.*
- *A lot more spacious and great seating areas.*
- *Much better, not so congested looking.*
- *Easier to move around in.*
- *Lets you appreciate the street more and easier to get around.*

- *Put too much better use.*
- *Looks more spacious.*
- *Looks better.*
- *Like being able to sit outside.*
- *Greener, calmer. The ability to sit out in the sun is great.*
- *User friendly and good for tourism industry.*
- *Cyclists and pedestrian friendly.*
- *Nicer place to come to every day - calmer. Sense of culture now, more European.*
- *Good in parts. It's always been a good street.*
- *Friendlier - better for pedestrians and tourists as there is more to see.*
- *Looks better and have more choice.*
- *Quieter and better ambience.*
- *Quieter and peaceful.*
- *More attractive. Greenery. More tourist friendly.*
- *Like Dobbies Garden seating area and information boards. Much calmer and chilled.*
- *Has gone down well. Wasn't sure at first but can now see benefits.*
- *More attractive.*
- *More pedestrian space, less traffic and quieter. Step in the right direction.*
- *It's the first time I've noticed the benefits of the changes - much more enjoyable.*
- *Pedestrian friendly, more space and greener.*
- *More pedestrianised and cafe culture is great. Greenery and outside seating area.*
- *More cyclist friendly.*
- *Quieter and easier to walk about.*
- *Calmer, less congested. Environmentally friendly also.*
- *More greenery.*
- *More attractive.*
- *Better for tourists, user friendly and looks nicer.*
- *Looks better and more of an atmosphere.*
- *Calmer, better atmosphere. More choice.*
- *Really like the concept of what they are trying to do and definitely all for it.*
- *I cycle more now.*
- *More user friendly. Better for tourists. Like the greenery.*
- *Very positive way forward for cyclists.*
- *More relaxing. Easier to walk about. Friendlier.*
- *Better to sit around.*
- *More pleasant to be in.*
- *Less traffic.*
- *I love coming here just to do nothing.*
- *More spacious.*
- *More spacious.*
- *Easier to get about.*
- *More pleasant to visit.*
- *More spacious.*
- *Looked far too congested before.*
- *Easier to move around in.*
- *More spacious.*

- *A better atmosphere, pleasant to be in.*
- *Much better, especially on days like these, when you just want to lounge about.*
- *Easier to get around.*
- *Less traffic.*
- *Just looked totally full of cars before. Much better now.*
- *Looks much better and better to move around in.*
- *Looks better and more room to move about.*
- *Easier to get about.*
- *Less congested.*
- *Good atmosphere.*
- *Good atmosphere.*
- *Just generally better.*
- *Easier to get about.*
- *More spacious.*
- *Much better without traffic.*
- *More spacious.*
- *Much safer looking and a nice atmosphere.*
- *Looks easier to get about now.*
- *Less polluted.*
- *Pleasant to be in.*
- *Easier to get about.*
- *Nice ambience.*
- *Think it looks much better and easier for getting around.*
- *Easier to get about. Less traffic.*
- *Better for cyclists - easier to get about.*
- *Easier to get around. Better for visiting.*
- *More cosmopolitan.*
- *Generally cleaner looking.*
- *More accessible and cafes on street is good.*
- *Better for pedestrians and cyclists. Attractive with outside cafes.*
- *Safer for cyclists and pedestrians.*
- *Better for cyclists. Fewer cars.*
- *Less traffic and better quality shops.*
- *More European with street cafes.*
- *Pedestrian areas. Flower displays. Cafe culture area - quite European.*
- *Less traffic. Feels safer.*
- *More pleasant to walk down.*
- *Less traffic. Better for pedestrians.*
- *More cafes and pedestrian culture, but not enough.*
- *More of a buzz about it. Good shops.*
- *Fewer cars.*
- *Much less traffic and outside eating.*
- *Less congested.*
- *Less congested. Easier for pedestrians.*
- *More continental. Street cafes. Like flowers. Less traffic.*
- *Fewer cars. More decent shops. Cafe culture.*

- *Made it easily accessible.*
- *Looks more attractive. There is a buzz about the area now.*
- *Easier for pedestrians and less traffic.*
- *Looks better. Better access for pedestrians.*
- *Improved for pedestrians.*
- *Makes cycling safer.*
- *Less congested.*
- *The idea of it is good. For tourists it's good, plenty of places to visit.*
- *More seating. Looks better without cars.*
- *I think everybody knows not to bring your car to Edinburgh. It looks better.*
- *More enjoyable to spend time here, especially on the only nice day of the year.*
- *I think fewer cars in the centre can only be a good thing for the environment.*
- *Easier for cyclists but still considering the need for some cars.*
- *Easier for walking about and safer.*
- *Better without all the cars. Easier to walk about.*
- *Better atmosphere. Continental feel.*
- *In the evenings, it's a pleasure to sit in a glasshouse watching the world go by.*
- *Better for cyclists.*
- *The ability to sit outside and enjoy the weather is great.*
- *Vibrant/ alive looking. Like the greenery. Needs more flowers though.*
- *Greener, friendlier and livelier.*
- *Better atmosphere. More relaxing. Great during summer.*
- *Looks good. Like the greenery/ flowers.*
- *Looks greener and friendlier. More to see and more options.*
- *User and cycle friendly. Looks more European.*
- *It's great at the moment, the place is buzzing.*
- *It's friendlier, more inviting and less boring.*
- *It looks good. It's greener, there's more choice and it's less busy.*
- *There are a lot more options. The seating areas outdoors are good. I like the flowers/ greenery.*
- *It looks good. There's a better atmosphere.*
- *It's user friendly. You can take kids right through on bikes.*
- *It's calmer, I like the flowers and being able to sit outside and enjoy lunch with people. However there are too many boards and more traffic elsewhere.*
- *It's better for cyclists.*
- *It looks great. I can see the benefits now but it was pointless during the winter.*
- *It looks great; it's colourful and has a lot more atmosphere.*
- *I like the concept but I think they are a long way from what they are trying to achieve. It's much unfinished. It's calmer, relaxing and more enjoyable.*
- *It's very attractive. It looks good.*
- *It's more cosmopolitan and user friendly. The atmosphere is calmer/ better.*
- *It's calmer and there's more choice. It's good for cyclists.*
- *More greener like plants. Outside dining.*
- *More attractive. Been great when weather is good.*
- *More attractive and friendlier. Less boring.*
- *Cleaner/ fresher. More to do, more choice. Better for cyclists.*

- *Looks good. Great place to visit.*
- *Better for cyclists, friendlier and less busy.*
- *Great to be able to dine in the sun. Great for tourists.*
- *More attractive, friendlier and greener.*
- *Much better for cyclists. Looks more attractive/ cosmopolitan.*

Q14b Reasons given for feeling the appearance of George Street has got worse

- *Total nightmare for drivers, as well as trams takes longer to get anywhere. Although, area does look nicer.*
- *Not as much parking, nightmare to drive to.*
- *Parking/ driving is difficult and longer to get there. Not enough parking facilities.*
- *I like to park in George Street because I'm staying close by and if you park after a certain time at night, you can stay there to a Sunday. It influences my decision of where to stay and where to come when I'm in Edinburgh.*
- *Parking is worse, far too expensive. Should reduce the costs or have day passes for visitors.*
- *Not enough parking. Makes journey longer and more stressful.*
- *Traffic disruptions.*
- *Traffic congestion is worse than it was. Pedestrians think they rule the whole area now.*
- *Traffic congestion and tail backs. Takes forever to get home from work.*
- *Not enough parking and traffic congestion. Haven't done anything to make roads or footpaths better.*
- *Takes longer to get home due to traffic disruptions.*
- *Cycle lanes take up most of the road. It's confusing when it changes over. No consideration for pedestrians.*
- *As a driver, it causes so much disruption to everyday lives.*
- *Nightmare to cycle and drive now. Put it back to the way it was.*
- *Too many tailbacks/ jams. Takes longer to get here.*
- *Can't get close to places that you need to get to, not enough parking.*
- *Get rid of lanes, pointless. No need for it, you can't move about as much.*
- *Lost its character, tents are shabby looking. Place looks unfinished.*
- *Ruin the look of George Street, no need for cycle lanes as nobody uses them.*
- *Not enough loading spaces, cars park in loading bays. Can't get into businesses.*
- *Too much traffic in Princes Street and Queen Street. Congested these areas instead.*
- *Tents and plants are shabby looking. No need for them during winter. Whole thing is a waste of money.*
- *Looks unfinished and poor appearance overall.*
- *Makes travelling to work longer due to one way routes.*
- *Poor looking, it was fine the way it was. Side streets are congested with traffic.*
- *Looks unfinished. Tents ruin look of street. Some disabled spaces were removed.*
- *Deliveries can't get into businesses as easily and tail backs are worse.*
- *Tents obscure lovely buildings. It was lovely as it was.*
- *Outside restaurants are sitting unused and making area look poor. It's taking away George Street history.*
- *Not being kind to motorists. Major impact to other roads in the city. Looks shabby and it's taking away George Street history.*
- *Takes look away from George Street and ruining the history of it. Trying to make it European.*
- *Taking away history of Edinburgh. Trying to make it a place it is not.*
- *Ruined look of street. It didn't need all this.*
- *Should leave things the way they were. Trying to change too much in a lovely city.*
- *More traffic congestion in side streets. Cars can't get in here. Need to be dropped off further down the street.*

- *Not impressed. Don't think it had done anything for George Street, apart from causing businesses to lose money and more traffic congestion.*
- *Causing too much congestion elsewhere, disrupts traffic flow and people lives. Takes much longer to get home.*
- *Ruined look of street. Obscure beautiful cultured buildings.*
- *Outside seating lying empty takes away look of street. Rubbish lying about also.*
- *Ruined the history of George Street, taken away what it's about. Outside restaurants are a shambles.*
- *Total inconvenience. Waste of public money.*
- *Causing traffic disruption to side streets. Ruined the look of the street.*
- *More inconvenient. Pressure on Queen Street which was not designed for such traffic.*
- *Can't see the benefits. Disrupts traffic. It's pointless until the summer.*
- *It's already hard to park in Edinburgh, it's alright if you know the place but I only visit a few times a year.*
- *Made use of pavements. I've brought the car before and spent more time trying to park than shopping.*
- *Buses get backed up and have to wait. This can delay my journey and causes stress as the delay can cause me to miss other connections.*
- *Takes taxis much longer to uplift/ drop off fares as they have to use additional streets for access.*
- *Not enough parking in city centre, especially for families with buggies.*
- *Destroyed concept of new town. Would like street back to the way it was without parking spaces or cafes on street. Historical setting.*
- *Don't like street cafes, take up too much room and you have to walk around them when the street is busy.*
- *Lot of confusion as a pedestrian due to cycle arrangements. Should take all vehicles away on one side of the street.*
- *For business purpose parking is necessary and this street has the width to cope with it.*
- *Tents are horrific. They are untidy and ruin street.*
- *Decking is cheap and tacky tents are an eyesore.*
- *Don't like the changes. Is poor looking, unfinished and unkempt.*
- *Amateurish and shabby. Unfinished and uninviting. Ruined look of George Street.*
- *Don't like it, ruined a good street. No need for all this. Tents are ugly and lying empty, total eyesore.*
- *Can't see benefits of changes, no outside restaurants seating available. Less parking and looks unfinished. Causes more driving stress.*
- *Ruined street, taken away the culture and history. No need for it at all. Causing unnecessary traffic congestion.*
- *Ruined street, tents are ugly. Ruined history and character of street.*
- *Harder to get dropped off to where you want to go. Not adequate for those in wheelchairs.*
- *Traffic congestions, worse elsewhere. Driving into the city was bad enough.*
- *Don't like tents, ruin look of street. Street has lost history as tacky looking.*
- *No need for, this whole thing is nonsense. Waste of tax payer's money.*
- *Don't like changes, it was fine the way it was. Should have spent money on fixing pavements.*
- *Stop/ start change over takes much longer to get there and pick people up. Not accessible for disabled people.*

- *Ruined street. Tents are hideous and can't see buildings.*
- *Harder to find parking space and very confusing for drivers.*
- *Don't like outside seating, it obscures buildings. Looks unfinished.*
- *Area is awful. Ruined look of it. Tents are ridiculous and too big.*
- *Don't like all the boards and signage, looks terrible. Makes the street look untidy.*
- *Too much clutter, particularly when it's busy. Pavements are uneven.*
- *Ruined street. Obscured buildings with unsightly tents and street furniture.*
- *Traffic congestion in side streets. Less safe, confusing for drivers. Area looks poor and boards are hideous.*
- *Don't like what they've done. No benefit to anyone.*
- *Don't like it. Tents obscure buildings. Was fine the way it was.*
- *Too much consideration for cyclists. Not thought about the impact for other road users, traffic disruption.*
- *Less parking. Tacky tents. Plant pots shabby. Area is untidy looking.*
- *Poor looking, shabby and messy. Ruined street. Not accessible for drivers.*
- *Ruined look of street. Changes are poor and rushed looking, no thought put into it.*
- *Shabby looking. Ruined history of street. Can't see buildings now. More cluttered looking.*
- *Traffic disruptions.*
- *Can't get taxi's to drop you off where you need to go. You need to walk which is fine, if you have no health issues.*
- *Don't like it. Looks poor/ unfinished/ temporary. Too much furniture everywhere.*
- *Ruined street - looks poor and unkempt and furniture sitting empty.*
- *Don't like what they have done. Not enough thought has been put in and what the impact would be in other areas.*
- *Don't like it - it's ruined the street. Place is messy and overcrowded. Ruined architecture.*
- *Too much congestion and advertising is cluttering up the street. It was better before.*
- *Ban cyclists and parking and it would be better.*
- *No bus route through it.*
- *Lost dignity. Too many cafes and outdoor seating.*
- *Not easy to access to with car. Not enough parking. Too much clutter.*
- *Premium street ruined. Not trailed properly. Don't think of businesses.*
- *More traffic going up and down side streets.*
- *It's a compromise which has tried to please small minorities, which has ended up annoying everybody.*
- *I preferred it as it was. It's not as clean now and you don't get a clear view. Just don't like it.*
- *Ruined street. Now cluttered and messy.*
- *Don't like it, cluttered and not enough space. Ruined look of area.*
- *You can't see the buildings. It's messy and cheap looking.*
- *I don't like it.*
- *It's a shambles, messy and unfinished.*
- *There is less parking and too much traffic congestion elsewhere.*
- *I don't like what they've done, it's not the same.*
- *It's ruined the street. You can't see the beautiful buildings for the outside seating area.*
- *Don't like it, ruined the culture and history of the street. Too much stuff and is a mess/ unkempt.*
- *Not keen, preferred it the way it was. Traffic is congested everywhere.*

- *Ruined look and history of street. Can't see buildings.*

Appendix 3 – Case Study Example – Decking & Marquees on George Street

How using an ETRO can generate trust and confidence in the design process, by engaging stakeholders, and providing an opportunity to evidence, through actions, that the project is listening and capable of acting on the evidence it is gathering.

1.1When the George Street ETRO was given committee approval, and before the ETRO had become active, a Stakeholder Group was invited to form. This was open to all, including members of the public, as well as expert groups representing disability groups, Heritage interests, the Emergency Services, transport groups representing the views of cyclists, walkers, public transport, taxis, motor cyclists, the Road Haulage Association, and others representing the local community, local business interests, tourism, and there was representation from Elected Members and senior officials from a range of Council departments.

1.2 The stakeholder group met every three months in the Assembly Rooms on George Street, with each meeting attracting a capacity audience that led to standing room only, such was the level of engagement, concern and interest in the ETRO and the long term design of the street.

1.3 The inaugural meeting of this group was one where a legacy of mistrust was articulated. Different participant groups mentioned that they had concerns and fears for the project, given previous negative experiences they may have had with other stakeholders or with the Council itself. All participants were able to express this, and they had the opportunity to express their positive hopes for the process too.

1.4 The inaugural meeting sought to begin the process of building trust and a shared agenda by outlining that, for a trial to be meaningful, and for it to help us learn what we need to learn, it needed to produce a robust, credible, empirical and independent evidence base. To assist with this, the first gathering of the Stakeholder Group asked the group to work collectively to agree the framing of the questionnaire, that would be put before 1200 users of the street. This was a useful first step towards building trust, understanding and consensus across the wide range of stakeholders, but the key transformative breakthrough came at the second meeting of the group.

1.5 At that point, three months into the trial, one issue had emerged that eclipsed all others for the Stakeholder Group. There was nearly universal agreement that the decking and marquees that had been placed on the street by hospitality businesses had not been a success in terms of place making. There was also a fear and perhaps a cynicism from some stakeholders that the ETRO trial would not be a genuine learning process, meaning that if the businesses wanted something then they would get it, regardless of the wider negative feedback. The trial's handling of the decking and marquees issue was therefore greatly anticipated in advance of the meeting, and had become the acid test, in many stakeholder's eyes, of whether the ETRO approach of trial, test and finesse had value and credibility as an approach to the long term design and layout.

1.6 The marquees were not a part of the Council's ETRO trial. They were a separate test that the businesses had brought to the trial, having received a time limited planning consent. Pointing to the fact that similar marquee structures are used in other Medieval UNESCO World Heritage Site cities, like Valetta, some businesses had a long held view that having year-round outdoor dining facilities, remote from the bar or restaurant, would successfully animate the street and bring life to the space.

An ETRO test provided the opportunity to test out that long-held theory and to assess it for seasonality, for its impact on the nearby Listed Buildings, and to assess if such an approach was compatible with putting on major events safely in George Street.

1.7 The trial had commenced in August 2014, with the first meeting of the Stakeholder Group having taken place in advance of the trial commencing (allowing the Group to frame the questionnaire and air any fears, concerns or interests before any work had taken place). However, the second meeting of the Stakeholder Group took place in December 2014. It would be the first meeting since the trial went live, and the first gathering where there was any feedback or data to analyse (as this group was presented with the independent research and feedback from the first 300 interviews, taken in September, October and November). The project manager listened carefully to the views in the room. It also took into account the independent research feedback, which comprised answers to questions framed and agreed by all stakeholders. The project also took into account information from Public Safety officials and the Emergency Services, who had experienced difficulty putting on the 2014 Light Night celebrations, when a record crowd of 28,000 attended the Christmas Lights switch on.

1.8 Given all of that objectively-sourced information, the project and the stakeholder group concluded that the structures had been too inflexible for major events to be held safely, and had represented a crush hazard, as they could not be removed. Aside from criticisms of their appearance, by being incapable of removal upon request, they had failed a key test of principle, as they had become a commercial use of civic space, hindering a key civic event

1.9 The meeting then concluded quickly, in light of that feedback, that the structures were not appropriate for George Street in the long run. The project acted upon the findings. Even at that early stage in the trial, just three months into a year-long trial, the Council wrote to businesses and gave them notice to remove the decking and marquee structures, making clear that these would not be permitted in the long run.

1.10 An ETRO is a useful approach to a design process on a key street, where there are competing users for the space, because such a decision does not need to go back to a committee or incur delays. The decision can be taken immediately, under the auspices of the ETRO, and that became the key transformative moment for most stakeholders. It helped to build trust and confidence in the process. Stakeholders were able to recognise it as a credible and valuable design process, that was interested in listening and learning, bringing competing parties together, and looking beyond short term criticisms or point-scoring between competing parties. Instead the ETRO sought to achieve a valuable long-term outcome, that began not by asking “do you like the trial layout?” It began the conversation by asking the question 'what is the maximum potential of this space, and how do we achieve that together?'

1.11 Importantly, the remainder of the trial continued to monitor all aspects of the trial and the issues highlighted in the mutually-agreed questionnaire. One of the key messages that emerged, following the 1200 interviews that took place across the year, was that the principle of enlivening the space on George Street was very widely supported. The decking and marquee structures were not supported and were not considered to be the appropriate means to achieve that. Also, a clear view emerged, through the testing and trialling process, that having any tables and chairs remote from the host business outwith Festival time is not supported as a practical or desirable solution for

the street. The principle of animation on the street, with outdoor dining as a part of that, on the pavement next to the host premises, is one that has been captured as a key outcome of the trial, and this is reflected in the Design Principles produced by Ironside Farrar.

Appendix 4 – Learning points for the Council arising from the George Street ETRO Trial

1.1 A trial approach ought to result in the final design being a better investment for the city as a public realm scheme. This appears counter-intuitive at first, as undertaking a trial approach to the future design of a space like George Street will take longer than if no trial period was run. Any changes made during the trial will also bring an inevitable increase in workload for Transport designers and Roads staff. However a trial approach brings potentially competing interest groups together, engaging with the design process at its outset and becoming influential participants rather than being given only the opportunity to object at a late stage in the process. This greater input, and the creation of a more shared agenda, ought to result in a much more efficient design process emerging, where the eventual design is much more reflective of the various stakeholders' requirements, likely to generate significantly fewer objections or delays as a public realm project, and more likely to be right first time. For example, businesses had long expressed a wish to have year-round dining on the street, but a trial allowed the decking and marquees proposal to be comprehensively ruled out in the final design.

1.2 In creating more space for pedestrians, footfall rose across all blocks on George Street, across all four seasons of the year during the trial.

Footfall figures for February 2014 (pre-trial) 2015 (ETRO trial year) and 2016 (post-trial, now that the street has reverted to its previous layout) show that footfall was higher in 2015 during the trial than it was in 2014 or 2016, when there was less pedestrian space than there was during the trial year. The ETRO trial period saw more people visiting George Street than before or since. During the trial the 1200 respondents reported to the independent research team that they were lingering longer on the street (3 hours most typically), people visited the street to do more than one thing (confirming that it is an important location in the vibrant life of Edinburgh City Centre), and people reported during the trial year that the increased pedestrian space made them want to return more frequently to George Street than before.

1.3 The project worked closely with the Emergency Services throughout the trial period, to ensure that the layout was safe for all users of the space. The trial year is the only year-long period in recent times where no jewellery shops on George Street were the victims of robbery. Yet during the trial period a jewellers shop on Frederick Street, adjacent to George Street, was a victim of robbery. Another jewellery chain with a store located on George Street suffered robberies in its other Scottish branches during the trial period, but not in their George Street branch. Also, just after the trial period ended, soon after the street was returned to its conventional layout, a jewellers shop on George Street was robbed. All of this suggests that the increased footfall, and the additional pedestrian space that separated the shop entrances from the live

carriageway, were factors in reducing this type of crime during the trial period and they made George Street a safer space.

1.4 The trial layout began with an ambition to reduce clutter and street furniture, especially on the side of the street where there was additional pedestrian space and the new cycle facility. It quickly became apparent that signage on its own was insufficient to deter some car, van and taxi drivers who drove down the cycle lane, endangering cyclists and pedestrians in the area. As the cycle lane was required to be also an emergency fire lane, it was not possible to block the space off entirely. However, the successful solution was eventually found, where a drop down bollard was installed at the entrance to the block, but leaving the exit end of the block free. The bollard stopped errant drivers from entering the space, but the open end at the exit was sufficient to provide for emergency services' access into the block.

1.5 The project sought to engage with local and national bus operators during the trial period. Indeed, a number of meetings were called by the Council to encourage bus operators to use George Street instead of Princes Street during the trial, especially at the west end. However, the local and national bus operators chose not to use George Street during the trial period, and used that time to argue for an additional bus stop on the western half of Princes Street. The ETRO trial concluded that George Street is not seen as an important route for bus operators. Alternative routes exist and were clearly considered preferable to George Street by the bus companies.

1.6 Parking revenue dropped on George Street during the trial period, as there were fewer car parking spaces on George Street, and lower occupancy of those which remained. The exact figures are outlined in Appendix 5.

1.7 The trial demonstrated that George Street is not a key through route for East-West traffic, but it is crucial for facilitating North-South traffic as it crosses at Hanover Street (for all traffic, Frederick Street (for public transport) and at the two ends of Charlotte Square and St Andrew Square.

1.8 One of the key concerns of local residents prior to the ETRO trial had been that pedestrianising part of the space may lead to vehicular traffic being displaced into the parallel residential streets to the north. The trial committed to tracking this impact, and the Council procured a leading national traffic counting firm to undertake traffic counts in streets to the north of George Street. To make this process as transparent as possible the Council placed local residents and the local Community Council in charge of the locations of the traffic counters, to ensure that the data was being captured in the correct locations, using local knowledge. The data from the traffic counts was then sent on verbatim and uninterpreted, for transparency. However, one learning point from the trial was that, despite this well intentioned piece of work, some types of technical data do require an element of interpretation in order to make sense of them. The vast amount of data that was forthcoming from the

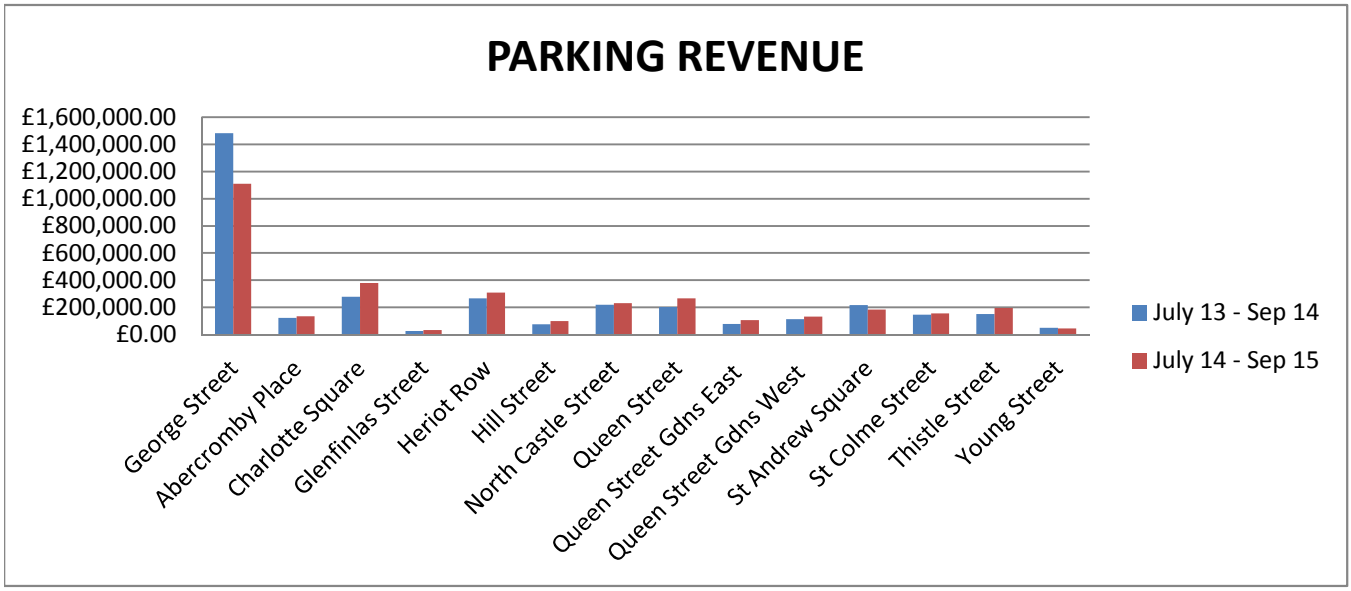
traffic counters showed that, during the trial period, there was an almost indiscernible impact on traffic in the parallel streets. This is most likely because George Street (unlike Queen Street) is not a critical east-west route for significant numbers of vehicles in the city centre.

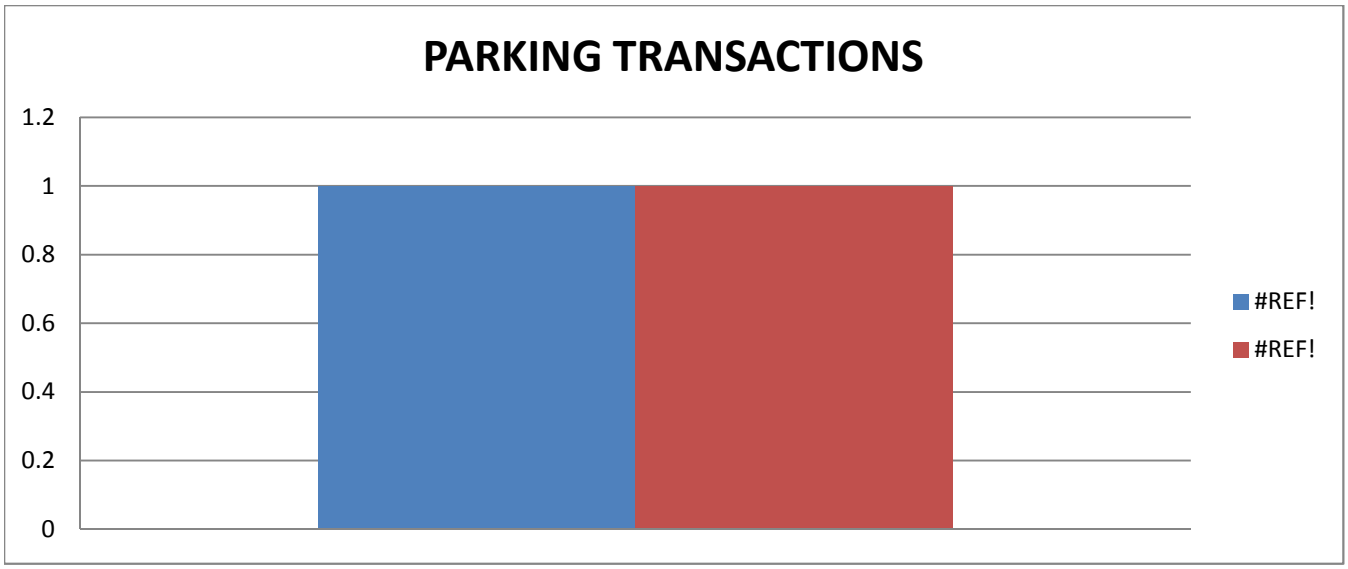
1.9 One of the learning points from the trial taken forward by Ironside Farrar in developing Design Principles was that the street has a very seasonal pattern of uses, and during the summer and winter Festivals periods in particular there are significant improvements that could be made to make the street and the space work better for all those who live, work, travel and entertain there. The temporary layout during the summer Festival in 2015 was not part of the ETRO trial, but the project continued to interview users of the street during that period. The summer Festival layout on some blocks was not universally liked. The future layout of the street could be made much more flexible and clear so that short term events could be facilitated without causing the same level of disruption as was experienced in 2015.

1.10 In particular, the traffic impacts studied on George Street during the trial year show that each block of George Street could potentially function in the same way that the High Street does during Festival times, with access for all vehicles before 10am, allowing the servicing and maintenance of the street. A portion of each block could then be closed off from 10am, as happens on the High Street. There would remain sufficient room on the ends of each block to accommodate users such as disabled parking bays, residents bays,taxi drop offs, a cycle lane, motor cycle parking and a reduced number of pay and display parking bays, while still leaving sufficient room for event spaces to be created, supporting the world's leading arts festivals. North to South traffic flows crossing the city centre would be unaffected by such an approach.

REVENUE	July 13 - Sep 14	July 14 - Sep 15	Difference	% Difference
George Street	£1,482,628.70	£1,110,743.60	-£371,885.10	-25.08%
Abercromby Place	£124,153.60	£134,487.30	£10,333.70	8.32%
Charlotte Square	£278,747.30	£380,569.65	£101,822.35	36.53%
Glenfinlas Street	£26,984.40	£34,159.70	£7,175.30	26.59%
Heriot Row	£265,552.50	£309,786.80	£44,234.30	16.66%
Hill Street	£76,376.50	£100,176.75	£23,800.25	31.16%
North Castle Street	£218,850.20	£230,477.45	£11,627.25	5.31%
Queen Street	£203,646.40	£267,252.35	£63,605.95	31.23%
Queen Street Gdns East	£77,296.30	£106,520.00	£29,223.70	37.81%
Queen Street Gdns West	£112,604.30	£132,830.30	£20,226.00	17.96%
St Andrew Square	£216,835.70	£183,614.70	-£33,221.00	-15.32%
St Colme Street	£146,536.20	£156,381.05	£9,844.85	6.72%
Thistle Street	£151,774.70	£196,766.00	£44,991.30	29.64%
Young Street	£49,866.90	£46,478.65	-£3,388.25	-6.79%
TOTALS	**£3,431,853.70**	**£3,390,244.30**	**-£41,609.40**	**-1.21%**

TRANSACTIONS	July 13 - Sep 14	July 14 - Sep 15	Difference	% Difference
George Street	417,305	284,714	-132,591	-31.77%
Abercromby Place	39,518	40,197	679	1.72%
Charlotte Square	70,998	90,527	19,529	27.51%
Glenfinlas Street	6,713	8,479	1,766	26.31%
Heriot Row	77,985	84,105	6,120	7.85%
Hill Street	19,634	24,559	4,925	25.08%
North Castle Street	59,824	59,165	-659	-1.10%
Queen Street	53,528	64,988	11,460	21.41%
Queen Street Gdns East	24,634	31,715	7,081	28.74%
Queen Street Gdns West	32,401	36,285	3,884	11.99%
St Andrew Square	64,176	49,147	-15,029	-23.42%
St Colme Street	35,660	35,668	8	0.02%
Thistle Street	41,770	50,469	8,699	20.83%
Young Street	12,235	10,794	-1,441	-11.78%
TOTALS	**956,381**	**870,812**	**-85,569**	**-8.95%**

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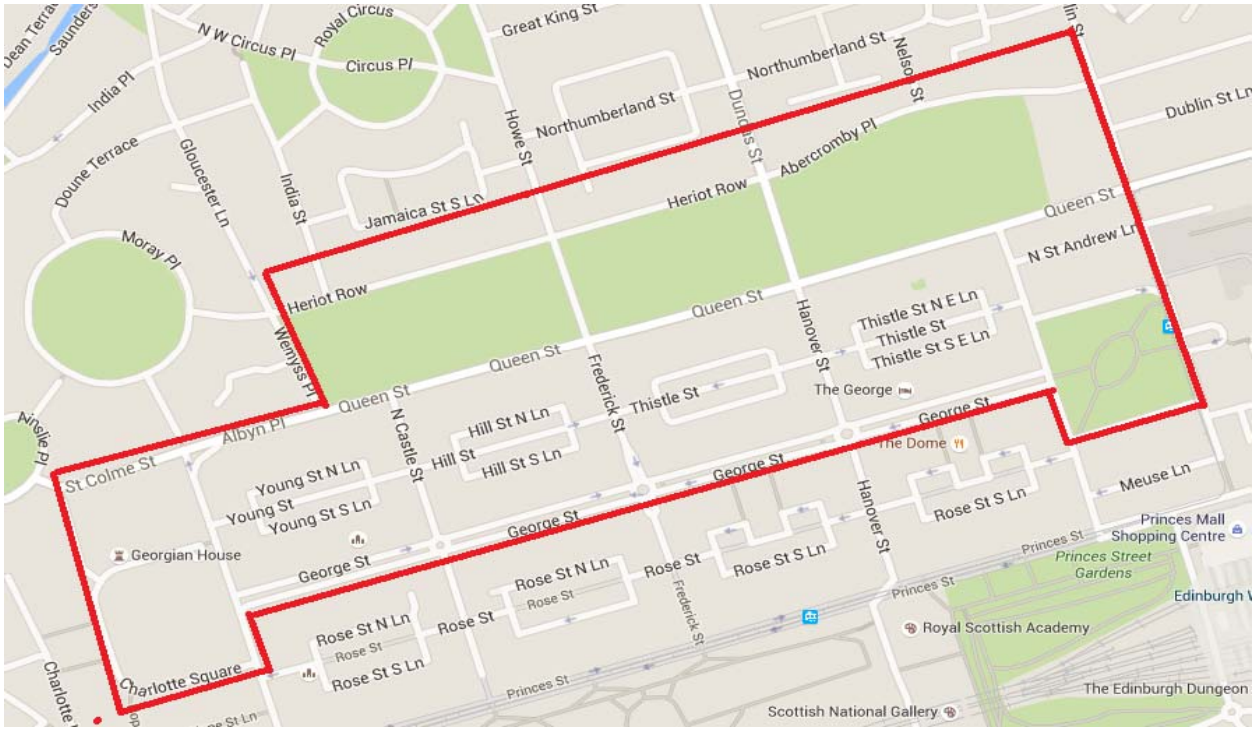
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India St
Abercromby Pl
Jamaica St S Ln
Heriot Row
Queen St
N St Andrew Ln
Moray Pl
Wemyss Pl
Thistle St N E Ln
Thistle St
Thistle St S E Ln
Hanover St
Frederick St
Thistle St
The George
George St
The Dome
Albyn Pl
St Colme St
N Castle St
Hill St N Ln
Hill St
Hill St S Ln
Young St N Ln
Young St
Young St S Ln
Georgian House
Rose St S Ln
Meuse Ln
Princes Mall
Shopping Centre
Princes Street
Gardens
Rose St N Ln
Rose St
Princes St
Edinburgh
Royal Scottish Academy
Charlotte Square
The Edinburgh Dungeon
Scottish National Gallery

Edinburgh ATC Study

Report Id 295b/15-01
Site Name Site 1 of 9
Description Queen Street, 20m west of Frederick Street
Direction Westbound

Tuesday 28 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	135	48	29	38	20	1	0	108	23	3	0	0	0	2	2	21	61	38	8	2	1	0	0	0	34	29.8	5
0100 - 0200	79	22	16	27	14	2	0	60	14	2	1	0	0	2	2	26	32	15	2	0	0	0	0	0	31.8	27.7	4.7
0200 - 0300	69	20	16	18	15	0	0	56	8	4	1	0	0	1	1	15	27	22	2	1	0	0	0	0	33.1	29.2	4.5
0300 - 0400	65	17	20	16	12	0	0	46	14	5	0	0	0	0	1	9	32	14	9	0	0	0	0	0	34.9	30.1	4.6
0400 - 0500	67	11	11	23	22	0	0	48	13	5	1	0	0	0	0	8	22	31	3	3	0	0	0	0	34.7	31.5	4.2
0500 - 0600	164	24	46	48	46	3	2	120	27	10	2	0	0	0	14	22	52	62	12	2	0	0	0	0	34	29.7	5.3
0600 - 0700	338	58	68	95	117	1	4	257	57	15	4	0	2	20	50	78	119	57	12	0	0	0	0	0	31.8	26	6.1
0700 - 0800	748	146	157	221	224	8	2	618	83	33	4	1	17	66	135	210	255	58	6	0	0	0	0	0	29.8	23.9	5.9
0800 - 0900	905	235	216	231	223	15	6	729	92	52	11	0	18	95	230	339	186	32	5	0	0	0	0	0	27.5	22.3	5.4
0900 - 1000	791	190	206	191	204	6	3	588	128	58	8	1	29	81	177	283	184	33	3	0	0	0	0	0	28	22.5	5.6
1000 - 1100	756	196	187	177	196	9	1	534	145	62	5	0	14	90	166	287	178	18	2	1	0	0	0	0	27.3	22.4	5.3
1100 - 1200	771	202	192	194	183	2	3	561	146	55	4	0	9	57	170	305	200	30	0	0	0	0	0	0	28	23.2	4.9
1200 - 1300	793	202	199	192	200	5	3	587	134	58	6	2	16	106	207	272	153	34	3	0	0	0	0	0	28	22	5.5
1300 - 1400	859	205	213	223	218	8	11	617	161	50	12	1	19	90	189	313	206	37	3	0	1	0	0	0	28	22.6	5.5
1400 - 1500	878	212	212	221	233	6	3	680	125	57	7	1	24	97	233	306	185	31	1	0	0	0	0	0	27.5	22	5.4
1500 - 1600	886	225	200	236	225	5	8	699	123	43	8	4	44	119	249	260	183	24	3	0	0	0	0	0	27.1	21.2	5.9
1600 - 1700	883	234	212	212	225	3	6	703	126	39	6	0	29	142	268	271	142	28	2	1	0	0	0	0	26.8	21	5.6
1700 - 1800	902	220	218	245	219	12	1	754	93	37	5	0	34	135	277	299	139	15	1	2	0	0	0	0	26.2	20.8	5.3
1800 - 1900	819	228	211	205	175	7	6	697	85	19	5	2	13	66	167	296	220	50	5	0	0	0	0	0	28.2	23.3	5.4
1900 - 2000	651	191	155	167	138	6	7	540	78	15	5	0	2	18	59	193	295	73	9	2	0	0	0	0	30.6	26.4	4.8
2000 - 2100	520	152	137	138	93	2	2	441	65	8	2	0	0	11	13	150	261	77	7	1	0	0	0	0	31.1	27.4	4.2
2100 - 2200	496	138	114	113	131	5	1	429	47	11	3	0	0	5	16	119	278	68	9	1	0	0	0	0	30.9	27.8	3.8
2200 - 2300	383	109	105	87	82	0	2	323	47	9	2	0	4	27	78	148	96	25	5	0	0	0	0	0	28.6	23.7	5.2
2300 - 0000	245	77	61	54	53	2	2	202	38	1	0	0	1	6	26	65	107	34	6	0	0	0	0	0	31.3	26.8	5.1
0700 - 1900	9991	2495	2423	2548	2525	86	53	7767	1441	563	81	12	266	1144	2468	3441	2231	390	34	4	1	0	0	0	27.7	22.2	5.6
0600 - 2200	11996	3034	2897	3061	3004	100	67	9434	1688	612	95	12	270	1198	2606	3981	3184	665	71	8	1	0	0	0	28.6	23	5.7
0600 - 0000	12624	3220	3063	3202	3139	102	71	9959	1773	622	97	12	275	1231	2710	4194	3387	724	82	8	1	0	0	0	28.6	23.1	5.7
0000 - 0000	13203	3362	3201	3372	3268	108	73	10397	1872	651	102	12	275	1236	2730	4295	3613	906	118	16	2	0	0	0	29.1	23.4	5.8

Wednesday 29 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	146	47	45	30	24	2	0	111	27	5	1	0	0	1	3	31	65	37	8	1	0	0	0	0	33.3	29	4.6
0100 - 0200	92	31	21	19	21	0	0	70	18	4	0	0	0	0	2	11	41	30	6	1	1	0	0	0	33.3	30.2	4.5
0200 - 0300	69	20	20	16	13	1	0	50	13	4	1	0	0	1	0	4	30	27	4	1	1	1	0	0	34.4	31.3	5.1
0300 - 0400	71	23	18	19	11	0	0	55	15	1	0	0	0	0	0	6	33	24	8	0	0	0	0	0	35.1	31	3.9
0400 - 0500	87	20	14	27	26	0	0	53	27	7	0	0	0	0	0	10	36	32	8	1	0	0	0	0	34.9	30.9	4.2
0500 - 0600	154	24	34	40	56	2	1	117	24	10	0	0	0	2	2	18	53	64	12	2	0	0	1	0	34.4	30.9	5.1
0600 - 0700	338	59	66	96	117	3	2	239	64	29	1	0	4	16	38	72	130	65	10	3	0	0	0	0	32.2	26.8	6
0700 - 0800	810	159	168	238	245	10	8	655	98	35	4	1	12	55	90	175	364	100	11	2	0	0	0	0	30.6	25.8	5.8
0800 - 0900	915	226	226	240	223	16	7	697	131	57	7	2	25	94	196	351	202	42	3	0	0	0	0	0	27.5	22.5	5.4
0900 - 1000	817	216	194	207	200	9	7	568	153	76	4	0	22	58	179	325	199	32	2	0	0	0	0	0	27.7	22.9	5.2
1000 - 1100	728	177	174	185	192	2	0	515	148	53	10	0	9	50	146	297	190	35	1	0	0	0	0	0	28.2	23.5	4.9
1100 - 1200	773	186	197	199	191	5	3	537	178	46	4	0	17	71	176	256	203	43	6	1	0	0	0	0	28.4	23.1	5.6
1200 - 1300	821	203	217	222	179	4	2	622	140	42	11	0	17	111	201	291	175	22	4	0	0	0	0	0	27.3	22	5.4
1300 - 1400	830	199	203	227	201	6	6	636	128	48	6	0	7	67	158	335	226	36	1	0	0	0	0	0	28.2	23.4	5
1400 - 1500	857	215	216	206	220	6	1	656	143	43	8	4	28	128	258	287	133	18	1	0	0	0	0	0	26.4	20.9	5.4
1500 - 1600	922	224	226	245	227	2	5	714	152	42	7	1	18	101	242	327	200	26	7	0	0	0	0	0	27.5	22.3	5.4
1600 - 1700	945	238	230	233	244	2	9	747	136	47	4	3	50	175	295	282	104	33	2	1	0	0	0	0	25.9	20.2	5.8
1700 - 1800	933	234	229	235	235	10	8	788	100	24	3	2	15	112	239	346	177	31	10	1	0	0	0	0	27.3	22.2	5.4
1800 - 1900	827	228	197	203	199	2	9	711	84	15	6	1	11	81	158	294	243	33	6	0	0	0	0	0	28.2	23.2	5.4
1900 - 2000	705	195	190	172	148	2	9	603	75	12	4	1	2	5	69	242	319	60	6	1	0	0	0	0	30	26.2	4.3
2000 - 2100	539	149	141	119	130	1	8	473	48	5	4	0	2	7	20	126	289	81	11	3	0	0	0	0	31.3	27.8	4.4
2100 - 2200	496	142	109	139	106	0	4	426	55	7	4	0	0	4	57	193	204	36	2	0	0	0	0	0	29.1	25.6	3.9
2200 - 2300	431	144	113	96	78	1	4	342	73	8	3	0	3	25	63	173	141	19	6	1	0	0	0	0	28.9	24.3	5.1
2300 - 0000	277	83	72	68	54	2	2	226	42	4	1	0	1	8	28	82	111	40	6	1	0	0	0	0	31.1	26.5	5.1
0700 - 1900	10178	2505	2477	2640	2556	74	65	7846	1591	528	74	14	231	1103	2338	3566	2416	451	54	5	0	0	0	0	28	22.6	5.6
0600 - 2200	12256	3050	2983	3166	3057	80	88	9587	1833	581	87	15	239	1135	2522	4199	3358	693	83	12	0	0	0	0	28.6	23.3	5.6
0600 - 0000	12964	3277	3168	3330	3189	83	94	10155	1948	593	91	15	243	1168	2613	4454	3610	752	95	14	0	0	0	0	28.9	23.4	5.6
0000 - 0000	13583	3442	3320	3481	3340	88	95	10611	2072	624	93	15	243	1172	2620	4534	3868	966	141	20	2	1	1	0	29.3	23.7	5.8

Thursday 30 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	145	37	40	39	29	1	2	114	25	1	2	0	0	1	4	23	59	47	9	0	2	0	0	0	33.3	29.7	4.7
0100 - 0200	90	34	27	10	19	0	0	55	29	5	1	0	0	2	1	17	43	20	7	0	0	0	0	0	33.8	29.2	4.7
0200 - 0300	76	24	18	18	16	0	1	63	10	2	0	0	0	3	0	10	36	22	4	0	1	0	0	0	33.8	29.2	5.4
0300 - 0400	82	25	24	22	11	0	0	60	18	3	1	0	0	0	1	17	35	23	6	0	0	0	0	0	34.2	29.3	4.3
0400 - 0500	76	16	14	19	27	0	0	56	19	1	0	0	0	2	2	10	37	18	7	0	0	0	0	0	34.7	29.6	4.9
0500 - 0600	163	17	48	51	47	3	0	119	35	6	0	0	0	2	2	16	58	65	16	4	0	0	0	0	35.3	31.1	4.9
0600 - 0700	315	56	64	85	110	3	2	227	60	18	5	1	6	13	38	94	104	48	10	1	0	0	0	0	31.3	25.8	6.1
0700 - 0800	739	153	156	207	223	5	4	618	80	24	8	0	10	39	89	162	311	120	6	2	0	0	0	0	31.3	26.1	5.7
0800 - 0900	891	222	231	228	210	13	8	693	113	59	5	2	20	82	158	287	287	47	6	2	0	0	0	0	29.1	23.6	5.8
0900 - 1000	804	217	207	195	185	10	8	580	142	57	7	1	26	92	180	305	157	35	8	0	0	0	0	0	27.7	22.2	5.7
1000 - 1100	793	187	189	221	196	7	3	563	152	57	11	2	21	96	216	278	150	25	4	1	0	0	0	0	27.3	21.9	5.5
1100 - 1200	802	200	197	186	219	5	3	574	162	55	3	2	15	86	177	297	193	31	1	0	0	0	0	0	28	22.6	5.4
1200 - 1300	795	189	208	194	204	4	6	578	156	47	4	1	17	67	160	293	223	33	0	1	0	0	0	0	28.4	23.2	5.3
1300 - 1400	789	174	188	200	227	4	3	584	149	42	7	1	13	91	136	275	217	55	1	0	0	0	0	0	28.6	23.3	5.6
1400 - 1500	900	227	226	229	218	6	3	686	154	46	5	2	23	96	251	323	171	30	4	0	0	0	0	0	27.3	22	5.4
1500 - 1600	907	215	217	247	228	3	4	714	145	37	4	4	43	172	253	263	138	31	2	1	0	0	0	0	26.6	20.6	5.9
1600 - 1700	971	248	247	226	250	6	7	751	156	45	6	2	33	135	313	318	147	19	3	1	0	0	0	0	26.4	21	5.4
1700 - 1800	933	234	248	227	224	9	9	775	106	31	3	1	27	140	288	319	132	24	2	0	0	0	0	0	26.2	21	5.3
1800 - 1900	860	219	216	211	214	8	10	738	82	20	2	1	24	98	225	298	169	37	7	1	0	0	0	0	28	22.2	5.6
1900 - 2000	757	209	179	192	177	1	13	637	81	18	7	0	4	54	117	243	271	55	10	2	1	0	0	0	29.3	24.7	5.4
2000 - 2100	632	182	179	137	134	4	7	543	71	3	4	0	3	10	46	215	259	88	8	2	1	0	0	0	30.9	26.6	4.7
2100 - 2200	503	127	129	124	123	1	3	431	54	9	5	0	0	9	28	153	224	79	9	1	0	0	0	0	31.5	27.1	4.4
2200 - 2300	425	114	130	98	83	2	2	362	52	5	2	0	5	39	90	144	111	31	4	1	0	0	0	0	29.3	23.8	5.6
2300 - 0000	323	98	82	81	62	1	4	261	48	8	1	0	1	20	47	96	123	27	7	1	0	1	0	0	30.2	25.3	5.7
0700 - 1900	10184	2485	2530	2571	2598	80	68	7854	1597	520	65	19	272	1194	2446	3418	2295	487	44	9	0	0	0	0	28.2	22.4	5.7
0600 - 2200	12391	3059	3081	3109	3142	89	93	9692	1863	568	86	20	285	1280	2675	4123	3153	757	81	15	2	0	0	0	28.6	23	5.8
0600 - 0000	13139	3271	3293	3288	3287	92	99	10315	1963	581	89	20	291	1339	2812	4363	3387	815	92	17	2	1	0	0	28.9	23.1	5.8
0000 - 0000	13771	3424	3464	3447	3436	96	102	10782	2099	599	93	20	291	1349	2822	4456	3655	1010	141	21	5	1	0	0	29.3	23.4	5.9

Friday 31 July 2015

TUBE 'A' PARKED ON

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	181	57	46	45	33	1	0	148	28	2	2	0	0	4	12	45	75	38	7	0	0	0	0	0	32.2	27.6	4.8
0100 - 0200	113	29	23	31	30	2	2	78	27	4	0	0	0	4	2	9	56	33	7	1	1	0	0	0	33.3	29.6	5.1
0200 - 0300	76	17	21	14	24	0	0	61	11	3	1	0	0	2	1	12	32	21	6	2	0	0	0	0	34.4	29.6	5.5
0300 - 0400	70	17	20	12	21	0	0	45	23	2	0	0	0	0	0	17	27	23	3	0	0	0	0	0	32.7	29.2	3.9
0400 - 0500	73	13	22	15	23	0	0	52	17	4	0	0	1	0	2	10	45	11	1	2	1	0	0	0	32.7	29.1	5.1
0500 - 0600	157	30	30	49	48	2	2	109	34	9	1	0	2	5	14	32	57	37	10	0	0	0	0	0	34	27.8	5.9
0600 - 0700	323	62	66	80	115	4	2	235	52	23	7	0	6	18	58	67	119	46	8	1	0	0	0	0	31.3	25.6	6.2
0700 - 0800	141	140	1	0	0	0	0	117	14	8	2	0	0	0	1	3	20	70	40	6	1	0	0	0	33.1	29.2	4.2
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0900 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1000 - 1100	639	32	211	191	205	4	3	453	128	46	5	2	22	92	148	239	121	15	0	0	0	0	0	0	26.8	21.5	5.4
1100 - 1200	859	220	209	208	222	4	5	646	139	60	5	2	28	116	259	320	121	12	1	0	0	0	0	0	25.9	21	5.1
1200 - 1300	913	226	231	218	238	9	4	700	141	52	7	2	42	146	303	315	101	3	1	0	0	0	0	0	25.1	20.1	5
1300 - 1400	870	224	223	206	217	6	5	673	145	37	4	2	25	105	240	302	162	30	4	0	0	0	0	0	27.3	21.8	5.6
1400 - 1500	912	211	233	246	222	1	6	677	163	51	14	3	32	117	294	286	162	17	1	0	0	0	0	0	26.8	21.1	5.4
1500 - 1600	904	233	245	208	218	1	8	704	144	40	7	0	17	125	238	302	197	24	0	1	0	0	0	0	27.3	21.9	5.3
1600 - 1700	913	233	230	225	225	2	5	739	116	38	13	0	23	113	234	333	187	21	0	2	0	0	0	0	27.3	21.9	5.4
1700 - 1800	924	230	249	237	208	8	13	765	103	29	6	0	38	151	252	301	159	20	3	0	0	0	0	0	26.6	21	5.5
1800 - 1900	773	217	196	185	175	6	7	653	80	17	10	0	17	71	163	242	243	29	7	1	0	0	0	0	28.4	23.3	5.6
1900 - 2000	692	192	163	179	158	4	1	576	88	11	12	1	5	17	60	206	316	79	7	1	0	0	0	0	30.6	26.3	4.8
2000 - 2100	519	142	124	123	130	1	4	439	64	7	4	0	0	2	28	132	240	101	13	3	0	0	0	0	32.2	28.1	4.3
2100 - 2200	537	133	147	137	120	0	4	454	63	10	6	0	0	5	38	177	242	65	8	1	1	0	0	0	30.6	26.9	4.3
2200 - 2300	566	135	122	153	156	2	5	463	88	5	3	0	30	132	153	164	69	13	3	2	0	0	0	0	25.9	19.9	6.1
2300 - 0000	459	126	114	125	94	1	1	354	98	5	0	0	13	71	107	163	87	17	1	0	0	0	0	0	26.8	21.6	5.5
0700 - 1900	7848	1966	2028	1924	1930	41	56	6127	1173	378	73	11	244	1037	2134	2660	1523	211	23	5	0	0	0	0	27.3	21.6	5.5
0600 - 2200	9919	2495	2528	2443	2453	50	67	7831	1440	429	102	12	255	1079	2318	3242	2440	502	59	11	1	0	0	0	28.4	22.7	5.8
0600 - 0000	10944	2756	2764	2721	2703	53	73	8648	1626	439	105	12	298	1282	2578	3569	2596	532	63	13	1	0	0	0	28.2	22.5	5.8
0000 - 0000	11614	2919	2926	2887	2882	58	77	9141	1766	463	109	12	301	1297	2609	3694	2888	695	97	18	3	0	0	0	28.9	22.9	6

Saturday 01 August 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile 85%	Average Speed	Standard deviation
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150			
0000 - 0100	329	93	81	86	69	2	2	232	83	7	3	0	2	24	74	137	75	15	1	1	0	0	0	0	28.2	23.4	4.9
0100 - 0200	243	74	54	47	68	0	0	188	52	2	1	0	0	9	25	84	102	20	2	1	0	0	0	0	30	25.9	4.6
0200 - 0300	157	52	39	35	31	0	0	119	32	5	1	0	0	2	21	39	65	26	4	0	0	0	0	0	32.2	26.8	5.1
0300 - 0400	174	45	48	48	33	0	0	134	39	1	0	0	0	0	11	36	79	44	4	0	0	0	0	0	32.4	28.3	4.3
0400 - 0500	86	28	17	24	17	0	0	67	16	3	0	0	0	1	1	13	41	23	4	2	1	0	0	0	34	29.8	5
0500 - 0600	121	24	26	30	41	0	1	91	24	5	0	0	0	0	2	19	42	44	11	3	0	0	0	0	35.3	30.8	5
0600 - 0700	179	41	35	57	46	1	2	128	32	14	2	0	0	1	5	16	68	68	17	2	2	0	0	0	35.1	30.9	5.1
0700 - 0800	273	66	67	63	77	0	1	209	42	15	6	0	0	4	13	42	103	80	22	5	3	1	0	0	35.1	29.9	5.8
0800 - 0900	446	96	92	126	132	4	0	335	63	38	6	0	3	13	43	129	166	77	13	2	0	0	0	0	31.8	26.8	5.4
0900 - 1000	622	144	152	156	170	5	4	468	100	33	12	0	3	21	31	139	292	116	16	4	0	0	0	0	32	27.6	5.1
1000 - 1100	708	175	166	179	188	2	2	578	85	33	8	0	3	16	70	251	307	57	4	0	0	0	0	0	29.8	25.9	4.4
1100 - 1200	782	201	209	190	182	2	5	648	96	26	5	1	4	34	95	304	275	60	9	0	0	0	0	0	29.3	25	4.9
1200 - 1300	801	194	218	199	190	1	9	660	96	31	4	0	5	35	125	290	271	63	9	2	0	0	1	0	29.5	24.8	5.1
1300 - 1400	757	200	188	192	177	1	5	636	94	18	3	0	7	35	91	264	270	79	10	0	1	0	0	0	30.2	25.3	5.2
1400 - 1500	780	204	163	208	205	1	4	660	91	20	4	0	6	35	126	303	248	54	7	1	0	0	0	0	28.9	24.6	4.8
1500 - 1600	781	174	188	213	206	4	3	659	92	14	9	1	5	28	116	314	263	52	1	1	0	0	0	0	28.9	24.6	4.6
1600 - 1700	813	201	204	234	174	1	8	693	83	20	8	0	12	75	182	301	197	38	6	1	1	0	0	0	28.2	23.1	5.4
1700 - 1800	865	253	195	216	201	2	3	758	75	20	7	1	9	53	176	306	262	50	7	1	0	0	0	0	29.1	23.9	5.3
1800 - 1900	738	197	207	182	152	3	8	619	88	12	8	1	16	26	91	249	255	87	13	0	0	0	0	0	30.4	25.5	5.5
1900 - 2000	698	197	173	164	164	1	6	581	91	11	8	0	7	25	83	226	279	68	7	3	0	0	0	0	30.2	25.6	5.1
2000 - 2100	542	148	142	106	146	0	4	450	77	7	4	0	1	6	29	178	239	80	8	0	1	0	0	0	31.1	27.1	4.3
2100 - 2200	471	127	118	116	110	2	3	380	68	12	6	0	2	8	50	150	180	65	15	1	0	0	0	0	31.1	26.4	5.1
2200 - 2300	507	117	117	129	144	3	3	409	81	9	2	0	9	60	140	185	90	18	4	1	0	0	0	0	27.1	22.1	5.4
2300 - 0000	438	126	100	114	98	1	1	353	80	2	1	0	6	35	69	165	128	31	1	2	1	0	0	0	29.1	24	5.6
0700 - 1900	8366	2105	2049	2158	2054	26	52	6923	1005	280	80	4	73	375	1159	2892	2909	813	117	17	5	1	1	0	30	25.2	5.3
0600 - 2200	10256	2618	2517	2601	2520	30	67	8462	1273	324	100	4	83	415	1326	3462	3675	1094	164	23	8	1	1	0	30.4	25.5	5.3
0600 - 0000	11201	2861	2734	2844	2762	34	71	9224	1434	335	103	4	98	510	1535	3812	3893	1143	169	26	9	1	1	0	30.2	25.3	5.4
0000 - 0000	12311	3177	2999	3114	3021	36	74	10055	1680	358	108	4	100	546	1669	4140	4297	1315	195	33	10	1	1	0	30.4	25.4	5.4

Sunday 02 August 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile 85%	Average Speed	Standard deviation
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150			
0000 - 0100	394	118	94	82	100	2	2	311	71	4	4	0	4	11	64	141	136	33	3	0	2	0	0	0	30	25	5.2
0100 - 0200	329	87	88	71	83	0	0	264	58	3	4	0	2	15	36	93	129	45	8	1	0	0	0	0	31.3	26.3	5.4
0200 - 0300	261	68	64	68	61	1	0	205	51	4	0	0	1	5	21	68	126	35	4	1	0	0	0	0	30.9	26.9	4.8
0300 - 0400	198	50	55	51	42	0	0	163	34	1	0	0	1	1	15	35	80	53	10	3	0	0	0	0	33.6	28.7	5.2
0400 - 0500	133	44	39	27	23	0	1	99	32	1	0	0	0	0	2	14	54	52	11	0	0	0	0	0	34.7	30.5	4.1
0500 - 0600	118	28	31	34	25	0	0	95	18	4	1	0	0	0	8	15	41	44	8	2	0	0	0	0	35.1	30	5
0600 - 0700	150	21	43	50	36	0	2	114	25	5	4	0	0	0	1	10	61	61	14	1	1	1	0	0	34.4	31.5	4.3
0700 - 0800	207	53	40	57	57	0	0	171	20	12	4	0	0	1	7	29	88	64	16	2	0	0	0	0	34	30	4.5
0800 - 0900	262	54	44	78	86	5	1	177	47	25	7	0	0	2	13	53	126	55	12	1	0	0	0	0	32.2	28.3	4.5
0900 - 1000	446	96	107	101	142	3	3	358	63	16	3	1	1	9	38	118	179	83	14	2	1	0	0	0	32	27.3	5.2
1000 - 1100	669	136	170	191	172	2	1	598	48	17	3	0	3	15	29	227	301	86	7	1	0	0	0	0	30.6	26.7	4.4
1100 - 1200	797	212	176	197	212	0	3	686	84	18	6	0	3	38	123	265	297	64	6	0	1	0	0	0	29.5	25.1	4.9
1200 - 1300	781	204	184	200	193	4	2	681	74	14	6	1	15	56	183	270	206	47	3	0	0	0	0	0	28.6	23.3	5.4
1300 - 1400	801	209	197	183	212	0	3	704	66	25	3	0	8	52	176	299	241	19	5	0	0	1	0	0	28	23.4	5
1400 - 1500	821	185	202	218	216	5	1	718	74	16	7	0	5	59	132	304	274	42	4	1	0	0	0	0	28.9	24.2	5
1500 - 1600	854	226	219	216	193	3	2	768	63	14	4	0	19	81	179	284	259	30	2	0	0	0	0	0	28	23	5.3
1600 - 1700	800	194	195	205	206	4	4	700	70	17	5	0	14	85	127	276	255	41	2	0	0	0	0	0	28.9	23.6	5.5
1700 - 1800	794	205	179	197	213	4	4	707	66	12	1	0	9	45	107	263	297	66	4	3	0	0	0	0	29.8	25	5.2
1800 - 1900	695	197	184	156	158	1	7	604	68	9	6	0	16	46	103	266	221	42	1	0	0	0	0	0	28.6	23.9	5.3
1900 - 2000	580	152	157	132	139	1	5	519	41	9	5	0	1	20	71	167	225	89	7	0	0	0	0	0	31.3	26.2	4.9
2000 - 2100	487	134	111	137	105	2	3	429	38	9	6	0	0	9	45	145	204	66	16	2	0	0	0	0	31.3	26.9	4.8
2100 - 2200	397	124	89	91	93	0	3	344	36	10	4	0	0	4	36	122	191	38	4	2	0	0	0	0	30.4	26.6	4.2
2200 - 2300	349	100	101	81	67	2	3	299	36	5	4	0	2	18	53	119	108	40	7	2	0	0	0	0	30.6	25.3	5.6
2300 - 0000	276	87	65	64	60	0	0	237	32	5	2	0	0	1	18	79	127	41	8	2	0	0	0	0	31.5	27.4	4.4
0700 - 1900	7927	1971	1897	1999	2060	31	31	6872	743	195	55	2	93	489	1217	2654	2744	639	76	10	2	1	0	0	29.5	24.7	5.4
0600 - 2200	9541	2402	2297	2409	2433	34	44	8278	883	228	74	2	94	522	1370	3098	3425	893	117	15	3	2	0	0	30	25.1	5.4
0600 - 0000	10166	2589	2463	2554	2560	36	47	8814	951	238	80	2	96	541	1441	3296	3660	974	132	19	3	2	0	0	30	25.1	5.4
0000 - 0000	11599	2984	2834	2887	2894	39	50	9951	1215	255	89	2	104	573	1587	3662	4226	1236	176	26	5	2	0	0	30.4	25.4	5.4

Monday 03 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	162	49	60	26	27	0	2	134	22	3	1	0	0	0	5	44	80	27	3	3	0	0	0	0	31.8	28.1	4.3
0100 - 0200	93	29	26	20	18	0	1	70	13	5	4	1	0	0	5	15	35	31	5	1	0	0	0	0	33.8	29	5.8
0200 - 0300	67	15	17	16	19	0	0	52	12	2	1	0	0	0	2	7	25	28	4	0	1	0	0	0	34.7	30.9	4.9
0300 - 0400	61	16	13	16	16	0	1	48	8	4	0	0	0	1	1	10	24	18	6	1	0	0	0	0	34.2	29.9	5.1
0400 - 0500	94	23	18	24	29	0	1	66	22	5	0	0	0	0	5	18	39	24	4	4	0	0	0	0	34.2	29.5	5.1
0500 - 0600	158	26	41	49	42	2	2	116	31	7	0	0	0	1	7	27	68	44	8	2	1	0	0	0	34	29.4	5.1
0600 - 0700	343	56	74	99	114	5	1	251	52	23	11	1	2	27	43	74	132	55	9	0	0	0	0	0	32	26	6.1
0700 - 0800	751	155	162	215	219	6	4	610	90	32	9	1	17	53	83	151	324	110	9	3	0	0	0	0	31.1	25.8	6.2
0800 - 0900	893	223	201	243	226	18	4	671	135	55	10	1	23	115	164	331	216	38	4	1	0	0	0	0	28	22.6	5.7
0900 - 1000	749	189	173	203	184	10	1	520	147	67	4	2	15	62	106	289	229	45	1	0	0	0	0	0	28.6	23.8	5.4
1000 - 1100	747	198	201	172	176	2	2	535	138	63	7	0	9	60	119	318	203	33	5	0	0	0	0	0	28.2	23.6	5
1100 - 1200	804	195	195	216	198	2	2	600	131	61	8	0	12	50	165	320	226	27	4	0	0	0	0	0	28.2	23.4	4.9
1200 - 1300	829	198	207	215	209	7	6	591	138	77	10	3	48	138	209	241	160	26	4	0	0	0	0	0	27.1	20.9	6.2
1300 - 1400	798	213	191	194	200	7	7	586	153	40	5	0	7	82	183	317	190	15	4	0	0	0	0	0	27.5	22.7	5
1400 - 1500	819	212	187	212	208	4	2	633	120	56	4	2	24	84	229	265	190	23	2	0	0	0	0	0	27.7	22.1	5.4
1500 - 1600	863	207	220	227	209	4	3	658	143	49	6	1	12	73	197	315	219	39	6	1	0	0	0	0	28.2	23.1	5.3
1600 - 1700	918	227	237	223	231	3	13	719	131	42	10	0	19	133	293	314	131	23	5	0	0	0	0	0	26.4	21.2	5.2
1700 - 1800	940	253	224	227	236	9	12	786	87	40	6	0	29	100	252	336	187	31	5	0	0	0	0	0	27.3	22	5.4
1800 - 1900	765	212	222	162	169	7	14	653	71	16	4	0	9	31	148	253	251	68	5	0	0	0	0	0	29.5	24.6	5.2
1900 - 2000	607	165	161	129	152	5	4	512	59	23	4	0	7	21	42	175	296	59	6	1	0	0	0	0	30.2	26.2	4.8
2000 - 2100	467	125	120	109	113	1	3	403	45	12	3	0	0	2	15	108	243	86	11	2	0	0	0	0	31.8	28.1	3.9
2100 - 2200	462	116	130	108	108	1	6	389	51	13	2	0	1	3	18	127	223	71	17	2	0	0	0	0	31.5	27.8	4.3
2200 - 2300	325	89	88	77	71	2	4	262	48	5	4	0	0	3	19	102	133	52	15	1	0	0	0	0	32.2	27.5	4.6
2300 - 0000	244	73	54	63	54	3	0	202	31	5	3	0	3	4	25	71	95	39	5	1	1	0	0	0	31.5	26.8	5.4
0700 - 1900	9876	2482	2420	2509	2465	79	70	7562	1484	598	83	10	224	981	2148	3450	2526	478	54	5	0	0	0	0	28.4	22.9	5.6
0600 - 2200	11755	2944	2905	2954	2952	91	84	9117	1691	669	103	11	234	1034	2266	3934	3420	749	97	10	0	0	0	0	28.9	23.6	5.7
0600 - 0000	12324	3106	3047	3094	3077	96	88	9581	1770	679	110	11	237	1041	2310	4107	3648	840	117	12	1	0	0	0	29.1	23.7	5.7
0000 - 0000	12959	3264	3222	3245	3228	98	95	10067	1878	705	116	12	237	1043	2335	4228	3919	1012	147	23	3	0	0	0	29.5	24	5.8

Virtual Day (7.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	213	64	56	49	43	1	1	165	40	4	2	0	1	6	23	63	79	34	6	1	1	0	0	0	31.5	26.6	5.4
0100 - 0200	148	44	36	32	36	1	0	112	30	4	2	0	0	5	10	36	63	28	5	1	0	0	0	0	32.2	27.5	5.3
0200 - 0300	111	31	28	26	26	0	0	87	20	3	1	0	0	2	7	22	49	26	4	1	0	0	0	0	33.1	28.3	5.2
0300 - 0400	103	28	28	26	21	0	0	79	22	2	0	0	0	0	4	19	44	28	7	1	0	0	0	0	33.6	29.2	4.7
0400 - 0500	88	22	19	23	24	0	0	63	21	4	0	0	0	0	2	12	39	27	5	2	0	0	0	0	34.4	30.1	4.7
0500 - 0600	148	25	37	43	44	2	1	110	28	7	1	0	0	1	7	21	53	51	11	2	0	0	0	0	34.7	29.9	5.3
0600 - 0700	284	50	59	80	94	2	2	207	49	18	5	0	3	14	33	59	105	57	11	1	0	0	0	0	32.7	26.9	6.2
0700 - 0800	524	125	107	143	149	4	3	428	61	23	5	0	8	31	60	113	216	82	11	2	0	0	0	0	31.5	26.1	6
0800 - 0900	616	151	144	164	157	10	4	472	83	41	7	1	13	57	115	213	169	42	6	1	0	0	0	0	29.1	23.5	5.8
0900 - 1000	604	150	148	150	155	6	4	440	105	44	5	1	14	46	102	208	177	49	6	1	0	0	0	0	29.3	24	5.8
1000 - 1100	720	157	185	188	189	4	2	539	121	47	7	1	12	60	128	271	207	38	3	0	0	0	0	0	28.6	23.6	5.3
1100 - 1200	798	202	196	199	201	3	3	607	134	46	5	1	13	65	166	295	216	38	4	0	0	0	0	0	28.4	23.3	5.3
1200 - 1300	819	202	209	206	202	5	5	631	126	46	7	1	23	94	198	282	184	33	3	0	0	0	0	0	27.7	22.3	5.6
1300 - 1400	815	203	200	204	207	5	6	634	128	37	6	1	12	75	168	301	216	39	4	0	0	0	0	0	28.2	23.2	5.4
1400 - 1500	852	209	206	220	217	4	3	673	124	41	7	2	20	88	218	296	195	31	3	0	0	0	0	0	27.7	22.4	5.4
1500 - 1600	874	215	216	227	215	3	5	702	123	34	6	2	23	100	211	295	208	32	3	1	0	0	0	0	27.7	22.3	5.6
1600 - 1700	892	225	222	223	222	3	7	722	117	35	7	1	26	123	245	299	166	29	3	1	0	0	0	0	27.3	21.6	5.6
1700 - 1800	899	233	220	226	219	8	7	762	90	28	4	1	23	105	227	310	193	34	5	1	0	0	0	0	27.5	22.2	5.5
1800 - 1900	782	214	205	186	177	5	9	668	80	15	6	1	15	60	151	271	229	49	6	0	0	0	0	0	28.9	23.7	5.5
1900 - 2000	670	186	168	162	154	3	6	567	73	14	6	0	4	23	72	207	286	69	7	1	0	0	0	0	30.2	25.9	4.9
2000 - 2100	529	147	136	124	122	2	4	454	58	7	4	0	1	7	28	151	248	83	11	2	0	0	0	0	31.3	27.4	4.4
2100 - 2200	480	130	119	118	113	1	3	408	53	10	4	0	0	5	35	149	220	60	9	1	0	0	0	0	30.9	26.9	4.4
2200 - 2300	427	115	111	103	97	2	3	351	61	7	3	0	8	43	85	148	107	28	6	1	0	0	0	0	29.1	23.4	5.9
2300 - 0000	323	96	78	81	68	1	1	262	53	4	1	0	4	21	46	103	111	33	5	1	0	0	0	0	30.2	25	5.7
0700 - 1900	9196	2287	2261	2336	2313	60	56	7279	1291	437	73	10	200	903	1987	3154	2378	496	57	8	1	0	0	0	28.4	23	5.7
0600 - 2200	11159	2800	2744	2820	2794	68	73	8914	1524	487	92	11	209	952	2155	3720	3236	765	96	13	2	0	0	0	29.1	23.7	5.7
0600 - 0000	11909	3011	2933	3005	2960	71	78	9528	1638	498	96	11	220	1016	2286	3971	3454	826	107	16	2	1	0	0	29.1	23.7	5.7
0000 - 0000	12720	3225	3138	3205	3153	75	81	10143	1797	522	101	11	222	1031	2339	4144	3781	1020	145	22	4	1	0	0	29.5	24	5.8

Virtual Week (1.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
Mon	12959	3264	3222	3245	3228	98	95	10067	1878	705	116	12	237	1043	2335	4228	3919	1012	147	23	3	0	0	0	29.5	24	5.8
Tue	13203	3362	3201	3372	3268	108	73	10397	1872	651	102	12	275	1236	2730	4295	3613	906	118	16	2	0	0	0	29.1	23.4	5.8
Wed	13583	3442	3320	3481	3340	88	95	10611	2072	624	93	15	243	1172	2620	4534	3868	966	141	20	2	1	1	0	29.3	23.7	5.8
Thu	13771	3424	3464	3447	3436	96	102	10782	2099	599	93	20	291	1349	2822	4456	3655	1010	141	21	5	1	0	0	29.3	23.4	5.9
Fri	11614	2919	2926	2887	2882	58	77	9141	1766	463	109	12	301	1297	2609	3694	2888	695	97	18	3	0	0	0	28.9	22.9	6
Sat	12311	3177	2999	3114	3021	36	74	10055	1680	358	108	4	100	546	1669	4140	4297	1315	195	33	10	1	1	0	30.4	25.4	5.4
Sun	11599	2984	2834	2887	2894	39	50	9951	1215	255	89	2	104	573	1587	3662	4226	1236	176	26	5	2	0	0	30.4	25.4	5.4
	89040	22572	21966	22433	22069	523	566	71004	12582	3655	710	77	1551	7216	16372	29009	26466	7140	1015	157	30	5	2	0	29.5	24	5.8

Total

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
	89040	22572	21966	22433	22069	523	566	71004	12582	3655	710	77	1551	7216	16372	29009	26466	7140	1015	157	30	5	2	0	29.5	24	5.8

Edinburgh ATC Study

Report Id 295b/15-01
Site Name Site 1 of 9
Description Queen Street, 20m west of Frederick Street
Direction Eastbound

Tuesday 28 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	126	32	31	36	27	0	2	101	22	1	0	0	0	0	9	47	47	15	4	4	0	0	0	0	32	27.4	5.2
0100 - 0200	92	27	30	18	17	2	0	73	13	4	0	0	0	2	9	24	45	8	4	0	0	0	0	0	30.2	26.6	4.9
0200 - 0300	53	12	10	16	15	1	0	40	8	4	0	0	0	2	5	22	16	6	2	0	0	0	0	0	30.4	25.7	5.2
0300 - 0400	54	15	10	19	10	0	0	40	12	1	1	0	0	0	4	10	23	17	0	0	0	0	0	0	33.6	28.6	4.2
0400 - 0500	78	13	14	21	30	1	1	52	14	10	0	0	0	2	1	18	38	14	4	1	0	0	0	0	32.9	28.6	4.8
0500 - 0600	158	27	32	42	57	0	1	119	26	9	3	0	0	1	13	36	63	40	4	1	0	0	0	0	32.7	28	4.7
0600 - 0700	359	49	83	103	124	0	3	271	45	34	6	0	4	23	51	105	130	40	5	1	0	0	0	0	30.4	25.2	5.7
0700 - 0800	700	146	179	183	192	2	7	528	97	62	4	1	40	144	155	224	114	20	2	0	0	0	0	0	26.6	20.6	6.1
0800 - 0900	761	206	203	165	187	6	7	626	58	60	4	8	131	272	215	110	24	1	0	0	0	0	0	0	21.7	16	5.2
0900 - 1000	679	178	160	165	176	3	2	546	58	66	4	11	195	276	143	49	5	0	0	0	0	0	0	0	18.8	13.8	4.6
1000 - 1100	802	203	193	208	198	3	5	611	105	73	5	0	46	210	327	182	34	3	0	0	0	0	0	0	22.8	18.2	4.6
1100 - 1200	763	183	179	200	201	1	6	590	80	82	4	2	76	188	284	178	32	3	0	0	0	0	0	0	23	18	4.9
1200 - 1300	732	193	195	159	185	1	7	567	86	67	4	2	87	243	219	149	25	4	2	1	0	0	0	0	23	17.1	5.4
1300 - 1400	738	176	192	185	185	2	4	590	85	52	5	1	64	196	257	169	44	6	1	0	0	0	0	0	23.3	18.2	5.2
1400 - 1500	773	186	195	202	190	5	5	631	77	49	6	1	70	188	280	178	49	6	1	0	0	0	0	0	23.7	18.3	5.2
1500 - 1600	777	182	196	199	200	5	3	647	65	54	3	1	38	153	311	207	57	9	1	0	0	0	0	0	24.2	19.3	4.9
1600 - 1700	765	185	204	203	173	4	5	648	57	50	1	4	79	244	212	169	47	8	2	0	0	0	0	0	23.7	17.7	5.7
1700 - 1800	741	205	182	167	187	11	10	628	36	54	2	5	140	321	214	53	7	1	0	0	0	0	0	0	19	14.9	4.3
1800 - 1900	817	196	211	199	211	7	8	729	49	22	2	0	49	191	321	198	52	4	2	0	0	0	0	0	23.9	18.8	4.9
1900 - 2000	722	178	204	176	164	3	4	620	59	33	3	1	23	98	216	260	112	11	1	0	0	0	0	0	26.4	21.1	5.2
2000 - 2100	562	141	152	113	156	3	6	499	38	13	3	0	11	50	121	231	115	26	7	1	0	0	0	0	28.2	23	5.5
2100 - 2200	477	108	118	135	116	6	5	413	42	8	3	0	12	32	117	195	104	15	2	0	0	0	0	0	27.3	22.7	5.1
2200 - 2300	389	103	116	95	75	1	3	336	37	10	2	0	3	26	117	152	78	11	1	1	0	0	0	0	27.1	22.5	4.7
2300 - 0000	271	70	82	53	66	1	3	232	33	1	1	0	1	2	37	107	95	26	1	2	0	0	0	0	30.2	25.6	4.6
0700 - 1900	9048	2239	2289	2235	2285	50	69	7341	853	691	44	36	1015	2626	2938	1866	490	65	11	1	0	0	0	0	23.3	17.6	5.4
0600 - 2200	11168	2715	2846	2762	2845	62	87	9144	1037	779	59	37	1065	2829	3443	2657	951	157	26	3	0	0	0	0	24.6	18.6	5.8
0600 - 0000	11828	2888	3044	2910	2986	64	93	9712	1107	790	62	37	1069	2857	3597	2916	1124	194	28	6	0	0	0	0	24.8	18.9	5.8
0000 - 0000	12389	3014	3171	3062	3142	68	97	10137	1202	819	66	37	1069	2864	3638	3073	1356	294	46	12	0	0	0	0	25.5	19.2	6.1

Wednesday 29 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	166	53	33	48	32	1	1	130	28	6	0	0	0	3	18	53	65	25	2	0	0	0	0	0	30.9	26.4	4.4
0100 - 0200	95	24	24	24	23	0	0	77	16	2	0	0	0	0	3	34	41	14	1	1	1	0	0	0	31.8	27.6	4.7
0200 - 0300	81	11	20	21	29	0	0	63	17	1	0	0	0	0	7	31	28	10	3	1	0	1	0	0	32.2	27.2	5.7
0300 - 0400	54	17	8	12	17	0	0	47	5	2	0	0	0	0	3	17	20	9	5	0	0	0	0	0	33.8	28.1	5.2
0400 - 0500	85	13	17	26	29	1	1	60	16	7	0	0	1	1	3	22	36	19	3	0	0	0	0	0	32.7	27.9	5.1
0500 - 0600	151	26	35	44	46	0	0	121	23	6	1	0	0	1	11	56	56	20	6	1	0	0	0	0	31.1	27.2	4.6
0600 - 0700	376	50	91	118	117	0	3	300	48	21	4	0	4	34	77	123	95	30	12	1	0	0	0	0	30.2	24	6.2
0700 - 0800	754	159	167	208	220	8	14	570	100	59	3	0	23	116	220	278	83	29	5	0	0	0	0	0	25.9	21.1	5.4
0800 - 0900	849	217	215	207	210	7	6	684	81	63	8	1	61	265	336	149	32	3	1	0	1	0	0	0	21.9	17.6	4.8
0900 - 1000	724	174	182	175	193	2	7	564	74	70	7	5	148	303	188	73	6	1	0	0	0	0	0	0	19.7	14.8	4.5
1000 - 1100	759	190	187	175	207	1	4	570	102	76	6	2	52	188	258	207	44	8	0	0	0	0	0	0	24.2	18.7	5.2
1100 - 1200	800	195	196	208	201	0	3	635	85	75	2	1	53	248	300	159	33	6	0	0	0	0	0	0	22.6	17.8	4.8
1200 - 1300	788	188	197	205	198	3	3	620	83	73	6	2	84	222	241	182	50	6	1	0	0	0	0	0	23.9	18	5.6
1300 - 1400	849	222	221	211	195	0	12	676	107	47	7	0	57	203	330	199	47	9	4	0	0	0	0	0	23.9	18.6	5.2
1400 - 1500	784	199	178	196	211	3	3	640	92	41	5	6	88	230	261	169	29	1	0	0	0	0	0	0	23	17.2	5.2
1500 - 1600	781	202	185	199	195	2	5	655	76	40	3	0	49	154	266	207	90	11	3	1	0	0	0	0	25.3	19.6	5.5
1600 - 1700	808	228	198	210	172	2	11	641	82	67	5	2	65	237	292	171	35	5	1	0	0	0	0	0	22.8	17.8	5
1700 - 1800	684	185	182	151	166	6	4	582	36	53	3	6	181	325	138	33	1	0	0	0	0	0	0	0	17.7	13.7	3.9
1800 - 1900	781	200	180	192	209	10	5	654	67	42	3	0	47	191	265	205	60	12	1	0	0	0	0	0	24.4	19	5.3
1900 - 2000	728	187	198	169	174	5	5	619	68	27	4	0	19	90	201	257	141	17	3	0	0	0	0	0	27.1	21.7	5.4
2000 - 2100	561	145	154	123	139	6	7	478	46	21	3	0	9	37	96	244	143	29	3	0	0	0	0	0	28.2	23.7	4.9
2100 - 2200	545	121	149	143	132	3	5	479	42	14	2	1	13	72	134	191	104	27	3	0	0	0	0	0	27.7	22.1	5.5
2200 - 2300	410	124	97	90	99	2	4	345	46	13	0	0	3	35	114	161	77	18	2	0	0	0	0	0	27.7	22.7	5
2300 - 0000	271	76	74	67	54	0	1	226	37	7	0	0	1	5	45	124	74	16	4	2	0	0	0	0	29.1	24.9	4.7
0700 - 1900	9361	2359	2288	2337	2377	44	77	7491	985	706	58	25	908	2682	3095	2032	510	91	16	1	1	0	0	0	23.5	17.9	5.4
0600 - 2200	11571	2862	2880	2890	2939	58	97	9367	1189	789	71	26	953	2915	3603	2847	993	194	37	2	1	0	0	0	24.6	18.8	5.7
0600 - 0000	12252	3062	3051	3047	3092	60	102	9938	1272	809	71	26	957	2955	3762	3132	1144	228	43	4	1	0	0	0	25.1	19.1	5.8
0000 - 0000	12884	3206	3188	3222	3268	62	104	10436	1377	833	72	26	958	2960	3807	3345	1390	325	63	7	2	1	0	0	25.7	19.5	6

Thursday 30 July 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile	Average	Standard
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	85%	Speed	deviation
0000 - 0100	182	42	49	52	39	4	0	147	29	2	0	0	2	0	14	64	71	22	8	1	0	0	0	0	31.1	26.7	4.9
0100 - 0200	105	33	27	21	24	0	0	65	38	2	0	0	0	2	13	37	40	12	1	0	0	0	0	0	30.4	25.9	4.4
0200 - 0300	68	19	21	15	13	1	0	50	16	1	0	0	1	0	4	22	30	6	1	3	1	0	0	0	31.1	27.7	6.1
0300 - 0400	61	16	14	21	10	0	0	54	6	1	0	0	0	0	3	20	28	8	1	1	0	0	0	0	31.3	27.7	4.4
0400 - 0500	81	17	20	20	24	2	1	57	13	7	1	1	0	3	6	27	26	13	5	0	0	0	0	0	32.9	26.8	6.2
0500 - 0600	167	33	28	41	65	0	0	126	19	18	4	0	1	0	7	41	80	34	4	0	0	0	0	0	32.4	27.9	4.4
0600 - 0700	338	45	75	98	120	1	4	258	47	24	4	0	1	9	49	110	107	46	11	3	2	0	0	0	31.3	26.2	5.9
0700 - 0800	729	156	169	204	200	5	8	541	107	66	2	0	17	80	240	216	143	25	3	3	2	0	0	0	27.5	21.9	5.8
0800 - 0900	856	224	216	201	215	6	7	683	97	62	1	5	73	277	293	160	37	10	0	1	0	0	0	0	22.8	17.5	5.2
0900 - 1000	722	191	169	170	192	5	15	529	89	79	5	6	117	262	226	90	17	3	1	0	0	0	0	0	21	15.8	5
1000 - 1100	746	189	166	190	201	3	5	561	102	72	3	2	56	204	251	194	36	3	0	0	0	0	0	0	23.5	18.1	4.9
1100 - 1200	787	180	200	202	205	3	5	617	87	62	13	4	63	252	289	148	30	1	0	0	0	0	0	0	22.4	17.5	4.8
1200 - 1300	822	209	206	214	193	6	7	636	99	69	5	3	93	275	271	152	25	3	0	0	0	0	0	0	22.8	17	5
1300 - 1400	809	190	200	213	206	4	15	653	80	50	7	1	56	207	319	180	37	8	1	0	0	0	0	0	23	18.2	4.9
1400 - 1500	794	210	194	192	198	4	3	629	92	61	5	2	38	208	322	179	39	5	1	0	0	0	0	0	23	18.3	4.7
1500 - 1600	811	203	195	207	206	3	5	653	94	50	6	1	34	154	295	245	74	7	1	0	0	0	0	0	24.6	19.8	4.9
1600 - 1700	735	202	195	174	164	2	10	575	59	78	11	4	127	279	226	81	15	3	0	0	0	0	0	0	20.4	15.5	4.9
1700 - 1800	738	188	206	184	160	8	5	644	33	46	2	13	180	332	178	29	6	0	0	0	0	0	0	0	17.9	13.9	4.1
1800 - 1900	840	192	190	227	231	5	9	723	55	45	3	5	98	255	281	177	24	0	0	0	0	0	0	0	22.4	17.1	5
1900 - 2000	812	226	215	177	194	5	13	690	61	42	1	3	45	126	275	265	78	15	4	0	1	0	0	0	25.3	20.1	5.6
2000 - 2100	584	155	162	123	144	4	1	510	55	14	0	0	5	36	124	223	164	22	9	1	0	0	0	0	28.2	23.7	5
2100 - 2200	572	133	133	147	159	3	7	491	51	17	3	0	16	63	134	189	132	29	9	0	0	0	0	0	28.4	22.6	6
2200 - 2300	483	143	114	102	124	1	3	408	59	9	3	1	13	55	115	178	92	26	2	1	0	0	0	0	27.7	22.4	5.6
2300 - 0000	306	85	78	62	81	5	1	240	48	11	1	0	1	10	54	139	80	17	4	1	0	0	0	0	28.9	24.3	4.9
0700 - 1900	9389	2334	2306	2378	2371	54	94	7444	994	740	63	46	952	2785	3191	1851	483	68	7	4	2	0	0	0	23	17.6	5.3
0600 - 2200	11695	2893	2891	2923	2988	67	119	9393	1208	837	71	49	1019	3019	3773	2638	964	180	40	8	5	0	0	0	24.4	18.5	5.8
0600 - 0000	12484	3121	3083	3087	3193	73	123	10041	1315	857	75	50	1033	3084	3942	2955	1136	223	46	10	5	0	0	0	24.8	18.8	5.9
0000 - 0000	13148	3281	3242	3257	3368	80	124	10540	1436	888	80	51	1037	3089	3989	3166	1411	318	66	15	6	0	0	0	25.5	19.2	6.1

Friday 31 July 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile	Average	Standard
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	85%	Speed	deviation
0000 - 0100	189	54	53	41	41	1	0	149	39	0	0	0	0	5	24	74	61	16	7	2	0	0	0	0	30.6	25.8	5.4
0100 - 0200	111	34	33	25	19	1	0	82	25	2	1	0	0	1	7	27	50	23	2	1	0	0	0	0	31.5	27.9	4.7
0200 - 0300	65	23	12	13	17	0	0	50	15	0	0	0	0	0	1	26	25	11	2	0	0	0	0	0	32.7	27.9	4.1
0300 - 0400	69	19	19	22	9	0	0	46	17	4	2	0	0	0	5	23	24	15	2	0	0	0	0	0	31.8	27.4	4.7
0400 - 0500	89	18	16	24	31	1	1	69	11	7	0	0	0	2	9	28	35	11	2	2	0	0	0	0	31.1	26.7	5.6
0500 - 0600	145	26	36	32	51	0	1	105	27	10	2	0	0	0	11	44	56	28	6	0	0	0	0	0	32.9	27.7	4.7
0600 - 0700	352	54	66	100	132	0	6	272	45	27	2	0	4	25	60	111	110	32	7	3	0	0	0	0	30	24.8	5.9
0700 - 0800	737	145	188	213	191	7	5	553	113	48	11	2	23	86	161	257	152	44	10	2	0	0	0	0	28.9	22.6	6.2
0800 - 0900	838	217	217	211	193	4	5	671	90	67	1	0	51	181	321	198	72	13	2	0	0	0	0	0	24.4	19.2	5.3
0900 - 1000	770	171	188	207	204	5	5	599	86	70	5	3	69	241	242	156	52	5	2	0	0	0	0	0	23.5	17.7	5.5
1000 - 1100	805	191	197	216	201	3	2	628	93	70	9	0	64	192	260	227	58	4	0	0	0	0	0	0	23.9	18.6	5.3
1100 - 1200	779	197	179	220	183	3	4	594	95	79	4	1	54	290	272	118	36	6	2	0	0	0	0	0	22.4	17.4	4.9
1200 - 1300	792	187	203	199	203	1	2	639	67	80	3	2	99	343	250	86	9	3	0	0	0	0	0	0	20.1	15.8	4.3
1300 - 1400	771	196	190	207	178	2	6	610	84	64	5	3	125	281	238	103	19	1	1	0	0	0	0	0	21	15.9	5
1400 - 1500	756	190	182	183	201	2	10	612	75	52	5	1	106	331	214	80	19	3	2	0	0	0	0	0	20.6	15.8	4.8
1500 - 1600	760	171	211	193	185	5	7	625	67	55	1	4	123	272	228	105	22	6	0	0	0	0	0	0	21.5	16.1	5.1
1600 - 1700	732	176	193	178	185	3	6	621	49	49	4	4	124	388	188	25	3	0	0	0	0	0	0	0	17.9	14.3	3.6
1700 - 1800	784	192	200	195	197	4	4	665	44	62	5	5	106	326	262	67	15	2	1	0	0	0	0	0	19.7	15.7	4.4
1800 - 1900	773	177	220	193	183	9	3	660	58	41	2	10	140	274	209	109	29	2	0	0	0	0	0	0	21.5	15.9	5.3
1900 - 2000	762	204	194	196	168	3	5	632	93	27	2	0	24	101	191	288	136	20	2	0	0	0	0	0	27.1	21.5	5.5
2000 - 2100	602	164	157	133	148	5	14	489	67	23	4	0	21	50	124	248	127	28	4	0	0	0	0	0	28	22.8	5.6
2100 - 2200	552	145	133	149	125	3	4	470	59	11	5	0	12	43	113	214	142	22	4	0	1	1	0	0	28	23.3	5.4
2200 - 2300	568	148	149	129	142	2	4	470	80	10	2	2	24	89	166	175	96	14	2	0	0	0	0	0	26.8	20.8	5.7
2300 - 0000	453	122	122	102	107	1	3	367	66	14	2	0	9	52	143	167	70	11	1	0	0	0	0	0	26.4	21.6	4.9
0700 - 1900	9297	2210	2368	2415	2304	48	59	7477	921	737	55	35	1084	3205	2845	1531	486	89	20	2	0	0	0	0	22.8	17.1	5.4
0600 - 2200	11565	2777	2918	2993	2877	59	88	9340	1185	825	68	35	1145	3424	3333	2392	1001	191	37	5	1	1	0	0	24.6	18.2	5.9
0600 - 0000	12586	3047	3189	3224	3126	62	95	10177	1331	849	72	37	1178	3565	3642	2734	1167	216	40	5	1	1	0	0	24.8	18.4	5.9
0000 - 0000	13254	3221	3358	3381	3294	65	97	10678	1465	872	77	37	1178	3573	3699	2956	1418	320	61	10	1	1	0	0	25.5	18.9	6.2

Saturday 01 August 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile	Average	Standard
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	85%	Speed	deviation
0000 - 0100	327	98	89	75	65	2	3	274	42	5	1	0	2	14	64	138	85	22	2	0	0	0	0	0	28.4	23.9	4.8
0100 - 0200	238	64	62	62	50	2	1	191	42	2	0	0	1	5	43	95	72	20	1	1	0	0	0	0	29.3	24.7	4.7
0200 - 0300	186	47	47	51	41	1	1	144	38	2	0	0	0	2	18	61	82	19	4	0	0	0	0	0	30.4	26.6	4.4
0300 - 0400	139	37	46	27	29	0	1	108	27	3	0	0	1	0	7	55	52	16	7	1	0	0	0	0	31.1	27.1	4.9
0400 - 0500	90	24	26	21	19	0	0	61	22	5	2	0	0	0	7	26	39	13	5	0	0	0	0	0	33.3	27.6	4.9
0500 - 0600	114	21	27	34	32	0	2	85	18	7	2	0	0	1	7	36	43	21	2	4	0	0	0	0	33.1	27.7	5.5
0600 - 0700	201	41	47	54	59	0	4	161	20	12	4	0	1	7	14	65	63	40	7	3	0	0	0	1	32.7	27.5	6.1
0700 - 0800	317	52	78	107	80	3	3	227	52	29	3	0	1	3	41	96	109	49	15	3	0	0	0	0	32.7	27	5.5
0800 - 0900	533	113	117	155	148	4	2	423	65	36	3	0	4	25	82	213	155	39	14	1	0	0	0	0	29.3	24.6	5.3
0900 - 1000	635	145	143	181	166	6	7	514	63	40	5	1	26	71	138	224	142	30	3	0	0	0	0	0	28	22.3	6
1000 - 1100	720	180	172	193	175	4	0	602	57	52	5	0	21	130	165	279	106	17	1	1	0	0	0	0	26.4	21.2	5.5
1100 - 1200	823	192	216	220	195	2	6	686	83	39	7	1	75	191	260	232	57	4	3	0	0	0	0	0	24.2	18.7	5.5
1200 - 1300	774	192	177	205	200	4	4	651	60	48	7	1	53	192	264	190	64	8	2	0	0	0	0	0	23.9	18.8	5.4
1300 - 1400	851	195	209	211	236	2	3	744	53	46	3	4	54	235	364	158	30	4	2	0	0	0	0	0	22.4	17.9	4.7
1400 - 1500	769	209	187	181	192	2	8	639	53	61	6	3	129	294	208	111	21	3	0	0	0	0	0	0	21.5	15.9	5.1
1500 - 1600	808	217	196	214	181	4	6	695	68	30	5	2	42	163	293	229	69	10	0	0	0	0	0	0	24.4	19.3	5.2
1600 - 1700	755	172	187	206	190	2	6	650	61	34	2	1	8	68	237	307	107	20	7	0	0	0	0	0	26.4	22	4.8
1700 - 1800	789	217	192	197	183	3	3	675	72	31	5	1	20	106	292	252	99	16	3	0	0	0	0	0	25.7	20.7	5
1800 - 1900	739	195	182	179	183	2	4	630	73	28	2	0	20	119	252	259	77	11	0	0	0	1	0	0	25.3	20.4	5
1900 - 2000	717	177	176	179	185	1	6	604	73	29	4	0	17	81	220	260	111	22	5	0	0	1	0	0	26.6	21.7	5.4
2000 - 2100	554	158	156	119	121	2	10	461	61	17	3	0	10	39	70	236	170	23	4	1	1	0	0	0	28.4	24	5.3
2100 - 2200	495	144	103	119	129	2	8	421	51	8	5	0	5	18	87	192	153	30	8	2	0	0	0	0	29.1	24.6	5.1
2200 - 2300	472	119	125	102	126	0	6	386	63	16	1	0	9	41	125	172	102	18	4	1	0	0	0	0	28	22.7	5.4
2300 - 0000	504	155	138	112	99	0	4	399	90	10	1	0	3	48	128	197	109	16	3	0	0	0	0	0	27.5	22.8	5
0700 - 1900	8513	2079	2056	2249	2129	38	52	7136	760	474	53	14	453	1597	2596	2550	1036	211	50	5	0	1	0	0	25.9	20.2	5.8
0600 - 2200	10480	2599	2538	2720	2623	43	80	8783	965	540	69	14	486	1742	2987	3303	1533	326	74	11	1	2	0	1	26.6	20.9	5.9
0600 - 0000	11456	2873	2801	2934	2848	43	90	9568	1118	566	71	14	498	1831	3240	3672	1744	360	81	12	1	2	0	1	26.8	21	5.9
0000 - 0000	12550	3164	3098	3204	3084	48	98	10431	1307	590	76	14	502	1853	3386	4083	2117	471	102	18	1	2	0	1	27.3	21.4	6

Sunday 02 August 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile	Average	Standard
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	85%	Speed	deviation
0000 - 0100	407	108	114	105	80	1	0	340	54	12	0	0	2	19	70	172	109	30	5	0	0	0	0	0	29.3	24.3	5
0100 - 0200	310	77	77	80	76	1	0	262	43	4	0	0	2	4	32	118	127	23	3	1	0	0	0	0	29.3	25.9	4.3
0200 - 0300	242	65	58	65	54	1	1	196	40	4	0	0	0	3	24	85	103	25	2	0	0	0	0	0	30.2	26.2	4.2
0300 - 0400	198	58	48	58	34	0	1	157	36	4	0	0	0	0	24	66	78	25	4	0	1	0	0	0	30.9	26.4	4.8
0400 - 0500	119	32	29	29	29	0	0	98	20	1	0	0	0	2	5	33	50	23	5	0	1	0	0	0	32	28	5
0500 - 0600	115	31	28	22	34	0	0	84	21	9	1	0	0	0	6	39	42	16	9	2	1	0	0	0	34.2	28.2	5.5
0600 - 0700	206	50	44	59	53	2	2	177	18	5	2	0	0	1	20	57	75	41	7	4	0	0	0	1	32.7	27.7	6
0700 - 0800	255	34	60	71	90	3	0	215	24	8	5	0	3	6	21	79	84	50	9	2	1	0	0	0	32.7	27	5.8
0800 - 0900	380	76	96	110	98	5	3	304	39	24	5	0	1	8	47	142	113	61	6	2	0	0	0	0	31.3	26.1	5.1
0900 - 1000	535	128	112	160	135	1	1	444	56	24	9	0	6	26	103	204	157	37	2	0	0	0	0	0	28.9	24.1	5
1000 - 1100	718	171	186	177	184	3	5	631	49	27	3	2	21	80	240	240	112	20	1	2	0	0	0	0	26.4	21.3	5.3
1100 - 1200	726	175	176	191	184	2	3	635	48	35	3	1	25	97	213	267	102	16	4	1	0	0	0	0	26.2	21.2	5.5
1200 - 1300	809	209	203	192	205	0	8	709	57	29	6	0	48	157	298	231	69	6	0	0	0	0	0	0	24.4	19.3	5.1
1300 - 1400	797	205	186	208	198	1	3	709	45	32	7	2	45	149	298	233	64	6	0	0	0	0	0	0	24.4	19.4	5
1400 - 1500	862	206	221	203	232	7	7	761	56	27	4	3	35	147	314	282	79	2	0	0	0	0	0	0	24.4	19.8	4.8
1500 - 1600	795	229	180	176	210	5	7	698	45	35	5	6	89	212	284	176	28	0	0	0	0	0	0	0	22.6	17.4	5
1600 - 1700	783	177	214	204	188	5	9	687	50	32	0	1	42	142	232	249	94	23	0	0	0	0	0	0	25.9	20.2	5.7
1700 - 1800	740	187	175	186	192	4	0	658	36	40	2	0	28	209	253	184	54	12	0	0	0	0	0	0	24.2	18.9	5.1
1800 - 1900	704	173	182	185	164	4	10	596	62	32	0	0	24	86	190	297	96	11	0	0	0	0	0	0	25.9	21.3	4.9
1900 - 2000	618	176	163	138	141	5	7	540	40	21	5	0	11	36	169	235	127	36	4	0	0	0	0	0	28.4	23	5.2
2000 - 2100	527	137	138	135	117	5	6	481	24	10	1	0	5	21	100	206	144	39	10	2	0	0	0	0	29.1	24.4	5.3
2100 - 2200	419	112	104	97	106	2	8	369	25	13	2	0	0	19	80	178	113	22	6	1	0	0	0	0	28.9	24.3	4.8
2200 - 2300	368	120	100	77	71	1	1	331	27	6	2	0	8	19	77	141	92	29	1	1	0	0	0	0	29.3	23.7	5.3
2300 - 0000	286	92	72	63	59	3	2	246	32	3	0	0	2	9	53	123	75	19	4	1	0	0	0	0	28.6	24.4	5
0700 - 1900	8104	1970	1991	2063	2080	40	56	7047	567	345	49	15	367	1319	2493	2584	1052	244	22	7	1	0	0	0	26.2	20.6	5.7
0600 - 2200	9874	2445	2440	2492	2497	54	79	8614	674	394	59	15	383	1396	2862	3260	1511	382	49	14	1	0	0	1	27.1	21.3	5.8
0600 - 0000	10528	2657	2612	2632	2627	58	82	9191	733	403	61	15	393	1424	2992	3524	1678	430	54	16	1	0	0	1	27.1	21.5	5.8
0000 - 0000	11919	3028	2966	2991	2934	61	84	10328	947	437	62	15	397	1452	3153	4037	2187	572	82	19	4	0	0	1	27.7	22	5.9

Monday 03 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	183	52	49	48	34	1	0	161	18	2	1	0	1	0	10	70	68	27	6	1	0	0	0	0	31.5	27.2	4.5
0100 - 0200	122	31	26	34	31	1	0	100	19	2	0	0	1	1	4	34	58	23	0	1	0	0	0	0	32.2	27.5	4.4
0200 - 0300	78	18	24	17	19	0	0	67	10	1	0	0	1	0	4	22	34	15	2	0	0	0	0	0	31.8	27.4	4.4
0300 - 0400	93	21	23	25	24	0	1	72	15	5	0	0	0	1	5	30	40	11	4	1	1	0	0	0	32.7	27.5	5.1
0400 - 0500	98	27	23	19	29	0	2	79	11	6	0	0	0	1	5	31	43	14	4	0	0	0	0	0	32	27.4	4.4
0500 - 0600	152	28	27	56	41	1	2	116	23	9	1	0	0	1	9	37	72	27	4	1	1	0	0	0	32.7	28.1	4.8
0600 - 0700	353	50	82	109	112	0	6	267	47	21	12	0	7	26	65	130	94	22	8	1	0	0	0	0	29.5	23.9	5.8
0700 - 0800	724	150	164	199	211	8	11	557	88	51	9	0	24	129	200	221	111	22	15	2	0	0	0	0	27.5	21.3	6.3
0800 - 0900	828	206	214	206	202	5	10	663	84	59	7	5	43	286	304	142	38	9	1	0	0	0	0	0	22.8	17.7	5
0900 - 1000	780	195	206	190	189	8	9	572	111	74	6	4	72	217	291	143	47	3	3	0	0	0	0	0	22.8	17.8	5.3
1000 - 1100	722	192	174	192	164	2	3	521	109	81	6	1	45	177	225	204	65	5	0	0	0	0	0	0	24.6	19.1	5.3
1100 - 1200	779	192	201	191	195	0	5	617	79	72	6	3	89	203	293	162	26	3	0	0	0	0	0	0	22.8	17.5	5.1
1200 - 1300	785	201	188	195	201	3	5	601	111	56	9	2	36	165	261	228	80	11	1	0	1	0	0	0	25.3	19.7	5.4
1300 - 1400	795	199	199	203	194	9	4	631	93	53	5	2	50	190	305	203	44	1	0	0	0	0	0	0	23.3	18.4	4.7
1400 - 1500	750	192	198	195	165	4	2	595	88	53	8	1	43	163	279	214	42	7	1	0	0	0	0	0	23.7	19	4.9
1500 - 1600	762	188	193	205	176	3	8	614	82	47	8	4	40	119	272	240	75	8	3	0	1	0	0	0	25.1	20	5.3
1600 - 1700	833	225	220	211	177	9	7	694	72	45	6	3	79	185	253	232	68	11	2	0	0	0	0	0	25.1	18.9	5.8
1700 - 1800	796	202	212	211	171	10	9	696	39	41	1	3	107	317	259	87	20	3	0	0	0	0	0	0	20.6	16	4.7
1800 - 1900	782	185	218	201	178	12	3	685	42	34	6	2	60	184	259	208	65	4	0	0	0	0	0	0	24.2	18.7	5.3
1900 - 2000	720	196	177	169	178	11	6	593	73	35	2	1	23	119	189	228	124	31	5	0	0	0	0	0	27.5	21.4	5.9
2000 - 2100	557	169	134	130	124	2	9	489	44	13	0	1	12	50	114	211	120	40	7	0	2	0	0	0	28.9	23.4	6
2100 - 2200	472	114	120	120	118	5	4	417	31	14	1	0	4	44	111	153	119	36	5	0	0	0	0	0	29.1	23.4	5.6
2200 - 2300	372	111	94	86	81	3	3	312	40	10	4	0	1	13	93	142	96	23	4	0	0	0	0	0	28.6	23.9	4.9
2300 - 0000	261	90	66	64	41	1	3	227	25	4	1	0	3	13	35	105	78	21	5	1	0	0	0	0	29.8	24.8	5.3
0700 - 1900	9336	2327	2387	2399	2223	73	76	7446	998	666	77	30	688	2335	3201	2284	681	87	26	2	2	0	0	0	24.2	18.7	5.4
0600 - 2200	11438	2856	2900	2927	2755	91	101	9212	1193	749	92	32	734	2574	3680	3006	1138	216	51	3	4	0	0	0	25.3	19.4	5.7
0600 - 0000	12071	3057	3060	3077	2877	95	107	9751	1258	763	97	32	738	2600	3808	3253	1312	260	60	4	4	0	0	0	25.5	19.7	5.8
0000 - 0000	12797	3234	3232	3276	3055	98	112	10346	1354	788	99	32	741	2604	3845	3477	1627	377	80	8	6	0	0	0	26.2	20.1	6

Virtual Day (7.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	226	63	60	58	45	1	1	186	33	4	0	0	1	6	30	88	72	22	5	1	0	0	0	0	30.4	25.5	5.1
0100 - 0200	153	41	40	38	34	1	0	121	28	3	0	0	1	2	16	53	62	18	2	1	0	0	0	0	30.4	26.2	4.7
0200 - 0300	110	28	27	28	27	1	0	87	21	2	0	0	0	1	9	38	45	13	2	1	0	0	0	0	30.9	26.7	4.7
0300 - 0400	95	26	24	26	19	0	0	75	17	3	0	0	0	0	7	32	38	14	3	0	0	0	0	0	31.5	27.2	4.8
0400 - 0500	91	21	21	23	27	1	1	68	15	6	0	0	0	2	5	26	38	15	4	0	0	0	0	0	32.2	27.6	5.2
0500 - 0600	143	27	30	39	47	0	1	108	22	10	2	0	0	1	9	41	59	27	5	1	0	0	0	0	32.9	27.8	4.8
0600 - 0700	312	48	70	92	102	0	4	244	39	21	5	0	3	18	48	100	96	36	8	2	0	0	0	0	30.9	25.3	6.1
0700 - 0800	602	120	144	169	169	5	7	456	83	46	5	0	19	81	148	196	114	34	8	2	0	0	0	0	28.4	22.3	6.2
0800 - 0900	721	180	183	179	179	5	6	579	73	53	4	3	52	188	228	159	67	19	3	1	0	0	0	0	25.1	19	6
0900 - 1000	692	169	166	178	179	4	7	538	77	60	6	4	90	199	190	134	61	11	2	0	0	0	0	0	24.6	17.8	6.1
1000 - 1100	753	188	182	193	190	3	3	589	88	64	5	1	44	169	247	219	65	9	0	0	0	0	0	0	24.8	19.3	5.3
1100 - 1200	780	188	192	205	195	2	5	625	80	63	6	2	62	210	273	181	45	6	1	0	0	0	0	0	23.7	18.3	5.2
1200 - 1300	786	197	196	196	198	3	5	632	80	60	6	2	71	228	258	174	46	6	1	0	0	0	0	0	23.5	18	5.3
1300 - 1400	801	198	200	205	199	3	7	659	78	49	6	2	64	209	302	178	41	5	1	0	0	0	0	0	23.3	18.1	5.1
1400 - 1500	784	199	194	193	198	4	5	644	76	49	6	2	73	223	268	173	40	4	1	0	0	0	0	0	23.3	17.8	5.2
1500 - 1600	785	199	194	199	193	4	6	655	71	44	4	3	59	175	278	201	59	7	1	0	0	0	0	0	24.2	18.8	5.3
1600 - 1700	773	195	202	198	178	4	8	645	61	51	4	3	75	220	234	176	53	10	2	0	0	0	0	0	24.2	18.1	5.7
1700 - 1800	753	197	193	184	179	7	5	650	42	47	3	5	109	277	228	101	29	5	1	0	0	0	0	0	21.7	16.3	5.2
1800 - 1900	777	188	198	197	194	7	6	668	58	35	3	2	63	186	254	208	58	6	0	0	0	0	0	0	24.2	18.7	5.4
1900 - 2000	726	192	190	172	172	5	7	614	67	31	3	1	23	93	209	256	118	22	3	0	0	0	0	0	26.8	21.5	5.5
2000 - 2100	564	153	150	125	136	4	8	487	48	16	2	0	10	40	107	228	140	30	6	1	0	0	0	0	28.4	23.6	5.4
2100 - 2200	505	125	123	130	126	3	6	437	43	12	3	0	9	42	111	187	124	26	5	0	0	0	0	0	28.4	23.2	5.5
2200 - 2300	437	124	114	97	103	1	3	370	50	11	2	0	9	40	115	160	90	20	2	1	0	0	0	0	27.7	22.5	5.4
2300 - 0000	336	99	90	75	72	2	2	277	47	7	1	0	3	20	71	137	83	18	3	1	0	0	0	0	28.4	23.8	5.1
0700 - 1900	9007	2217	2241	2297	2253	50	69	7340	868	623	57	29	781	2364	2908	2100	677	122	22	3	1	0	0	0	24.2	18.5	5.6
0600 - 2200	11113	2735	2773	2815	2789	62	93	9122	1064	702	70	30	826	2557	3383	2872	1156	235	45	7	2	0	0	0	25.3	19.3	5.9
0600 - 0000	11886	2958	2977	2987	2964	65	99	9768	1162	720	73	30	838	2617	3569	3169	1329	273	50	8	2	0	0	0	25.7	19.6	5.9
0000 - 0000	12706	3164	3179	3199	3164	69	102	10414	1298	747	76	30	840	2628	3645	3448	1644	382	71	13	3	1	0	0	26.4	20	6.1

Virtual Week (1.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
Mon	12797	3234	3232	3276	3055	98	112	10346	1354	788	99	32	741	2604	3845	3477	1627	377	80	8	6	0	0	0	26.2	20.1	6
Tue	12389	3014	3171	3062	3142	68	97	10137	1202	819	66	37	1069	2864	3638	3073	1356	294	46	12	0	0	0	0	25.5	19.2	6.1
Wed	12884	3206	3188	3222	3268	62	104	10436	1377	833	72	26	958	2960	3807	3345	1390	325	63	7	2	1	0	0	25.7	19.5	6
Thu	13148	3281	3242	3257	3368	80	124	10540	1436	888	80	51	1037	3089	3989	3166	1411	318	66	15	6	0	0	0	25.5	19.2	6.1
Fri	13254	3221	3358	3381	3294	65	97	10678	1465	872	77	37	1178	3573	3699	2956	1418	320	61	10	1	1	0	0	25.5	18.9	6.2
Sat	12550	3164	3098	3204	3084	48	98	10431	1307	590	76	14	502	1853	3386	4083	2117	471	102	18	1	2	0	1	27.3	21.4	6
Sun	11919	3028	2966	2991	2934	61	84	10328	947	437	62	15	397	1452	3153	4037	2187	572	82	19	4	0	0	1	27.7	22	5.9
	88941	22148	22255	22393	22145	482	716	72896	9088	5227	532	212	5882	18395	25517	24137	11506	2677	500	89	20	4	0	2	26.4	20	6.1

Total

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
	88941	22148	22255	22393	22145	482	716	72896	9088	5227	532	212	5882	18395	25517	24137	11506	2677	500	89	20	4	0	2	26.4	20	6.1

Edinburgh ATC Study

Report Id 295b/15-02
Site Name Site 2 of 9
Description Abercromby Place, 15m east of Nelson Street
Direction Eastbound

Tuesday 28 July 2015

TUBE 'A' PARKED ON

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	17	6	6	3	2	0	0	14	2	1	0	0	0	0	1	8	4	4	0	0	0	0	0	0	32.9	27	4.4
0100 - 0200	17	3	5	5	4	0	0	12	5	0	0	0	0	0	2	3	5	7	0	0	0	0	0	0	32	28.3	5.1
0200 - 0300	10	1	3	3	3	0	0	8	2	0	0	0	0	0	0	2	7	1	0	0	0	0	0	0	-	28.2	3.8
0300 - 0400	4	1	1	0	2	0	0	2	2	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	-	26.3	4.2
0400 - 0500	5	0	1	2	2	0	0	4	1	0	0	0	0	1	1	0	1	1	1	0	0	0	0	0	-	26.9	11
0500 - 0600	24	3	4	10	7	1	0	19	4	0	0	0	0	0	4	7	9	4	0	0	0	0	0	0	30.6	26.8	4.6
0600 - 0700	65	8	17	20	20	3	2	45	12	3	0	0	0	4	2	15	31	11	2	0	0	0	0	0	32	27.3	5.4
0700 - 0800	164	23	34	59	48	7	0	140	13	4	0	0	2	6	9	46	83	14	3	1	0	0	0	0	30	26.4	5
0800 - 0900	289	71	78	65	75	19	2	237	22	9	0	1	2	16	19	113	120	16	2	0	0	0	0	0	29.5	25.3	4.9
0900 - 1000	160	41	46	43	30	7	2	128	15	8	0	1	1	8	15	56	67	12	0	0	0	0	0	0	29.3	25	5.1
1000 - 1100	180	47	42	40	51	3	0	148	21	8	0	0	1	7	20	79	66	6	1	0	0	0	0	0	28.4	24.6	4.4
1100 - 1200	156	39	30	41	46	1	1	127	21	6	0	0	0	4	14	62	64	11	1	0	0	0	0	0	29.3	25.6	4
1200 - 1300	129	48	44	37	0	2	0	108	17	2	0	0	1	6	19	55	39	8	1	0	0	0	0	0	28.6	24.5	4.8
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1600 - 1700	2	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	-	22.7	8.2
1700 - 1800	257	87	56	62	52	6	3	231	16	1	0	0	2	7	17	116	94	19	2	0	0	0	0	0	29.1	25.5	4.4
1800 - 1900	160	55	39	27	39	7	1	140	12	0	0	0	0	8	13	54	68	15	1	1	0	0	0	0	29.8	25.7	4.9
1900 - 2000	110	32	28	28	22	3	2	94	9	2	0	0	1	2	13	38	47	8	1	0	0	0	0	0	30	25.8	4.5
2000 - 2100	98	30	28	21	19	4	5	85	3	1	0	0	1	6	7	35	36	13	0	0	0	0	0	0	30.6	25.7	5.2
2100 - 2200	65	21	13	12	19	2	0	56	7	0	0	0	1	2	7	29	17	7	2	0	0	0	0	0	29.8	25.2	5.2
2200 - 2300	49	17	15	10	7	1	0	43	4	1	0	1	0	3	10	20	13	2	0	0	0	0	0	0	28.6	23.4	5.5
2300 - 0000	25	5	8	8	4	0	0	21	4	0	0	0	0	1	3	8	12	1	0	0	0	0	0	0	28.6	25.3	4.2
0700 - 1900	1497	411	369	374	343	52	9	1261	137	38	0	2	9	62	127	581	602	101	11	2	0	0	0	0	29.3	25.4	4.7
0600 - 2200	1835	502	455	455	423	64	18	1541	168	44	0	2	12	76	156	698	733	140	16	2	0	0	0	0	29.5	25.5	4.8
0600 - 0000	1909	524	478	473	434	65	18	1605	176	45	0	3	12	80	169	726	758	143	16	2	0	0	0	0	29.5	25.4	4.8
0000 - 0000	1986	538	498	496	454	66	18	1664	192	46	0	3	12	81	177	749	784	161	17	2	0	0	0	0	29.8	25.5	4.8

Wednesday 29 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	9	0	3	1	5	0	0	7	1	1	0	0	0	0	0	4	5	0	0	0	0	0	0	0	-	26.6	1.8
0100 - 0200	5	1	3	0	1	0	0	4	1	0	0	0	0	0	0	1	3	1	0	0	0	0	0	0	-	28.1	4.5
0200 - 0300	4	3	1	0	0	0	0	2	2	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	-	26.2	6.2
0300 - 0400	4	1	0	2	1	0	0	2	2	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0	-	31.1	3.8
0400 - 0500	7	1	2	2	2	0	0	7	0	0	0	0	0	0	0	2	3	2	0	0	0	0	0	0	-	28.3	3.8
0500 - 0600	22	2	3	8	9	1	0	16	5	0	0	0	0	0	4	2	13	2	1	0	0	0	0	0	30	26.8	5.5
0600 - 0700	50	5	6	17	22	4	1	32	8	5	0	0	1	4	3	14	25	2	0	0	1	0	0	0	30	25.7	6.1
0700 - 0800	185	32	28	64	61	2	2	156	18	7	0	0	0	5	13	52	99	15	1	0	0	0	0	0	29.8	26.3	4.3
0800 - 0900	299	70	79	75	75	17	2	256	22	2	0	0	5	14	25	95	133	22	4	0	0	1	0	0	29.5	25.5	5.4
0900 - 1000	182	34	51	46	51	5	3	137	27	10	0	0	3	3	20	67	69	16	4	0	0	0	0	0	30	25.8	4.8
1000 - 1100	164	45	42	34	43	5	0	130	24	5	0	0	2	3	13	59	73	12	1	1	0	0	0	0	29.5	25.8	4.6
1100 - 1200	176	41	47	37	51	3	1	144	23	5	0	0	2	7	29	83	47	7	1	0	0	0	0	0	27.7	23.9	4.5
1200 - 1300	175	48	46	50	31	5	1	145	14	10	0	0	0	6	19	61	72	15	1	0	1	0	0	0	29.5	25.5	4.8
1300 - 1400	178	45	39	50	44	6	0	142	25	5	0	0	2	7	18	90	51	6	4	0	0	0	0	0	28.2	24.8	4.4
1400 - 1500	193	45	48	50	50	1	3	162	25	2	0	0	2	7	28	97	47	11	1	0	0	0	0	0	28	24.1	4.7
1500 - 1600	194	46	37	62	49	3	0	161	21	9	0	0	1	6	27	69	75	15	1	0	0	0	0	0	29.3	25.2	4.6
1600 - 1700	233	65	66	52	50	2	1	207	20	3	0	0	2	2	25	86	104	13	1	0	0	0	0	0	28.9	25.7	4.1
1700 - 1800	291	85	71	78	57	11	0	251	25	4	0	0	4	12	31	96	130	16	2	0	0	0	0	0	29.3	25.2	4.9
1800 - 1900	151	40	33	40	38	2	2	128	18	1	0	0	0	2	15	57	60	16	1	0	0	0	0	0	30	26.1	4.3
1900 - 2000	120	33	25	37	25	2	1	109	8	0	0	0	1	2	7	45	54	10	0	1	0	0	0	0	30	26.2	4.6
2000 - 2100	93	19	35	23	16	2	1	85	5	0	0	0	1	1	17	31	31	12	0	0	0	0	0	0	30	25.1	4.8
2100 - 2200	78	18	17	19	24	0	0	76	1	1	0	0	0	0	16	41	16	4	1	0	0	0	0	0	28	24.2	4.1
2200 - 2300	57	24	11	14	8	2	0	50	5	0	0	0	0	3	7	31	13	3	0	0	0	0	0	0	28	24.2	4.4
2300 - 0000	38	11	11	9	7	0	0	30	8	0	0	0	0	0	4	15	16	2	1	0	0	0	0	0	29.3	26.6	3.8
0700 - 1900	2421	596	587	638	600	62	15	2019	262	63	0	0	23	74	263	912	960	164	22	1	1	1	0	0	29.3	25.3	4.7
0600 - 2200	2762	671	670	734	687	70	18	2321	284	69	0	0	26	81	306	1043	1086	192	23	2	2	1	0	0	29.3	25.3	4.7
0600 - 0000	2857	706	692	757	702	72	18	2401	297	69	0	0	26	84	317	1089	1115	197	24	2	2	1	0	0	29.3	25.3	4.7
0000 - 0000	2908	714	704	770	720	73	18	2439	308	70	0	0	26	84	322	1100	1140	206	25	2	2	1	0	0	29.3	25.4	4.7

Thursday 30 July 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile	Average	Standard
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	85%	Speed	deviation
0000 - 0100	21	6	2	7	6	0	0	17	3	1	0	0	0	0	2	5	13	0	1	0	0	0	0	0	30.2	27.4	4
0100 - 0200	11	3	5	3	0	0	0	7	4	0	0	0	0	0	0	5	5	1	0	0	0	0	0	0	30.2	27.3	4
0200 - 0300	3	1	1	0	1	0	0	3	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	-	27.5	4.7
0300 - 0400	2	0	1	1	0	0	0	1	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	23.1	2.5
0400 - 0500	6	0	0	0	6	0	0	5	1	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	-	27.7	4.3
0500 - 0600	27	2	5	12	8	1	0	24	2	0	0	0	0	0	2	7	12	3	3	0	0	0	0	0	31.5	28.1	5.2
0600 - 0700	51	12	11	11	17	0	0	40	8	3	0	0	0	0	3	8	28	12	0	0	0	0	0	0	32	27.9	4.1
0700 - 0800	175	35	27	47	66	4	4	147	18	2	0	0	0	5	5	49	85	29	1	0	1	0	0	0	31.3	27.5	4.5
0800 - 0900	292	72	69	67	84	23	5	238	20	6	0	0	2	21	29	95	119	23	3	0	0	0	0	0	29.3	25.2	5.2
0900 - 1000	186	50	39	47	50	6	1	148	24	7	0	0	2	4	23	74	71	12	0	0	0	0	0	0	28.6	24.9	4.3
1000 - 1100	163	40	36	41	46	1	2	139	18	3	0	0	2	4	18	51	78	7	3	0	0	0	0	0	29.5	25.7	4.7
1100 - 1200	170	44	40	43	43	4	1	132	25	8	0	0	2	5	22	66	64	8	3	0	0	0	0	0	28.6	24.9	4.6
1200 - 1300	189	49	40	56	44	3	1	160	18	7	0	0	2	9	33	80	50	15	0	0	0	0	0	0	28.9	24.1	4.9
1300 - 1400	167	37	30	58	42	2	1	137	23	4	0	0	2	10	14	66	66	8	1	0	0	0	0	0	28.9	24.9	4.8
1400 - 1500	190	51	51	47	41	4	1	152	30	3	0	2	2	9	20	64	76	15	2	0	0	0	0	0	29.5	24.9	5.4
1500 - 1600	228	66	55	56	51	5	1	194	23	5	0	0	1	8	25	87	94	12	1	0	0	0	0	0	29.1	25.1	4.3
1600 - 1700	232	59	60	55	58	3	4	194	28	3	0	0	2	12	27	97	73	19	2	0	0	0	0	0	29.1	24.9	4.9
1700 - 1800	264	90	66	63	45	8	3	231	20	2	0	1	4	12	38	98	98	12	1	0	0	0	0	0	29.1	24.4	5.1
1800 - 1900	146	46	36	28	36	7	3	120	11	5	0	0	4	6	18	47	56	15	0	0	0	0	0	0	30.2	25.3	5.2
1900 - 2000	138	35	39	29	35	5	2	123	8	0	0	0	2	3	14	45	55	17	2	0	0	0	0	0	30.6	26.1	5
2000 - 2100	102	29	31	24	18	3	1	91	7	0	0	0	1	4	9	29	44	14	1	0	0	0	0	0	30.9	26	5
2100 - 2200	85	25	18	22	20	3	2	74	5	1	0	0	0	4	9	24	35	12	1	0	0	0	0	0	30.9	26.3	5.4
2200 - 2300	60	17	11	20	12	1	1	50	6	2	0	0	0	0	7	23	25	4	1	0	0	0	0	0	30.4	26.2	4.2
2300 - 0000	47	13	11	11	12	3	0	42	2	0	0	0	0	2	5	22	15	3	0	0	0	0	0	0	28.9	25	4.4
0700 - 1900	2402	639	549	608	606	70	27	1992	258	55	0	3	25	105	272	874	930	175	17	0	1	0	0	0	29.3	25.1	4.9
0600 - 2200	2778	740	648	694	696	81	32	2320	286	59	0	3	28	116	307	980	1092	230	21	0	1	0	0	0	29.8	25.3	4.9
0600 - 0000	2885	770	670	725	720	85	33	2412	294	61	0	3	28	118	319	1025	1132	237	22	0	1	0	0	0	29.8	25.3	4.9
0000 - 0000	2955	782	684	748	741	86	33	2469	305	62	0	3	28	118	323	1048	1164	244	26	0	1	0	0	0	29.8	25.3	4.9

Friday 31 July 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile	Average	Standard
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	85%	Speed	deviation
0000 - 0100	21	8	2	5	6	0	0	18	2	1	0	0	0	0	2	10	6	1	1	1	0	0	0	0	27.7	26.2	6.1
0100 - 0200	13	2	5	2	4	0	0	11	2	0	0	0	0	0	0	3	6	2	2	0	0	0	0	0	33.8	29.6	5
0200 - 0300	5	0	1	0	4	0	0	4	1	0	0	0	0	0	1	0	2	2	0	0	0	0	0	0	-	27.8	5.6
0300 - 0400	8	2	3	1	2	0	0	6	0	2	0	0	0	0	3	3	1	1	0	0	0	0	0	0	-	23.9	5.2
0400 - 0500	5	0	0	3	2	0	0	4	1	0	0	0	0	0	0	1	2	1	1	0	0	0	0	0	-	29.5	5
0500 - 0600	20	2	5	9	4	1	0	17	2	0	0	0	0	1	0	3	14	2	0	0	0	0	0	0	30.2	27.6	3.9
0600 - 0700	44	5	10	11	18	3	0	35	4	2	0	0	0	4	5	10	19	4	2	0	0	0	0	0	30.4	25.9	6.1
0700 - 0800	157	26	29	46	56	4	2	127	17	7	0	0	0	3	3	44	87	17	2	1	0	0	0	0	30.9	27.5	4.3
0800 - 0900	236	48	54	71	63	12	2	195	22	5	0	0	0	13	18	80	108	14	2	1	0	0	0	0	29.1	25.6	4.7
0900 - 1000	199	55	44	49	51	6	1	157	29	6	0	0	0	10	22	92	68	7	0	0	0	0	0	0	28.4	24.6	4
1000 - 1100	184	52	45	46	41	4	1	145	23	11	0	0	0	7	24	56	85	12	0	0	0	0	0	0	29.8	25.6	4.6
1100 - 1200	187	46	43	47	51	1	1	157	20	8	0	0	0	6	22	85	62	12	0	0	0	0	0	0	28.9	24.9	4.1
1200 - 1300	197	43	45	51	58	3	1	170	19	4	0	0	1	4	15	84	80	12	1	0	0	0	0	0	29.5	25.8	4.2
1300 - 1400	219	55	50	61	53	3	1	176	31	8	0	0	1	4	23	87	88	15	1	0	0	0	0	0	29.8	25.6	4.1
1400 - 1500	222	48	45	74	55	3	3	185	26	5	0	0	1	8	23	90	85	13	2	0	0	0	0	0	29.3	25.3	4.4
1500 - 1600	210	55	56	55	44	4	3	177	18	8	0	0	1	5	21	67	92	18	6	0	0	0	0	0	30	26	4.8
1600 - 1700	239	55	57	64	63	4	4	214	13	4	0	0	0	6	16	99	100	16	1	0	1	0	0	0	29.3	25.7	4.3
1700 - 1800	253	83	68	54	48	5	4	226	14	4	0	0	1	6	26	92	106	16	6	0	0	0	0	0	29.5	25.8	4.5
1800 - 1900	152	45	38	39	30	4	2	131	14	1	0	0	1	7	18	51	66	8	1	0	0	0	0	0	28.9	25.2	4.8
1900 - 2000	112	24	31	35	22	0	4	101	7	0	0	0	0	0	4	41	48	17	2	0	0	0	0	0	30.9	27.2	3.7
2000 - 2100	91	25	22	24	20	4	4	71	11	1	0	0	0	7	4	36	35	6	3	0	0	0	0	0	30	25.4	5
2100 - 2200	75	19	21	13	22	2	2	66	5	0	0	0	0	2	3	39	24	6	1	0	0	0	0	0	29.5	25.6	4.1
2200 - 2300	89	15	23	35	16	4	4	77	4	0	0	0	4	1	11	45	23	5	0	0	0	0	0	0	27.3	23.8	4.8
2300 - 0000	77	15	31	16	15	0	0	65	9	3	0	0	1	2	12	22	34	6	0	0	0	0	0	0	29.8	25.3	4.5
0700 - 1900	2455	611	574	657	613	53	25	2060	246	71	0	0	6	79	231	927	1027	160	22	2	1	0	0	0	29.5	25.6	4.4
0600 - 2200	2777	684	658	740	695	62	35	2333	273	74	0	0	6	92	247	1053	1153	193	30	2	1	0	0	0	29.8	25.7	4.4
0600 - 0000	2943	714	712	791	726	66	39	2475	286	77	0	0	11	95	270	1120	1210	204	30	2	1	0	0	0	29.5	25.6	4.5
0000 - 0000	3015	728	728	811	748	67	39	2535	294	80	0	0	11	96	276	1140	1241	213	34	3	1	0	0	0	29.8	25.6	4.5

Saturday 01 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	43	11	10	13	9	0	0	32	10	1	0	0	0	1	2	10	24	6	0	0	0	0	0	0	30.6	27.2	4.3
0100 - 0200	22	7	6	3	6	0	0	20	2	0	0	0	0	0	0	5	15	2	0	0	0	0	0	0	29.8	27.8	2.4
0200 - 0300	19	6	8	3	2	0	0	17	2	0	0	0	0	1	2	7	6	2	1	0	0	0	0	0	30.6	26	5.8
0300 - 0400	13	2	5	4	2	0	0	10	2	1	0	0	0	0	2	2	5	4	0	0	0	0	0	0	32.9	28	5.3
0400 - 0500	13	6	1	3	3	0	0	11	2	0	0	0	1	0	1	1	6	4	0	0	0	0	0	0	31.1	27.3	6.6
0500 - 0600	15	3	1	3	8	1	0	10	3	1	0	0	0	0	1	1	6	6	1	0	0	0	0	0	35.1	30.3	5.5
0600 - 0700	33	7	9	9	8	0	0	26	5	2	0	0	0	0	2	11	13	5	2	0	0	0	0	0	31.3	27.7	4.6
0700 - 0800	45	10	7	11	17	3	0	36	4	2	0	0	0	4	2	10	20	7	2	0	0	0	0	0	32.4	27	6.2
0800 - 0900	76	13	21	21	21	0	0	66	7	3	0	0	0	0	5	13	35	17	6	0	0	0	0	0	32.9	28.8	4.6
0900 - 1000	106	19	29	32	26	2	0	92	11	1	0	0	0	3	12	30	50	8	2	1	0	0	0	0	29.5	26.3	5
1000 - 1100	115	28	33	22	32	0	2	95	14	4	0	0	0	2	12	49	43	7	2	0	0	0	0	0	29.1	25.6	4.4
1100 - 1200	138	31	29	41	37	7	4	114	8	5	0	0	1	7	12	67	41	8	2	0	0	0	0	0	28.6	24.9	4.6
1200 - 1300	141	35	31	39	36	4	3	126	5	3	0	1	2	5	19	59	48	7	0	0	0	0	0	0	28	24.1	4.7
1300 - 1400	138	41	34	41	22	1	3	123	7	4	0	0	0	2	28	65	40	3	0	0	0	0	0	0	27.7	24.1	3.8
1400 - 1500	117	29	19	36	33	1	0	104	8	4	0	1	0	5	11	49	36	13	2	0	0	0	0	0	29.8	25.6	5.1
1500 - 1600	148	39	42	32	35	1	1	129	14	3	0	0	0	3	16	63	50	15	1	0	0	0	0	0	29.8	25.3	4.3
1600 - 1700	146	27	37	45	37	0	1	133	12	0	0	0	0	1	15	58	59	12	1	0	0	0	0	0	29.5	25.8	3.9
1700 - 1800	156	43	44	34	35	1	2	141	8	4	0	0	0	1	16	59	58	19	3	0	0	0	0	0	30.6	26.3	4.4
1800 - 1900	107	28	27	26	26	0	1	97	8	1	0	0	0	2	5	39	50	11	0	0	0	0	0	0	30	26.5	3.8
1900 - 2000	98	28	29	21	20	3	2	82	11	0	0	0	3	3	7	41	35	8	0	1	0	0	0	0	29.8	25.2	5.4
2000 - 2100	74	19	23	14	18	1	1	63	9	0	0	0	0	2	4	22	38	8	0	0	0	0	0	0	30.2	26.5	3.9
2100 - 2200	70	19	18	16	17	1	2	56	10	1	0	0	1	2	2	29	22	12	2	0	0	0	0	0	31.5	26.5	5.2
2200 - 2300	58	14	17	16	11	2	3	51	2	0	0	0	0	3	5	25	17	6	2	0	0	0	0	0	30	25.8	5.6
2300 - 0000	57	13	14	17	13	0	0	46	9	2	0	0	0	0	6	22	24	4	1	0	0	0	0	0	30.2	26	4.3
0700 - 1900	1433	343	353	380	357	20	17	1256	106	34	0	2	3	35	153	561	530	127	21	1	0	0	0	0	29.5	25.7	4.6
0600 - 2200	1708	416	432	440	420	25	22	1483	141	37	0	2	7	42	168	664	638	160	25	2	0	0	0	0	29.8	25.7	4.7
0600 - 0000	1823	443	463	473	444	27	25	1580	152	39	0	2	7	45	179	711	679	170	28	2	0	0	0	0	29.8	25.7	4.7
0000 - 0000	1948	478	494	502	474	28	25	1680	173	42	0	2	8	47	187	737	741	194	30	2	0	0	0	0	30	25.9	4.7

Sunday 02 August 2015

TUBE 'A' PARKED ON

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	34	7	6	10	11	0	0	27	7	0	0	0	0	0	1	12	15	5	1	0	0	0	0	0	31.1	27.5	3.8
0100 - 0200	38	8	4	15	11	0	0	28	9	1	0	0	0	0	2	7	25	4	0	0	0	0	0	0	29.8	27.4	3.2
0200 - 0300	26	9	8	5	4	0	0	20	6	0	0	0	0	0	2	7	13	4	0	0	0	0	0	0	30.2	26.9	3.7
0300 - 0400	10	2	2	3	3	0	0	7	3	0	0	0	0	0	0	2	7	1	0	0	0	0	0	0	-	27.8	3.6
0400 - 0500	11	3	4	1	3	0	0	10	1	0	0	0	0	0	0	2	4	4	1	0	0	0	0	0	33.6	30	4.3
0500 - 0600	11	2	2	4	3	0	0	10	1	0	0	0	0	0	0	1	4	6	0	0	0	0	0	0	32.9	30.4	3.5
0600 - 0700	13	3	2	8	0	0	0	11	2	0	0	0	0	0	0	6	4	0	3	0	0	0	0	0	36	28.3	5.4
0700 - 0800	27	4	7	4	12	1	0	24	1	1	0	0	0	1	0	4	14	4	3	0	1	0	0	0	32.7	29.4	6.5
0800 - 0900	41	8	10	12	11	4	1	27	7	2	0	0	1	4	5	11	15	3	2	0	0	0	0	0	30.2	24.7	6.7
0900 - 1000	86	12	25	27	22	2	1	75	6	2	0	0	0	3	10	26	32	11	4	0	0	0	0	0	31.5	26.4	5.2
1000 - 1100	128	24	38	35	31	3	1	115	8	1	0	2	1	5	13	51	39	17	0	0	0	0	0	0	30	25	5.5
1100 - 1200	154	30	36	46	42	1	1	146	4	2	0	0	3	6	29	51	56	6	3	0	0	0	0	0	29.3	24.5	5.2
1200 - 1300	142	29	32	31	50	1	0	137	3	1	0	0	3	15	30	55	34	5	0	0	0	0	0	0	28	23	5.3
1300 - 1400	151	32	40	34	45	2	2	142	5	0	0	0	6	9	28	64	41	3	0	0	0	0	0	0	27.7	23	4.8
1400 - 1500	130	27	27	36	40	2	0	117	10	1	0	0	3	7	27	53	31	9	0	0	0	0	0	0	28.2	23.1	5.3
1500 - 1600	119	28	30	29	32	1	1	109	6	2	0	1	0	3	25	56	30	4	0	0	0	0	0	0	27.1	23.6	4.7
1600 - 1700	133	40	33	28	32	0	2	123	8	0	0	0	3	6	17	60	43	4	0	0	0	0	0	0	28.2	23.9	4.8
1700 - 1800	106	28	32	25	21	1	2	99	4	0	0	0	1	4	19	46	28	8	0	0	0	0	0	0	28.4	24.1	4.7
1800 - 1900	133	30	34	33	36	0	1	125	6	1	0	0	1	1	22	62	39	7	1	0	0	0	0	0	28.6	24.7	4.3
1900 - 2000	93	29	17	25	22	1	1	82	9	0	0	0	0	1	11	37	40	3	1	0	0	0	0	0	28	25.2	3.7
2000 - 2100	85	22	17	27	19	1	1	77	5	1	0	0	0	2	10	42	25	5	1	0	0	0	0	0	28.6	24.9	4.2
2100 - 2200	65	22	12	18	13	0	3	57	5	0	0	0	0	0	11	26	21	6	1	0	0	0	0	0	30.4	26	4
2200 - 2300	44	13	12	9	10	1	0	40	2	1	0	0	2	0	11	20	10	1	0	0	0	0	0	0	26.6	23.4	4.5
2300 - 0000	4	4	0	0	0	0	0	4	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	-	23.4	5
0700 - 1900	1350	292	344	340	374	18	12	1239	68	13	0	3	22	64	225	539	402	81	13	0	1	0	0	0	28.9	24.2	5.2
0600 - 2200	1606	368	392	418	428	20	17	1466	89	14	0	3	22	67	257	650	492	95	19	0	1	0	0	0	28.9	24.4	5.1
0600 - 0000	1654	385	404	427	438	21	17	1510	91	15	0	3	24	67	269	672	503	96	19	0	1	0	0	0	28.9	24.4	5
0000 - 0000	1784	416	430	465	473	21	17	1612	118	16	0	3	24	67	274	703	571	120	21	0	1	0	0	0	29.1	24.6	5

Monday 03 August 2015

TUBE 'A' PARKED ON

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0700 - 0800	3	0	0	0	3	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	-	22.7	1.7
0800 - 0900	264	57	78	71	58	18	4	216	19	7	0	0	3	15	31	101	94	19	1	0	0	0	0	0	29.5	24.8	5
0900 - 1000	162	44	41	35	42	6	1	120	24	11	0	0	2	8	22	70	54	5	1	0	0	0	0	0	28.6	24.3	4.6
1000 - 1100	150	44	45	22	39	5	1	116	24	4	0	0	2	8	16	69	41	13	0	1	0	0	0	0	28.9	24.3	5.1
1100 - 1200	160	33	42	53	32	2	0	136	14	8	0	0	1	4	25	84	40	6	0	0	0	0	0	0	27.5	23.9	4.1
1200 - 1300	152	41	39	29	43	5	2	128	11	6	0	0	1	4	18	71	50	8	0	0	0	0	0	0	28.9	24.9	4.2
1300 - 1400	157	37	42	48	30	1	2	140	13	1	0	0	1	0	19	76	54	6	1	0	0	0	0	0	28.9	25	3.7
1400 - 1500	69	35	0	0	34	1	0	60	5	3	0	0	0	2	9	29	26	2	1	0	0	0	0	0	28	24.8	4
1500 - 1600	165	35	41	46	43	2	1	143	11	8	0	0	0	3	18	62	74	7	0	1	0	0	0	0	28.6	25.4	4.1
1600 - 1700	227	51	52	61	63	2	3	196	22	4	0	1	0	5	9	103	88	17	4	0	0	0	0	0	29.5	25.9	4.1
1700 - 1800	257	88	64	45	60	4	2	240	10	1	0	0	2	5	29	93	115	11	2	0	0	0	0	0	29.1	25.4	4.2
1800 - 1900	137	41	31	33	32	5	1	121	9	1	0	0	5	5	12	46	56	10	3	0	0	0	0	0	28.9	25.2	5.4
1900 - 2000	100	31	23	24	22	2	4	88	5	1	0	0	0	1	14	36	37	11	1	0	0	0	0	0	29.8	25.9	4.4
2000 - 2100	75	18	13	25	19	3	2	64	5	1	0	0	1	3	6	29	29	6	1	0	0	0	0	0	29.8	25.5	5.1
2100 - 2200	54	18	14	13	9	2	2	47	2	1	0	0	0	3	5	24	17	5	0	0	0	0	0	0	29.3	25.2	4.8
2200 - 2300	36	10	7	13	6	1	0	30	5	0	0	0	0	1	6	11	11	5	2	0	0	0	0	0	32.2	26.3	5.5
2300 - 0000	26	9	7	4	6	1	0	19	5	1	0	0	0	1	0	13	9	3	0	0	0	0	0	0	29.1	25.8	4.5
0700 - 1900	1903	506	475	443	479	51	17	1619	162	54	0	1	17	59	208	807	692	104	13	2	0	0	0	0	28.9	25	4.5
0600 - 2200	2132	573	525	505	529	58	25	1818	174	57	0	1	18	66	233	896	775	126	15	2	0	0	0	0	29.1	25	4.5
0600 - 0000	2194	592	539	522	541	60	25	1867	184	58	0	1	18	68	239	920	795	134	17	2	0	0	0	0	29.1	25.1	4.5
0000 - 0000	2194	592	539	522	541	60	25	1867	184	58	0	1	18	68	239	920	795	134	17	2	0	0	0	0	29.1	25.1	4.5

Virtual Day (7.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	21	5	4	6	6	0	0	16	4	1	0	0	0	0	1	7	10	2	0	0	0	0	0	0	30.6	27.1	4.3
0100 - 0200	15	3	4	4	4	0	0	12	3	0	0	0	0	0	1	3	8	2	0	0	0	0	0	0	31.3	27.9	3.8
0200 - 0300	10	3	3	2	2	0	0	8	2	0	0	0	0	0	1	3	4	2	0	0	0	0	0	0	-	26.9	4.6
0300 - 0400	6	1	2	2	1	0	0	4	1	0	0	0	0	0	1	2	2	1	0	0	0	0	0	0	-	27	4.8
0400 - 0500	7	1	1	2	3	0	0	6	1	0	0	0	0	0	0	1	3	2	0	0	0	0	0	0	-	28.3	5.8
0500 - 0600	17	2	3	7	6	1	0	14	2	0	0	0	0	0	2	3	8	3	1	0	0	0	0	0	32.4	28	4.9
0600 - 0700	37	6	8	11	12	1	0	27	6	2	0	0	0	2	2	9	17	5	1	0	0	0	0	0	31.8	27	5.4
0700 - 0800	108	19	19	33	38	3	1	90	10	3	0	0	0	3	5	30	55	12	2	0	0	0	0	0	30.9	27	4.8
0800 - 0900	214	48	56	55	55	13	2	176	17	5	0	0	2	12	19	73	89	16	3	0	0	0	0	0	29.8	25.5	5.2
0900 - 1000	154	36	39	40	39	5	1	122	19	6	0	0	1	6	18	59	59	10	2	0	0	0	0	0	29.3	25.2	4.7
1000 - 1100	155	40	40	34	40	3	1	127	19	5	0	0	1	5	17	59	61	11	1	0	0	0	0	0	29.3	25.2	4.8
1100 - 1200	163	38	38	44	43	3	1	137	16	6	0	0	1	6	22	71	53	8	1	0	0	0	0	0	28.6	24.7	4.5
1200 - 1300	161	42	40	42	37	3	1	139	12	5	0	0	1	7	22	66	53	10	0	0	0	0	0	0	28.9	24.6	4.7
1300 - 1400	144	35	34	42	34	2	1	123	15	3	0	0	2	5	19	64	49	6	1	0	0	0	0	0	28.6	24.6	4.3
1400 - 1500	132	34	27	35	36	2	1	111	15	3	0	0	1	5	17	55	43	9	1	0	0	0	0	0	28.9	24.7	4.9
1500 - 1600	152	38	37	40	36	2	1	130	13	5	0	0	0	4	19	58	59	10	1	0	0	0	0	0	29.3	25.2	4.5
1600 - 1700	173	42	44	44	44	2	2	153	15	2	0	0	1	5	16	72	67	12	1	0	0	0	0	0	29.1	25.4	4.4
1700 - 1800	226	72	57	52	45	5	2	203	14	2	0	0	2	7	25	86	90	14	2	0	0	0	0	0	29.3	25.3	4.7
1800 - 1900	141	41	34	32	34	4	2	123	11	1	0	0	2	4	15	51	56	12	1	0	0	0	0	0	29.5	25.5	4.8
1900 - 2000	110	30	27	28	24	2	2	97	8	0	0	0	1	2	10	40	45	11	1	0	0	0	0	0	30	26	4.6
2000 - 2100	88	23	24	23	18	3	2	77	6	1	0	0	1	4	8	32	34	9	1	0	0	0	0	0	30.4	25.6	4.8
2100 - 2200	70	20	16	16	18	1	2	62	5	1	0	0	0	2	8	30	22	7	1	0	0	0	0	0	30.2	25.6	4.8
2200 - 2300	56	16	14	17	10	2	1	49	4	1	0	0	1	2	8	25	16	4	1	0	0	0	0	0	29.1	24.6	5
2300 - 0000	39	10	12	9	8	1	0	32	5	1	0	0	0	1	4	15	16	3	0	0	0	0	0	0	29.8	25.6	4.3
0700 - 1900	1923	485	464	491	482	47	17	1635	177	47	0	2	15	68	211	743	735	130	17	1	1	0	0	0	29.3	25.2	4.7
0600 - 2200	2228	565	540	569	554	54	24	1897	202	51	0	2	17	77	239	855	853	162	21	1	1	0	0	0	29.5	25.3	4.7
0600 - 0000	2324	591	565	595	572	57	25	1979	211	52	0	2	18	80	252	895	885	169	22	1	1	0	0	0	29.5	25.3	4.7
0000 - 0000	2399	607	582	616	593	57	25	2038	225	53	0	2	18	80	257	914	919	182	24	2	1	0	0	0	29.5	25.4	4.7

Virtual Week (1.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
Mon	2194	592	539	522	541	60	25	1867	184	58	0	1	18	68	239	920	795	134	17	2	0	0	0	0	29.1	25.1	4.5
Tue	1986	538	498	496	454	66	18	1664	192	46	0	3	12	81	177	749	784	161	17	2	0	0	0	0	29.8	25.5	4.8
Wed	2908	714	704	770	720	73	18	2439	308	70	0	0	26	84	322	1100	1140	206	25	2	2	1	0	0	29.3	25.4	4.7
Thu	2955	782	684	748	741	86	33	2469	305	62	0	3	28	118	323	1048	1164	244	26	0	1	0	0	0	29.8	25.3	4.9
Fri	3015	728	728	811	748	67	39	2535	294	80	0	0	11	96	276	1140	1241	213	34	3	1	0	0	0	29.8	25.6	4.5
Sat	1948	478	494	502	474	28	25	1680	173	42	0	2	8	47	187	737	741	194	30	2	0	0	0	0	30	25.9	4.7
Sun	1784	416	430	465	473	21	17	1612	118	16	0	3	24	67	274	703	571	120	21	0	1	0	0	0	29.1	24.6	5
	16790	4248	4077	4314	4151	401	175	14266	1574	374	0	12	127	561	1798	6397	6436	1272	170	11	5	1	0	0	29.5	25.4	4.7

Total

Time	15 Minute Bin Drops					Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile	Average	Standard
	Hourly Totals	00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	85%	Speed	deviation
	16790	4248	4077	4314	4151	401	175	14266	1574	374	0	12	127	561	1798	6397	6436	1272	170	11	5	1	0	0	29.5	25.4	4.7

Edinburgh ATC Study

Report Id 295b/15-02
Site Name Site 2 of 9
Description Abercromby Place, 15m east of Nelson Street
Direction Westbound

Tuesday 28 July 2015

TUBE 'A' PARKED ON

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	11	4	4	1	2	1	0	8	2	0	0	0	0	1	1	3	5	0	0	1	0	0	0	0	30.6	26.9	7.1
0100 - 0200	11	2	4	2	3	0	0	10	1	0	0	0	0	0	0	3	6	2	0	0	0	0	0	0	30	27.6	3.4
0200 - 0300	2	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	-	31.2	0.3
0300 - 0400	6	1	1	2	2	0	0	5	1	0	0	0	0	0	1	1	3	1	0	0	0	0	0	0	-	27.2	5.9
0400 - 0500	4	0	1	1	2	0	0	2	2	0	0	0	0	0	1	2	0	0	1	0	0	0	0	0	-	27.2	8.8
0500 - 0600	13	5	1	1	6	0	0	9	4	0	0	0	0	0	2	3	6	2	0	0	0	0	0	0	29.3	26.6	4.4
0600 - 0700	45	9	4	15	17	0	1	34	8	2	0	0	0	2	5	9	19	7	3	0	0	0	0	0	31.5	26.9	5.9
0700 - 0800	119	20	19	30	50	1	1	96	17	4	0	0	1	2	12	27	61	15	1	0	0	0	0	0	30.6	26.7	4.8
0800 - 0900	180	47	50	45	38	1	1	156	15	7	0	0	0	5	18	69	72	14	2	0	0	0	0	0	29.3	25.7	4.3
0900 - 1000	171	46	44	42	39	0	0	137	27	7	0	0	1	6	17	80	53	14	0	0	0	0	0	0	29.3	25.1	4.4
1000 - 1100	159	36	40	48	35	0	0	122	25	11	1	0	0	7	13	68	62	9	0	0	0	0	0	0	28.4	25.3	4
1100 - 1200	144	32	25	55	32	0	1	110	23	9	1	0	2	5	20	55	53	8	1	0	0	0	0	0	28.6	24.7	4.5
1200 - 1300	127	33	53	41	0	0	0	98	23	6	0	0	0	2	17	52	40	15	1	0	0	0	0	0	30.6	25.4	4.6
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1700 - 1800	176	36	50	52	38	0	4	160	10	2	0	0	1	5	20	69	72	8	1	0	0	0	0	0	28.6	25.2	4.3
1800 - 1900	167	51	41	43	32	5	1	149	9	3	0	0	0	5	20	58	67	15	1	1	0	0	0	0	29.8	25.6	4.8
1900 - 2000	125	33	37	24	31	0	0	116	9	0	0	0	0	7	15	40	52	11	0	0	0	0	0	0	29.3	25.2	4.7
2000 - 2100	79	22	28	15	14	1	3	70	4	1	0	0	0	3	13	33	27	3	0	0	0	0	0	0	28.9	24.5	4.4
2100 - 2200	55	16	11	11	17	0	0	47	8	0	0	0	0	4	14	16	18	2	1	0	0	0	0	0	28.9	24	5.1
2200 - 2300	48	15	9	12	12	0	1	38	8	1	0	0	0	3	7	22	13	3	0	0	0	0	0	0	26.8	23.8	4.4
2300 - 0000	28	11	8	6	3	0	0	22	6	0	0	0	0	3	7	4	10	3	1	0	0	0	0	0	30	24.6	6.6
0700 - 1900	1243	301	322	356	264	7	8	1028	149	49	2	0	5	37	137	478	480	98	7	1	0	0	0	0	29.5	25.4	4.5
0600 - 2200	1547	381	402	421	343	8	12	1295	178	52	2	0	5	53	184	576	596	121	11	1	0	0	0	0	29.5	25.4	4.6
0600 - 0000	1623	407	419	439	358	8	13	1355	192	53	2	0	5	59	198	602	619	127	12	1	0	0	0	0	29.5	25.3	4.6
0000 - 0000	1670	420	430	446	374	9	13	1390	203	53	2	0	5	60	203	614	639	134	13	2	0	0	0	0	29.5	25.4	4.6

Wednesday 29 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	17	9	2	5	1	0	0	15	2	0	0	0	0	0	0	1	13	3	0	0	0	0	0	0	29.8	28.8	3.3
0100 - 0200	12	3	3	3	3	0	0	12	0	0	0	0	0	0	0	6	5	1	0	0	0	0	0	0	28.2	25.9	3.1
0200 - 0300	6	1	2	1	2	0	0	2	4	0	0	0	0	0	0	2	3	1	0	0	0	0	0	0	-	28.3	3.7
0300 - 0400	2	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	-	31.9	1.3
0400 - 0500	6	1	3	0	2	0	0	5	1	0	0	0	0	0	0	2	3	1	0	0	0	0	0	0	-	27.4	3.2
0500 - 0600	17	3	7	3	4	0	0	15	2	0	0	0	0	0	3	2	8	4	0	0	0	0	0	0	31.5	27.6	5.5
0600 - 0700	41	6	10	14	11	0	1	24	10	6	0	0	0	3	4	9	13	9	2	1	0	0	0	0	33.8	27.4	6.5
0700 - 0800	118	20	21	34	43	3	1	96	15	3	0	0	1	5	5	44	52	10	0	1	0	0	0	0	29.8	25.9	4.5
0800 - 0900	209	40	55	53	61	4	0	178	23	3	1	0	0	7	19	70	93	18	1	0	0	1	0	0	29.5	25.9	4.6
0900 - 1000	194	51	50	47	46	1	1	148	36	7	1	0	0	5	23	69	79	17	1	0	0	0	0	0	29.5	25.7	4.4
1000 - 1100	162	37	36	52	37	0	2	119	26	13	2	0	0	4	20	70	59	8	1	0	0	0	0	0	28.4	24.6	4.2
1100 - 1200	184	50	37	53	44	1	1	138	36	8	0	0	0	7	19	75	71	10	2	0	0	0	0	0	29.1	25.4	4.3
1200 - 1300	157	39	29	54	35	0	1	128	17	11	0	0	1	4	20	59	63	9	1	0	0	0	0	0	29.1	25.1	4.3
1300 - 1400	171	49	45	40	37	2	1	133	30	5	0	0	1	8	15	54	79	10	3	1	0	0	0	0	29.5	25.7	4.8
1400 - 1500	165	34	38	48	45	0	1	124	36	4	0	0	1	9	28	65	53	8	1	0	0	0	0	0	28.4	24.1	4.8
1500 - 1600	156	35	30	41	50	1	0	132	17	6	0	0	1	9	17	57	58	10	4	0	0	0	0	0	29.5	25.2	5.1
1600 - 1700	181	39	54	39	49	0	4	161	12	4	0	0	0	3	20	67	82	9	0	0	0	0	0	0	29.3	25.7	3.8
1700 - 1800	201	51	47	56	47	1	3	181	15	1	0	0	1	8	27	83	69	12	1	0	0	0	0	0	28.2	24.6	4.4
1800 - 1900	162	50	42	30	40	5	0	144	9	4	0	0	1	8	22	47	75	9	0	0	0	0	0	0	29.1	25	4.6
1900 - 2000	135	35	26	36	38	2	0	120	11	2	0	0	0	6	29	51	38	10	0	1	0	0	0	0	29.1	24.3	5
2000 - 2100	95	22	26	22	25	0	1	88	6	0	0	0	0	4	10	35	35	9	1	1	0	0	0	0	30.4	25.8	4.9
2100 - 2200	71	22	19	15	15	1	0	64	5	1	0	0	0	4	6	34	21	5	1	0	0	0	0	0	28.9	25	4.7
2200 - 2300	46	16	13	11	6	2	0	38	6	0	0	0	0	7	11	20	8	0	0	0	0	0	0	0	26.4	22.1	4.5
2300 - 0000	24	3	6	8	7	0	0	19	5	0	0	0	0	2	6	2	14	0	0	0	0	0	0	0	29.1	24.1	5.6
0700 - 1900	2060	495	484	547	534	18	15	1682	272	69	4	0	7	77	235	760	833	130	15	2	0	1	0	0	29.1	25.2	4.5
0600 - 2200	2402	580	565	634	623	21	17	1978	304	78	4	0	7	94	284	889	940	163	19	5	0	1	0	0	29.3	25.2	4.6
0600 - 0000	2472	599	584	653	636	23	17	2035	315	78	4	0	7	103	301	911	962	163	19	5	0	1	0	0	29.3	25.2	4.6
0000 - 0000	2532	617	601	666	648	23	17	2085	325	78	4	0	7	103	304	924	994	175	19	5	0	1	0	0	29.3	25.2	4.6

Thursday 30 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	17	3	4	7	3	0	0	15	2	0	0	0	0	0	2	5	7	3	0	0	0	0	0	0	30.2	27	4.3
0100 - 0200	7	2	4	0	1	0	0	3	4	0	0	0	0	0	2	1	3	1	0	0	0	0	0	0	-	25.9	5.4
0200 - 0300	9	1	2	2	4	0	0	5	4	0	0	0	0	1	0	3	5	0	0	0	0	0	0	0	-	25	4.5
0300 - 0400	5	2	3	0	0	0	0	4	1	0	0	0	0	0	2	1	2	0	0	0	0	0	0	0	-	23.8	5.1
0400 - 0500	7	0	2	2	3	0	0	6	1	0	0	0	0	0	1	3	2	1	0	0	0	0	0	0	-	25.9	4
0500 - 0600	16	4	3	5	4	0	0	12	4	0	0	0	0	0	3	4	5	4	0	0	0	0	0	0	31.5	26.3	5
0600 - 0700	46	8	11	10	17	1	1	34	7	3	0	0	1	2	1	8	15	15	3	0	1	0	0	0	33.3	29.1	6.9
0700 - 0800	111	28	22	24	37	3	1	90	14	3	0	0	1	6	9	26	59	7	2	1	0	0	0	0	29.8	26.2	5.1
0800 - 0900	199	40	48	54	57	2	0	177	18	1	1	0	0	5	14	87	75	16	2	0	0	0	0	0	29.5	25.7	4.1
0900 - 1000	174	33	52	43	46	2	2	129	33	8	0	0	0	7	29	57	70	10	1	0	0	0	0	0	28.9	24.9	4.6
1000 - 1100	157	42	34	44	37	1	1	113	21	20	1	0	0	4	23	68	53	9	0	0	0	0	0	0	29.1	24.8	4.2
1100 - 1200	165	49	35	49	32	0	1	126	27	11	0	0	0	6	20	73	57	8	1	0	0	0	0	0	28.2	24.8	4.3
1200 - 1300	175	44	36	46	49	1	0	134	27	13	0	0	1	4	21	77	60	11	1	0	0	0	0	0	28.6	25	4.5
1300 - 1400	156	39	34	41	42	0	1	128	20	7	0	0	0	9	19	55	60	12	1	0	0	0	0	0	29.3	25.1	4.8
1400 - 1500	179	39	50	44	46	2	0	141	29	7	0	1	0	6	24	87	50	9	2	0	0	0	0	0	28.6	24.5	4.5
1500 - 1600	154	33	38	39	44	0	0	133	20	1	0	0	1	7	7	73	54	11	1	0	0	0	0	0	29.1	25.3	4.2
1600 - 1700	188	51	38	46	53	1	2	155	26	4	0	0	0	9	23	79	68	7	2	0	0	0	0	0	28.6	24.8	4.5
1700 - 1800	213	39	60	60	54	1	3	193	14	2	0	0	3	4	21	81	87	14	3	0	0	0	0	0	29.3	25.4	4.6
1800 - 1900	181	58	42	39	42	3	1	160	17	0	0	0	0	5	21	73	72	10	0	0	0	0	0	0	28.4	24.9	4.1
1900 - 2000	152	38	44	35	35	2	0	134	14	2	0	0	0	6	18	44	71	11	1	0	1	0	0	0	29.5	25.8	5
2000 - 2100	99	30	28	22	19	0	2	82	13	2	0	0	0	2	8	34	39	13	2	1	0	0	0	0	30.9	26.6	4.6
2100 - 2200	76	21	18	19	18	1	2	68	5	0	0	0	0	1	9	29	28	8	0	1	0	0	0	0	30.4	26.2	4.8
2200 - 2300	68	22	17	18	11	1	0	59	7	1	0	0	0	3	11	26	24	3	0	1	0	0	0	0	29.3	24.9	4.7
2300 - 0000	37	13	7	6	11	1	0	28	8	0	0	0	0	0	2	17	14	4	0	0	0	0	0	0	29.1	26	3.9
0700 - 1900	2052	495	489	529	539	16	12	1679	266	77	2	1	6	72	231	836	765	124	16	1	0	0	0	0	29.1	25.1	4.5
0600 - 2200	2425	592	590	615	628	20	17	1997	305	84	2	1	7	83	267	951	918	171	22	3	2	0	0	0	29.3	25.3	4.6
0600 - 0000	2530	627	614	639	650	22	17	2084	320	85	2	1	7	86	280	994	956	178	22	4	2	0	0	0	29.3	25.3	4.6
0000 - 0000	2591	639	632	655	665	22	17	2129	336	85	2	1	7	87	290	1011	980	187	22	4	2	0	0	0	29.3	25.3	4.6

Friday 31 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	19	8	6	1	4	0	0	12	7	0	0	0	0	0	0	3	13	1	1	1	0	0	0	0	30.6	29.1	4.7
0100 - 0200	11	5	3	2	1	0	0	7	4	0	0	0	0	0	0	2	5	4	0	0	0	0	0	0	32	29.6	3.2
0200 - 0300	7	1	2	1	3	0	0	4	3	0	0	0	0	0	1	0	3	3	0	0	0	0	0	0	-	28.3	5.7
0300 - 0400	4	1	1	1	1	0	0	2	2	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	-	27.9	7.5
0400 - 0500	4	1	0	1	2	0	0	2	2	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	-	21	6.6
0500 - 0600	16	2	1	5	8	0	0	11	5	0	0	0	0	0	2	4	8	2	0	0	0	0	0	0	30.9	27.1	4.4
0600 - 0700	45	5	11	10	19	1	2	31	8	3	0	0	1	2	4	12	18	6	1	1	0	0	0	0	32	26.4	6.2
0700 - 0800	101	19	17	27	38	2	1	76	14	8	0	0	0	2	12	27	43	15	1	0	1	0	0	0	31.1	26.4	5.3
0800 - 0900	172	37	36	51	48	3	0	147	19	3	0	1	2	7	15	67	71	8	1	0	0	0	0	0	29.1	24.9	5
0900 - 1000	158	29	45	44	40	0	1	116	29	12	0	0	0	3	8	57	76	12	2	0	0	0	0	0	29.5	26.2	3.7
1000 - 1100	184	48	45	60	31	3	1	142	29	9	0	0	1	4	22	72	75	7	2	0	0	1	0	0	28.9	25.2	4.7
1100 - 1200	187	45	53	47	42	2	1	143	29	11	1	0	0	6	23	71	73	14	0	0	0	0	0	0	29.1	25.2	4.2
1200 - 1300	179	42	39	45	53	0	0	143	27	9	0	0	0	4	17	79	64	13	2	0	0	0	0	0	29.5	25.4	4.3
1300 - 1400	180	51	42	42	45	0	1	143	28	8	0	0	1	6	17	65	70	18	3	0	0	0	0	0	30	25.8	4.8
1400 - 1500	171	36	48	40	47	1	1	142	23	4	0	0	2	10	19	63	57	18	2	0	0	0	0	0	29.8	25.1	5.2
1500 - 1600	191	47	55	44	45	0	2	163	20	6	0	0	2	4	16	80	75	14	0	0	0	0	0	0	29.3	25.4	4.3
1600 - 1700	206	62	40	49	55	0	2	173	24	7	0	0	2	5	19	80	90	10	0	0	0	0	0	0	28.4	25.1	4.1
1700 - 1800	206	52	48	61	45	1	1	186	15	3	0	0	0	6	21	88	87	3	1	0	0	0	0	0	28.9	25.1	3.9
1800 - 1900	182	54	44	39	45	2	1	155	21	3	0	0	1	9	23	52	75	18	3	1	0	0	0	0	30.2	25.7	5.1
1900 - 2000	147	44	48	28	27	0	2	123	21	1	0	0	0	6	21	45	67	8	0	0	0	0	0	0	29.5	25.1	4.6
2000 - 2100	100	26	23	33	18	1	1	83	15	0	0	0	0	4	19	27	38	10	2	0	0	0	0	0	30.4	25.6	5.3
2100 - 2200	65	17	16	13	19	0	0	51	14	0	0	0	0	1	5	23	29	6	0	1	0	0	0	0	30.4	26.3	4.7
2200 - 2300	96	23	24	26	23	0	1	80	14	1	0	0	1	3	22	35	31	3	1	0	0	0	0	0	28.2	23.9	4.6
2300 - 0000	68	14	27	16	11	0	1	56	10	1	0	0	0	2	16	25	22	3	0	0	0	0	0	0	29.1	24.5	4.5
0700 - 1900	2117	522	512	549	534	14	12	1729	278	83	1	1	11	66	212	801	856	150	17	1	1	1	0	0	29.3	25.4	4.5
0600 - 2200	2474	614	610	633	617	16	17	2017	336	87	1	1	12	79	261	908	1008	180	20	3	1	1	0	0	29.5	25.4	4.6
0600 - 0000	2638	651	661	675	651	16	19	2153	360	89	1	1	13	84	299	968	1061	186	21	3	1	1	0	0	29.5	25.4	4.6
0000 - 0000	2699	669	674	686	670	16	19	2191	383	89	1	1	13	85	304	978	1092	198	22	4	1	1	0	0	29.5	25.4	4.7

Saturday 01 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	38	17	8	8	5	2	0	31	5	0	0	0	0	0	9	10	16	3	0	0	0	0	0	0	29.5	25.5	4.6
0100 - 0200	25	6	11	5	3	0	0	15	10	0	0	0	0	1	4	6	10	4	0	0	0	0	0	0	30.6	26.3	5.7
0200 - 0300	20	4	4	5	7	0	0	16	4	0	0	0	0	2	3	7	7	1	0	0	0	0	0	0	27.5	24.1	4.8
0300 - 0400	11	3	5	3	0	0	0	8	3	0	0	0	0	0	0	2	2	4	2	1	0	0	0	0	36	32.3	5.6
0400 - 0500	11	3	1	5	2	0	0	9	2	0	0	0	0	0	3	2	4	2	0	0	0	0	0	0	30	25.9	5.5
0500 - 0600	12	3	2	5	2	0	1	8	2	1	0	0	0	0	0	1	6	4	0	0	1	0	0	0	34.4	31.1	6.8
0600 - 0700	17	5	3	2	7	1	0	12	4	0	0	0	0	1	1	1	7	7	0	0	0	0	0	0	32.9	28.3	5.7
0700 - 0800	37	7	12	9	9	0	0	32	3	2	0	0	1	1	4	9	16	5	1	0	0	0	0	0	29.1	25.7	5.7
0800 - 0900	74	12	18	25	19	0	0	58	13	3	0	0	1	4	6	19	31	13	0	0	0	0	0	0	31.3	25.7	5.1
0900 - 1000	83	21	18	27	17	0	0	72	8	3	0	0	0	4	5	34	26	12	2	0	0	0	0	0	31.1	26.3	4.9
1000 - 1100	128	26	26	31	45	0	0	108	13	7	0	0	1	4	21	49	43	9	0	1	0	0	0	0	29.1	25	4.9
1100 - 1200	134	30	29	38	37	0	0	121	9	4	0	0	0	5	20	56	45	8	0	0	0	0	0	0	29.1	24.7	4.4
1200 - 1300	159	32	49	37	41	1	1	145	6	6	0	0	0	12	22	58	60	4	3	0	0	0	0	0	28.9	24.4	5.2
1300 - 1400	143	33	35	40	35	1	0	130	10	2	0	0	1	10	20	64	44	4	0	0	0	0	0	0	28.9	23.8	4.7
1400 - 1500	148	32	37	39	40	0	4	126	14	4	0	0	0	5	11	63	55	12	2	0	0	0	0	0	30.2	25.7	4.4
1500 - 1600	132	40	33	27	32	0	1	114	16	1	0	0	0	4	22	60	31	14	1	0	0	0	0	0	29.8	24.8	4.7
1600 - 1700	163	34	47	45	37	0	1	145	14	3	0	0	0	3	24	76	45	12	2	1	0	0	0	0	29.1	25	4.6
1700 - 1800	131	36	40	36	19	0	0	116	15	0	0	0	0	2	13	55	50	9	2	0	0	0	0	0	28.6	25.5	4.2
1800 - 1900	128	41	31	24	32	0	1	113	13	1	0	0	0	6	16	24	52	27	3	0	0	0	0	0	32	26.7	5.3
1900 - 2000	86	24	24	26	12	0	0	72	14	0	0	0	0	3	21	33	25	4	0	0	0	0	0	0	27.7	23.9	4.4
2000 - 2100	81	19	26	17	19	1	0	61	17	2	0	0	0	5	12	19	33	11	1	0	0	0	0	0	30.9	25.9	5.5
2100 - 2200	49	14	14	8	13	0	0	41	7	1	0	0	0	2	8	16	15	6	1	1	0	0	0	0	31.5	25.8	5.9
2200 - 2300	45	10	11	7	17	0	1	39	5	0	0	0	0	1	7	12	18	7	0	0	0	0	0	0	29.3	25.9	4.5
2300 - 0000	52	15	19	12	6	0	0	43	8	1	0	0	0	1	7	16	19	6	3	0	0	0	0	0	31.3	26.3	5
0700 - 1900	1460	344	375	378	363	2	8	1280	134	36	0	0	4	60	184	567	498	129	16	2	0	0	0	0	29.8	25.2	4.8
0600 - 2200	1693	406	442	431	414	4	8	1466	176	39	0	0	4	71	226	636	578	157	18	3	0	0	0	0	30	25.2	4.9
0600 - 0000	1790	431	472	450	437	4	9	1548	189	40	0	0	4	73	240	664	615	170	21	3	0	0	0	0	30	25.2	4.9
0000 - 0000	1907	467	503	481	456	6	10	1635	215	41	0	0	4	76	259	692	660	188	23	4	1	0	0	0	30	25.3	5

Sunday 02 August 2015 E 'A' PARKED ON

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	46	9	10	16	11	0	0	33	13	0	0	0	0	0	6	16	20	3	0	1	0	0	0	0	30	26.4	4.6
0100 - 0200	30	8	5	8	9	0	0	24	6	0	0	0	0	1	6	13	7	2	1	0	0	0	0	0	29.8	25	4.8
0200 - 0300	19	6	5	5	3	0	0	16	3	0	0	0	0	0	1	5	9	4	0	0	0	0	0	0	30.9	27.2	4.1
0300 - 0400	15	3	3	1	8	0	0	11	4	0	0	0	0	0	4	4	3	3	1	0	0	0	0	0	32.2	25.4	6.3
0400 - 0500	8	0	1	1	6	0	0	5	3	0	0	0	0	0	0	0	5	3	0	0	0	0	0	0	-	30.3	2.6
0500 - 0600	12	2	1	5	4	0	0	12	0	0	0	0	0	0	1	1	7	1	2	0	0	0	0	0	32.2	29.4	5
0600 - 0700	8	2	2	1	3	0	0	5	2	1	0	0	0	0	1	1	3	2	1	0	0	0	0	0	-	29.8	5.5
0700 - 0800	19	1	5	4	9	0	0	18	1	0	0	0	0	1	3	2	11	2	0	0	0	0	0	0	30	26.2	4.8
0800 - 0900	54	10	11	12	21	0	0	47	4	3	0	1	1	0	9	22	19	1	1	0	0	0	0	0	28.6	24.3	5.2
0900 - 1000	61	7	22	21	11	0	0	52	5	4	0	0	0	2	9	21	23	6	0	0	0	0	0	0	29.8	25.1	4.6
1000 - 1100	117	32	29	22	34	0	0	107	8	2	0	1	0	5	17	53	34	7	0	0	0	0	0	0	28.9	24.3	4.9
1100 - 1200	141	31	32	43	35	0	0	136	4	1	0	0	0	10	38	52	37	4	0	0	0	0	0	0	28.2	23.2	4.7
1200 - 1300	157	46	37	38	36	1	1	142	11	2	0	0	7	7	31	75	30	7	0	0	0	0	0	0	27.1	22.7	5.2
1300 - 1400	179	41	46	49	43	0	1	160	16	2	0	0	3	19	48	71	29	9	0	0	0	0	0	0	26.4	22.2	5.1
1400 - 1500	179	50	48	28	53	0	1	162	13	3	0	0	0	15	43	74	41	5	1	0	0	0	0	0	27.3	22.8	4.7
1500 - 1600	237	50	62	65	60	0	0	225	12	0	0	0	2	12	47	105	59	11	0	1	0	0	0	0	27.5	23.6	4.7
1600 - 1700	178	57	54	31	36	0	1	164	10	3	0	0	1	6	21	90	48	9	3	0	0	0	0	0	29.1	24.6	4.6
1700 - 1800	157	27	53	41	36	1	3	141	10	2	0	0	3	4	19	66	53	12	0	0	0	0	0	0	28.4	24.7	4.7
1800 - 1900	127	36	32	34	25	0	1	109	15	2	0	0	0	5	26	49	41	6	0	0	0	0	0	0	28.4	24.1	4.4
1900 - 2000	89	35	19	19	16	0	2	79	8	0	0	0	0	6	14	31	33	5	0	0	0	0	0	0	28.2	24.5	4.6
2000 - 2100	91	29	24	24	14	2	0	84	5	0	0	0	1	4	16	30	29	9	1	1	0	0	0	0	29.1	25	5.3
2100 - 2200	60	11	16	19	14	1	3	52	3	0	1	0	0	4	9	27	15	5	0	0	0	0	0	0	28.2	24	4.7
2200 - 2300	40	14	13	8	5	0	0	37	3	0	0	0	0	0	7	10	16	6	1	0	0	0	0	0	30.9	26.2	4.6
2300 - 0000	3	3	0	0	0	0	0	3	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	-	26.3	2.2
0700 - 1900	1606	388	431	388	399	2	8	1463	109	24	0	2	17	86	311	680	425	79	5	1	0	0	0	0	28.2	23.6	4.9
0600 - 2200	1854	465	492	451	446	5	13	1683	127	25	1	2	18	100	351	769	505	100	7	2	0	0	0	0	28.4	23.8	4.9
0600 - 0000	1897	482	505	459	451	5	13	1723	130	25	1	2	18	100	358	780	523	106	8	2	0	0	0	0	28.4	23.8	4.9
0000 - 0000	2027	510	530	495	492	5	13	1824	159	25	1	2	18	101	376	819	574	122	12	3	0	0	0	0	28.6	24	5

Monday 03 August 2015

TUBE 'A' PARKED ON

Time	Hourly Totals	00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0800 - 0900	170	47	35	37	51	3	1	144	16	6	0	0	0	5	11	65	74	13	2	0	0	0	0	0	30	25.9	4.4
0900 - 1000	142	30	39	29	44	4	0	107	23	8	0	0	2	7	13	47	62	11	0	0	0	0	0	0	29.5	25.4	4.9
1000 - 1100	147	33	39	33	42	0	2	104	31	9	1	0	1	9	26	54	48	9	0	0	0	0	0	0	28.2	24.2	4.5
1100 - 1200	164	34	36	51	43	1	1	135	20	7	0	0	1	8	26	74	42	10	2	1	0	0	0	0	28.9	24.4	5
1200 - 1300	156	46	39	39	32	1	1	124	19	10	1	0	0	3	17	67	62	6	1	0	0	0	0	0	28.6	25.3	3.7
1300 - 1400	142	36	39	36	31	2	2	104	25	9	0	0	1	10	13	67	47	4	0	0	0	0	0	0	28	24.3	4.2
1400 - 1500	55	28	0	0	27	2	0	44	5	3	1	0	1	1	6	23	21	2	1	0	0	0	0	0	28.4	25	4.6
1500 - 1600	167	45	46	37	39	1	0	135	20	11	0	0	0	9	20	59	64	11	4	0	0	0	0	0	29.1	25.1	5.1
1600 - 1700	158	30	42	38	48	3	1	132	16	6	0	1	1	6	18	56	58	14	2	2	0	0	0	0	29.3	25.4	5.5
1700 - 1800	171	39	47	48	37	7	0	147	11	6	0	0	1	6	17	66	70	9	2	0	0	0	0	0	29.1	25.2	4.5
1800 - 1900	165	47	45	32	41	1	0	150	13	1	0	0	2	10	12	68	65	8	0	0	0	0	0	0	28.6	24.9	4.5
1900 - 2000	132	44	37	23	28	3	2	114	7	6	0	0	0	6	15	52	50	8	1	0	0	0	0	0	28.6	25.1	4.7
2000 - 2100	79	19	27	18	15	0	1	69	6	3	0	0	0	0	7	26	39	5	2	0	0	0	0	0	29.5	26.4	4
2100 - 2200	64	15	23	13	13	2	1	54	5	2	0	0	0	1	7	23	25	7	1	0	0	0	0	0	30	26.1	4.6
2200 - 2300	38	14	12	8	4	0	0	37	1	0	0	0	0	2	8	12	12	4	0	0	0	0	0	0	28.4	24.4	5
2300 - 0000	23	8	4	6	5	0	0	19	4	0	0	0	0	2	3	8	10	0	0	0	0	0	0	0	29.1	24.5	4.7
0700 - 1900	1637	415	407	380	435	25	8	1326	199	76	3	1	10	74	179	646	613	97	14	3	0	0	0	0	28.9	25	4.7
0600 - 2200	1912	493	494	434	491	30	12	1563	217	87	3	1	10	81	208	747	727	117	18	3	0	0	0	0	29.1	25.1	4.7
0600 - 0000	1973	515	510	448	500	30	12	1619	222	87	3	1	10	85	219	767	749	121	18	3	0	0	0	0	29.1	25.1	4.7
0000 - 0000	1973	515	510	448	500	30	12	1619	222	87	3	1	10	85	219	767	749	121	18	3	0	0	0	0	29.1	25.1	4.7

Virtual Day (7.00)

Time	Hourly Totals	00-15	15 Minute Bin Drops 15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	21	7	5	5	4	0	0	16	4	0	0	0	0	0	3	5	11	2	0	0	0	0	0	0	30.6	26.9	4.8
0100 - 0200	14	4	4	3	3	0	0	10	4	0	0	0	0	0	2	4	5	2	0	0	0	0	0	0	31.1	26.3	4.8
0200 - 0300	9	2	2	2	3	0	0	6	3	0	0	0	0	0	1	2	4	2	0	0	0	0	0	0	-	26.3	4.7
0300 - 0400	6	2	2	1	2	0	0	4	2	0	0	0	0	0	1	1	2	2	0	0	0	0	0	0	-	27.8	6.4
0400 - 0500	6	1	1	1	2	0	0	4	2	0	0	0	0	0	1	1	2	1	0	0	0	0	0	0	-	26.6	5.3
0500 - 0600	12	3	2	3	4	0	0	10	2	0	0	0	0	0	2	2	6	2	0	0	0	0	0	0	31.5	27.9	5.3
0600 - 0700	29	5	6	7	11	0	1	20	6	2	0	0	0	1	2	6	11	7	1	0	0	0	0	0	32.9	27.6	6.3
0700 - 0800	72	14	14	18	27	1	1	58	9	3	0	0	1	2	6	19	35	8	1	0	0	0	0	0	30.2	26.2	4.9
0800 - 0900	151	33	36	40	42	2	0	130	15	4	0	0	1	5	13	57	62	12	1	0	0	0	0	0	29.5	25.6	4.6
0900 - 1000	140	31	39	36	35	1	1	109	23	7	0	0	0	5	15	52	56	12	1	0	0	0	0	0	29.5	25.5	4.5
1000 - 1100	151	36	36	41	37	1	1	116	22	10	1	0	0	5	20	62	53	8	0	0	0	0	0	0	28.9	24.8	4.5
1100 - 1200	160	39	35	48	38	1	1	130	21	7	0	0	0	7	24	65	54	9	1	0	0	0	0	0	28.9	24.7	4.5
1200 - 1300	159	40	40	43	35	1	1	131	19	8	0	0	1	5	21	67	54	9	1	0	0	0	0	0	28.9	24.8	4.6
1300 - 1400	139	36	34	35	33	1	1	114	18	5	0	0	1	9	19	54	47	8	1	0	0	0	0	0	28.9	24.5	4.9
1400 - 1500	128	31	32	28	37	1	1	106	17	4	0	0	1	7	19	54	40	8	1	0	0	0	0	0	28.6	24.4	4.8
1500 - 1600	148	36	38	36	39	0	0	129	15	4	0	0	1	6	18	62	49	10	1	0	0	0	0	0	29.3	24.8	4.7
1600 - 1700	153	39	39	35	40	1	2	133	15	4	0	0	1	5	18	64	56	9	1	0	0	0	0	0	29.1	25.1	4.5
1700 - 1800	179	40	49	51	39	2	2	161	13	2	0	0	1	5	20	73	70	10	1	0	0	0	0	0	28.9	25.1	4.4
1800 - 1900	159	48	40	34	37	2	1	140	14	2	0	0	1	7	20	53	64	13	1	0	0	0	0	0	29.5	25.2	4.7
1900 - 2000	124	36	34	27	27	1	1	108	12	2	0	0	0	6	19	42	48	8	0	0	0	0	0	0	29.1	24.9	4.8
2000 - 2100	89	24	26	22	18	1	1	77	9	1	0	0	0	3	12	29	34	9	1	0	0	0	0	0	30.2	25.7	4.9
2100 - 2200	63	17	17	14	16	1	1	54	7	1	0	0	0	2	8	24	22	6	1	0	0	0	0	0	30	25.4	5
2200 - 2300	54	16	14	13	11	0	0	47	6	0	0	0	0	3	10	20	17	4	0	0	0	0	0	0	28.4	24.4	4.7
2300 - 0000	34	10	10	8	6	0	0	27	6	0	0	0	0	1	6	10	13	2	1	0	0	0	0	0	29.5	25.1	4.9
0700 - 1900	1739	423	431	447	438	12	10	1455	201	59	2	1	9	67	213	681	639	115	13	2	0	0	0	0	29.1	25	4.6
0600 - 2200	2044	504	514	517	509	15	14	1714	235	65	2	1	9	80	254	782	753	144	16	3	0	0	0	0	29.3	25.1	4.7
0600 - 0000	2132	530	538	538	526	15	14	1788	247	65	2	1	9	84	271	812	784	150	17	3	0	0	0	0	29.3	25.1	4.7
0000 - 0000	2200	548	554	554	544	16	14	1839	263	65	2	1	9	85	279	829	813	161	18	4	1	0	0	0	29.3	25.1	4.7

Virtual Week (1.00)

Time	Hourly Totals	00-15	15 Minute Bin Drops 15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
Mon	1973	515	510	448	500	30	12	1619	222	87	3	1	10	85	219	767	749	121	18	3	0	0	0	0	29.1	25.1	4.7
Tue	1670	420	430	446	374	9	13	1390	203	53	2	0	5	60	203	614	639	134	13	2	0	0	0	0	29.5	25.4	4.6
Wed	2532	617	601	666	648	23	17	2085	325	78	4	0	7	103	304	924	994	175	19	5	0	1	0	0	29.3	25.2	4.6
Thu	2591	639	632	655	665	22	17	2129	336	85	2	1	7	87	290	1011	980	187	22	4	2	0	0	0	29.3	25.3	4.6
Fri	2699	669	674	686	670	16	19	2191	383	89	1	1	13	85	304	978	1092	198	22	4	1	1	0	0	29.5	25.4	4.7
Sat	1907	467	503	481	456	6	10	1635	215	41	0	0	4	76	259	692	660	188	23	4	1	0	0	0	30	25.3	5
Sun	2027	510	530	495	492	5	13	1824	159	25	1	2	18	101	376	819	574	122	12	3	0	0	0	0	28.6	24	5
	15399	3837	3880	3877	3805	111	101	12873	1843	458	13	5	64	597	1955	5805	5688	1125	129	25	4	2	0	0	29.3	25.1	4.7

Total

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed															
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
	15399	3837	3880	3877	3805	111	101	12873	1843	458	13	5	64	597	1955	5805	5688	1125	129	25	4	2	0	0	29.3	25.1	4.7

Edinburgh ATC Study

Report Id	295b/15-03
Site Name	Site 3 of 9
Description	Heriot Row, 25m east of Howe Stree
Direction	Westbound

Tuesday 28 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	6	1	1	2	2	0	0	4	2	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	-	17.3	2.4
0100 - 0200	5	2	0	1	2	0	0	1	4	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	-	17.6	1.7
0200 - 0300	5	0	2	1	2	0	0	3	2	0	0	0	0	2	0	3	0	0	0	0	0	0	0	0	-	19.3	5.8
0300 - 0400	3	0	1	0	2	0	0	0	3	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	-	18	3
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0500 - 0600	6	2	0	3	1	1	0	1	4	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	-	18	3.4
0600 - 0700	28	0	7	9	12	2	1	20	2	3	0	0	3	2	21	2	0	0	0	0	0	0	0	0	20.4	17.2	3.4
0700 - 0800	97	9	16	36	36	3	1	73	16	4	0	0	4	25	54	14	0	0	0	0	0	0	0	0	20.8	17.6	3.3
0800 - 0900	207	49	56	49	53	13	3	151	38	2	0	1	27	99	67	10	3	0	0	0	0	0	0	0	19	15.3	3.9
0900 - 1000	101	26	29	27	19	7	0	66	21	7	0	1	5	33	50	10	1	1	0	0	0	0	0	0	19.7	16.7	4.4
1000 - 1100	100	25	27	22	26	4	0	61	24	11	0	1	6	36	46	10	1	0	0	0	0	0	0	0	20.4	16.5	3.9
1100 - 1200	88	20	20	25	23	0	0	67	18	3	0	0	4	30	46	7	1	0	0	0	0	0	0	0	19.5	16.7	3.3
1200 - 1300	98	23	23	26	26	2	1	69	22	3	1	2	5	37	40	14	0	0	0	0	0	0	0	0	20.6	16.5	4.1
1300 - 1400	120	31	25	33	31	1	3	83	26	7	0	0	6	42	55	16	1	0	0	0	0	0	0	0	20.6	17	3.6
1400 - 1500	132	26	42	27	37	5	0	93	25	8	1	1	6	46	56	21	2	0	0	0	0	0	0	0	21	17	4.2
1500 - 1600	100	18	25	31	26	1	2	75	19	3	0	0	3	34	53	10	0	0	0	0	0	0	0	0	20.1	17.1	3.2
1600 - 1700	154	52	33	32	37	1	1	123	22	6	1	1	8	59	73	10	2	1	0	0	0	0	0	0	19.7	16.5	3.8
1700 - 1800	165	53	40	39	33	4	4	134	17	4	2	1	13	59	67	16	9	0	0	0	0	0	0	0	20.8	16.9	4.8
1800 - 1900	103	31	29	18	25	6	2	73	20	2	0	0	10	38	33	20	2	0	0	0	0	0	0	0	22.4	17.2	4.5
1900 - 2000	51	14	18	10	9	3	2	36	6	4	0	0	2	12	29	6	2	0	0	0	0	0	0	0	20.8	17.7	4.1
2000 - 2100	41	11	8	8	14	0	1	34	5	1	0	0	0	10	22	8	1	0	0	0	0	0	0	0	22.6	18.8	3.6
2100 - 2200	34	12	6	6	10	2	0	21	10	1	0	0	0	17	13	4	0	0	0	0	0	0	0	0	18.6	16.2	3.3
2200 - 2300	20	7	6	2	5	0	0	14	6	0	0	0	0	14	5	1	0	0	0	0	0	0	0	0	17.9	15.9	2.4
2300 - 0000	11	2	2	4	3	0	1	7	3	0	0	0	4	1	3	3	0	0	0	0	0	0	0	0	21	15.6	5.6
0700 - 1900	1465	363	365	365	372	47	17	1068	268	60	5	8	97	538	640	158	22	2	0	0	0	0	0	0	20.4	16.7	4
0600 - 2200	1619	400	404	398	417	54	21	1179	291	69	5	8	102	579	725	178	25	2	0	0	0	0	0	0	20.4	16.7	4
0600 - 0000	1650	409	412	404	425	54	22	1200	300	69	5	8	106	594	733	182	25	2	0	0	0	0	0	0	20.4	16.7	4
0000 - 0000	1675	414	416	411	434	55	22	1209	315	69	5	8	106	600	749	185	25	2	0	0	0	0	0	0	20.4	16.7	4

Wednesday 29 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	2	0	1	1	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	-	16.6	0.2
0100 - 0200	4	0	1	1	2	0	0	3	1	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	-	19	3.6
0200 - 0300	3	2	1	0	0	0	0	1	2	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	-	17.1	1
0300 - 0400	1	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	16.6	-
0400 - 0500	5	1	2	1	1	0	0	1	4	0	0	0	1	1	1	2	0	0	0	0	0	0	0	0	-	16.8	6.8
0500 - 0600	4	0	1	2	1	1	0	0	3	0	0	0	1	0	2	0	1	0	0	0	0	0	0	0	-	18.8	7.8
0600 - 0700	19	0	8	5	6	2	0	8	6	3	0	0	2	4	9	3	1	0	0	0	0	0	0	0	22.1	18	5
0700 - 0800	107	12	9	36	50	3	0	87	12	5	0	0	5	44	51	6	1	0	0	0	0	0	0	0	19.5	16.3	3.6
0800 - 0900	195	45	56	48	46	13	1	137	40	4	0	3	23	81	73	13	2	0	0	0	0	0	0	0	19.5	15.7	4
0900 - 1000	94	20	27	21	26	1	2	60	26	5	0	1	5	24	50	13	1	0	0	0	0	0	0	0	20.8	17.4	3.9
1000 - 1100	87	21	22	18	26	3	0	62	16	6	0	0	6	16	51	13	1	0	0	0	0	0	0	0	20.8	17.6	3.8
1100 - 1200	121	26	33	33	29	3	1	79	32	6	0	0	13	50	44	12	2	0	0	0	0	0	0	0	20.4	16	4.1
1200 - 1300	119	30	28	33	28	5	1	74	30	8	1	2	7	47	44	18	1	0	0	0	0	0	0	0	20.8	16.9	4.2
1300 - 1400	132	39	32	36	25	5	2	85	35	5	0	1	9	33	73	15	1	0	0	0	0	0	0	0	20.4	16.9	4.2
1400 - 1500	130	32	31	27	40	2	1	80	39	7	1	2	5	38	60	24	1	0	0	0	0	0	0	0	21.3	17.2	4.1
1500 - 1600	132	26	30	50	26	2	1	99	25	5	0	0	11	44	62	14	1	0	0	0	0	0	0	0	20.1	16.8	3.6
1600 - 1700	170	44	34	46	46	5	3	123	33	5	1	2	13	59	75	17	3	1	0	0	0	0	0	0	20.1	16.5	4.3
1700 - 1800	175	40	48	46	41	12	2	124	32	4	1	3	17	66	73	13	3	0	0	0	0	0	0	0	19.9	16.1	4.1
1800 - 1900	102	26	25	33	18	3	2	75	20	2	0	0	5	28	49	17	3	0	0	0	0	0	0	0	22.4	18	3.9
1900 - 2000	73	25	12	16	20	1	1	56	13	2	0	0	3	19	29	19	2	1	0	0	0	0	0	0	22.6	18.5	4.1
2000 - 2100	46	12	16	8	10	2	1	35	7	1	0	1	4	11	23	6	1	0	0	0	0	0	0	0	20.8	17.5	4.7
2100 - 2200	29	10	5	2	12	1	0	19	9	0	0	0	3	9	11	6	0	0	0	0	0	0	0	0	21.3	17.1	4
2200 - 2300	28	10	10	5	3	2	1	22	3	0	0	0	0	12	14	2	0	0	0	0	0	0	0	0	19.5	16.8	3
2300 - 0000	8	2	4	1	1	0	0	7	1	0	0	0	1	2	5	0	0	0	0	0	0	0	0	0	-	15.9	3.8
0700 - 1900	1564	361	375	427	401	57	16	1085	340	62	4	14	119	530	705	175	20	1	0	0	0	0	0	0	20.4	16.7	4.1
0600 - 2200	1731	408	416	458	449	63	18	1203	375	68	4	15	131	573	777	209	24	2	0	0	0	0	0	0	20.6	16.8	4.1
0600 - 0000	1767	420	430	464	453	65	19	1232	379	68	4	15	132	587	796	211	24	2	0	0	0	0	0	0	20.6	16.8	4.1
0000 - 0000	1786	423	437	469	457	66	19	1237	392	68	4	15	134	590	805	215	25	2	0	0	0	0	0	0	20.6	16.8	4.1

Thursday 30 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	1	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	18.4	-
0100 - 0200	1	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	20.3	-
0200 - 0300	1	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	-	12.3	-
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0400 - 0500	1	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	20.4	-
0500 - 0600	7	2	0	3	2	1	0	6	0	0	0	0	0	3	3	1	0	0	0	0	0	0	0	0	-	16.3	3.9
0600 - 0700	22	2	5	2	13	2	0	10	6	4	0	0	1	6	11	4	0	0	0	0	0	0	0	0	21.3	17.9	3.8
0700 - 0800	112	9	17	32	54	5	1	89	15	2	0	0	6	38	48	16	4	0	0	0	0	0	0	0	21.5	17.5	4.1
0800 - 0900	180	43	43	49	45	17	3	124	31	5	0	1	17	63	84	13	1	1	0	0	0	0	0	0	19.9	16.2	4.1
0900 - 1000	120	32	30	29	29	5	2	80	27	6	0	0	10	31	62	15	2	0	0	0	0	0	0	0	20.4	17.2	4
1000 - 1100	97	24	24	19	30	2	0	66	25	4	0	0	2	32	46	12	5	0	0	0	0	0	0	0	21.3	17.8	3.9
1100 - 1200	103	30	26	24	23	2	0	66	30	5	0	0	5	31	57	10	0	0	0	0	0	0	0	0	20.4	16.9	3.3
1200 - 1300	118	29	39	28	22	3	0	72	33	9	1	2	8	42	53	13	0	0	0	0	0	0	0	0	19.9	16.6	3.9
1300 - 1400	105	20	27	38	20	1	1	74	25	3	1	0	2	33	51	17	2	0	0	0	0	0	0	0	21	17.5	3.4
1400 - 1500	147	37	42	37	31	6	1	90	43	7	0	2	9	51	63	20	2	0	0	0	0	0	0	0	20.6	16.6	4.3
1500 - 1600	150	33	37	39	41	4	3	97	38	7	1	0	15	64	56	12	2	0	0	0	1	0	0	0	20.4	16.3	4.8
1600 - 1700	147	31	36	37	43	2	4	105	30	5	1	0	13	67	56	9	2	0	0	0	0	0	0	0	19.5	15.7	4
1700 - 1800	174	45	50	39	40	5	1	135	27	5	1	1	12	68	69	19	5	0	0	0	0	0	0	0	20.4	16.7	4.1
1800 - 1900	100	31	20	21	28	4	4	71	17	4	0	1	4	32	52	8	3	0	0	0	0	0	0	0	20.1	17.1	4
1900 - 2000	68	21	16	15	16	5	0	52	11	0	0	0	3	17	32	14	2	0	0	0	0	0	0	0	21.7	18	4
2000 - 2100	44	11	17	9	7	3	0	33	8	0	0	0	3	13	24	4	0	0	0	0	0	0	0	0	20.1	16.8	3.8
2100 - 2200	34	13	5	10	6	0	2	23	8	1	0	0	0	7	19	8	0	0	0	0	0	0	0	0	22.6	18.5	3.4
2200 - 2300	28	9	8	4	7	0	0	17	10	1	0	0	2	6	17	3	0	0	0	0	0	0	0	0	20.6	17.4	3.6
2300 - 0000	19	6	7	3	3	2	0	11	6	0	0	0	2	5	8	3	1	0	0	0	0	0	0	0	22.4	17.3	4.7
0700 - 1900	1553	364	391	392	406	56	20	1069	341	62	5	7	103	552	697	164	28	1	0	0	1	0	0	0	20.4	16.8	4.1
0600 - 2200	1721	411	434	428	448	66	22	1187	374	67	5	7	110	595	783	194	30	1	0	0	1	0	0	0	20.6	16.9	4.1
0600 - 0000	1768	426	449	435	458	68	22	1215	390	68	5	7	114	606	808	200	31	1	0	0	1	0	0	0	20.6	16.9	4.1
0000 - 0000	1779	431	449	439	460	69	22	1224	391	68	5	7	114	610	814	201	31	1	0	0	1	0	0	0	20.6	16.9	4.1

Friday 31 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	10	6	1	1	2	0	0	3	7	0	0	0	0	2	5	3	0	0	0	0	0	0	0	0	-	18.9	3.7
0100 - 0200	6	2	1	2	1	0	1	2	3	0	0	0	0	1	4	1	0	0	0	0	0	0	0	0	-	18.5	3.2
0200 - 0300	5	1	1	1	2	0	0	2	3	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	-	19.1	2
0300 - 0400	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	24.1	-
0400 - 0500	1	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	20.9	-
0500 - 0600	4	0	1	2	1	1	0	2	1	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	-	14.4	3.9
0600 - 0700	19	2	4	2	11	3	0	9	3	4	0	0	2	1	12	4	0	0	0	0	0	0	0	0	21	17.9	3.9
0700 - 0800	99	14	15	31	39	4	1	76	17	1	0	0	4	25	50	17	3	0	0	0	0	0	0	0	21.5	17.9	3.9
0800 - 0900	175	30	49	47	49	14	2	120	36	3	0	2	22	74	67	10	0	0	0	0	0	0	0	0	19.7	15.4	4.1
0900 - 1000	112	32	27	23	30	2	0	73	33	4	0	0	4	41	50	15	1	1	0	0	0	0	0	0	20.8	17.3	4.1
1000 - 1100	116	26	31	34	25	1	0	85	24	6	0	3	6	40	57	8	2	0	0	0	0	0	0	0	20.1	16.4	4.1
1100 - 1200	110	25	31	23	31	1	2	61	37	8	1	3	2	33	50	20	2	0	0	0	0	0	0	0	21.7	17.3	4.2
1200 - 1300	127	32	33	30	32	2	0	86	34	3	2	1	4	57	57	8	0	0	0	0	0	0	0	0	19.5	16.1	3.3
1300 - 1400	138	36	22	39	41	3	2	102	27	3	1	1	9	43	67	13	5	0	0	0	0	0	0	0	20.1	16.8	4
1400 - 1500	131	35	25	39	32	2	3	79	38	8	1	0	9	45	63	13	1	0	0	0	0	0	0	0	19.9	16.6	3.6
1500 - 1600	129	22	41	36	30	1	1	89	31	5	2	0	4	52	57	13	3	0	0	0	0	0	0	0	20.6	16.7	3.6
1600 - 1700	164	30	33	49	52	5	1	122	32	2	2	1	11	56	73	20	3	0	0	0	0	0	0	0	20.1	16.9	4.1
1700 - 1800	164	58	50	33	23	3	1	132	23	4	1	2	12	63	65	17	5	0	0	0	0	0	0	0	20.4	16.4	4.3
1800 - 1900	95	27	21	23	24	4	1	66	24	0	0	1	3	24	49	16	2	0	0	0	0	0	0	0	21.5	18	4
1900 - 2000	54	14	14	21	5	1	0	37	14	2	0	1	1	13	26	13	0	0	0	0	0	0	0	0	21.7	18.1	4.2
2000 - 2100	51	16	13	8	14	3	2	33	13	0	0	1	4	10	28	6	1	1	0	0	0	0	0	0	20.6	17.1	5
2100 - 2200	27	7	10	3	7	2	0	14	11	0	0	0	1	9	14	3	0	0	0	0	0	0	0	0	19.7	17.4	3.6
2200 - 2300	31	3	9	9	10	1	0	21	9	0	0	0	1	13	10	7	0	0	0	0	0	0	0	0	21.7	17.1	4.2
2300 - 0000	22	5	8	3	6	0	0	12	9	1	0	0	3	4	11	3	1	0	0	0	0	0	0	0	21	17.8	4.4
0700 - 1900	1560	367	378	407	408	42	14	1091	356	47	10	14	90	553	705	170	27	1	0	0	0	0	0	0	20.4	16.7	4
0600 - 2200	1711	406	419	441	445	51	16	1184	397	53	10	16	98	586	785	196	28	2	0	0	0	0	0	0	20.6	16.8	4
0600 - 0000	1764	414	436	453	461	52	16	1217	415	54	10	16	102	603	806	206	29	2	0	0	0	0	0	0	20.6	16.8	4.1
0000 - 0000	1791	423	441	459	468	53	17	1227	430	54	10	16	103	607	822	212	29	2	0	0	0	0	0	0	20.6	16.8	4.1

Saturday 01 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	13	5	2	3	3	0	0	6	7	0	0	0	0	2	8	3	0	0	0	0	0	0	0	0	21.3	18.5	3.2
0100 - 0200	11	3	4	1	3	0	0	0	11	0	0	0	0	2	8	1	0	0	0	0	0	0	0	0	19.2	17.9	2.2
0200 - 0300	6	2	1	2	1	0	0	5	1	0	0	0	0	2	3	1	0	0	0	0	0	0	0	0	-	16.8	3.1
0300 - 0400	4	3	0	1	0	0	0	1	3	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	-	17.5	2.3
0400 - 0500	5	3	0	1	1	0	0	2	3	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	-	18.7	2.9
0500 - 0600	6	0	1	2	3	1	0	1	2	2	0	0	0	2	3	0	1	0	0	0	0	0	0	0	-	18.7	6.1
0600 - 0700	10	3	3	1	3	0	0	6	2	2	0	0	0	2	5	3	0	0	0	0	0	0	0	0	-	19.1	3
0700 - 0800	24	6	2	8	8	1	0	13	6	3	1	0	0	8	11	5	0	0	0	0	0	0	0	0	21.3	17.9	3.3
0800 - 0900	39	7	9	10	13	0	0	32	5	2	0	0	1	5	22	8	3	0	0	0	0	0	0	0	23.3	19.7	4
0900 - 1000	62	8	17	17	20	1	0	46	13	2	0	1	3	12	31	13	2	0	0	0	0	0	0	0	22.6	18.1	4.5
1000 - 1100	63	7	16	17	23	0	1	52	8	2	0	0	3	12	32	14	1	1	0	0	0	0	0	0	22.1	18.3	4.5
1100 - 1200	81	19	19	22	21	4	3	56	17	0	1	0	4	27	36	13	0	1	0	0	0	0	0	0	21.7	17.5	4.2
1200 - 1300	84	21	16	20	27	3	0	65	15	1	0	1	3	36	34	10	0	0	0	0	0	0	0	0	20.1	16.5	4
1300 - 1400	83	22	25	18	18	3	2	66	11	1	0	0	9	26	45	3	0	0	0	0	0	0	0	0	19.7	16.1	3.4
1400 - 1500	76	19	15	21	21	0	0	57	18	1	0	1	10	24	34	5	1	1	0	0	0	0	0	0	20.1	16.3	4.9
1500 - 1600	71	20	17	17	17	1	0	50	19	1	0	0	3	20	38	10	0	0	0	0	0	0	0	0	20.8	17.6	3.7
1600 - 1700	80	12	18	30	20	0	0	59	18	3	0	0	3	31	39	7	0	0	0	0	0	0	0	0	18.8	16.5	3.3
1700 - 1800	92	27	21	29	15	1	2	68	21	0	0	0	1	33	35	21	2	0	0	0	0	0	0	0	22.1	18	4
1800 - 1900	60	12	18	17	13	1	0	46	12	1	0	0	4	11	33	12	0	0	0	0	0	0	0	0	21.3	17.8	3.6
1900 - 2000	41	13	12	10	6	1	0	24	15	1	0	0	2	5	26	8	0	0	0	0	0	0	0	0	21.5	18.3	3.4
2000 - 2100	45	15	13	11	6	2	1	26	16	0	0	0	1	14	22	8	0	0	0	0	0	0	0	0	21	18.2	3.5
2100 - 2200	31	10	7	6	8	1	0	23	7	0	0	0	2	13	11	5	0	0	0	0	0	0	0	0	20.8	16.4	4.1
2200 - 2300	23	5	7	7	4	0	0	17	6	0	0	0	1	10	9	3	0	0	0	0	0	0	0	0	20.4	17	3.4
2300 - 0000	17	3	5	3	6	0	0	12	5	0	0	0	0	4	12	0	1	0	0	0	0	0	0	0	19.7	17.6	3.1
0700 - 1900	815	180	193	226	216	15	8	610	163	17	2	3	44	245	390	121	9	3	0	0	0	0	0	0	21	17.3	4.1
0600 - 2200	942	221	228	254	239	19	9	689	203	20	2	3	49	279	454	145	9	3	0	0	0	0	0	0	21.3	17.4	4
0600 - 0000	982	229	240	264	249	19	9	718	214	20	2	3	50	293	475	148	10	3	0	0	0	0	0	0	21	17.4	4
0000 - 0000	1027	245	248	274	260	20	9	733	241	22	2	3	50	303	503	154	11	3	0	0	0	0	0	0	21	17.4	4

Sunday 02 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	8	1	2	2	3	0	0	3	5	0	0	0	0	1	6	1	0	0	0	0	0	0	0	0	-	18.9	2.3
0100 - 0200	9	3	2	3	1	0	0	3	6	0	0	0	0	1	4	4	0	0	0	0	0	0	0	0	-	19.7	2.7
0200 - 0300	6	2	2	0	2	0	0	3	3	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	-	21.1	1.8
0300 - 0400	4	0	1	2	1	0	0	2	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	-	20.2	3.4
0400 - 0500	7	2	3	0	2	0	0	2	5	0	0	0	1	2	2	1	1	0	0	0	0	0	0	0	-	18.5	6.3
0500 - 0600	3	0	0	2	1	0	0	2	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	-	21.8	1.1
0600 - 0700	6	2	1	3	0	0	0	4	2	0	0	0	1	0	4	1	0	0	0	0	0	0	0	0	-	17.6	4.9
0700 - 0800	10	2	3	1	4	0	0	6	3	1	0	0	0	0	9	1	0	0	0	0	0	0	0	0	-	18.9	2.2
0800 - 0900	18	2	5	4	7	1	0	10	3	4	0	0	0	4	9	5	0	0	0	0	0	0	0	0	21	18.6	3.5
0900 - 1000	60	8	20	13	19	1	0	48	9	2	0	0	2	18	28	12	0	0	0	0	0	0	0	0	21.3	17.6	3.8
1000 - 1100	73	11	21	19	22	1	0	61	10	1	0	0	6	16	33	16	2	0	0	0	0	0	0	0	22.6	18.1	4.3
1100 - 1200	97	25	18	36	18	1	1	75	20	0	0	3	8	37	40	8	1	0	0	0	0	0	0	0	19.7	15.8	4.4
1200 - 1300	104	32	19	26	27	2	0	83	18	1	0	0	19	39	31	15	0	0	0	0	0	0	0	0	20.1	15.5	4.4
1300 - 1400	106	27	24	23	32	2	0	86	17	1	0	2	16	54	26	8	0	0	0	0	0	0	0	0	18.8	14.4	4.1
1400 - 1500	94	25	27	29	13	3	0	72	19	0	0	1	8	34	38	11	2	0	0	0	0	0	0	0	20.1	16.6	4.4
1500 - 1600	88	20	16	28	24	4	0	70	13	1	0	0	7	35	38	8	0	0	0	0	0	0	0	0	19.5	16	3.6
1600 - 1700	81	21	20	19	21	1	1	60	18	1	0	0	10	30	40	1	0	0	0	0	0	0	0	0	19.5	15.7	3.6
1700 - 1800	72	16	23	14	19	2	3	52	15	0	0	0	5	17	38	9	3	0	0	0	0	0	0	0	21	17.6	4.1
1800 - 1900	84	26	23	14	21	2	1	67	12	2	0	0	5	33	39	6	1	0	0	0	0	0	0	0	20.4	16.7	3.7
1900 - 2000	46	17	11	11	7	0	0	30	16	0	0	0	1	18	20	7	0	0	0	0	0	0	0	0	19.7	16.8	3.7
2000 - 2100	36	11	11	8	6	0	0	28	7	1	0	0	0	7	22	6	1	0	0	0	0	0	0	0	21.7	18.2	3
2100 - 2200	28	12	3	4	9	0	0	17	11	0	0	0	0	5	14	9	0	0	0	0	0	0	0	0	23	19	3.5
2200 - 2300	21	5	8	4	4	1	0	13	7	0	0	0	1	8	9	3	0	0	0	0	0	0	0	0	20.4	16.7	3.4
2300 - 0000	9	3	3	2	1	1	0	3	5	0	0	0	0	3	5	1	0	0	0	0	0	0	0	0	-	16.6	2.8
0700 - 1900	887	215	219	226	227	20	6	690	157	14	0	6	86	317	369	100	9	0	0	0	0	0	0	0	20.4	16.3	4.2
0600 - 2200	1003	257	245	252	249	20	6	769	193	15	0	6	88	347	429	123	10	0	0	0	0	0	0	0	20.6	16.5	4.1
0600 - 0000	1033	265	256	258	254	22	6	785	205	15	0	6	89	358	443	127	10	0	0	0	0	0	0	0	20.6	16.5	4.1
0000 - 0000	1070	273	266	267	264	22	6	800	227	15	0	6	90	362	461	140	11	0	0	0	0	0	0	0	20.8	16.6	4.1

Monday 03 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	7	0	3	3	1	0	0	5	1	1	0	0	0	3	3	1	0	0	0	0	0	0	0	0	-	17.1	3.1
0100 - 0200	2	1	0	1	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	-	16.6	3.5
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0300 - 0400	1	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	18.5	-
0400 - 0500	3	0	2	1	0	0	0	2	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	-	20.1	3.4
0500 - 0600	5	0	2	1	2	1	0	2	2	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	-	18.7	4.4
0600 - 0700	24	0	6	6	12	1	1	14	4	4	0	0	1	3	9	10	0	1	0	0	0	0	0	0	23	19.8	4.6
0700 - 0800	93	11	18	30	34	1	1	70	16	5	0	0	2	24	38	24	4	1	0	0	0	0	0	0	23.3	18.9	4.5
0800 - 0900	195	45	53	56	41	10	8	134	39	3	1	3	31	76	76	8	0	1	0	0	0	0	0	0	18.8	15.1	4.2
0900 - 1000	89	22	25	20	22	3	1	65	15	5	0	0	4	33	42	9	0	1	0	0	0	0	0	0	20.1	16.8	3.8
1000 - 1100	85	18	23	16	28	3	3	50	27	2	0	0	7	27	40	9	2	0	0	0	0	0	0	0	20.4	16.9	4.2
1100 - 1200	106	32	24	29	21	1	0	67	29	8	1	1	6	34	51	11	2	1	0	0	0	0	0	0	20.6	17.1	4.3
1200 - 1300	105	34	29	19	23	2	0	69	26	7	1	0	9	37	49	10	0	0	0	0	0	0	0	0	19.9	16.4	3.6
1300 - 1400	89	30	20	23	16	1	1	58	25	2	2	0	3	40	34	11	1	0	0	0	0	0	0	0	20.8	16.8	3.8
1400 - 1500	102	29	28	27	18	5	1	66	23	6	1	1	9	36	43	12	1	0	0	0	0	0	0	0	20.6	16.3	4.3
1500 - 1600	111	23	30	33	25	1	1	72	31	6	0	0	7	36	50	17	1	0	0	0	0	0	0	0	21	17	3.9
1600 - 1700	156	43	36	37	40	3	3	113	31	5	1	1	15	54	60	22	4	0	0	0	0	0	0	0	21.3	16.6	4.4
1700 - 1800	176	48	58	36	34	9	3	138	24	0	2	3	13	53	74	30	3	0	0	0	0	0	0	0	21	17	4.6
1800 - 1900	70	17	22	8	23	4	2	48	16	0	0	1	4	16	38	11	0	0	0	0	0	0	0	0	21	17.4	4.2
1900 - 2000	60	19	14	11	16	3	0	45	12	0	0	0	2	21	25	11	1	0	0	0	0	0	0	0	21	17.3	3.9
2000 - 2100	31	9	10	7	5	0	1	18	10	2	0	0	1	9	15	6	0	0	0	0	0	0	0	0	21.5	17.8	3.5
2100 - 2200	41	7	15	9	10	1	1	33	6	0	0	0	3	15	16	7	0	1	0	0	0	0	0	0	20.8	16.9	3.8
2200 - 2300	18	6	4	8	0	2	0	11	5	0	0	0	3	6	6	3	0	0	0	0	0	0	0	0	19.7	16.2	3.8
2300 - 0000	17	5	4	5	3	1	0	9	7	0	0	0	1	4	10	2	0	0	0	0	0	0	0	0	19.7	17.2	3.3
0700 - 1900	1377	352	366	334	325	43	24	950	302	49	9	10	110	466	595	174	18	4	0	0	0	0	0	0	20.8	16.7	4.3
0600 - 2200	1533	387	411	367	368	48	27	1060	334	55	9	10	117	514	660	208	19	5	0	0	0	0	0	0	20.8	16.8	4.3
0600 - 0000	1568	398	419	380	371	51	27	1080	346	55	9	10	121	524	676	213	19	5	0	0	0	0	0	0	20.8	16.8	4.2
0000 - 0000	1586	399	427	386	374	52	27	1090	352	56	9	10	121	529	684	218	19	5	0	0	0	0	0	0	20.8	16.8	4.2

Virtual Day (7.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	7	2	1	2	2	0	0	3	3	0	0	0	0	1	4	1	0	0	0	0	0	0	0	0	-	18.2	3
0100 - 0200	5	2	1	1	1	0	0	2	4	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	-	18.5	2.6
0200 - 0300	4	1	1	1	1	0	0	2	2	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	-	18.6	3.6
0300 - 0400	2	0	1	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	18.9	3
0400 - 0500	3	1	1	0	1	0	0	1	2	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	-	18.6	5
0500 - 0600	5	1	1	2	2	1	0	2	2	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	-	17.9	4.8
0600 - 0700	18	1	5	4	8	1	0	10	4	3	0	0	1	3	10	4	0	0	0	0	0	0	0	0	21.9	18.2	4.1
0700 - 0800	77	9	11	25	32	2	1	59	12	3	0	0	3	23	37	12	2	0	0	0	0	0	0	0	21.5	17.6	3.9
0800 - 0900	144	32	39	38	36	10	2	101	27	3	0	1	17	57	57	10	1	0	0	0	0	0	0	0	19.7	15.7	4.1
0900 - 1000	91	21	25	21	24	3	1	63	21	4	0	0	5	27	45	12	1	0	0	0	0	0	0	0	20.8	17.2	4.1
1000 - 1100	89	19	23	21	26	2	1	62	19	5	0	1	5	26	44	12	2	0	0	0	0	0	0	0	21	17.3	4.1
1100 - 1200	101	25	24	27	24	2	1	67	26	4	0	1	6	35	46	12	1	0	0	0	0	0	0	0	20.4	16.7	4
1200 - 1300	**108**	**29**	**27**	**26**	**26**	**3**	**0**	**74**	**25**	**5**	**1**	**1**	**8**	**42**	**44**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20.1**	**16.4**	**3.9**
1300 - 1400	110	29	25	30	26	2	2	79	24	3	1	1	8	39	50	12	1	0	0	0	0	0	0	0	20.4	16.5	3.9
1400 - 1500	116	29	30	30	27	3	1	77	29	5	1	1	8	39	51	15	1	0	0	0	0	0	0	0	20.6	16.7	4.2
1500 - 1600	112	23	28	33	27	2	1	79	25	4	0	0	7	41	51	12	1	0	0	0	0	0	0	0	20.4	16.7	3.9
1600 - 1700	136	33	30	36	37	2	2	101	26	4	1	1	10	51	59	12	2	0	0	0	0	0	0	0	20.1	16.4	4
1700 - 1800	145	41	41	34	29	5	2	112	23	2	1	1	10	51	60	18	4	0	0	0	0	0	0	0	21	16.8	4.4
1800 - 1900	88	24	23	19	22	3	2	64	17	2	0	0	5	26	42	13	2	0	0	0	0	0	0	0	21.3	17.4	4
1900 - 2000	56	18	14	13	11	2	0	40	12	1	0	0	2	15	27	11	1	0	0	0	0	0	0	0	21.7	17.9	3.9
2000 - 2100	42	12	13	8	9	1	1	30	9	1	0	0	2	11	22	6	1	0	0	0	0	0	0	0	21.5	17.7	4
2100 - 2200	32	10	7	6	9	1	0	21	9	0	0	0	1	11	14	6	0	0	0	0	0	0	0	0	21.3	17.3	3.8
2200 - 2300	24	6	7	6	5	1	0	16	7	0	0	0	1	10	10	3	0	0	0	0	0	0	0	0	20.4	16.8	3.4
2300 - 0000	15	4	5	3	3	1	0	9	5	0	0	0	2	3	8	2	0	0	0	0	0	0	0	0	20.8	17.1	4
0700 - 1900	1317	315	327	340	336	40	15	938	275	44	5	9	93	457	586	152	19	2	0	0	0	0	0	0	20.6	16.7	4.1
0600 - 2200	1466	356	365	371	374	46	17	1039	310	50	5	9	99	496	659	179	21	2	0	0	0	0	0	0	20.8	16.8	4.1
0600 - 0000	1505	366	377	380	382	47	17	1064	321	50	5	9	102	509	677	184	21	2	0	0	0	0	0	0	20.6	16.8	4.1
0000 - 0000	1531	373	383	386	388	48	17	1074	335	50	5	9	103	514	691	189	22	2	0	0	0	0	0	0	20.8	16.9	4.1

Virtual Week (1.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
Mon	1586	399	427	386	374	52	27	1090	352	56	9	10	121	529	684	218	19	5	0	0	0	0	0	0	20.8	16.8	4.2
Tue	1675	414	416	411	434	55	22	1209	315	69	5	8	106	600	749	185	25	2	0	0	0	0	0	0	20.4	16.7	4
Wed	1786	423	437	469	457	66	19	1237	392	68	4	15	134	590	805	215	25	2	0	0	0	0	0	0	20.6	16.8	4.1
Thu	1779	431	449	439	460	69	22	1224	391	68	5	7	114	610	814	201	31	1	0	0	1	0	0	0	20.6	16.9	4.1
Fri	1791	423	441	459	468	53	17	1227	430	54	10	16	103	607	822	212	29	2	0	0	0	0	0	0	20.6	16.8	4.1
Sat	1027	245	248	274	260	20	9	733	241	22	2	3	50	303	503	154	11	3	0	0	0	0	0	0	21	17.4	4
Sun	1070	273	266	267	264	22	6	800	227	15	0	6	90	362	461	140	11	0	0	0	0	0	0	0	20.8	16.6	4.1
	10714	2608	2684	2705	2717	337	122	7520	2348	352	35	65	718	3601	4838	1325	151	15	0	0	1	0	0	0	20.8	16.9	4.1

Total

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
	10714	2608	2684	2705	2717	337	122	7520	2348	352	35	65	718	3601	4838	1325	151	15	0	0	1	0	0	0	20.8	16.9	4.1

Edinburgh ATC Study

Report Id 295b/15-03
Site Name Site 3 of 9
Description Heriot Row, 25m east of Howe Street
Direction Eastbound

Tuesday 28 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	3	0	0	1	2	0	0	3	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	-	21.5	0.9
0100 - 0200	6	1	3	1	1	0	0	6	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	-	20.6	3.8
0200 - 0300	4	1	1	2	0	0	0	2	2	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	-	21.4	1.5
0300 - 0400	2	0	0	1	1	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	23.9	1.7
0400 - 0500	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	25.6	-
0500 - 0600	1	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	21	-
0600 - 0700	24	3	2	8	11	0	1	16	5	2	0	0	0	1	9	13	1	0	0	0	0	0	0	0	23.5	21.3	2.6
0700 - 0800	72	12	9	19	32	0	0	60	8	4	0	0	1	0	26	39	6	0	0	0	0	0	0	0	24.8	21.9	3
0800 - 0900	148	27	42	38	41	0	1	127	12	7	1	0	1	12	83	44	7	1	0	0	0	0	0	0	22.8	20	3.2
0900 - 1000	157	43	43	39	32	0	0	130	20	4	3	2	7	15	82	41	7	2	1	0	0	0	0	0	23.5	19.6	4.7
1000 - 1100	128	28	28	39	33	0	0	104	15	9	0	0	0	10	64	45	8	1	0	0	0	0	0	0	24.6	20.8	3.5
1100 - 1200	135	30	26	51	28	0	0	111	19	4	1	1	1	7	68	52	5	1	0	0	0	0	0	0	23.7	20.6	3.6
1200 - 1300	165	32	48	50	35	0	0	140	19	6	0	0	1	7	97	56	4	0	0	0	0	0	0	0	23.3	20.3	2.9
1300 - 1400	147	43	25	41	38	0	1	129	16	1	0	0	3	17	73	49	5	0	0	0	0	0	0	0	23	19.7	3.6
1400 - 1500	150	32	41	39	38	0	0	136	9	5	0	0	1	9	81	49	9	1	0	0	0	0	0	0	23	20.4	3.3
1500 - 1600	144	41	41	32	30	0	0	129	11	4	0	0	2	16	64	54	8	0	0	0	0	0	0	0	23.3	20.1	3.4
1600 - 1700	133	31	34	31	37	0	0	124	7	2	0	0	1	7	63	56	5	1	0	0	0	0	0	0	23.9	20.8	3.1
1700 - 1800	166	43	47	42	34	0	2	157	7	0	0	1	2	4	78	71	8	2	0	0	0	0	0	0	23.7	21	3.5
1800 - 1900	125	35	35	29	26	0	1	119	4	1	0	0	1	0	54	62	8	0	0	0	0	0	0	0	24.2	21.6	2.8
1900 - 2000	98	30	30	18	20	0	0	93	5	0	0	0	2	2	41	47	5	0	1	0	0	0	0	0	23.9	21.6	3.7
2000 - 2100	64	17	20	12	15	0	1	60	2	1	0	0	0	2	35	27	0	0	0	0	0	0	0	0	22.6	20.7	2.3
2100 - 2200	37	14	10	5	8	0	0	33	4	0	0	0	0	1	15	20	0	1	0	0	0	0	0	0	24.2	21.6	3
2200 - 2300	27	11	7	6	3	0	0	21	5	1	0	0	0	4	16	7	0	0	0	0	0	0	0	0	22.1	19.3	2.7
2300 - 0000	11	6	4	0	1	0	0	10	1	0	0	0	0	0	6	4	1	0	0	0	0	0	0	0	22.8	21.4	2.4
0700 - 1900	1670	397	419	450	404	0	5	1466	147	47	5	4	21	104	833	618	80	9	1	0	0	0	0	0	23.7	20.5	3.5
0600 - 2200	1893	461	481	493	458	0	7	1668	163	50	5	4	23	110	933	725	86	10	2	0	0	0	0	0	23.7	20.6	3.5
0600 - 0000	1931	478	492	499	462	0	7	1699	169	51	5	4	23	114	955	736	87	10	2	0	0	0	0	0	23.7	20.6	3.5
0000 - 0000	1948	481	496	504	467	0	7	1713	172	51	5	4	23	115	960	747	87	10	2	0	0	0	0	0	23.7	20.6	3.4

Wednesday 29 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	8	4	2	2	0	0	0	8	0	0	0	0	0	0	2	6	0	0	0	0	0	0	0	0	-	21.4	3.1
0100 - 0200	3	0	2	1	0	0	0	3	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	-	22.3	3.3
0200 - 0300	2	1	0	0	1	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	-	18.8	7.4
0300 - 0400	4	1	1	1	1	0	0	2	1	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	-	21.6	3.4
0400 - 0500	3	1	1	1	0	0	0	2	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	-	18.4	6.3
0500 - 0600	6	1	3	2	0	0	0	5	1	0	0	0	0	0	1	4	1	0	0	0	0	0	0	0	-	23.5	2.1
0600 - 0700	23	5	7	5	6	0	1	14	6	2	0	0	0	0	8	13	2	0	0	0	0	0	0	0	24.4	22.3	2.7
0700 - 0800	82	14	12	19	37	0	2	65	12	3	0	0	1	0	26	44	10	1	0	0	0	0	0	0	25.7	22.3	3.3
0800 - 0900	133	30	42	37	24	0	0	118	10	2	3	0	4	3	61	58	6	1	0	0	0	0	0	0	23.5	20.9	3.5
0900 - 1000	162	44	43	34	41	0	3	128	24	6	1	3	3	10	71	63	11	1	0	0	0	0	0	0	23.5	20.4	4.2
1000 - 1100	148	39	36	40	33	0	0	125	14	9	0	0	2	5	87	50	2	2	0	0	0	0	0	0	23	20.2	3.2
1100 - 1200	160	45	29	49	37	0	2	119	36	3	0	1	5	25	63	60	6	0	0	0	0	0	0	0	23	19.7	4
1200 - 1300	160	45	31	44	40	0	0	133	21	6	0	0	2	24	80	50	4	0	0	0	0	0	0	0	23	19.6	3.7
1300 - 1400	167	52	33	42	40	1	1	138	22	5	0	0	2	8	89	60	6	2	0	0	0	0	0	0	23.7	20.4	3.3
1400 - 1500	145	41	30	35	39	0	3	114	23	4	1	0	8	13	65	48	9	2	0	0	0	0	0	0	24.4	20.1	4.7
1500 - 1600	138	29	32	35	42	0	0	121	12	5	0	0	1	3	62	57	13	2	0	0	0	0	0	0	24.6	21.4	3.6
1600 - 1700	140	36	44	27	33	0	2	131	5	2	0	0	2	3	63	66	4	2	0	0	0	0	0	0	24.2	21	3.5
1700 - 1800	187	44	47	49	47	0	1	179	7	0	0	0	4	11	97	67	8	0	0	0	0	0	0	0	23	20.2	3.3
1800 - 1900	142	51	25	28	38	0	1	128	10	2	1	0	0	4	63	65	9	1	0	0	0	0	0	0	24.8	21.4	3.3
1900 - 2000	107	33	30	19	25	0	0	100	7	0	0	0	0	9	56	40	1	1	0	0	0	0	0	0	22.8	20.4	2.9
2000 - 2100	68	20	12	22	14	0	1	65	1	1	0	0	0	2	28	33	5	0	0	0	0	0	0	0	23.7	21.3	2.8
2100 - 2200	47	10	15	13	9	0	1	40	6	0	0	0	0	0	22	22	3	0	0	0	0	0	0	0	23.7	21.5	2.3
2200 - 2300	30	9	6	6	9	0	0	23	7	0	0	0	0	2	16	12	0	0	0	0	0	0	0	0	22.8	20.1	2.7
2300 - 0000	18	5	4	4	5	0	0	16	2	0	0	0	0	1	10	5	2	0	0	0	0	0	0	0	23.7	21.1	3.3
0700 - 1900	1764	470	404	439	451	1	15	1499	196	47	6	4	34	109	827	688	88	14	0	0	0	0	0	0	23.9	20.5	3.7
0600 - 2200	2009	538	468	498	505	1	18	1718	216	50	6	4	34	120	941	796	99	15	0	0	0	0	0	0	23.7	20.6	3.6
0600 - 0000	2057	552	478	508	519	1	18	1757	225	50	6	4	34	123	967	813	101	15	0	0	0	0	0	0	23.7	20.6	3.6
0000 - 0000	2083	560	487	515	521	1	18	1778	229	51	6	4	34	125	974	829	102	15	0	0	0	0	0	0	23.7	20.6	3.6

Thursday 30 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	7	3	3	0	1	0	0	7	0	0	0	0	0	0	4	3	0	0	0	0	0	0	0	0	-	20.5	1.6
0100 - 0200	4	2	0	2	0	0	0	3	1	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	-	21.9	1.9
0200 - 0300	4	1	0	1	2	0	0	3	1	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	-	18.1	2.9
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0400 - 0500	4	1	0	0	3	0	0	2	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	-	21.1	1.7
0500 - 0600	5	2	2	0	1	0	0	4	0	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	-	23.9	1.3
0600 - 0700	22	2	8	8	4	0	1	16	4	1	0	0	0	0	6	13	3	0	0	0	0	0	0	0	25.3	23	2.8
0700 - 0800	88	20	17	15	36	0	0	71	15	2	0	0	0	0	30	54	4	0	0	0	0	0	0	0	23.9	21.8	2.3
0800 - 0900	140	30	31	39	40	0	0	114	20	4	2	0	0	2	62	67	9	0	0	0	0	0	0	0	23.9	21.3	2.6
0900 - 1000	152	37	49	34	32	1	1	117	23	10	0	0	3	19	75	51	3	1	0	0	0	0	0	0	23.3	19.7	3.9
1000 - 1100	177	38	44	44	51	0	0	141	19	17	0	0	0	16	80	77	4	0	0	0	0	0	0	0	23	20.3	3.1
1100 - 1200	130	35	31	28	36	0	1	104	17	8	0	0	0	12	64	50	4	0	0	0	0	0	0	0	23	20.3	3.2
1200 - 1300	133	24	26	40	43	1	0	106	17	9	0	0	0	10	59	54	9	0	1	0	0	0	0	0	23.9	20.9	3.5
1300 - 1400	148	38	26	39	45	0	2	125	13	8	0	0	1	10	78	52	7	0	0	0	0	0	0	0	23.7	20.2	3.4
1400 - 1500	160	44	44	34	38	0	0	129	28	3	0	0	2	14	88	48	6	2	0	0	0	0	0	0	23.3	20.2	3.6
1500 - 1600	134	30	30	34	40	0	0	122	10	2	0	0	0	13	50	66	5	0	0	0	0	0	0	0	23.7	20.6	3.3
1600 - 1700	173	53	31	45	44	0	1	153	15	4	0	0	1	17	85	62	7	1	0	0	0	0	0	0	23	20.3	3.4
1700 - 1800	200	40	54	52	54	0	1	185	14	0	0	1	0	10	102	68	18	0	1	0	0	0	0	0	23.5	20.7	3.6
1800 - 1900	162	50	48	31	33	1	0	149	10	1	1	0	0	15	87	58	2	0	0	0	0	0	0	0	23.3	20.1	3.1
1900 - 2000	98	27	29	20	22	0	1	93	3	1	0	0	1	5	43	40	9	0	0	0	0	0	0	0	24.4	21.2	3.4
2000 - 2100	76	19	26	18	13	0	0	71	5	0	0	0	0	2	32	34	7	1	0	0	0	0	0	0	24.2	21.8	3.2
2100 - 2200	35	12	6	10	7	0	1	32	2	0	0	0	0	0	9	25	1	0	0	0	0	0	0	0	24.6	22.4	2.4
2200 - 2300	32	6	10	8	8	0	0	26	5	1	0	0	0	1	16	13	1	1	0	0	0	0	0	0	23.3	21.4	3.2
2300 - 0000	19	5	5	3	6	0	0	18	1	0	0	0	0	2	8	7	2	0	0	0	0	0	0	0	23	20.6	3.5
0700 - 1900	1797	439	431	435	492	3	6	1516	201	68	3	1	7	138	860	707	78	4	2	0	0	0	0	0	23.5	20.5	3.3
0600 - 2200	2028	499	500	491	538	3	9	1728	215	70	3	1	8	145	950	819	98	5	2	0	0	0	0	0	23.7	20.6	3.3
0600 - 0000	2079	510	515	502	552	3	9	1772	221	71	3	1	8	148	974	839	101	6	2	0	0	0	0	0	23.7	20.6	3.3
0000 - 0000	2103	519	520	505	559	3	9	1791	225	72	3	1	8	149	984	852	101	6	2	0	0	0	0	0	23.7	20.6	3.3

Friday 31 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	7	1	5	0	1	0	0	4	3	0	0	0	0	0	4	3	0	0	0	0	0	0	0	0	-	20.3	1.8
0100 - 0200	4	2	1	0	1	0	0	2	2	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	-	22.2	3.4
0200 - 0300	2	0	0	0	2	0	0	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	-	20.9	1.9
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0400 - 0500	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	22.3	-
0500 - 0600	6	1	2	0	3	0	0	5	1	0	0	0	0	0	1	4	1	0	0	0	0	0	0	0	-	23	3
0600 - 0700	27	2	5	9	11	0	2	18	5	2	0	0	0	0	10	15	2	0	0	0	0	0	0	0	24.4	22.3	2.6
0700 - 0800	76	14	12	23	27	0	0	61	9	6	0	0	1	4	23	36	12	0	0	0	0	0	0	0	25.9	21.8	3.9
0800 - 0900	148	32	35	40	41	0	0	127	19	2	0	0	0	9	69	60	10	0	0	0	0	0	0	0	24.2	21	3.2
0900 - 1000	132	25	29	47	31	0	0	110	19	3	0	0	4	16	62	43	6	1	0	0	0	0	0	0	23.3	19.8	4
1000 - 1100	164	39	38	47	40	0	0	134	22	8	0	2	0	6	93	59	3	1	0	0	0	0	0	0	22.8	20.2	3.2
1100 - 1200	155	37	48	32	38	0	0	126	19	10	0	0	1	12	72	65	4	1	0	0	0	0	0	0	23.5	20.5	3.4
1200 - 1300	166	40	38	44	44	0	0	143	15	8	0	0	1	19	95	44	7	0	0	0	0	0	0	0	23	19.8	3.5
1300 - 1400	163	36	37	45	45	0	1	140	17	5	0	0	0	10	71	72	7	3	0	0	0	0	0	0	24.6	21.1	3.6
1400 - 1500	152	30	43	44	35	0	1	125	22	4	0	0	2	14	79	47	10	0	0	0	0	0	0	0	23.5	20.2	3.6
1500 - 1600	170	41	42	39	48	0	0	154	13	3	0	0	0	11	98	57	3	1	0	0	0	0	0	0	23.5	20.3	2.9
1600 - 1700	165	42	38	39	46	0	1	144	15	5	0	0	3	6	93	57	5	1	0	0	0	0	0	0	23.5	20.6	3.3
1700 - 1800	174	50	41	47	36	0	2	162	8	2	0	0	0	5	105	59	3	1	1	0	0	0	0	0	22.6	20.4	3
1800 - 1900	145	39	34	33	39	0	1	132	9	3	0	0	0	1	76	59	7	2	0	0	0	0	0	0	23.7	21.2	3.2
1900 - 2000	84	27	23	18	16	0	1	78	5	0	0	0	0	5	41	32	5	0	1	0	0	0	0	0	23.3	21.1	3.7
2000 - 2100	70	17	17	22	14	0	0	64	6	0	0	0	0	5	21	41	3	0	0	0	0	0	0	0	23.9	21.3	3.2
2100 - 2200	46	11	9	15	11	0	0	44	1	1	0	0	0	0	21	19	4	2	0	0	0	0	0	0	24.4	21.8	3.7
2200 - 2300	59	15	9	15	20	0	0	52	6	1	0	0	0	7	29	19	3	1	0	0	0	0	0	0	23.7	20	3.9
2300 - 0000	37	10	11	6	10	0	0	34	3	0	0	0	0	3	21	12	1	0	0	0	0	0	0	0	21.7	19.9	2.8
0700 - 1900	1810	425	435	480	470	0	6	1558	187	59	0	2	12	113	936	658	77	11	1	0	0	0	0	0	23.5	20.5	3.4
0600 - 2200	2037	482	489	544	522	0	9	1762	204	62	0	2	12	123	1029	765	91	13	2	0	0	0	0	0	23.5	20.6	3.4
0600 - 0000	2133	507	509	565	552	0	9	1848	213	63	0	2	12	133	1079	796	95	14	2	0	0	0	0	0	23.5	20.6	3.4
0000 - 0000	2153	511	518	565	559	0	9	1861	220	63	0	2	12	133	1087	806	97	14	2	0	0	0	0	0	23.5	20.6	3.4

Saturday 01 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	19	6	5	5	3	0	1	17	1	0	0	0	0	0	11	7	1	0	0	0	0	0	0	0	23.7	20.9	2.5
0100 - 0200	13	6	3	2	2	0	0	11	2	0	0	0	0	0	8	4	1	0	0	0	0	0	0	0	22.4	20.7	2.8
0200 - 0300	10	1	6	2	1	0	0	9	1	0	0	0	0	0	6	4	0	0	0	0	0	0	0	0	-	21.5	2.3
0300 - 0400	9	0	4	3	2	0	0	5	4	0	0	0	0	0	1	6	2	0	0	0	0	0	0	0	-	23.3	2.8
0400 - 0500	5	0	1	3	1	0	0	3	2	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	-	19.6	3.7
0500 - 0600	5	1	1	2	1	0	0	5	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	-	23.3	1.5
0600 - 0700	6	1	1	0	4	0	0	5	1	0	0	0	1	0	2	3	0	0	0	0	0	0	0	0	-	20.1	6.9
0700 - 0800	25	4	9	7	5	0	0	21	2	2	0	0	0	2	10	9	3	1	0	0	0	0	0	0	25.7	21.6	4.3
0800 - 0900	45	3	12	18	12	0	0	38	5	1	1	0	0	2	10	25	8	0	0	0	0	0	0	0	26.8	22.8	3.5
0900 - 1000	80	18	21	26	15	0	0	69	8	0	3	1	2	5	35	34	3	0	0	0	0	0	0	0	24.2	20.4	4.3
1000 - 1100	105	21	23	27	34	0	1	92	7	5	0	2	4	7	51	36	5	0	0	0	0	0	0	0	23	19.7	4.2
1100 - 1200	107	21	25	32	29	0	0	100	6	1	0	0	1	10	44	50	2	0	0	0	0	0	0	0	23.7	20.4	3.4
1200 - 1300	130	29	37	28	36	0	0	123	6	1	0	0	0	18	55	43	14	0	0	0	0	0	0	0	24.4	20.8	3.7
1300 - 1400	125	27	32	31	35	0	0	119	6	0	0	0	1	6	61	51	5	1	0	0	0	0	0	0	24.2	20.9	3.2
1400 - 1500	141	32	42	33	34	0	2	130	7	2	0	0	1	13	71	48	8	0	0	0	0	0	0	0	23.3	20.2	3.3
1500 - 1600	108	30	25	23	30	0	1	100	5	2	0	0	0	10	60	32	5	1	0	0	0	0	0	0	23.9	20.5	3.5
1600 - 1700	120	27	38	25	30	0	0	111	8	1	0	0	0	9	51	52	7	1	0	0	0	0	0	0	23.9	21.1	3.4
1700 - 1800	108	30	33	28	17	0	0	101	7	0	0	0	0	7	41	49	11	0	0	0	0	0	0	0	24.8	21.5	3.5
1800 - 1900	95	30	26	22	17	0	1	85	9	0	0	0	0	4	37	46	8	0	0	0	0	0	0	0	25.1	21.3	3.5
1900 - 2000	69	23	18	15	13	0	0	62	7	0	0	0	1	3	25	36	3	1	0	0	0	0	0	0	23.7	21.2	3.6
2000 - 2100	51	16	16	15	4	0	0	44	6	1	0	0	0	2	24	24	0	1	0	0	0	0	0	0	23.5	21	3.2
2100 - 2200	27	9	3	7	8	0	0	27	0	0	0	0	0	2	11	9	5	0	0	0	0	0	0	0	25.9	21.3	4
2200 - 2300	33	8	10	2	13	0	0	28	5	0	0	0	0	2	19	12	0	0	0	0	0	0	0	0	21.7	19.9	2.3
2300 - 0000	22	8	7	6	1	0	0	18	4	0	0	0	0	1	12	7	2	0	0	0	0	0	0	0	25.1	21.3	3.4
0700 - 1900	1189	272	323	300	294	0	5	1089	76	15	4	3	9	93	526	475	79	4	0	0	0	0	0	0	24.2	20.8	3.6
0600 - 2200	1342	321	361	337	323	0	5	1227	90	16	4	3	11	100	588	547	87	6	0	0	0	0	0	0	24.2	20.8	3.6
0600 - 0000	1397	337	378	345	337	0	5	1273	99	16	4	3	11	103	619	566	89	6	0	0	0	0	0	0	24.2	20.8	3.6
0000 - 0000	1458	351	398	362	347	0	6	1323	109	16	4	3	11	103	650	592	93	6	0	0	0	0	0	0	24.2	20.8	3.6

Sunday 02 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	20	6	4	8	2	0	0	16	4	0	0	0	0	1	13	5	1	0	0	0	0	0	0	0	22.4	20.3	2.9
0100 - 0200	11	3	1	4	3	0	0	10	1	0	0	0	0	0	5	6	0	0	0	0	0	0	0	0	23.3	21.4	2.5
0200 - 0300	8	1	3	3	1	0	0	5	3	0	0	0	0	1	3	4	0	0	0	0	0	0	0	0	-	21.1	3
0300 - 0400	6	1	2	0	3	0	0	4	2	0	0	0	2	0	2	2	0	0	0	0	0	0	0	0	-	17.3	6.7
0400 - 0500	4	1	0	2	1	0	0	3	1	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	-	18.2	4.6
0500 - 0600	5	2	0	1	2	0	0	5	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	-	23.3	1.8
0600 - 0700	6	1	2	3	0	0	0	5	1	0	0	0	0	0	2	3	1	0	0	0	0	0	0	0	-	22.4	3.4
0700 - 0800	13	3	2	5	3	0	0	12	1	0	0	0	0	0	5	6	2	0	0	0	0	0	0	0	23.7	22.2	3
0800 - 0900	35	7	6	15	7	0	0	30	2	3	0	0	0	3	16	14	1	1	0	0	0	0	0	0	24.2	20.7	3.6
0900 - 1000	46	6	16	9	15	0	0	41	5	0	0	0	1	4	23	18	0	0	0	0	0	0	0	0	22.8	19.7	3.3
1000 - 1100	108	19	28	31	30	0	0	99	8	1	0	0	3	22	41	39	2	1	0	0	0	0	0	0	23.3	19.5	4.2
1100 - 1200	134	30	32	45	27	0	0	130	4	0	0	1	3	20	57	48	4	1	0	0	0	0	0	0	23.5	19.5	4.2
1200 - 1300	158	39	38	41	40	0	0	146	11	1	0	1	19	39	62	36	1	0	0	0	0	0	0	0	21.9	17.4	4.8
1300 - 1400	163	43	31	45	44	0	0	155	6	2	0	0	10	40	83	26	4	0	0	0	0	0	0	0	21.3	17.6	3.9
1400 - 1500	158	45	44	27	42	0	0	148	10	0	0	0	8	43	76	30	1	0	0	0	0	0	0	0	21.3	17.5	3.9
1500 - 1600	157	36	50	40	31	0	0	145	11	1	0	0	7	28	74	45	3	0	0	0	0	0	0	0	22.4	18.8	3.8
1600 - 1700	117	29	39	24	25	0	0	106	10	1	0	0	2	15	56	37	6	1	0	0	0	0	0	0	23.3	20	4
1700 - 1800	122	25	35	28	34	0	1	114	6	1	0	0	1	5	67	43	6	0	0	0	0	0	0	0	23.5	20.4	3.2
1800 - 1900	80	23	15	24	18	0	0	74	5	1	0	0	1	3	38	36	2	0	0	0	0	0	0	0	23.5	20.8	3.2
1900 - 2000	65	24	16	13	12	0	1	60	4	0	0	0	0	6	32	24	2	1	0	0	0	0	0	0	23	20.5	3.3
2000 - 2100	50	15	13	14	8	0	0	47	3	0	0	0	0	3	25	19	3	0	0	0	0	0	0	0	25.1	21.2	2.9
2100 - 2200	31	7	11	6	7	0	0	28	1	2	0	0	2	0	19	9	1	0	0	0	0	0	0	0	23.3	19.6	3.7
2200 - 2300	26	8	5	9	4	0	0	22	4	0	0	0	0	2	16	7	1	0	0	0	0	0	0	0	22.4	20.1	2.9
2300 - 0000	13	8	2	1	2	0	0	12	1	0	0	0	0	2	9	2	0	0	0	0	0	0	0	0	20.8	19	2.9
0700 - 1900	1291	305	336	334	316	0	1	1200	79	11	0	2	55	222	598	378	32	4	0	0	0	0	0	0	22.8	18.9	4.1
0600 - 2200	1443	352	378	370	343	0	2	1340	88	13	0	2	57	231	676	433	39	5	0	0	0	0	0	0	22.8	19.1	4.1
0600 - 0000	1482	368	385	380	349	0	2	1374	93	13	0	2	57	235	701	442	40	5	0	0	0	0	0	0	22.8	19.1	4.1
0000 - 0000	1536	382	395	398	361	0	2	1417	104	13	0	2	59	238	727	464	41	5	0	0	0	0	0	0	22.8	19.2	4

Monday 03 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	5	3	0	2	0	0	0	5	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	-	19.9	3.8
0100 - 0200	6	3	2	1	0	0	0	5	1	0	0	0	0	0	4	1	1	0	0	0	0	0	0	0	-	21	3.6
0200 - 0300	2	1	0	0	1	0	0	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	-	19.3	3.6
0300 - 0400	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	22.3	-
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0500 - 0600	5	1	0	2	2	0	0	4	1	0	0	0	0	0	2	2	1	0	0	0	0	0	0	0	-	22.8	3.2
0600 - 0700	21	3	3	3	12	0	1	15	3	2	0	0	0	0	9	11	1	0	0	0	0	0	0	0	23.9	22	2.4
0700 - 0800	74	15	20	20	19	0	1	59	12	2	0	0	0	5	20	44	5	0	0	0	0	0	0	0	24.4	21.5	3.3
0800 - 0900	149	31	40	35	43	0	0	127	16	6	0	1	0	8	76	55	9	0	0	0	0	0	0	0	23.7	20.5	3.2
0900 - 1000	134	25	36	32	41	0	1	110	16	7	0	1	2	14	65	46	5	1	0	0	0	0	0	0	23.7	20	3.9
1000 - 1100	119	30	25	30	34	0	1	95	15	8	0	0	1	3	62	43	10	0	0	0	0	0	0	0	23.7	20.8	3.4
1100 - 1200	144	33	28	42	41	0	0	120	17	7	0	0	0	12	77	52	2	1	0	0	0	0	0	0	23.7	20.3	3.4
1200 - 1300	124	37	26	29	32	0	0	105	15	4	0	0	2	8	61	45	8	0	0	0	0	0	0	0	23.7	20.5	3.5
1300 - 1400	141	35	37	38	31	0	1	119	16	5	0	0	0	8	72	57	3	1	0	0	0	0	0	0	23.7	20.7	3
1400 - 1500	124	18	33	35	38	0	4	104	14	1	1	0	3	8	57	47	7	2	0	0	0	0	0	0	24.2	20.6	4.1
1500 - 1600	143	40	32	30	41	0	0	126	12	5	0	0	0	5	83	45	9	0	1	0	0	0	0	0	23.7	21	3.2
1600 - 1700	135	28	35	35	37	0	2	113	19	1	0	0	0	8	48	73	5	0	1	0	0	0	0	0	24.2	21.5	3.3
1700 - 1800	165	40	42	45	38	1	1	151	8	4	0	0	0	3	76	73	11	2	0	0	0	0	0	0	24.6	21.4	3.2
1800 - 1900	140	46	32	31	31	0	0	133	5	2	0	0	0	11	63	58	8	0	0	0	0	0	0	0	23.9	20.6	3.4
1900 - 2000	91	33	22	18	18	1	1	85	2	2	0	0	1	3	43	39	3	2	0	0	0	0	0	0	23.5	21.1	3.3
2000 - 2100	52	19	11	9	13	0	2	49	1	0	0	0	1	1	22	27	1	0	0	0	0	0	0	0	24.2	21.4	3
2100 - 2200	48	15	12	8	13	0	1	40	7	0	0	0	0	4	25	16	3	0	0	0	0	0	0	0	23.9	20.4	3.7
2200 - 2300	26	10	8	7	1	0	1	23	2	0	0	0	0	2	8	14	2	0	0	0	0	0	0	0	24.2	21.5	3.4
2300 - 0000	8	3	3	2	0	0	0	7	1	0	0	0	0	0	6	1	1	0	0	0	0	0	0	0	-	20.3	3.7
0700 - 1900	1592	378	386	402	426	1	11	1362	165	52	1	2	8	93	760	638	82	7	2	0	0	0	0	0	23.9	20.8	3.4
0600 - 2200	1804	448	434	440	482	2	16	1551	178	56	1	2	10	101	859	731	90	9	2	0	0	0	0	0	23.9	20.8	3.4
0600 - 0000	1838	461	445	449	483	2	17	1581	181	56	1	2	10	103	873	746	93	9	2	0	0	0	0	0	23.9	20.8	3.4
0000 - 0000	1857	469	448	454	486	2	17	1598	183	56	1	2	10	104	882	753	95	9	2	0	0	0	0	0	23.9	20.8	3.4

Virtual Day (7.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	10	3	3	3	1	0	0	9	1	0	0	0	0	0	5	4	0	0	0	0	0	0	0	0	-	20.7	2.6
0100 - 0200	7	2	2	2	1	0	0	6	1	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	-	21.2	2.9
0200 - 0300	5	1	1	1	1	0	0	3	1	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	-	20.6	2.9
0300 - 0400	3	0	1	1	1	0	0	2	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	-	21.4	4.8
0400 - 0500	3	0	0	1	1	0	0	2	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	-	19.9	4
0500 - 0600	5	1	1	1	1	0	0	4	1	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	-	23.2	2.1
0600 - 0700	18	2	4	5	7	0	1	13	4	1	0	0	0	0	7	10	1	0	0	0	0	0	0	0	24.6	22.1	3
0700 - 0800	61	12	12	15	23	0	0	50	8	3	0	0	0	2	20	33	6	0	0	0	0	0	0	0	24.8	21.9	3.2
0800 - 0900	114	23	30	32	30	0	0	97	12	4	1	0	1	6	54	46	7	0	0	0	0	0	0	0	23.7	20.8	3.2
0900 - 1000	123	28	34	32	30	0	1	101	16	4	1	1	3	12	59	42	5	1	0	0	0	0	0	0	23.5	19.9	4.1
1000 - 1100	136	31	32	37	36	0	0	113	14	8	0	1	1	10	68	50	5	1	0	0	0	0	0	0	23.5	20.2	3.5
1100 - 1200	138	33	31	40	34	0	0	116	17	5	0	0	2	14	64	54	4	1	0	0	0	0	0	0	23.5	20.2	3.6
1200 - 1300	148	35	35	39	39	0	0	128	15	5	0	0	4	18	73	47	7	0	0	0	0	0	0	0	23.5	19.8	3.9
1300 - 1400	151	39	32	40	40	0	1	132	14	4	0	0	2	14	75	52	5	1	0	0	0	0	0	0	23.5	20	3.6
1400 - 1500	147	35	40	35	38	0	1	127	16	3	0	0	4	16	74	45	7	1	0	0	0	0	0	0	23.5	19.8	3.9
1500 - 1600	142	35	36	33	37	0	0	128	11	3	0	0	1	12	70	51	7	1	0	0	0	0	0	0	23.5	20.3	3.5
1600 - 1700	140	35	37	32	36	0	1	126	11	2	0	0	1	9	66	58	6	1	0	0	0	0	0	0	23.7	20.7	3.4
1700 - 1800	160	39	43	42	37	0	1	150	8	1	0	0	1	6	81	61	9	1	0	0	0	0	0	0	23.7	20.8	3.4
1800 - 1900	127	39	31	28	29	0	1	117	7	1	0	0	0	5	60	55	6	0	0	0	0	0	0	0	24.2	21	3.2
1900 - 2000	87	28	24	17	18	0	1	82	5	0	0	0	1	5	40	37	4	1	0	0	0	0	0	0	23.7	21	3.4
2000 - 2100	62	18	16	16	12	0	1	57	3	0	0	0	0	2	27	29	3	0	0	0	0	0	0	0	23.9	21.2	3
2100 - 2200	39	11	9	9	9	0	0	35	3	0	0	0	0	1	17	17	2	0	0	0	0	0	0	0	24.2	21.2	3.4
2200 - 2300	33	10	8	8	8	0	0	28	5	0	0	0	0	3	17	12	1	0	0	0	0	0	0	0	23.3	20.3	3.2
2300 - 0000	18	6	5	3	4	0	0	16	2	0	0	0	0	1	10	5	1	0	0	0	0	0	0	0	23.7	20.5	3.1
0700 - 1900	1588	384	391	406	408	1	7	1384	150	43	3	3	21	125	763	595	74	8	1	0	0	0	0	0	23.7	20.4	3.6
0600 - 2200	1794	443	444	453	453	1	9	1571	165	45	3	3	22	133	854	688	84	9	1	0	0	0	0	0	23.7	20.5	3.6
0600 - 0000	1845	459	457	464	465	1	10	1615	172	46	3	3	22	137	881	705	87	9	1	0	0	0	0	0	23.7	20.5	3.6
0000 - 0000	1877	468	466	472	471	1	10	1640	177	46	3	3	22	138	895	720	88	9	1	0	0	0	0	0	23.7	20.5	3.6

Virtual Week (1.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
Mon	1857	469	448	454	486	2	17	1598	183	56	1	2	10	104	882	753	95	9	2	0	0	0	0	0	23.9	20.8	3.4
Tue	1948	481	496	504	467	0	7	1713	172	51	5	4	23	115	960	747	87	10	2	0	0	0	0	0	23.7	20.6	3.4
Wed	2083	560	487	515	521	1	18	1778	229	51	6	4	34	125	974	829	102	15	0	0	0	0	0	0	23.7	20.6	3.6
Thu	2103	519	520	505	559	3	9	1791	225	72	3	1	8	149	984	852	101	6	2	0	0	0	0	0	23.7	20.6	3.3
Fri	2153	511	518	565	559	0	9	1861	220	63	0	2	12	133	1087	806	97	14	2	0	0	0	0	0	23.5	20.6	3.4
Sat	1458	351	398	362	347	0	6	1323	109	16	4	3	11	103	650	592	93	6	0	0	0	0	0	0	24.2	20.8	3.6
Sun	1536	382	395	398	361	0	2	1417	104	13	0	2	59	238	727	464	41	5	0	0	0	0	0	0	22.8	19.2	4
	13138	3273	3262	3303	3300	6	68	11481	1242	322	19	18	157	967	6264	5043	616	65	8	0	0	0	0	0	23.7	20.5	3.6

Total

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
	13138	3273	3262	3303	3300	6	68	11481	1242	322	19	18	157	967	6264	5043	616	65	8	0	0	0	0	0	23.7	20.5	3.6

Edinburgh ATC Study

Report Id 295b/15-04
Site Name Site 4 of 9
Description George Street, 100m east of Charlotte Square
Direction Westbound

Tuesday 28 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	39	11	11	6	11	1	1	29	8	0	0	0	1	7	17	14	0	0	0	0	0	0	0	0	23	19.1	4
0100 - 0200	29	8	9	5	7	1	0	20	8	0	0	0	6	5	11	6	1	0	0	0	0	0	0	0	22.6	17.4	5.3
0200 - 0300	16	6	5	2	3	1	0	10	3	1	1	1	0	2	7	1	5	0	0	0	0	0	0	0	29.3	20.6	7.5
0300 - 0400	6	3	0	2	1	0	0	4	2	0	0	0	1	2	0	1	2	0	0	0	0	0	0	0	-	19.2	9.1
0400 - 0500	13	6	1	3	3	0	0	9	2	2	0	0	0	2	3	6	1	1	0	0	0	0	0	0	24.2	21	6.1
0500 - 0600	8	3	2	1	2	0	0	3	2	2	1	0	1	0	1	6	0	0	0	0	0	0	0	0	-	20.9	5.5
0600 - 0700	21	5	1	8	7	1	0	16	1	3	0	0	1	4	7	6	3	0	0	0	0	0	0	0	23.5	19.7	5.4
0700 - 0800	86	23	11	26	26	9	0	52	18	7	0	0	2	9	29	27	12	5	2	0	0	0	0	0	27.7	22.2	5.9
0800 - 0900	188	43	57	46	42	21	4	139	13	9	2	2	10	28	65	70	11	2	0	0	0	0	0	0	24.4	19.7	5
0900 - 1000	148	39	36	37	36	6	5	101	19	12	5	0	8	26	54	45	15	0	0	0	0	0	0	0	24.2	19.5	4.8
1000 - 1100	159	35	42	36	46	4	4	108	27	15	1	1	14	31	52	44	14	2	1	0	0	0	0	0	24.4	19	5.7
1100 - 1200	165	31	40	45	49	6	1	115	29	14	0	5	20	49	56	27	6	2	0	0	0	0	0	0	22.1	16.6	5.5
1200 - 1300	159	36	43	40	40	7	4	119	20	9	0	1	24	50	48	26	9	1	0	0	0	0	0	0	22.6	16.9	5.4
1300 - 1400	135	33	28	37	37	9	2	103	18	3	0	0	18	44	51	18	4	0	0	0	0	0	0	0	21.5	16.5	4.8
1400 - 1500	146	29	39	37	41	6	1	103	28	7	1	1	8	46	44	37	9	0	1	0	0	0	0	0	23.3	18.2	5.1
1500 - 1600	150	37	36	40	37	7	3	104	28	8	0	2	15	40	52	28	11	2	0	0	0	0	0	0	23.3	17.7	5.8
1600 - 1700	194	62	38	48	46	12	6	142	32	2	0	1	24	57	61	41	9	1	0	0	0	0	0	0	22.6	17.2	5.3
1700 - 1800	234	58	69	63	44	26	9	176	18	4	1	1	12	57	94	52	16	2	0	0	0	0	0	0	23.3	18.6	4.9
1800 - 1900	193	55	52	40	46	17	9	143	20	4	0	1	10	53	59	56	12	2	0	0	0	0	0	0	23.3	18.6	5.1
1900 - 2000	155	46	39	44	26	4	3	114	29	5	0	2	27	36	67	18	4	1	0	0	0	0	0	0	20.8	16.2	5.2
2000 - 2100	130	34	31	31	34	4	2	93	30	0	1	0	8	27	62	24	9	0	0	0	0	0	0	0	22.8	18.4	4.5
2100 - 2200	103	21	27	30	25	4	3	79	17	0	0	0	6	20	47	23	6	1	0	0	0	0	0	0	22.4	18.8	4.8
2200 - 2300	94	20	30	18	26	4	0	70	19	1	0	1	10	20	38	21	4	0	0	0	0	0	0	0	22.4	17.9	4.9
2300 - 0000	94	23	29	14	28	1	2	74	17	0	0	0	6	19	36	32	1	0	0	0	0	0	0	0	22.4	18.6	4.4
0700 - 1900	1957	481	491	495	490	130	48	1405	270	94	10	15	165	490	665	471	128	19	4	0	0	0	0	0	23.5	18.3	5.4
0600 - 2200	2366	587	589	608	582	143	56	1707	347	102	11	17	207	577	848	542	150	21	4	0	0	0	0	0	23.5	18.2	5.3
0600 - 0000	2554	630	648	640	636	148	58	1851	383	103	11	18	223	616	922	595	155	21	4	0	0	0	0	0	23.3	18.2	5.3
0000 - 0000	2665	667	676	659	663	151	59	1926	408	108	13	19	232	634	961	629	164	22	4	0	0	0	0	0	23.3	18.2	5.3

Wednesday 29 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	65	16	19	15	15	0	0	50	15	0	0	1	4	12	22	20	5	1	0	0	0	0	0	0	24.6	19.3	5.6
0100 - 0200	42	12	8	12	10	0	0	33	8	0	1	1	7	6	14	11	2	1	0	0	0	0	0	0	22.1	17.7	6.2
0200 - 0300	26	10	5	4	7	1	0	19	5	1	0	1	4	7	3	7	3	0	1	0	0	0	0	0	23.7	18	7.8
0300 - 0400	19	7	7	3	2	0	0	16	3	0	0	0	0	2	6	9	1	1	0	0	0	0	0	0	25.5	21.4	4.7
0400 - 0500	8	5	1	1	1	0	0	5	2	1	0	0	2	0	4	1	1	0	0	0	0	0	0	0	-	17.8	6.3
0500 - 0600	10	1	4	2	3	1	0	5	3	1	0	0	0	2	1	4	3	0	0	0	0	0	0	0	-	22	6.3
0600 - 0700	33	6	7	7	13	2	0	23	2	6	0	0	0	5	10	11	6	1	0	0	0	0	0	0	26.4	22.1	5.4
0700 - 0800	90	11	17	38	24	8	1	66	12	3	0	0	3	13	18	36	12	7	1	0	0	0	0	0	28	22.3	6
0800 - 0900	215	53	45	75	42	22	9	145	28	9	2	0	2	34	59	90	24	5	1	0	0	0	0	0	25.7	21.2	5
0900 - 1000	157	42	28	34	53	11	1	97	34	12	2	0	12	51	51	35	7	1	0	0	0	0	0	0	22.8	18	5.1
1000 - 1100	149	30	40	41	38	7	2	103	28	9	0	0	16	36	40	49	8	0	0	0	0	0	0	0	24.4	18.4	5.5
1100 - 1200	144	31	45	32	36	2	4	97	24	17	0	0	16	39	50	34	3	2	0	0	0	0	0	0	22.6	17.6	5.3
1200 - 1300	171	43	36	42	50	5	3	130	18	13	2	2	11	53	60	39	5	1	0	0	0	0	0	0	22.8	17.7	5
1300 - 1400	169	41	39	49	40	7	2	115	29	15	1	3	18	57	49	33	8	1	0	0	0	0	0	0	22.6	16.8	5.3
1400 - 1500	172	46	45	32	49	8	3	132	22	7	0	1	18	45	62	36	9	1	0	0	0	0	0	0	22.6	17.5	5.2
1500 - 1600	177	48	37	44	48	10	2	131	24	10	0	2	11	53	64	37	5	4	1	0	0	0	0	0	23.3	18.1	5.5
1600 - 1700	211	61	58	50	42	23	7	143	26	11	1	1	11	41	66	60	28	2	2	0	0	0	0	0	25.7	20	5.6
1700 - 1800	258	56	71	66	65	42	10	171	23	11	1	0	6	63	93	66	23	5	2	0	0	0	0	0	24.8	19.6	5.2
1800 - 1900	199	52	47	47	53	18	8	142	26	5	0	3	20	51	55	54	10	4	2	0	0	0	0	0	23.7	18.5	6.1
1900 - 2000	193	50	53	45	45	15	4	146	25	3	0	2	29	56	59	38	7	2	0	0	0	0	0	0	22.6	16.9	5.7
2000 - 2100	134	37	30	32	35	3	4	96	29	2	0	0	2	31	63	30	7	1	0	0	0	0	0	0	22.8	19	4.4
2100 - 2200	132	29	36	34	33	6	2	93	29	2	0	3	18	32	47	25	5	2	0	0	0	0	0	0	22.6	17.1	5.7
2200 - 2300	106	33	24	25	24	1	3	81	21	0	0	0	3	18	45	37	2	1	0	0	0	0	0	0	23	19.3	4.3
2300 - 0000	102	27	26	28	21	0	1	71	28	2	0	1	11	25	34	28	3	0	0	0	0	0	0	0	22.1	17.6	5.1
0700 - 1900	2112	514	508	550	540	163	52	1472	294	122	9	12	144	536	667	569	142	33	9	0	0	0	0	0	24.4	18.8	5.6
0600 - 2200	2604	636	634	668	666	189	62	1830	379	135	9	17	193	660	846	673	167	39	9	0	0	0	0	0	24.2	18.6	5.6
0600 - 0000	2812	696	684	721	711	190	66	1982	428	137	9	18	207	703	925	738	172	40	9	0	0	0	0	0	23.9	18.6	5.5
0000 - 0000	2982	747	728	758	749	192	66	2110	464	140	10	21	224	732	975	790	187	43	10	0	0	0	0	0	23.9	18.6	5.5

Thursday 30 July 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile 85%	Average Speed	Standard deviation
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150			
0000 - 0100	75	17	21	21	16	4	0	56	15	0	0	2	12	15	30	12	2	2	0	0	0	0	0	0	22.6	17.4	5.8
0100 - 0200	52	14	13	8	17	1	0	38	12	0	1	1	6	10	18	14	3	0	0	0	0	0	0	0	22.6	17.8	5.6
0200 - 0300	28	8	12	5	3	0	0	24	4	0	0	1	2	8	9	4	4	0	0	0	0	0	0	0	23.9	18.1	6.7
0300 - 0400	24	8	8	7	1	0	0	20	4	0	0	1	2	4	7	6	2	2	0	0	0	0	0	0	25.5	19.6	7.1
0400 - 0500	15	5	4	1	5	0	0	13	2	0	0	0	2	0	4	4	4	1	0	0	0	0	0	0	27.5	22	6.7
0500 - 0600	11	1	4	3	3	0	0	6	1	4	0	0	0	0	3	6	2	0	0	0	0	0	0	0	25.1	23.7	3.1
0600 - 0700	32	5	6	11	10	4	0	18	5	5	0	0	2	8	5	6	8	3	0	0	0	0	0	0	28.9	21.8	7.1
0700 - 0800	82	8	8	28	38	4	1	60	11	6	0	0	3	10	15	37	13	4	0	0	0	0	0	0	27.5	21.9	5.5
0800 - 0900	191	47	50	40	54	19	3	140	22	5	2	1	2	38	64	64	21	1	0	0	0	0	0	0	25.1	20.3	4.6
0900 - 1000	152	41	42	40	29	10	6	93	29	13	1	0	8	39	61	27	15	2	0	0	0	0	0	0	23.9	18.8	5.1
1000 - 1100	145	38	35	35	37	7	0	91	30	17	0	1	9	43	51	39	2	0	0	0	0	0	0	0	22.8	17.9	4.7
1100 - 1200	195	38	53	47	57	8	3	146	26	11	1	0	25	66	75	24	5	0	0	0	0	0	0	0	20.8	16.2	4.5
1200 - 1300	182	52	44	41	45	8	5	134	29	6	0	1	29	37	57	47	11	0	0	0	0	0	0	0	23.9	17.7	5.6
1300 - 1400	159	38	36	49	36	5	3	116	24	11	0	1	33	55	44	23	3	0	0	0	0	0	0	0	21.7	15.7	5
1400 - 1500	190	56	57	39	38	7	4	152	24	3	0	1	30	51	59	37	10	2	0	0	0	0	0	0	23	17.1	5.7
1500 - 1600	198	45	55	48	50	10	6	140	34	8	0	1	17	45	60	55	16	4	0	0	0	0	0	0	24.4	19	5.5
1600 - 1700	214	41	71	56	46	18	6	156	24	9	1	0	10	37	66	68	25	7	1	0	0	0	0	0	26.2	20.5	5.6
1700 - 1800	268	58	81	75	54	31	12	189	25	11	0	5	21	90	83	53	14	2	0	0	0	0	0	0	22.1	17.3	5.2
1800 - 1900	235	60	72	53	50	14	7	185	24	4	1	0	40	86	58	38	8	4	0	1	0	0	0	0	22.1	16.6	5.6
1900 - 2000	202	61	55	53	33	5	7	164	26	0	0	2	35	66	55	32	9	3	0	0	0	0	0	0	22.6	16.4	5.8
2000 - 2100	143	34	39	41	29	6	4	110	23	0	0	0	5	32	64	34	4	3	1	0	0	0	0	0	23.3	18.9	4.8
2100 - 2200	118	33	24	29	32	2	4	82	27	2	1	0	8	20	55	26	6	3	0	0	0	0	0	0	22.4	18.9	4.9
2200 - 2300	106	24	30	26	26	2	2	74	28	0	0	1	3	20	41	30	9	2	0	0	0	0	0	0	23.9	19.6	4.8
2300 - 0000	94	25	25	21	23	2	0	68	23	1	0	1	4	22	29	33	4	1	0	0	0	0	0	0	23.7	18.8	4.9
0700 - 1900	2211	522	604	551	534	141	56	1602	302	104	6	11	227	597	693	512	143	26	1	1	0	0	0	0	23.7	18.1	5.5
0600 - 2200	2706	655	728	685	638	158	71	1976	383	111	7	13	277	723	872	610	170	38	2	1	0	0	0	0	23.5	18.1	5.5
0600 - 0000	2906	704	783	732	687	162	73	2118	434	112	7	15	284	765	942	673	183	41	2	1	0	0	0	0	23.5	18.1	5.5
0000 - 0000	3111	757	845	777	732	167	73	2275	472	116	8	20	308	802	1013	719	200	46	2	1	0	0	0	0	23.5	18.2	5.5

Friday 31 July 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile 85%	Average Speed	Standard deviation
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150			
0000 - 0100	88	28	16	23	21	2	0	64	22	0	0	1	8	13	39	23	1	3	0	0	0	0	0	0	22.4	18.7	5.1
0100 - 0200	54	11	18	15	10	1	1	44	8	0	0	1	3	2	20	24	3	0	1	0	0	0	0	0	25.1	20.9	5.6
0200 - 0300	30	6	7	12	5	0	0	23	7	0	0	0	2	3	16	7	2	0	0	0	0	0	0	0	21.9	19.3	3.8
0300 - 0400	23	7	8	3	5	0	0	15	8	0	0	0	2	3	7	6	5	0	0	0	0	0	0	0	28.2	19.9	6.4
0400 - 0500	9	3	5	0	1	0	0	4	5	0	0	0	2	0	2	4	0	1	0	0	0	0	0	0	-	20.8	7.8
0500 - 0600	12	4	3	1	4	1	0	6	4	1	0	0	1	2	3	5	1	0	0	0	0	0	0	0	25.3	20.3	5.8
0600 - 0700	27	4	5	4	14	2	0	20	2	3	0	0	2	5	7	8	3	2	0	0	0	0	0	0	27.5	20.4	6.4
0700 - 0800	81	15	14	23	29	8	2	54	12	4	1	1	5	10	13	29	19	3	1	0	0	0	0	0	27.5	21.9	6.4
0800 - 0900	172	47	37	49	39	11	5	124	21	11	0	0	4	29	51	68	19	1	0	0	0	0	0	0	25.3	20.4	4.7
0900 - 1000	142	37	30	35	40	11	1	97	24	7	2	1	15	25	53	37	7	3	1	0	0	0	0	0	23.7	18.7	5.8
1000 - 1100	172	34	40	51	47	9	2	119	29	13	0	1	7	42	76	40	3	3	0	0	0	0	0	0	22.8	18.5	4.5
1100 - 1200	172	37	35	50	50	2	2	130	24	13	1	1	14	45	58	46	6	2	0	0	0	0	0	0	23	18.2	5.1
1200 - 1300	201	48	60	38	55	7	4	144	27	18	1	3	36	63	67	26	6	0	0	0	0	0	0	0	21.3	15.9	5.2
1300 - 1400	187	53	42	45	47	6	4	151	18	8	0	0	28	67	54	31	7	0	0	0	0	0	0	0	22.4	16.4	5.1
1400 - 1500	159	39	36	37	47	4	5	127	19	4	0	1	24	36	57	32	8	1	0	0	0	0	0	0	22.4	17.1	5.3
1500 - 1600	187	39	54	48	46	12	2	152	14	7	0	0	17	49	72	42	7	0	0	0	0	0	0	0	22.6	17.7	4.8
1600 - 1700	207	57	55	48	47	21	2	151	23	9	1	2	22	55	62	47	17	2	0	0	0	0	0	0	23.3	18.1	5.7
1700 - 1800	245	56	69	68	52	28	11	180	19	6	1	1	12	81	87	48	13	3	0	0	0	0	0	0	22.6	18.1	5
1800 - 1900	204	66	39	49	50	14	5	144	33	7	1	2	13	55	73	55	5	1	0	0	0	0	0	0	23.3	18	4.8
1900 - 2000	217	51	58	51	57	8	1	182	23	3	0	2	9	73	95	30	8	0	0	0	0	0	0	0	21.5	17.3	4.4
2000 - 2100	175	38	49	53	35	3	0	136	35	1	0	3	14	47	77	29	5	0	0	0	0	0	0	0	21.9	17.2	4.8
2100 - 2200	176	45	35	50	46	2	4	133	34	2	1	0	16	70	53	29	7	1	0	0	0	0	0	0	22.4	17.1	4.9
2200 - 2300	148	47	34	32	35	0	0	130	15	1	2	0	23	47	50	21	7	0	0	0	0	0	0	0	21.5	16.3	4.9
2300 - 0000	131	34	38	25	34	1	2	112	15	1	0	2	25	34	47	21	2	0	0	0	0	0	0	0	21	16	4.9
0700 - 1900	2129	528	511	541	549	133	45	1573	263	107	8	13	197	557	723	501	117	19	2	0	0	0	0	0	23.3	18	5.3
0600 - 2200	2724	666	658	699	701	148	50	2044	357	116	9	18	238	752	955	597	140	22	2	0	0	0	0	0	23.3	17.9	5.2
0600 - 0000	3003	747	730	756	770	149	52	2286	387	118	11	20	286	833	1052	639	149	22	2	0	0	0	0	0	23	17.7	5.2
0000 - 0000	3219	806	787	810	816	153	53	2442	441	119	11	22	304	856	1139	708	161	26	3	0	0	0	0	0	23	17.9	5.2

Saturday 01 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	89	21	24	18	26	5	0	71	12	1	0	1	10	18	34	19	6	1	0	0	0	0	0	0	22.6	18.1	5.5
0100 - 0200	72	16	21	12	23	1	0	59	12	0	0	0	7	17	28	13	5	2	0	0	0	0	0	0	25.1	18.5	5.7
0200 - 0300	79	26	24	13	16	1	0	64	13	1	0	1	6	12	25	26	8	1	0	0	0	0	0	0	25.3	19.4	5.7
0300 - 0400	57	19	20	7	11	1	0	45	10	1	0	1	6	12	9	19	9	1	0	0	0	0	0	0	26.2	19.8	6.5
0400 - 0500	17	6	4	3	4	1	0	8	6	1	1	1	0	4	2	4	4	1	1	0	0	0	0	0	27.1	21.5	8.2
0500 - 0600	13	3	5	1	4	0	0	8	2	3	0	0	1	1	5	4	1	1	0	0	0	0	0	0	25.7	21.4	6.4
0600 - 0700	14	2	4	5	3	2	0	7	4	1	0	0	0	4	2	6	1	1	0	0	0	0	0	0	25.1	21.5	5.8
0700 - 0800	30	3	5	13	9	1	1	16	9	3	0	0	1	3	4	14	7	1	0	0	0	0	0	0	29.1	22.9	5.6
0800 - 0900	76	13	17	23	23	1	0	52	16	7	0	1	2	8	28	26	8	3	0	0	0	0	0	0	25.1	20.8	5.3
0900 - 1000	87	19	19	22	27	4	2	58	16	7	0	0	2	18	29	33	5	0	0	0	0	0	0	0	24.4	19.7	4.9
1000 - 1100	132	27	33	38	34	1	3	104	11	11	2	0	8	26	44	48	6	0	0	0	0	0	0	0	23.7	19.2	4.7
1100 - 1200	136	26	43	31	36	5	0	101	20	9	1	0	5	34	48	41	7	1	0	0	0	0	0	0	22.8	19	4.8
1200 - 1300	157	33	50	39	35	2	7	122	16	10	0	1	11	32	59	44	6	3	1	0	0	0	0	0	23.7	19	5.3
1300 - 1400	144	29	27	49	39	4	4	111	19	5	1	1	15	34	46	41	6	0	0	0	0	1	0	0	23.5	18.4	6.1
1400 - 1500	163	53	33	42	35	5	5	134	16	3	0	2	17	49	54	33	7	1	0	0	0	0	0	0	23	17.2	5.5
1500 - 1600	202	52	58	45	47	4	6	167	19	6	0	2	41	63	64	24	5	3	0	0	0	0	0	0	21.3	15.8	5.5
1600 - 1700	209	53	48	57	51	4	7	160	27	11	0	0	21	64	78	38	8	0	0	0	0	0	0	0	21.9	17.3	4.7
1700 - 1800	193	56	40	50	47	3	7	144	30	9	0	1	23	52	73	34	7	2	0	0	1	0	0	0	22.6	17.6	5.6
1800 - 1900	228	60	52	55	61	8	4	175	38	3	0	4	43	61	77	35	6	2	0	0	0	0	0	0	21.7	16.1	5.5
1900 - 2000	247	65	50	64	68	6	4	193	37	6	1	4	62	78	68	28	5	2	0	0	0	0	0	0	20.6	15.1	5.4
2000 - 2100	208	42	67	52	47	2	9	156	39	1	1	2	50	84	52	19	0	0	1	0	0	0	0	0	19.5	14.7	4.7
2100 - 2200	199	47	57	39	56	1	3	154	41	0	0	1	38	66	77	16	0	1	0	0	0	0	0	0	19.2	15.4	4.5
2200 - 2300	188	37	63	46	42	0	2	153	33	0	0	1	36	75	52	18	6	0	0	0	0	0	0	0	20.1	15.4	4.8
2300 - 0000	165	44	47	39	35	1	1	131	31	1	0	1	21	45	65	29	4	0	0	0	0	0	0	0	21.3	16.7	4.9
0700 - 1900	1757	424	425	464	444	42	46	1344	237	84	4	12	189	444	604	411	78	16	1	0	1	1	0	0	23.3	17.9	5.5
0600 - 2200	2425	580	603	624	618	53	62	1854	358	92	6	19	339	676	803	480	84	20	2	0	1	1	0	0	22.6	17.1	5.5
0600 - 0000	2778	661	713	709	695	54	65	2138	422	93	6	21	396	796	920	527	94	20	2	0	1	1	0	0	22.4	17	5.4
0000 - 0000	3105	752	811	763	779	63	65	2393	477	100	7	25	426	860	1023	612	127	27	3	0	1	1	0	0	22.8	17.2	5.5

Sunday 02 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	112	32	21	43	16	2	1	88	21	0	0	1	25	44	34	7	1	0	0	0	0	0	0	0	18.1	14.3	4.3
0100 - 0200	94	26	22	26	20	1	1	81	11	0	0	2	19	23	24	22	4	0	0	0	0	0	0	0	22.8	16.5	6.2
0200 - 0300	92	22	27	22	21	2	0	76	14	0	0	2	22	22	25	18	2	1	0	0	0	0	0	0	22.6	16	6
0300 - 0400	80	16	25	22	17	0	0	66	14	0	0	0	10	14	20	26	10	0	0	0	0	0	0	0	25.5	19.1	6.4
0400 - 0500	46	17	12	11	6	2	0	37	7	0	0	0	2	12	12	16	3	1	0	0	0	0	0	0	24.8	19.7	5.7
0500 - 0600	21	8	5	4	4	1	0	16	4	0	0	0	0	2	7	4	6	1	0	0	1	0	0	0	30.2	24.4	8
0600 - 0700	13	4	3	4	2	2	0	9	2	0	0	0	1	0	5	3	4	0	0	0	0	0	0	0	26.8	21.4	5.6
0700 - 0800	24	0	2	12	10	2	0	17	3	2	0	0	1	7	9	6	0	1	0	0	0	0	0	0	23.7	18.6	5.3
0800 - 0900	30	5	6	7	12	1	0	24	4	1	0	0	2	5	10	9	3	1	0	0	0	0	0	0	24.4	19.8	5.8
0900 - 1000	78	8	20	20	30	6	0	61	7	3	1	2	12	24	26	10	3	1	0	0	0	0	0	0	21.7	16.2	5.4
1000 - 1100	148	31	36	39	42	2	1	129	13	3	0	0	12	59	39	29	6	3	0	0	0	0	0	0	22.8	17.2	5.3
1100 - 1200	191	46	52	48	45	7	2	162	11	7	2	5	46	74	38	24	3	1	0	0	0	0	0	0	20.6	14.6	5.5
1200 - 1300	199	53	47	42	57	2	4	178	12	2	1	2	53	92	33	15	3	1	0	0	0	0	0	0	19.2	14.1	4.8
1300 - 1400	206	50	54	63	39	3	3	173	22	5	0	2	57	89	43	12	2	1	0	0	0	0	0	0	18.3	13.9	4.7
1400 - 1500	207	50	46	60	51	8	6	179	10	4	0	2	38	88	55	15	8	1	0	0	0	0	0	0	19.9	15.2	5.1
1500 - 1600	195	50	48	44	53	4	6	162	14	9	0	3	36	86	46	17	7	0	0	0	0	0	0	0	19.7	14.8	5
1600 - 1700	145	37	41	36	31	2	1	124	12	6	0	1	19	55	38	23	8	1	0	0	0	0	0	0	22.6	16.6	5.3
1700 - 1800	150	42	39	31	38	10	2	123	10	5	0	2	14	44	52	31	7	0	0	0	0	0	0	0	22.8	17.3	5.2
1800 - 1900	139	37	43	29	30	2	4	112	18	3	0	1	15	35	45	30	11	2	0	0	0	0	0	0	23	18	5.7
1900 - 2000	131	43	31	34	23	1	5	107	15	3	0	1	24	44	28	20	13	1	0	0	0	0	0	0	22.6	16.7	5.9
2000 - 2100	98	33	20	27	18	4	1	78	13	2	0	1	8	17	44	21	7	0	0	0	0	0	0	0	22.1	18.6	4.7
2100 - 2200	76	24	15	13	24	2	4	59	11	0	0	0	1	20	33	16	5	1	0	0	0	0	0	0	23.3	19.1	4.6
2200 - 2300	100	27	25	26	22	0	2	83	15	0	0	0	6	23	49	19	3	0	0	0	0	0	0	0	23	17.8	4.5
2300 - 0000	68	19	20	15	14	2	2	48	16	0	0	0	4	23	27	11	3	0	0	0	0	0	0	0	21.7	17.7	4.4
0700 - 1900	1712	409	434	431	438	49	29	1444	136	50	4	20	305	658	434	221	61	13	0	0	0	0	0	0	21.5	15.7	5.4
0600 - 2200	2030	513	503	509	505	58	39	1697	177	55	4	22	339	739	544	281	90	15	0	0	0	0	0	0	21.9	16.1	5.4
0600 - 0000	2198	559	548	550	541	60	43	1828	208	55	4	22	349	785	620	311	96	15	0	0	0	0	0	0	21.9	16.2	5.4
0000 - 0000	2643	680	660	678	625	68	45	2192	279	55	4	27	427	902	742	404	122	18	0	0	1	0	0	0	22.4	16.3	5.6

Monday 03 August 2015

TUBES DAMAEGD DUE TO ROADWORKS

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	79	20	22	22	15	0	0	67	12	0	0	1	12	27	33	6	0	0	0	0	0	0	0	0	19.2	15.7	4.2
0100 - 0200	71	13	18	24	16	2	0	52	17	0	0	4	17	29	16	4	1	0	0	0	0	0	0	0	18.1	13.7	5
0200 - 0300	39	14	14	7	4	1	1	29	8	0	0	2	4	15	10	6	2	0	0	0	0	0	0	0	21.7	15.7	5.6
0300 - 0400	16	2	3	6	5	5	0	7	2	2	0	4	12	0	0	0	0	0	0	0	0	0	0	0	8.9	7.6	1.7
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0500 - 0600	2	2	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	-	5.8	0.3
0600 - 0700	3	0	0	2	1	1	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	-	8.5	1.2
0700 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0800 - 0900	6	0	1	0	5	0	0	4	2	0	0	0	0	0	4	1	1	0	0	0	0	0	0	0	-	20.4	4.7
0900 - 1000	2	2	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-	22.7	1.3
1000 - 1100	7	0	2	2	3	0	0	7	0	0	0	0	0	0	0	0	0	5	0	0	2	0	0	0	-	42.1	7
1100 - 1200	3	2	0	1	0	0	0	1	2	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	-	23.2	4.8
1200 - 1300	3	2	0	1	0	0	0	1	2	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	-	19.4	7.3
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1400 - 1500	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	-	11.6	-
1500 - 1600	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-	23.9	-
1600 - 1700	4	1	2	0	1	0	0	2	1	1	0	0	1	2	1	0	0	0	0	0	0	0	0	0	-	13.8	3.8
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1800 - 1900	6	1	1	3	1	1	0	5	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	-	11.4	2.6
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
2000 - 2100	3	0	1	0	2	0	0	3	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	-	11.7	0.8
2100 - 2200	5	1	1	1	2	0	0	4	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	-	13.9	1.3
2200 - 2300	3	0	0	3	0	0	0	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	-	12.6	0.1
2300 - 0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0700 - 1900	33	8	6	8	11	1	0	20	10	2	0	0	5	6	6	7	2	0	5	0	0	2	0	0	37.8	22.7	11.9
0600 - 2200	44	9	8	11	16	2	0	29	10	3	0	0	9	13	6	7	2	0	5	0	0	2	0	0	28	20	11.4
0600 - 0000	47	9	8	14	16	2	0	32	10	3	0	0	9	16	6	7	2	0	5	0	0	2	0	0	28	19.5	11.1
0000 - 0000	254	60	65	73	56	10	1	189	49	5	0	13	54	87	65	23	5	0	5	0	0	2	0	0	20.1	15.3	7

Virtual Day (7.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	78	21	19	21	17	2	0	61	15	0	0	1	10	19	30	14	2	1	0	0	0	0	0	0	22.1	17.2	5.3
0100 - 0200	59	14	16	15	15	1	0	47	11	0	0	1	9	13	19	13	3	0	0	0	0	0	0	0	23.3	17.3	6
0200 - 0300	44	13	13	9	8	1	0	35	8	0	0	1	6	10	14	10	4	0	0	0	0	0	0	0	23.9	17.8	6.2
0300 - 0400	32	9	10	7	6	1	0	25	6	0	0	1	5	5	7	10	4	1	0	0	0	0	0	0	25.7	18.8	6.9
0400 - 0500	15	6	4	3	3	0	0	11	3	1	0	0	1	3	4	5	2	1	0	0	0	0	0	0	26.2	20.4	6.5
0500 - 0600	11	3	3	2	3	0	0	7	2	2	0	0	0	1	3	4	2	0	0	0	0	0	0	0	27.1	22	6.8
0600 - 0700	20	4	4	6	7	2	0	14	2	3	0	0	1	4	5	6	4	1	0	0	0	0	0	0	27.5	20.9	6.3
0700 - 0800	56	9	8	20	19	5	1	38	9	4	0	0	2	7	13	21	9	3	1	0	0	0	0	0	27.7	21.9	5.9
0800 - 0900	125	30	30	34	31	11	3	90	15	6	1	1	3	20	40	47	12	2	0	0	0	0	0	0	25.1	20.4	4.9
0900 - 1000	109	27	25	27	31	7	2	72	19	8	2	0	8	26	39	27	7	1	0	0	0	0	0	0	23.9	18.6	5.3
1000 - 1100	130	28	33	35	35	4	2	94	20	10	0	0	9	34	43	36	6	1	1	0	0	0	0	0	23.5	18.5	5.5
1100 - 1200	144	30	38	36	39	4	2	107	19	10	1	2	18	44	47	28	4	1	0	0	0	0	0	0	22.4	16.9	5.3
1200 - 1300	153	38	40	35	40	4	4	118	18	8	1	1	23	47	46	28	6	1	0	0	0	0	0	0	22.6	16.7	5.4
1300 - 1400	143	35	32	42	34	5	3	110	19	7	0	1	24	49	41	23	4	0	0	0	0	0	0	0	21.9	16.1	5.3
1400 - 1500	148	39	37	35	37	5	3	118	17	4	0	1	19	45	47	27	7	1	0	0	0	0	0	0	22.6	17	5.4
1500 - 1600	159	39	41	38	40	7	4	122	19	7	0	1	20	48	51	29	7	2	0	0	0	0	0	0	23	17.2	5.5
1600 - 1700	169	45	45	42	38	11	4	125	21	7	0	1	15	44	53	40	14	2	0	0	0	0	0	0	23.9	18.4	5.6
1700 - 1800	193	47	53	50	43	20	7	140	18	7	0	1	13	55	69	41	11	2	0	0	0	0	0	0	23	18.2	5.2
1800 - 1900	172	47	44	39	42	11	5	129	23	4	0	2	21	49	52	38	7	2	0	0	0	0	0	0	23	17.5	5.6
1900 - 2000	164	45	41	42	36	6	3	129	22	3	0	2	27	50	53	24	7	1	0	0	0	0	0	0	21.9	16.4	5.4
2000 - 2100	127	31	34	34	29	3	3	96	24	1	0	1	13	34	52	22	5	1	0	0	0	0	0	0	22.1	17.5	4.9
2100 - 2200	116	29	28	28	31	2	3	86	23	1	0	1	12	33	45	19	4	1	0	0	0	0	0	0	21.9	17.3	5.1
2200 - 2300	106	27	29	25	25	1	1	85	19	0	0	0	12	29	39	21	4	0	0	0	0	0	0	0	22.6	17.4	5
2300 - 0000	93	25	26	20	22	1	1	72	19	1	0	1	10	24	34	22	2	0	0	0	0	0	0	0	22.1	17.4	4.9
0700 - 1900	1702	412	426	434	429	94	39	1266	216	80	6	12	176	470	542	385	96	18	3	0	0	0	0	0	23.5	17.9	5.6
0600 - 2200	2128	521	532	543	532	107	49	1591	287	88	7	15	229	591	696	456	115	22	3	0	0	0	0	0	23.3	17.7	5.5
0600 - 0000	2328	572	588	589	579	109	51	1748	325	89	7	16	251	645	770	499	122	23	3	0	0	0	0	0	23.3	17.7	5.5
0000 - 0000	2568	638	653	645	631	115	52	1932	370	92	8	21	282	696	845	555	138	26	4	0	0	0	0	0	23.3	17.7	5.5

Virtual Week (1.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
Mon	254	60	65	73	56	10	1	189	49	5	0	13	54	87	65	23	5	0	5	0	0	2	0	0	20.1	15.3	7
Tue	2665	667	676	659	663	151	59	1926	408	108	13	19	232	634	961	629	164	22	4	0	0	0	0	0	23.3	18.2	5.3
Wed	2982	747	728	758	749	192	66	2110	464	140	10	21	224	732	975	790	187	43	10	0	0	0	0	0	23.9	18.6	5.5
Thu	3111	757	845	777	732	167	73	2275	472	116	8	20	308	802	1013	719	200	46	2	1	0	0	0	0	23.5	18.2	5.5
Fri	3219	806	787	810	816	153	53	2442	441	119	11	22	304	856	1139	708	161	26	3	0	0	0	0	0	23	17.9	5.2
Sat	3105	752	811	763	779	63	65	2393	477	100	7	25	426	860	1023	612	127	27	3	0	1	1	0	0	22.8	17.2	5.5
Sun	2643	680	660	678	625	68	45	2192	279	55	4	27	427	902	742	404	122	18	0	0	1	0	0	0	22.4	16.3	5.6
	17979	4469	4572	4518	4420	804	362	13527	2590	643	53	147	1975	4873	5918	3885	966	182	27	1	2	3	0	0	23.3	17.7	5.5

Total

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
	17979	4469	4572	4518	4420	804	362	13527	2590	643	53	147	1975	4873	5918	3885	966	182	27	1	2	3	0	0	23.3	17.7	5.5

Edinburgh ATC Study

Report Id 295b/15-05
Site Name Site 5 of 9
Description George Street, 90m east of North Castle Stree
Direction Eastbound

Tuesday 28 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	64	19	19	16	10	0	0	40	17	1	6	1	6	17	30	9	1	0	0	0	0	0	0	0	19.9	16.8	4.5
0100 - 0200	54	17	14	15	8	0	0	23	30	1	0	1	10	15	17	7	3	1	0	0	0	0	0	0	21.7	16.5	5.9
0200 - 0300	39	16	8	6	9	0	0	25	13	1	0	0	6	11	11	10	1	0	0	0	0	0	0	0	22.4	17.1	5.2
0300 - 0400	38	21	9	6	2	0	0	27	11	0	0	0	3	13	10	5	7	0	0	0	0	0	0	0	26.2	18.8	6
0400 - 0500	12	1	3	6	2	0	0	10	2	0	0	0	1	4	4	3	0	0	0	0	0	0	0	0	21.3	16.5	4.7
0500 - 0600	23	2	1	10	10	0	0	16	3	2	2	0	1	5	7	7	3	0	0	0	0	0	0	0	25.5	19.9	5.6
0600 - 0700	47	8	10	10	19	2	2	22	8	11	2	1	3	8	13	17	5	0	0	0	0	0	0	0	24.8	19.3	5.6
0700 - 0800	93	22	14	22	35	7	2	46	18	11	9	1	12	25	25	19	11	0	0	0	0	0	0	0	24.6	18	6.1
0800 - 0900	113	30	26	25	32	7	3	64	20	12	7	1	11	32	34	31	4	0	0	0	0	0	0	0	22.6	17.4	5.1
0900 - 1000	134	38	30	37	29	8	1	81	25	11	8	7	33	49	29	15	1	0	0	0	0	0	0	0	19.9	14.2	5.1
1000 - 1100	154	45	37	41	31	4	1	92	30	17	10	4	49	62	32	7	0	0	0	0	0	0	0	0	17.4	12.9	4.4
1100 - 1200	121	31	24	34	32	2	2	73	26	9	9	11	45	40	17	8	0	0	0	0	0	0	0	0	17.2	11.8	5
1200 - 1300	123	30	41	32	20	8	0	75	24	13	3	7	52	36	18	9	1	0	0	0	0	0	0	0	18.1	12.3	5.1
1300 - 1400	92	32	18	19	23	2	2	68	12	4	4	32	49	8	2	0	1	0	0	0	0	0	0	0	10.3	7.7	3.6
1400 - 1500	148	38	33	36	41	4	3	99	26	3	13	5	63	64	13	3	0	0	0	0	0	0	0	0	14.8	11.5	3.6
1500 - 1600	155	34	56	32	33	4	1	105	30	6	9	2	58	50	35	10	0	0	0	0	0	0	0	0	18.8	13.3	4.7
1600 - 1700	117	36	15	34	32	6	2	79	23	4	3	2	13	42	40	16	4	0	0	0	0	0	0	0	21	16.3	4.8
1700 - 1800	150	33	30	39	48	9	0	97	33	2	9	4	42	56	33	12	2	1	0	0	0	0	0	0	18.6	13.9	5
1800 - 1900	157	33	51	40	33	7	0	111	20	8	11	4	45	59	37	12	0	0	0	0	0	0	0	0	18.8	13.8	4.6
1900 - 2000	122	24	37	34	27	0	0	86	22	5	9	0	26	39	33	19	5	0	0	0	0	0	0	0	22.4	16	5.4
2000 - 2100	83	21	23	18	21	0	0	54	19	5	5	0	11	16	29	23	3	1	0	0	0	0	0	0	23.5	18.1	5.2
2100 - 2200	72	22	18	19	13	1	0	49	13	7	2	0	9	17	34	9	3	0	0	0	0	0	0	0	21	17.3	4.5
2200 - 2300	72	21	23	14	14	4	0	49	12	2	5	1	4	10	32	19	5	1	0	0	0	0	0	0	23.9	19.2	5.2
2300 - 0000	75	18	20	18	19	0	0	53	12	5	5	0	2	8	37	22	4	2	0	0	0	0	0	0	23.9	20.2	4.6
0700 - 1900	1557	402	375	391	389	68	17	990	287	100	95	80	472	523	315	142	24	1	0	0	0	0	0	0	19	13.6	5.3
0600 - 2200	1881	477	463	472	469	71	19	1201	349	128	113	81	521	603	424	210	40	2	0	0	0	0	0	0	20.1	14.2	5.5
0600 - 0000	2028	516	506	504	502	75	19	1303	373	135	123	82	527	621	493	251	49	5	0	0	0	0	0	0	20.8	14.6	5.6
0000 - 0000	2258	592	560	563	543	75	19	1444	449	140	131	84	554	686	572	292	64	6	0	0	0	0	0	0	21	14.9	5.7

Wednesday 29 July 2015

TUBE 'A' PARKED ON

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	57	17	14	12	14	0	0	45	9	2	1	0	4	6	16	24	7	0	0	0	0	0	0	0	24.4	20.1	5.1
0100 - 0200	31	11	11	7	2	0	0	21	8	2	0	0	1	4	6	12	6	1	1	0	0	0	0	0	26.8	22.3	5.9
0200 - 0300	23	5	7	4	7	0	0	16	5	2	0	0	0	1	3	10	7	0	0	2	0	0	0	0	26.8	25.4	6.4
0300 - 0400	18	8	4	4	2	0	0	13	5	0	0	0	1	2	4	10	1	0	0	0	0	0	0	0	24.6	21.1	4.6
0400 - 0500	11	4	0	2	5	0	0	9	1	0	1	0	1	2	2	3	3	0	0	0	0	0	0	0	27.5	21	6.4
0500 - 0600	17	4	0	4	9	0	0	13	2	0	2	0	0	6	5	4	2	0	0	0	0	0	0	0	25.3	19.7	5.1
0600 - 0700	47	4	10	15	18	0	2	27	5	12	1	0	1	6	11	17	11	1	0	0	0	0	0	0	26.6	22	5
0700 - 0800	99	16	14	40	29	5	2	43	18	11	20	3	9	44	25	13	3	2	0	0	0	0	0	0	21.7	16.3	5.3
0800 - 0900	91	40	26	25	0	8	3	48	17	4	11	2	19	38	20	11	1	0	0	0	0	0	0	0	20.6	15.1	5.1
0900 - 1000	35	0	0	0	35	5	0	26	2	2	0	0	10	17	7	1	0	0	0	0	0	0	0	0	17	13.3	3.7
1000 - 1100	134	38	38	30	28	4	0	73	25	18	14	2	32	57	27	13	3	0	0	0	0	0	0	0	20.6	14.3	4.9
1100 - 1200	169	34	46	45	44	4	1	110	30	13	11	6	59	58	37	9	0	0	0	0	0	0	0	0	18.8	13.2	4.7
1200 - 1300	148	41	38	38	31	5	2	87	35	6	13	4	61	48	24	11	0	0	0	0	0	0	0	0	17.7	12.7	4.6
1300 - 1400	158	29	46	38	45	5	2	112	20	7	12	5	44	60	42	4	3	0	0	0	0	0	0	0	17.7	13.7	4.5
1400 - 1500	191	53	50	43	45	6	1	129	35	8	12	3	63	84	34	6	1	0	0	0	0	0	0	0	17.2	13.1	4.1
1500 - 1600	167	43	46	37	41	6	2	111	32	2	14	7	43	73	32	8	2	2	0	0	0	0	0	0	17.9	13.8	5
1600 - 1700	151	39	42	38	32	8	4	97	23	7	12	0	9	69	46	21	5	0	1	0	0	0	0	0	21.7	16.7	4.8
1700 - 1800	167	39	40	43	45	17	3	108	22	7	10	1	32	63	47	19	3	2	0	0	0	0	0	0	20.6	15.6	5.1
1800 - 1900	160	48	37	50	25	6	1	99	33	4	17	4	37	48	50	18	3	0	0	0	0	0	0	0	20.6	15.1	5.1
1900 - 2000	136	42	36	28	30	5	1	84	25	5	16	0	20	61	37	14	4	0	0	0	0	0	0	0	20.4	15.5	4.5
2000 - 2100	94	25	26	24	19	3	0	47	29	2	13	0	4	24	40	19	6	1	0	0	0	0	0	0	22.8	18.5	4.8
2100 - 2200	95	24	23	16	32	1	0	61	23	1	9	0	9	30	32	19	5	0	0	0	0	0	0	0	24.8	17.7	5.2
2200 - 2300	88	20	20	26	22	3	0	45	26	1	13	0	11	25	29	18	4	1	0	0	0	0	0	0	22.6	17.6	5
2300 - 0000	77	21	21	23	12	2	0	43	22	3	7	1	8	19	26	19	4	0	0	0	0	0	0	0	23	17.9	5.2
0700 - 1900	1670	420	423	427	400	79	21	1043	292	89	146	37	418	659	391	134	24	6	1	0	0	0	0	0	19.5	14.4	5
0600 - 2200	2042	515	518	510	499	88	24	1262	374	109	185	37	452	780	511	203	50	8	1	0	0	0	0	0	20.4	15	5.2
0600 - 0000	2207	556	559	559	533	93	24	1350	422	113	205	38	471	824	566	240	58	9	1	0	0	0	0	0	20.6	15.2	5.2
0000 - 0000	2364	605	595	592	572	93	24	1467	452	119	209	38	478	845	602	303	84	10	2	2	0	0	0	0	21.5	15.6	5.5

Thursday 30 July 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile 85%	Average Speed	Standard deviation
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150			
0000 - 0100	64	19	17	17	11	0	0	30	23	1	10	0	5	6	21	24	8	0	0	0	0	0	0	0	24.8	20.2	5.3
0100 - 0200	42	11	8	10	13	0	0	26	15	1	0	1	4	5	14	13	5	0	0	0	0	0	0	0	25.1	19.1	5.7
0200 - 0300	31	8	8	8	7	0	0	20	11	0	0	1	1	3	8	13	5	0	0	0	0	0	0	0	25.5	20.9	5.4
0300 - 0400	20	7	7	4	2	1	0	14	5	0	0	0	1	1	4	11	2	1	0	0	0	0	0	0	25.5	22.4	5.4
0400 - 0500	9	2	3	2	2	0	0	5	1	2	1	1	0	1	1	4	2	0	0	0	0	0	0	0	-	21.7	7.4
0500 - 0600	24	6	4	3	11	0	1	12	4	3	4	0	1	5	8	5	5	0	0	0	0	0	0	0	27.3	20.8	5.8
0600 - 0700	54	4	12	15	23	1	2	27	8	6	10	0	3	12	16	19	4	0	0	0	0	0	0	0	25.1	19.3	5.3
0700 - 0800	106	25	30	19	32	6	7	44	15	13	21	0	12	42	30	15	6	1	0	0	0	0	0	0	22.4	16.6	5.2
0800 - 0900	142	38	39	28	37	7	2	90	20	18	5	1	18	59	37	23	4	0	0	0	0	0	0	0	22.1	16.4	5.1
0900 - 1000	152	33	31	47	41	8	1	102	25	14	2	0	32	48	54	15	3	0	0	0	0	0	0	0	19.7	15.4	4.6
1000 - 1100	139	43	30	29	37	6	6	88	28	8	3	3	40	39	39	14	3	1	0	0	0	0	0	0	20.6	14.8	5.7
1100 - 1200	161	43	37	51	30	3	2	110	32	9	5	2	39	77	33	7	3	0	0	0	0	0	0	0	17.7	14	4.4
1200 - 1300	150	36	42	42	30	6	1	104	25	6	8	1	34	61	30	22	2	0	0	0	0	0	0	0	21.3	14.8	5
1300 - 1400	167	35	33	55	44	2	2	113	33	7	10	7	56	62	28	9	4	1	0	0	0	0	0	0	17.9	13.2	5
1400 - 1500	183	42	51	33	57	7	2	127	33	11	3	4	66	69	34	8	2	0	0	0	0	0	0	0	18.3	13.2	4.6
1500 - 1600	163	44	40	39	40	3	5	95	43	6	11	1	39	67	38	15	3	0	0	0	0	0	0	0	20.4	14.8	4.8
1600 - 1700	137	38	39	28	32	4	1	88	28	6	10	0	27	51	45	11	2	1	0	0	0	0	0	0	20.1	15.1	4.8
1700 - 1800	193	61	48	38	46	14	3	135	31	4	6	3	45	75	49	18	2	1	0	0	0	0	0	0	20.1	14.7	4.9
1800 - 1900	178	50	42	49	37	11	1	130	30	3	3	3	53	81	30	10	1	0	0	0	0	0	0	0	17.7	13.4	4.3
1900 - 2000	160	52	35	31	42	3	4	102	30	7	14	2	42	52	45	14	3	2	0	0	0	0	0	0	20.4	15	5.6
2000 - 2100	112	37	31	27	17	1	2	75	22	1	11	1	14	25	39	25	8	0	0	0	0	0	0	0	23.5	18	5.4
2100 - 2200	89	25	18	35	11	1	0	54	18	7	9	1	10	16	38	19	5	0	0	0	0	0	0	0	22.4	17.9	5
2200 - 2300	94	25	27	19	23	1	0	63	18	2	10	0	8	25	35	20	3	3	0	0	0	0	0	0	23.3	18.2	5.6
2300 - 0000	75	15	31	21	8	1	0	43	21	1	9	0	3	21	31	15	5	0	0	0	0	0	0	0	23	18.3	4.5
0700 - 1900	1871	488	462	458	463	77	33	1226	343	105	87	25	461	731	447	167	35	5	0	0	0	0	0	0	19.9	14.6	4.9
0600 - 2200	2286	606	558	566	556	83	41	1484	421	126	131	29	530	836	585	244	55	7	0	0	0	0	0	0	20.6	15	5.2
0600 - 0000	2455	646	616	606	587	85	41	1590	460	129	150	29	541	882	651	279	63	10	0	0	0	0	0	0	20.8	15.2	5.2
0000 - 0000	2645	699	663	650	633	86	42	1697	519	136	165	32	553	903	707	349	90	11	0	0	0	0	0	0	21.5	15.6	5.4

Friday 31 July 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile 85%	Average Speed	Standard deviation
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150			
0000 - 0100	65	14	14	19	18	3	0	41	14	1	6	0	3	10	18	23	10	1	0	0	0	0	0	0	25.9	20.8	5.3
0100 - 0200	43	13	9	12	9	2	0	23	16	2	0	1	1	7	14	16	3	1	0	0	0	0	0	0	24.4	20	5.4
0200 - 0300	26	7	6	8	5	0	0	18	8	0	0	0	0	3	9	10	4	0	0	0	0	0	0	0	25.5	21.4	4.7
0300 - 0400	33	12	7	9	5	0	0	26	6	0	1	1	2	3	5	11	7	4	0	0	0	0	0	0	30.4	22.8	7.3
0400 - 0500	7	1	3	1	2	0	0	4	1	2	0	0	2	1	1	1	2	0	0	0	0	0	0	0	-	18.5	8.8
0500 - 0600	25	5	5	4	11	1	0	14	4	4	2	1	1	2	8	7	4	2	0	0	0	0	0	0	26.8	21	6.9
0600 - 0700	49	9	10	14	16	0	2	25	6	10	6	0	0	8	21	12	6	2	0	0	0	0	0	0	25.9	20.7	5.1
0700 - 0800	79	18	14	22	25	5	2	41	16	6	9	1	5	20	27	20	5	1	0	0	0	0	0	0	23.9	18.8	5.5
0800 - 0900	127	30	25	39	33	7	4	81	21	10	4	0	11	39	51	21	5	0	0	0	0	0	0	0	21.5	17.5	4.4
0900 - 1000	172	49	38	36	49	7	1	112	24	21	7	1	12	60	72	23	3	1	0	0	0	0	0	0	21	17	4.5
1000 - 1100	160	47	35	38	40	3	1	112	23	18	3	5	42	53	42	15	3	0	0	0	0	0	0	0	19.9	14.5	5.1
1100 - 1200	137	32	32	32	41	4	1	94	24	9	5	5	39	48	33	10	2	0	0	0	0	0	0	0	19.2	13.8	5.1
1200 - 1300	173	45	34	47	47	8	0	121	28	10	6	4	50	69	31	15	2	1	1	0	0	0	0	0	19.8	14	5.3
1300 - 1400	177	47	42	53	35	2	2	125	31	12	5	2	49	86	25	13	1	1	0	0	0	0	0	0	17.9	13.6	4.5
1400 - 1500	174	42	45	42	45	1	2	140	23	6	2	0	40	65	47	13	5	3	1	0	0	0	0	0	19.2	15.2	5.5
1500 - 1600	177	48	49	52	28	5	0	127	31	5	9	0	35	66	52	23	1	0	0	0	0	0	0	0	20.6	15.3	4.7
1600 - 1700	180	35	55	52	38	7	6	124	28	6	9	4	49	61	38	26	2	0	0	0	0	0	0	0	21	14.5	5.2
1700 - 1800	164	44	43	37	40	6	5	121	20	7	5	0	20	49	48	39	7	1	0	0	0	0	0	0	22.4	17.2	5.3
1800 - 1900	195	49	51	46	49	2	2	142	30	7	12	5	41	66	52	23	7	1	0	0	0	0	0	0	21	15.3	5.5
1900 - 2000	147	36	31	36	44	1	0	104	28	5	9	1	20	50	48	26	2	0	0	0	0	0	0	0	21.3	16.3	4.7
2000 - 2100	137	36	33	38	30	4	2	92	28	7	4	1	8	30	55	39	2	1	0	1	0	0	0	0	22.6	18.4	5.1
2100 - 2200	127	26	30	38	33	2	2	91	24	7	1	2	23	30	45	25	1	1	0	0	0	0	0	0	21.9	16.5	5.4
2200 - 2300	112	30	31	21	30	1	0	86	16	3	6	2	14	43	38	12	3	0	0	0	0	0	0	0	20.8	15.9	4.7
2300 - 0000	145	33	32	41	39	1	0	109	23	5	7	2	41	59	32	9	2	0	0	0	0	0	0	0	18.6	13.9	4.6
0700 - 1900	1915	486	463	496	470	57	26	1340	299	117	76	27	393	682	518	241	43	9	2	0	0	0	0	0	21	15.4	5.2
0600 - 2200	2375	593	567	622	593	64	32	1652	385	146	96	31	444	800	687	343	54	13	2	1	0	0	0	0	21.3	15.8	5.3
0600 - 0000	2632	656	630	684	662	66	32	1847	424	154	109	35	499	902	757	364	59	13	2	1	0	0	0	0	21.3	15.7	5.3
0000 - 0000	2831	708	674	737	712	72	32	1973	473	163	118	38	508	928	812	432	89	21	2	1	0	0	0	0	21.7	16	5.5

Saturday 01 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	155	44	34	39	38	1	1	116	31	3	3	6	93	41	12	3	0	0	0	0	0	0	0	0	13.9	10.7	3.8
0100 - 0200	111	30	28	25	28	1	1	86	21	1	1	4	50	40	15	1	1	0	0	0	0	0	0	0	15.9	11.6	4.1
0200 - 0300	93	26	22	21	24	1	0	68	22	2	0	3	32	32	19	7	0	0	0	0	0	0	0	0	17.9	13.1	4.7
0300 - 0400	79	28	20	15	16	0	0	69	8	1	1	10	39	25	4	1	0	0	0	0	0	0	0	0	13.4	10	3.7
0400 - 0500	17	7	5	1	4	0	0	14	2	1	0	0	1	4	2	5	4	1	0	0	0	0	0	0	26.6	21.3	7.2
0500 - 0600	15	4	2	2	7	0	0	9	4	0	2	1	1	1	6	3	2	1	0	0	0	0	0	0	29.8	20	7.5
0600 - 0700	25	4	6	6	9	0	0	14	7	2	2	0	2	5	8	6	4	0	0	0	0	0	0	0	25.5	19.7	5.9
0700 - 0800	35	6	6	11	12	1	1	20	5	7	1	1	3	3	12	10	4	1	1	0	0	0	0	0	25.9	19.9	6.9
0800 - 0900	67	14	15	16	22	1	0	44	8	6	8	0	3	8	18	29	7	2	0	0	0	0	0	0	25.3	21.2	5.1
0900 - 1000	131	27	37	29	38	6	4	93	16	8	4	1	18	50	33	22	6	1	0	0	0	0	0	0	23.3	16.6	5.5
1000 - 1100	121	33	29	26	33	2	2	91	17	6	3	2	13	32	41	28	5	0	0	0	0	0	0	0	23.3	17.3	5.1
1100 - 1200	146	31	31	39	45	3	0	112	16	12	3	0	30	58	36	16	5	1	0	0	0	0	0	0	20.8	15.4	5.3
1200 - 1300	132	30	24	38	40	4	2	91	19	5	11	2	25	56	35	11	3	0	0	0	0	0	0	0	18.8	14.8	4.7
1300 - 1400	159	45	31	48	35	5	1	122	19	2	10	2	31	82	27	13	4	0	0	0	0	0	0	0	19.9	14.4	4.6
1400 - 1500	168	48	46	37	37	1	3	125	25	3	11	2	50	62	36	15	2	1	0	0	0	0	0	0	19.5	14	4.9
1500 - 1600	149	39	35	42	33	2	1	110	23	8	5	2	42	50	44	10	1	0	0	0	0	0	0	0	19.2	14.1	4.7
1600 - 1700	111	41	26	21	23	1	0	83	24	2	1	0	21	36	29	21	1	2	1	0	0	0	0	0	21.5	16.5	5.9
1700 - 1800	154	38	45	39	32	4	1	117	26	2	4	3	28	54	36	28	4	1	0	0	0	0	0	0	21.9	16.1	5.5
1800 - 1900	167	38	40	50	39	4	0	123	35	1	4	5	37	58	43	22	2	0	0	0	0	0	0	0	20.8	14.9	5.2
1900 - 2000	170	46	49	37	38	2	2	121	34	7	4	3	40	53	50	21	2	1	0	0	0	0	0	0	20.1	15.3	5.4
2000 - 2100	152	34	43	43	32	2	3	115	26	2	4	0	27	56	37	26	5	1	0	0	0	0	0	0	22.4	16	5.2
2100 - 2200	163	39	39	43	42	0	0	116	38	3	6	1	29	61	51	19	2	0	0	0	0	0	0	0	20.4	15.5	4.7
2200 - 2300	162	32	60	23	47	2	1	108	42	2	7	8	65	60	25	3	1	0	0	0	0	0	0	0	16.8	12	4.5
2300 - 0000	206	43	51	64	48	1	1	156	40	4	4	4	108	65	22	6	1	0	0	0	0	0	0	0	15.4	11.6	4
0700 - 1900	1540	390	365	396	389	34	15	1131	233	62	65	20	301	549	390	225	44	9	2	0	0	0	0	0	21.5	15.7	5.4
0600 - 2200	2050	513	502	525	510	38	20	1497	338	76	81	24	399	724	536	297	57	11	2	0	0	0	0	0	21.5	15.7	5.4
0600 - 0000	2418	588	613	612	605	41	22	1761	420	82	92	36	572	849	583	306	59	11	2	0	0	0	0	0	21	15.1	5.4
0000 - 0000	2888	727	724	715	722	44	24	2123	508	90	99	60	788	992	641	326	66	13	2	0	0	0	0	0	20.6	14.6	5.5

Sunday 02 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	185	46	42	53	44	0	0	147	31	3	4	11	89	68	14	3	0	0	0	0	0	0	0	0	14.5	11.1	3.6
0100 - 0200	124	39	27	38	20	0	1	96	24	1	2	12	67	37	7	1	0	0	0	0	0	0	0	0	13.4	10.2	3.6
0200 - 0300	120	29	32	36	23	1	0	93	25	1	0	4	60	36	19	0	1	0	0	0	0	0	0	0	16.3	11.5	4.2
0300 - 0400	128	30	31	37	30	0	0	110	17	1	0	6	66	36	14	5	1	0	0	0	0	0	0	0	16.1	11.6	4.6
0400 - 0500	57	18	14	6	19	0	0	46	8	3	0	0	15	21	12	6	3	0	0	0	0	0	0	0	20.6	15.3	5.5
0500 - 0600	33	5	12	7	9	0	0	25	6	1	1	0	3	8	5	14	3	0	0	0	0	0	0	0	23.7	19	5.6
0600 - 0700	22	3	6	6	7	1	0	16	5	0	0	0	1	5	9	4	1	1	0	1	0	0	0	0	25.7	20	7.9
0700 - 0800	32	8	9	3	12	0	0	26	1	4	1	0	5	10	8	5	3	1	0	0	0	0	0	0	23.5	17.5	6.6
0800 - 0900	45	10	11	9	15	0	1	32	8	3	1	0	2	17	10	10	6	0	0	0	0	0	0	0	23.7	19	5.8
0900 - 1000	72	14	11	24	23	0	0	55	9	5	3	0	16	27	17	9	3	0	0	0	0	0	0	0	21	15.3	5.2
1000 - 1100	125	32	36	25	32	0	0	99	19	2	5	1	42	45	24	10	3	0	0	0	0	0	0	0	19	13.7	5.2
1100 - 1200	168	47	40	39	42	0	1	146	15	1	5	4	63	80	16	3	2	0	0	0	0	0	0	0	15.2	12.2	3.8
1200 - 1300	166	43	45	36	42	0	2	138	16	4	6	0	63	73	25	4	1	0	0	0	0	0	0	0	16.3	12.8	3.7
1300 - 1400	169	37	38	48	46	1	0	142	19	3	4	5	61	73	22	6	2	0	0	0	0	0	0	0	16.8	12.4	4.4
1400 - 1500	206	44	55	48	59	1	3	172	21	0	9	8	77	73	40	6	2	0	0	0	0	0	0	0	17.4	12.6	4.4
1500 - 1600	200	47	49	53	51	1	1	173	18	2	5	19	79	78	15	7	1	1	0	0	0	0	0	0	15	11.4	4.5
1600 - 1700	161	40	48	47	26	0	1	123	28	2	7	2	55	67	25	9	3	0	0	0	0	0	0	0	17.4	13.3	4.5
1700 - 1800	131	33	25	32	41	0	1	102	18	3	7	2	22	47	41	16	3	0	0	0	0	0	0	0	20.6	15.6	4.9
1800 - 1900	139	33	38	33	35	1	1	98	24	2	13	1	32	53	40	9	3	1	0	0	0	0	0	0	19.9	14.9	4.9
1900 - 2000	113	29	34	28	22	1	0	79	17	6	10	1	14	45	39	12	2	0	0	0	0	0	0	0	19.9	15.7	4.5
2000 - 2100	73	18	19	20	16	0	0	53	13	2	5	0	7	25	23	13	5	0	0	0	0	0	0	0	23.3	17.4	5
2100 - 2200	72	13	24	14	21	0	1	42	15	5	9	0	3	28	27	10	4	0	0	0	0	0	0	0	22.6	17.2	4.9
2200 - 2300	72	19	15	18	20	0	2	45	14	6	5	1	8	25	22	12	2	2	0	0	0	0	0	0	22.8	16.9	5.5
2300 - 0000	72	18	24	15	15	0	0	42	18	3	9	0	1	17	35	16	3	0	0	0	0	0	0	0	23.9	19	4
0700 - 1900	1614	388	405	397	424	4	11	1306	196	31	66	42	517	643	283	94	32	3	0	0	0	0	0	0	18.3	13.4	4.9
0600 - 2200	1894	451	488	465	490	6	12	1496	246	44	90	43	542	746	381	133	44	4	0	1	0	0	0	0	19	13.9	5.1
0600 - 0000	2038	488	527	498	525	6	14	1583	278	53	104	44	551	788	438	161	49	6	0	1	0	0	0	0	19.5	14.2	5.2
0000 - 0000	2685	655	685	675	670	7	15	2100	389	63	111	77	851	994	509	190	57	6	0	1	0	0	0	0	19	13.6	5.2

Monday 03 August 2015

TUBE 'A' DAMAGED

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	55	17	18	13	7	0	0	28	18	1	8	0	0	10	17	24	3	1	0	0	0	0	0	0	25.1	20.5	4.5
0100 - 0200	42	13	15	6	8	0	0	27	15	0	0	0	0	4	15	16	7	0	0	0	0	0	0	0	25.9	21.3	4.2
0200 - 0300	26	9	4	4	9	0	0	15	10	1	0	0	0	4	10	7	3	1	0	0	1	0	0	0	25.9	21.8	6.8
0300 - 0400	28	9	8	7	4	0	0	22	5	1	0	0	0	2	5	18	2	1	0	0	0	0	0	0	25.7	22	4
0400 - 0500	21	6	6	2	7	0	0	13	6	1	1	0	1	6	6	7	1	0	0	0	0	0	0	0	23.9	18.7	5.4
0500 - 0600	37	7	7	7	16	0	2	22	7	4	2	0	0	1	16	12	5	3	0	0	0	0	0	0	26.4	22.4	4.6
0600 - 0700	47	9	14	10	14	0	3	24	7	11	2	0	2	5	15	15	9	1	0	0	0	0	0	0	26.2	21.5	5.6
0700 - 0800	53	10	9	10	24	0	0	25	16	10	2	0	4	7	16	19	7	0	0	0	0	0	0	0	25.3	20	5.4
0800 - 0900	72	17	23	11	21	0	0	36	18	6	12	1	13	20	17	14	6	1	0	0	0	0	0	0	23.7	17	6.5
0900 - 1000	67	11	16	16	24	0	0	33	17	10	7	1	7	12	22	20	4	1	0	0	0	0	0	0	23.7	18.8	5.6
1000 - 1100	101	25	23	31	22	0	0	58	19	13	11	2	17	36	33	11	2	0	0	0	0	0	0	0	19.5	15.4	4.7
1100 - 1200	99	29	21	24	25	0	0	52	20	11	16	2	29	45	14	8	1	0	0	0	0	0	0	0	18.3	13.5	4.7
1200 - 1300	112	21	31	23	37	0	0	64	27	11	10	2	42	46	17	3	2	0	0	0	0	0	0	0	16.8	12.8	4.7
1300 - 1400	114	31	32	26	25	1	2	62	28	8	13	2	29	48	20	13	2	0	0	0	0	0	0	0	19.9	14.3	5.1
1400 - 1500	106	22	34	27	23	0	1	61	27	4	13	1	25	40	25	11	4	0	0	0	0	0	0	0	20.1	15	5.2
1500 - 1600	90	20	22	21	27	0	0	45	26	3	16	0	14	38	28	6	4	0	0	0	0	0	0	0	20.4	15.7	4.4
1600 - 1700	104	28	30	26	20	0	2	57	23	8	14	0	10	35	39	17	2	1	0	0	0	0	0	0	21.7	16.9	4.6
1700 - 1800	88	31	28	17	12	1	1	55	20	3	8	0	14	36	20	13	4	1	0	0	0	0	0	0	21.9	16.2	5.3
1800 - 1900	74	16	21	16	21	0	0	49	13	1	11	0	8	16	29	16	4	1	0	0	0	0	0	0	23	18.4	5.4
1900 - 2000	76	21	18	18	19	0	0	41	14	2	19	0	10	22	28	14	2	0	0	0	0	0	0	0	22.8	16.8	5.2
2000 - 2100	63	16	15	11	21	0	0	36	14	2	11	0	4	26	22	8	2	1	0	0	0	0	0	0	22.6	17.1	5
2100 - 2200	58	9	16	18	15	0	0	30	16	1	11	0	2	14	26	13	3	0	0	0	0	0	0	0	21.7	18.5	4.4
2200 - 2300	54	15	16	11	12	0	0	29	14	3	8	0	6	9	14	15	8	2	0	0	0	0	0	0	26.4	20	6.1
2300 - 0000	62	13	25	8	16	0	0	36	20	1	5	0	6	22	24	9	1	0	0	0	0	0	0	0	21.3	16.5	4.5
0700 - 1900	1080	261	290	248	281	2	6	597	254	88	133	11	212	379	280	151	42	5	0	0	0	0	0	0	21.7	15.8	5.4
0600 - 2200	1324	316	353	305	350	2	9	728	305	104	176	11	230	446	371	201	58	7	0	0	0	0	0	0	22.1	16.2	5.5
0600 - 0000	1440	344	394	324	378	2	9	793	339	108	189	11	242	477	409	225	67	9	0	0	0	0	0	0	22.4	16.4	5.5
0000 - 0000	1649	405	452	363	429	2	11	920	400	116	200	11	243	504	478	309	88	15	0	0	1	0	0	0	23	17	5.7

Virtual Day (7.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	92	25	23	24	20	1	0	64	20	2	5	3	29	23	18	16	4	0	0	0	0	0	0	0	22.8	15.1	6.2
0100 - 0200	64	19	16	16	13	0	0	43	18	1	0	3	19	16	13	9	4	0	0	0	0	0	0	0	22.6	15	6.5
0200 - 0300	51	14	12	12	12	0	0	36	13	1	0	1	14	13	11	8	3	0	0	0	0	0	0	0	22.8	15.7	6.7
0300 - 0400	49	16	12	12	9	0	0	40	8	0	0	2	16	12	7	9	3	1	0	0	0	0	0	0	23.5	15.1	7.1
0400 - 0500	19	6	5	3	6	0	0	14	3	1	0	0	3	6	4	4	2	0	0	0	0	0	0	0	24.6	17.8	6.4
0500 - 0600	25	5	4	5	10	0	0	16	4	2	2	0	1	4	8	7	3	1	0	0	0	0	0	0	26.8	20.5	5.8
0600 - 0700	42	6	10	11	15	1	2	22	7	7	3	0	2	7	13	13	6	1	0	0	0	0	0	0	25.9	20.4	5.6
0700 - 0800	71	15	14	18	24	3	2	35	13	9	9	1	7	22	20	14	6	1	0	0	0	0	0	0	23.9	17.8	5.8
0800 - 0900	94	26	24	22	23	4	2	56	16	8	7	1	11	30	27	20	5	0	0	0	0	0	0	0	23.3	17.3	5.4
0900 - 1000	109	25	23	27	34	5	1	72	17	10	4	1	18	38	33	15	3	0	0	0	0	0	0	0	21.3	15.9	5.2
1000 - 1100	133	38	33	31	32	3	1	88	23	12	7	3	34	46	34	14	3	0	0	0	0	0	0	0	20.1	14.6	5.2
1100 - 1200	143	35	33	38	37	2	1	100	23	9	8	4	43	58	27	9	2	0	0	0	0	0	0	0	18.6	13.4	4.8
1200 - 1300	143	35	36	37	35	4	1	97	25	8	8	3	47	56	26	11	2	0	0	0	0	0	0	0	18.3	13.5	4.8
1300 - 1400	148	37	34	41	36	3	2	106	23	6	8	8	46	60	24	8	2	0	0	0	0	0	0	0	17.7	13.1	4.9
1400 - 1500	168	41	45	38	44	3	2	122	27	5	9	3	55	65	33	9	2	1	0	0	0	0	0	0	18.3	13.4	4.8
1500 - 1600	157	39	42	39	36	3	1	109	29	5	10	4	44	60	35	11	2	0	0	0	0	0	0	0	19	13.9	4.9
1600 - 1700	137	37	36	35	29	4	2	93	25	5	8	1	26	52	37	17	3	1	0	0	0	0	0	0	21	15.5	5.1
1700 - 1800	150	40	37	35	38	7	2	105	24	4	7	2	29	54	39	21	4	1	0	0	0	0	0	0	21.3	15.6	5.2
1800 - 1900	153	38	40	41	34	4	1	107	26	4	10	3	36	54	40	16	3	0	0	0	0	0	0	0	20.4	14.8	5.1
1900 - 2000	132	36	34	30	32	2	1	88	24	5	12	1	25	46	40	17	3	0	0	0	0	0	0	0	21	15.7	5.1
2000 - 2100	102	27	27	26	22	1	1	67	22	3	8	0	11	29	35	22	4	1	0	0	0	0	0	0	23	17.6	5.2
2100 - 2200	97	23	24	26	24	1	0	63	21	4	7	1	12	28	36	16	3	0	0	0	0	0	0	0	21.9	16.9	5
2200 - 2300	93	23	27	19	24	2	0	61	20	3	8	2	17	28	28	14	4	1	0	0	0	0	0	0	22.6	16.3	5.8
2300 - 0000	102	23	29	27	22	1	0	69	22	3	7	1	24	30	30	14	3	0	0	0	0	0	0	0	21.5	15.5	5.4
0700 - 1900	1607	405	398	402	402	46	18	1090	272	85	95	35	396	595	375	165	35	5	1	0	0	0	0	0	20.4	14.6	5.2
0600 - 2200	1979	496	493	495	495	50	22	1331	345	105	125	37	445	705	499	233	51	7	1	0	0	0	0	0	20.8	15.1	5.3
0600 - 0000	2174	542	549	541	542	53	23	1461	388	111	139	39	486	763	557	261	58	9	1	0	0	0	0	0	20.8	15.2	5.4
0000 - 0000	2474	627	622	614	612	54	24	1675	456	118	148	49	568	836	617	314	77	12	1	1	0	0	0	0	21.3	15.2	5.5

Virtual Week (1.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
Mon	1649	405	452	363	429	2	11	920	400	116	200	11	243	504	478	309	88	15	0	0	1	0	0	0	23	17	5.7
Tue	2258	592	560	563	543	75	19	1444	449	140	131	84	554	686	572	292	64	6	0	0	0	0	0	0	21	14.9	5.7
Wed	2364	605	595	592	572	93	24	1467	452	119	209	38	478	845	602	303	84	10	2	2	0	0	0	0	21.5	15.6	5.5
Thu	2645	699	663	650	633	86	42	1697	519	136	165	32	553	903	707	349	90	11	0	0	0	0	0	0	21.5	15.6	5.4
Fri	2831	708	674	737	712	72	32	1973	473	163	118	38	508	928	812	432	89	21	2	1	0	0	0	0	21.7	16	5.5
Sat	2888	727	724	715	722	44	24	2123	508	90	99	60	788	992	641	326	66	13	2	0	0	0	0	0	20.6	14.6	5.5
Sun	2685	655	685	675	670	7	15	2100	389	63	111	77	851	994	509	190	57	6	0	1	0	0	0	0	19	13.6	5.2
	17320	4391	4353	4295	4281	379	167	11724	3190	827	1033	340	3975	5852	4321	2201	538	82	6	4	1	0	0	0	21.3	15.2	5.5

Total

Time	Hourly	15 Minute Bin Drops 00-15	15-30	30-45	45-00		Vehicle Classes COBA+					Vehicle Speed MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	P-Tile	Average	Standard

	Totals					Cycles	Motor Cycle	CAR	LGV	HGV	BUS	0 <6	6 <11	11 <16	16 <21	21 <26	26 <31	31 <36	36 <41	41 <46	46 <51	51 <56	56 <61	61 <150	85%	Speed	deviation
	17320	4391	4353	4295	4281	379	167	11724	3190	827	1033	340	3975	5852	4321	2201	538	82	6	4	1	0	0	0	21.3	15.2	5.5

Edinburgh ATC Study

Report Id 295b/15-06
Site Name Site 6 of 9
Description George Street, 90m west of Hanover Stree
Direction Westbound

Tuesday 28 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	42	13	10	7	12	1	1	16	24	0	0	0	0	6	8	23	5	0	0	0	0	0	0	0	25.3	21.4	4.1
0100 - 0200	26	6	9	5	6	0	0	15	10	0	1	0	0	2	8	13	2	1	0	0	0	0	0	0	25.3	21.5	3.9
0200 - 0300	13	5	4	1	3	0	0	8	4	1	0	0	0	0	3	6	3	1	0	0	0	0	0	0	27.3	24.2	4.3
0300 - 0400	5	2	1	2	0	0	0	2	3	0	0	0	0	0	0	2	1	2	0	0	0	0	0	0	-	28.2	5.2
0400 - 0500	11	6	1	2	2	1	0	4	5	1	0	0	1	1	3	4	1	1	0	0	0	0	0	0	25.9	21.9	7.4
0500 - 0600	8	2	2	0	4	1	0	3	2	2	0	0	0	0	2	4	1	1	0	0	0	0	0	0	-	24.6	5.5
0600 - 0700	21	4	2	7	8	3	0	6	9	2	1	0	0	4	5	11	1	0	0	0	0	0	0	0	24.2	20.7	4.4
0700 - 0800	95	17	15	32	31	10	0	56	18	11	0	0	4	14	28	36	9	4	0	0	0	0	0	0	25.7	21	5.3
0800 - 0900	203	46	56	57	44	25	7	135	24	8	4	2	7	47	77	56	12	2	0	0	0	0	0	0	23.5	19	4.8
0900 - 1000	144	37	37	31	39	11	4	76	34	16	3	0	7	56	52	25	4	0	0	0	0	0	0	0	21.5	17	4.2
1000 - 1100	126	29	31	24	42	5	1	65	34	21	0	0	14	36	42	29	4	0	1	0	0	0	0	0	22.4	17.5	5.3
1100 - 1200	133	22	40	31	40	11	2	75	29	14	2	1	29	46	41	13	3	0	0	0	0	0	0	0	20.6	15.1	4.8
1200 - 1300	153	43	29	39	42	10	5	79	37	22	0	1	20	58	53	18	3	0	0	0	0	0	0	0	20.1	16	4.6
1300 - 1400	131	34	36	29	32	7	4	87	22	11	0	1	16	48	57	8	1	0	0	0	0	0	0	0	19.9	15.7	4.1
1400 - 1500	144	33	33	41	37	8	1	81	37	14	3	0	23	64	45	12	0	0	0	0	0	0	0	0	19	15	4
1500 - 1600	127	37	30	25	35	8	2	69	33	15	0	0	11	51	44	17	4	0	0	0	0	0	0	0	21	16.5	4.5
1600 - 1700	175	51	56	36	32	14	3	109	38	10	1	0	10	46	81	34	3	1	0	0	0	0	0	0	21.7	18	4.2
1700 - 1800	213	56	49	59	49	28	6	132	35	11	1	1	12	56	87	49	8	0	0	0	0	0	0	0	22.4	18	4.4
1800 - 1900	187	52	46	38	51	15	8	112	45	7	0	0	6	43	72	50	15	1	0	0	0	0	0	0	23.9	19.4	4.7
1900 - 2000	150	37	39	38	36	8	2	91	42	6	1	1	5	30	69	39	6	0	0	0	0	0	0	0	23.7	18.8	4.4
2000 - 2100	116	35	28	26	27	5	1	67	43	0	0	1	5	20	43	41	4	1	1	0	0	0	0	0	23.5	19.4	5.1
2100 - 2200	98	23	27	24	24	2	4	55	37	0	0	0	5	22	33	28	8	2	0	0	0	0	0	0	23.7	19.4	5
2200 - 2300	97	21	26	26	24	2	0	52	42	1	0	0	1	7	40	43	6	0	0	0	0	0	0	0	23.9	20.8	3.7
2300 - 0000	92	25	24	22	21	1	2	44	45	0	0	0	0	4	34	44	10	0	0	0	0	0	0	0	25.5	21.7	3.3
0700 - 1900	1831	457	458	442	474	152	43	1076	386	160	14	6	159	565	679	347	66	8	1	0	0	0	0	0	22.4	17.4	4.9
0600 - 2200	2216	556	554	537	569	170	50	1295	517	168	16	8	174	641	829	466	85	11	2	0	0	0	0	0	22.6	17.7	4.9
0600 - 0000	2405	602	604	585	614	173	52	1391	604	169	16	8	175	652	903	553	101	11	2	0	0	0	0	0	22.8	18	4.9
0000 - 0000	2510	636	631	602	641	176	53	1439	652	173	17	8	176	661	927	605	114	17	2	0	0	0	0	0	23	18.2	5

Wednesday 29 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	72	15	23	20	14	0	0	34	37	0	1	0	0	6	26	28	10	2	0	0	0	0	0	0	26.2	21.4	4.4
0100 - 0200	49	15	6	19	9	0	0	25	24	0	0	0	0	2	11	28	8	0	0	0	0	0	0	0	25.9	22.9	3.5
0200 - 0300	30	9	6	8	7	1	0	15	13	1	0	0	1	2	2	14	8	2	1	0	0	0	0	0	29.8	24.5	5.9
0300 - 0400	13	3	6	3	1	0	0	9	4	0	0	0	0	0	3	5	3	1	1	0	0	0	0	0	29.8	25.1	5.8
0400 - 0500	8	4	1	2	1	0	0	4	3	1	0	0	0	0	1	6	1	0	0	0	0	0	0	0	-	22.8	2.4
0500 - 0600	12	2	3	2	5	1	0	7	3	1	0	0	0	0	3	6	3	0	0	0	0	0	0	0	27.1	22.9	4.2
0600 - 0700	33	6	6	6	15	6	1	9	8	9	0	0	1	7	9	8	8	0	0	0	0	0	0	0	26.6	20.8	5.4
0700 - 0800	84	7	21	27	29	10	0	48	16	10	0	0	2	13	29	30	6	3	1	0	0	0	0	0	24.4	20.5	5.6
0800 - 0900	208	46	45	75	42	26	6	126	37	11	2	0	7	43	93	55	10	0	0	0	0	0	0	0	23	18.9	4.3
0900 - 1000	131	39	30	32	30	13	0	55	49	12	2	1	13	47	38	26	5	1	0	0	0	0	0	0	22.4	17	5.2
1000 - 1100	145	34	29	43	39	6	2	82	37	17	1	0	9	55	49	29	2	1	0	0	0	0	0	0	21.7	16.9	4.5
1100 - 1200	146	39	46	27	34	3	3	79	37	22	2	1	21	57	47	17	3	0	0	0	0	0	0	0	20.4	15.8	4.4
1200 - 1300	166	45	35	38	48	4	6	96	43	13	4	1	37	62	45	18	3	0	0	0	0	0	0	0	20.4	15.2	4.9
1300 - 1400	150	31	44	43	32	6	2	87	34	19	2	1	20	49	51	25	4	0	0	0	0	0	0	0	21.7	16.4	4.9
1400 - 1500	149	33	40	34	42	6	4	97	28	12	2	0	22	64	46	14	3	0	0	0	0	0	0	0	19.7	15.4	4.5
1500 - 1600	147	27	36	39	45	14	1	87	35	9	1	0	18	53	49	26	0	1	0	0	0	0	0	0	21.3	16.4	4.3
1600 - 1700	176	46	44	41	45	25	5	98	40	6	2	2	18	55	56	43	2	0	0	0	0	0	0	0	22.6	17.2	5
1700 - 1800	215	49	60	44	62	33	9	131	28	13	1	0	13	55	72	57	17	0	1	0	0	0	0	0	23.9	18.7	5.2
1800 - 1900	171	48	45	33	45	19	7	99	37	9	0	1	8	46	69	44	2	1	0	0	0	0	0	0	22.8	18.1	4.7
1900 - 2000	164	51	38	38	37	18	6	85	48	7	0	0	8	38	71	36	11	0	0	0	0	0	0	0	23.3	18.4	4.6
2000 - 2100	120	34	23	33	30	5	3	54	56	2	0	0	7	11	53	40	8	1	0	0	0	0	0	0	23	19.7	4.5
2100 - 2200	107	26	27	28	26	4	4	61	38	0	0	0	5	16	41	37	8	0	0	0	0	0	0	0	24.2	19.7	4.7
2200 - 2300	119	33	22	32	32	1	2	61	54	0	1	0	1	9	60	39	9	1	0	0	0	0	0	0	23.9	20.7	3.7
2300 - 0000	98	31	24	22	21	1	1	50	44	2	0	0	0	6	48	35	8	1	0	0	0	0	0	0	24.2	20.9	3.5
0700 - 1900	1888	444	475	476	493	165	45	1085	421	153	19	7	188	599	644	384	57	7	2	0	0	0	0	0	22.4	17.2	5
0600 - 2200	2312	561	569	581	601	198	59	1294	571	171	19	7	209	671	818	505	92	8	2	0	0	0	0	0	22.6	17.6	5
0600 - 0000	2529	625	615	635	654	200	62	1405	669	173	20	7	210	686	926	579	109	10	2	0	0	0	0	0	22.8	17.9	5
0000 - 0000	2713	673	660	689	691	202	62	1499	753	176	21	7	211	696	972	666	142	15	4	0	0	0	0	0	23.3	18.2	5.1

Thursday 30 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	77	16	25	18	18	2	1	35	38	0	1	0	0	3	30	34	8	2	0	0	0	0	0	0	25.1	21.7	3.7
0100 - 0200	60	22	14	11	13	0	0	25	35	0	0	0	0	1	26	20	12	1	0	0	0	0	0	0	26.4	22.1	3.9
0200 - 0300	35	9	14	8	4	0	0	11	24	0	0	0	0	0	9	19	6	1	0	0	0	0	0	0	26.6	23.6	3.5
0300 - 0400	19	6	6	5	2	0	0	13	6	0	0	0	0	2	2	0	11	3	1	0	0	0	0	0	31.5	26.6	5.8
0400 - 0500	10	2	2	0	6	0	0	5	5	0	0	0	0	1	1	4	3	1	0	0	0	0	0	0	-	24.5	5.3
0500 - 0600	14	1	3	1	9	1	0	6	2	5	0	0	1	1	4	6	2	0	0	0	0	0	0	0	24.4	20.7	6
0600 - 0700	29	4	5	10	10	9	0	8	6	5	1	0	2	6	8	8	3	2	0	0	0	0	0	0	27.3	20.2	6.3
0700 - 0800	92	7	18	27	40	10	1	53	18	10	0	0	5	20	27	27	13	0	0	0	0	0	0	0	25.7	19.8	5.4
0800 - 0900	189	49	49	46	45	22	6	119	34	6	2	0	6	47	75	52	9	0	0	0	0	0	0	0	23.5	19	4.5
0900 - 1000	151	36	43	38	34	12	5	65	52	16	1	1	23	32	67	20	7	1	0	0	0	0	0	0	21.9	17	5.3
1000 - 1100	122	31	30	26	35	6	0	62	37	16	1	0	17	56	33	14	2	0	0	0	0	0	0	0	19.9	15.6	4.2
1100 - 1200	161	37	43	37	44	7	2	90	42	17	3	1	47	66	33	11	2	0	0	1	0	0	0	0	18.6	14	5
1200 - 1300	155	39	37	36	43	11	3	81	42	15	3	1	33	53	52	13	3	0	0	0	0	0	0	0	20.1	15.4	4.7
1300 - 1400	142	39	27	35	41	6	4	82	38	12	0	0	24	58	46	12	2	0	0	0	0	0	0	0	19.9	15.4	4.3
1400 - 1500	147	39	44	31	33	8	1	106	25	6	1	2	40	48	42	13	2	0	0	0	0	0	0	0	19	14.6	4.6
1500 - 1600	192	49	48	45	50	13	10	109	44	14	2	2	19	75	58	34	4	0	0	0	0	0	0	0	21.5	16.3	4.9
1600 - 1700	178	44	48	46	40	18	6	108	36	8	2	0	9	42	68	50	7	2	0	0	0	0	0	0	23	18.6	4.8
1700 - 1800	230	51	64	55	60	32	5	149	35	7	2	0	28	63	90	39	10	0	0	0	0	0	0	0	22.4	17	4.9
1800 - 1900	231	60	62	60	49	17	6	155	50	3	0	0	38	78	77	29	8	1	0	0	0	0	0	0	21.3	16.3	5.1
1900 - 2000	167	53	34	52	28	5	6	102	49	5	0	1	14	34	68	43	7	0	0	0	0	0	0	0	23	18.2	5
2000 - 2100	138	33	38	34	33	8	4	72	53	1	0	0	7	30	50	45	4	2	0	0	0	0	0	0	23.5	19.2	4.7
2100 - 2200	104	30	19	29	26	2	4	47	48	2	1	0	3	14	51	31	5	0	0	0	0	0	0	0	23.3	19.5	4
2200 - 2300	113	28	34	26	25	3	2	50	58	0	0	0	4	7	47	43	10	2	0	0	0	0	0	0	24.6	20.9	4.5
2300 - 0000	101	29	30	21	21	2	0	45	54	0	0	0	2	7	47	37	7	1	0	0	0	0	0	0	24.6	20.6	3.9
0700 - 1900	**1990**	**481**	**513**	**482**	**514**	**162**	**49**	**1179**	**453**	**130**	**17**	**7**	**289**	**638**	**668**	**314**	**69**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**21.9**	**16.6**	**5.1**
0600 - 2200	**2428**	**601**	**609**	**607**	**611**	**186**	**63**	**1408**	**609**	**143**	**19**	**8**	**315**	**722**	**845**	**441**	**88**	**8**	**0**	**1**	**0**	**0**	**0**	**0**	**22.4**	**17**	**5.1**
0600 - 0000	**2642**	**658**	**673**	**654**	**657**	**191**	**65**	**1503**	**721**	**143**	**19**	**8**	**321**	**736**	**939**	**521**	**105**	**11**	**0**	**1**	**0**	**0**	**0**	**0**	**22.6**	**17.3**	**5.1**
0000 - 0000	**2857**	**714**	**737**	**697**	**709**	**194**	**66**	**1598**	**831**	**148**	**20**	**8**	**322**	**744**	**1011**	**604**	**147**	**19**	**1**	**1**	**0**	**0**	**0**	**0**	**23**	**17.7**	**5.3**

Friday 31 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	103	28	23	27	25	1	0	47	54	0	1	0	1	5	56	34	5	1	0	1	0	0	0	0	23.9	20.5	4.3
0100 - 0200	58	11	17	18	12	1	0	25	32	0	0	0	0	2	17	24	13	1	1	0	0	0	0	0	26.8	23	4.4
0200 - 0300	34	8	6	14	6	0	0	12	22	0	0	0	0	1	13	19	1	0	0	0	0	0	0	0	25.1	21.8	3
0300 - 0400	21	4	5	6	6	3	0	4	12	2	0	0	2	4	2	7	6	0	0	0	0	0	0	0	26.8	21.3	6.6
0400 - 0500	7	2	3	1	1	0	0	1	6	0	0	0	0	1	2	3	1	0	0	0	0	0	0	0	-	22.2	4.3
0500 - 0600	19	3	4	4	8	2	0	7	8	2	0	0	1	4	7	7	0	0	0	0	0	0	0	0	22.1	18.3	4.3
0600 - 0700	23	4	2	3	14	3	0	9	7	3	1	0	0	4	9	7	3	0	0	0	0	0	0	0	25.3	20.9	4.6
0700 - 0800	96	17	19	29	31	11	3	52	17	12	1	0	5	15	29	39	3	5	0	0	0	0	0	0	25.5	20.7	5.7
0800 - 0900	159	36	33	54	36	20	2	92	33	11	1	0	7	28	60	54	9	1	0	0	0	0	0	0	23.9	19.5	4.6
0900 - 1000	138	36	31	32	39	14	1	68	43	11	1	0	12	38	46	32	10	0	0	0	0	0	0	0	22.8	18	5
1000 - 1100	154	27	32	43	52	8	2	95	33	16	0	0	13	50	64	22	5	0	0	0	0	0	0	0	21.5	17	4.3
1100 - 1200	160	33	32	43	52	7	0	95	47	6	5	2	31	54	44	25	4	0	0	0	0	0	0	0	21.3	15.9	5
1200 - 1300	**176**	**44**	**48**	**43**	**41**	**8**	**5**	**103**	**43**	**16**	**1**	**1**	**17**	**63**	**60**	**33**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21.7**	**16.8**	**4.4**
1300 - 1400	160	40	47	31	42	8	4	110	26	11	1	0	20	48	60	26	6	0	0	0	0	0	0	0	22.1	16.9	5
1400 - 1500	162	43	33	38	48	8	4	100	35	14	1	0	19	60	46	28	6	3	0	0	0	0	0	0	22.4	17	5.1
1500 - 1600	180	44	52	38	46	16	2	118	33	9	2	3	28	62	63	19	5	0	0	0	0	0	0	0	20.4	15.6	4.8
1600 - 1700	169	45	41	38	45	13	1	95	40	19	1	1	7	56	70	32	3	0	0	0	0	0	0	0	21.7	17.5	4.1
1700 - 1800	214	49	63	53	49	23	7	135	38	9	2	0	16	56	77	49	13	3	0	0	0	0	0	0	23.3	18.4	5
1800 - 1900	178	57	37	49	35	19	2	90	58	7	2	2	8	54	56	48	9	1	0	0	0	0	0	0	23.5	18.5	4.9
1900 - 2000	195	59	50	43	43	5	2	121	61	5	1	0	8	35	85	60	5	2	0	0	0	0	0	0	23.9	19.3	4.5
2000 - 2100	172	38	39	53	42	7	0	90	75	0	0	0	3	24	78	56	11	0	0	0	0	0	0	0	23.9	19.9	4.2
2100 - 2200	174	51	40	49	34	3	2	96	68	3	2	0	4	26	95	41	6	2	0	0	0	0	0	0	22.4	19	4
2200 - 2300	138	40	34	32	32	0	0	87	48	2	1	0	5	17	56	54	6	0	0	0	0	0	0	0	24.4	19.9	4.5
2300 - 0000	112	32	34	26	20	1	2	73	33	3	0	2	7	19	34	38	11	1	0	0	0	0	0	0	24.6	19.5	5.7
0700 - 1900	**1946**	**471**	**468**	**491**	**516**	**155**	**33**	**1153**	**446**	**141**	**18**	**9**	**183**	**584**	**675**	**407**	**75**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**22.6**	**17.5**	**5**
0600 - 2200	**2510**	**623**	**599**	**639**	**649**	**173**	**37**	**1469**	**657**	**152**	**22**	**9**	**198**	**673**	**942**	**571**	**100**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**18**	**4.9**
0600 - 0000	**2760**	**695**	**667**	**697**	**701**	**174**	**39**	**1629**	**738**	**157**	**23**	**11**	**210**	**709**	**1032**	**663**	**117**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**23.3**	**18.1**	**4.9**
0000 - 0000	**3002**	**751**	**725**	**767**	**759**	**181**	**39**	**1725**	**872**	**161**	**24**	**11**	**214**	**726**	**1129**	**757**	**143**	**20**	**1**	**1**	**0**	**0**	**0**	**0**	**23.5**	**18.4**	**5**

Saturday 01 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	83	22	19	18	24	3	0	53	26	1	0	0	8	10	24	25	15	1	0	0	0	0	0	0	26.2	20.4	6
0100 - 0200	72	20	16	13	23	0	0	53	19	0	0	2	8	5	18	28	9	2	0	0	0	0	0	0	25.7	20.4	6.5
0200 - 0300	82	27	24	13	18	0	0	54	27	1	0	0	5	7	19	32	17	1	1	0	0	0	0	0	26.8	21.8	5.9
0300 - 0400	56	13	20	11	12	2	0	36	15	2	1	1	7	3	19	16	9	1	0	0	0	0	0	0	26.2	20.1	6.4
0400 - 0500	17	5	6	3	3	2	0	6	9	0	0	0	0	3	2	7	4	1	0	0	0	0	0	0	26.6	23.3	5.7
0500 - 0600	14	3	4	1	6	1	0	8	2	3	0	0	0	1	5	3	5	0	0	0	0	0	0	0	27.1	22.3	4.2
0600 - 0700	16	3	3	3	7	4	0	7	3	2	0	0	1	5	6	1	3	0	0	0	0	0	0	0	25.9	18.3	5.9
0700 - 0800	30	6	3	9	12	3	0	14	10	3	0	2	2	7	11	6	2	0	0	0	0	0	0	0	22.6	17.3	5.6
0800 - 0900	58	12	12	18	16	1	1	36	13	7	0	0	4	16	25	10	1	2	0	0	0	0	0	0	22.4	17.9	5.1
0900 - 1000	78	13	19	23	23	4	2	51	14	6	1	1	3	27	33	14	0	0	0	0	0	0	0	0	21.7	17.1	4.3
1000 - 1100	112	27	26	33	26	2	2	73	18	15	2	0	13	42	38	18	1	0	0	0	0	0	0	0	21	16.2	4.2
1100 - 1200	121	25	37	34	25	7	1	73	25	13	2	1	12	48	47	12	1	0	0	0	0	0	0	0	19.9	15.9	4.2
1200 - 1300	134	33	42	25	34	4	6	85	27	11	1	0	10	53	51	16	4	0	0	0	0	0	0	0	20.6	16.4	4.3
1300 - 1400	129	24	28	34	43	4	4	83	24	13	1	1	12	70	41	3	2	0	0	0	0	0	0	0	18.3	15.1	3.6
1400 - 1500	147	41	35	35	36	9	1	95	34	7	1	2	16	63	50	14	2	0	0	0	0	0	0	0	20.1	15.8	4.2
1500 - 1600	173	35	49	47	42	3	4	124	33	9	0	0	26	80	50	17	0	0	0	0	0	0	0	0	19.7	15.2	4.1
1600 - 1700	173	44	39	44	46	6	4	111	41	11	0	0	23	58	70	19	3	0	0	0	0	0	0	0	20.6	16.3	4.1
1700 - 1800	190	62	43	47	38	2	4	121	51	10	2	3	7	60	81	31	8	0	0	0	0	0	0	0	21.5	17.5	4.4
1800 - 1900	195	62	38	49	46	8	2	119	59	6	1	1	12	51	82	42	7	0	0	0	0	0	0	0	22.6	18	4.5
1900 - 2000	180	39	38	51	52	4	4	121	46	5	0	2	8	47	80	37	6	0	0	0	0	0	0	0	21.9	17.9	4.4
2000 - 2100	174	29	52	42	51	4	3	109	58	0	0	0	7	28	95	39	3	1	1	0	0	0	0	0	22.4	18.7	4.2
2100 - 2200	193	50	46	48	49	1	0	91	100	1	0	0	6	36	99	45	7	0	0	0	0	0	0	0	22.8	18.8	3.9
2200 - 2300	181	40	54	47	40	0	5	98	75	3	0	1	16	52	74	32	6	0	0	0	0	0	0	0	22.1	17.4	4.6
2300 - 0000	166	48	40	47	31	3	0	100	60	3	0	4	22	36	64	34	5	1	0	0	0	0	0	0	22.4	17.2	5.4
0700 - 1900	1540	384	371	398	387	53	31	985	349	111	11	11	140	575	579	202	31	2	0	0	0	0	0	0	21	16.5	4.4
0600 - 2200	2103	505	510	542	546	66	38	1313	556	119	11	13	162	691	859	324	50	3	1	0	0	0	0	0	21.5	17	4.4
0600 - 0000	2450	593	604	636	617	69	43	1511	691	125	11	18	200	779	997	390	61	4	1	0	0	0	0	0	21.5	17.1	4.5
0000 - 0000	2774	683	693	695	703	77	43	1721	789	132	12	21	228	808	1084	501	120	10	2	0	0	0	0	0	22.4	17.5	4.9

Sunday 02 August 2015

TUBES DAMAGED DUE TO ROADWORKS

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	82	20	15	30	17	0	0	63	17	1	1	1	9	12	35	22	1	1	1	0	0	0	0	0	23.5	18.4	5.8
0100 - 0200	80	19	23	23	15	0	2	62	16	0	0	2	20	8	24	21	5	0	0	0	0	0	0	0	23.3	16.9	6.5
0200 - 0300	87	22	24	24	17	0	0	59	27	1	0	1	17	10	25	24	8	1	1	0	0	0	0	0	24.2	18.4	6.7
0300 - 0400	87	23	31	22	11	2	3	64	18	0	0	3	12	7	27	30	7	1	0	0	0	0	0	0	25.1	18.9	6.6
0400 - 0500	43	16	12	11	4	1	0	36	6	0	0	0	2	5	12	15	5	4	0	0	0	0	0	0	27.5	21.1	6.1
0500 - 0600	21	8	5	4	4	1	0	16	2	2	0	0	1	2	5	7	5	0	0	0	0	1	0	0	26.6	23.2	8.4
0600 - 0700	18	6	2	4	6	3	0	9	6	0	0	0	2	3	4	4	5	0	0	0	0	0	0	0	26.8	20.3	6.4
0700 - 0800	23	3	4	9	7	3	0	14	6	0	0	0	2	6	7	7	1	0	0	0	0	0	0	0	24.2	18	5.3
0800 - 0900	34	5	11	10	8	1	0	28	4	1	0	0	7	9	10	6	2	0	0	0	0	0	0	0	21.5	16.7	5.6
0900 - 1000	71	12	18	16	25	7	0	47	11	2	4	1	13	23	22	11	1	0	0	0	0	0	0	0	21	15.8	5.1
1000 - 1100	131	25	31	33	42	1	3	100	21	6	0	3	24	48	35	17	4	0	0	0	0	0	0	0	21	15.6	5.1
1100 - 1200	160	28	47	37	48	7	3	122	18	9	1	0	40	67	41	10	1	1	0	0	0	0	0	0	19.2	14.4	4.5
1200 - 1300	164	39	33	36	56	3	3	134	14	8	2	5	58	64	27	10	0	0	0	0	0	0	0	0	17	12.6	4.3
1300 - 1400	155	41	40	43	31	6	3	115	22	8	1	2	47	75	27	3	1	0	0	0	0	0	0	0	17.2	13.2	3.8
1400 - 1500	176	45	41	49	41	10	1	141	14	10	0	1	72	67	28	7	1	0	0	0	0	0	0	0	16.8	12.8	4
1500 - 1600	156	29	49	36	42	8	3	118	20	7	0	4	52	66	26	7	0	1	0	0	0	0	0	0	17.2	12.9	4.4
1600 - 1700	143	36	30	43	34	8	1	101	23	9	1	0	36	65	32	10	0	0	0	0	0	0	0	0	17.7	13.9	4.1
1700 - 1800	126	35	35	29	27	9	1	94	15	7	0	1	34	39	33	15	4	0	0	0	0	0	0	0	20.4	15.2	5.2
1800 - 1900	113	30	30	22	31	3	6	70	29	5	0	0	5	24	37	36	7	4	0	0	0	0	0	0	23.9	19.5	5.2
1900 - 2000	104	32	27	26	19	2	4	72	23	3	0	0	4	32	39	20	8	1	0	0	0	0	0	0	22.8	18.2	4.7
2000 - 2100	73	28	18	16	11	4	2	53	12	2	0	2	1	16	30	20	4	0	0	0	0	0	0	0	22.6	18.8	4.4
2100 - 2200	59	18	15	8	18	2	4	43	10	0	0	0	0	9	29	17	4	0	0	0	0	0	0	0	25.3	19.9	4.1
2200 - 2300	73	22	21	25	5	1	2	54	16	0	0	1	1	8	32	29	2	0	0	0	0	0	0	0	23.7	20	3.8
2300 - 0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0700 - 1900	1452	328	369	363	392	66	24	1084	197	72	9	17	390	553	325	139	22	6	0	0	0	0	0	0	19.7	14.4	4.9
0600 - 2200	1706	412	431	417	446	77	34	1261	248	77	9	19	397	613	427	200	43	7	0	0	0	0	0	0	20.8	15.1	5.1
0600 - 0000	1779	434	452	442	451	78	36	1315	264	77	9	20	398	621	459	229	45	7	0	0	0	0	0	0	21	15.3	5.2
0000 - 0000	2179	542	562	556	519	82	41	1615	350	81	10	27	459	665	587	348	76	14	2	0	0	1	0	0	21.9	15.9	5.6

Monday 03 August 2015

TUBES DAMAGED DUE TO ROADWORKS

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0100 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0200 - 0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0300 - 0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0400 - 0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0500 - 0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0600 - 0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0700 - 0800	1	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	18.5	-
0800 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0900 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1000 - 1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1100 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1200 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1300 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1400 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1500 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1600 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1700 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1800 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
1900 - 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
2000 - 2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
2100 - 2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
2200 - 2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
2300 - 0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
0700 - 1900	1	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	18.5	-
0600 - 2200	1	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	18.5	-
0600 - 0000	1	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	18.5	-
0000 - 0000	1	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	18.5	-

Virtual Day (7.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	66	16	16	17	16	1	0	35	28	0	1	0	3	6	26	24	6	1	0	0	0	0	0	0	25.1	20.5	5
0100 - 0200	49	13	12	13	11	0	0	29	19	0	0	1	4	3	15	19	7	1	0	0	0	0	0	0	25.9	20.8	5.7
0200 - 0300	40	11	11	10	8	0	0	23	17	1	0	0	3	3	10	16	6	1	0	0	0	0	0	0	26.4	21.4	6
0300 - 0400	29	7	10	7	5	1	0	18	8	1	0	1	3	2	8	9	5	1	0	0	0	0	0	0	27.1	20.9	6.9
0400 - 0500	14	5	4	3	2	1	0	8	5	0	0	0	0	2	3	6	2	1	0	0	0	0	0	0	27.5	22.1	5.8
0500 - 0600	13	3	3	2	5	1	0	7	3	2	0	0	0	1	4	5	2	0	0	0	0	0	0	0	26.6	21.7	6.1
0600 - 0700	20	4	3	5	9	4	0	7	6	3	0	0	1	4	6	6	3	0	0	0	0	0	0	0	26.2	20.3	5.5
0700 - 0800	60	8	11	19	22	7	1	34	12	7	0	0	3	11	19	21	5	2	0	0	0	0	0	0	25.5	20.1	5.6
0800 - 0900	122	28	29	37	27	14	3	77	21	6	1	0	5	27	49	33	6	1	0	0	0	0	0	0	23.5	18.9	4.7
0900 - 1000	102	25	25	25	27	9	2	52	29	9	2	1	10	32	37	18	4	0	0	0	0	0	0	0	21.9	17.1	4.9
1000 - 1100	113	25	26	29	34	4	1	68	26	13	1	0	13	41	37	18	3	0	0	0	0	0	0	0	21.5	16.5	4.7
1100 - 1200	126	26	35	30	35	6	2	76	28	12	2	1	26	48	36	13	2	0	0	0	0	0	0	0	20.4	15.1	4.7
1200 - 1300	**135**	**35**	**32**	**31**	**38**	**6**	**4**	**83**	**29**	**12**	**2**	**1**	**25**	**50**	**41**	**15**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20.1**	**15.4**	**4.8**
1300 - 1400	124	30	32	31	32	5	3	81	24	11	1	1	20	50	40	11	2	0	0	0	0	0	0	0	19.9	15.5	4.5
1400 - 1500	132	33	32	33	34	7	2	89	25	9	1	1	27	52	37	13	2	0	0	0	0	0	0	0	19.9	15.1	4.6
1500 - 1600	139	32	38	33	37	9	3	89	28	9	1	1	22	55	41	17	2	0	0	0	0	0	0	0	20.6	15.5	4.7
1600 - 1700	145	38	37	35	35	12	3	89	31	9	1	0	15	46	54	27	3	0	0	0	0	0	0	0	21.7	17	4.6
1700 - 1800	170	43	45	41	41	18	5	109	29	8	1	1	16	47	63	34	9	0	0	0	0	0	0	0	22.6	17.6	4.9
1800 - 1900	154	44	37	36	37	12	4	92	40	5	0	1	11	42	56	36	7	1	0	0	0	0	0	0	23.3	18.1	5
1900 - 2000	137	39	32	35	31	6	3	85	38	4	0	1	7	31	59	34	6	0	0	0	0	0	0	0	23.3	18.5	4.6
2000 - 2100	113	28	28	29	28	5	2	64	42	1	0	0	4	18	50	34	5	1	0	0	0	0	0	0	23.3	19.3	4.5
2100 - 2200	105	28	25	27	25	2	3	56	43	1	0	0	3	18	50	28	5	1	0	0	0	0	0	0	23.3	19.2	4.2
2200 - 2300	103	26	27	27	23	1	2	57	42	1	0	0	4	14	44	34	6	0	0	0	0	0	0	0	23.9	19.7	4.4
2300 - 0000	81	24	22	20	16	1	1	45	34	1	0	1	4	10	32	27	6	1	0	0	0	0	0	0	24.2	19.6	5
0700 - 1900	1521	366	379	379	397	108	32	938	322	110	13	8	193	502	510	256	46	6	0	0	0	0	0	0	21.9	16.7	5
0600 - 2200	1897	465	467	475	489	124	40	1149	451	119	14	9	208	573	674	358	65	8	1	0	0	0	0	0	22.4	17.2	5
0600 - 0000	2081	515	516	521	528	126	42	1251	527	121	14	10	216	598	751	419	77	9	1	0	0	0	0	0	22.6	17.4	5
0000 - 0000	2291	571	573	572	575	130	43	1371	607	124	15	12	230	614	816	497	106	14	2	0	0	0	0	0	23	17.7	5.2

Virtual Week (1.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
Mon	1	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-	18.5	-
Tue	2510	636	631	602	641	176	53	1439	652	173	17	8	176	661	927	605	114	17	2	0	0	0	0	0	23	18.2	5
Wed	2713	673	660	689	691	202	62	1499	753	176	21	7	211	696	972	666	142	15	4	0	0	0	0	0	23.3	18.2	5.1
Thu	2857	714	737	697	709	194	66	1598	831	148	20	8	322	744	1011	604	147	19	1	1	0	0	0	0	23	17.7	5.3
Fri	3002	751	725	767	759	181	39	1725	872	161	24	11	214	726	1129	757	143	20	1	1	0	0	0	0	23.5	18.4	5
Sat	2774	683	693	695	703	77	43	1721	789	132	12	21	228	808	1084	501	120	10	2	0	0	0	0	0	22.4	17.5	4.9
Sun	2179	542	562	556	519	82	41	1615	350	81	10	27	459	665	587	348	76	14	2	0	1	0	0	0	21.9	15.9	5.6
	16036	3999	4008	4006	4023	912	304	9598	4247	871	104	82	1610	4300	5711	3481	742	95	12	2	0	1	0	0	23	17.7	5.2

Total

Time	Hourly	15 Minute Bin Drops 00-15	15-30	30-45	45-00		Vehicle Classes COBA+					Vehicle Speed MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	P-Tile	Average	Standard

	Totals					Cycles	Motor Cycle	CAR	LGV	HGV	BUS	0 <6	6 <11	11 <16	16 <21	21 <26	26 <31	31 <36	36 <41	41 <46	46 <51	51 <56	56 <61	61 <150	85%	Speed	deviation
	16036	3999	4008	4006	4023	912	304	9598	4247	871	104	82	1610	4300	5711	3481	742	95	12	2	0	1	0	0	23	17.7	5.2

Edinburgh ATC Study

Report Id 295b/15-07
Site Name Site 7 of 9
Description George Street, 100m west of St. Andrew Square
Direction Eastbound

Tuesday 28 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	57	17	12	14	14	0	0	34	10	0	13	0	1	6	29	18	1	2	0	0	0	0	0	0	23.7	20.1	4.2
0100 - 0200	41	9	12	8	12	1	0	25	13	0	2	0	1	8	12	18	2	0	0	0	0	0	0	0	24.2	20	4.4
0200 - 0300	33	10	9	6	8	0	0	22	10	0	1	0	0	2	15	16	0	0	0	0	0	0	0	0	23.9	20.7	3.3
0300 - 0400	20	8	9	1	2	0	0	13	6	0	1	0	0	2	4	9	5	0	0	0	0	0	0	0	27.3	22.9	4.7
0400 - 0500	17	2	2	8	5	0	1	9	4	0	3	0	0	1	3	9	3	1	0	0	0	0	0	0	26.8	23.3	4.9
0500 - 0600	24	7	2	6	9	0	0	6	4	5	9	0	0	1	10	11	2	0	0	0	0	0	0	0	23.5	20.7	3.4
0600 - 0700	78	9	22	21	26	4	0	24	18	12	20	0	4	24	28	16	5	1	0	0	0	0	0	0	24.2	18.4	5.3
0700 - 0800	155	30	38	38	49	17	2	62	27	12	35	0	8	56	59	30	2	0	0	0	0	0	0	0	21.5	17.1	4.2
0800 - 0900	212	58	54	51	49	25	3	105	25	14	40	0	19	79	85	25	4	0	0	0	0	0	0	0	20.4	16.5	4.3
0900 - 1000	229	53	57	62	57	7	3	120	37	25	37	1	51	84	73	18	2	0	0	0	0	0	0	0	19.9	15	4.5
1000 - 1100	211	62	48	56	45	6	0	117	38	23	27	5	50	83	62	11	0	0	0	0	0	0	0	0	18.6	14.1	4.4
1100 - 1200	191	48	46	53	44	4	5	113	25	17	27	6	49	73	49	13	1	0	0	0	0	0	0	0	18.8	14	4.6
1200 - 1300	187	47	52	39	49	11	0	112	32	13	19	3	59	77	39	8	1	0	0	0	0	0	0	0	17.7	13.2	4.3
1300 - 1400	192	49	51	49	43	10	2	127	22	10	21	7	77	73	27	8	0	0	0	0	0	0	0	0	16.1	12.4	4.3
1400 - 1500	159	45	43	38	33	3	0	117	14	9	16	3	30	60	56	8	1	1	0	0	0	0	0	0	18.8	14.8	4.4
1500 - 1600	179	47	42	42	48	7	2	131	20	10	9	2	43	74	46	10	4	0	0	0	0	0	0	0	18.8	14.3	4.5
1600 - 1700	183	51	38	43	51	13	6	124	17	11	12	2	22	65	65	26	3	0	0	0	0	0	0	0	21	16.1	4.7
1700 - 1800	192	50	44	49	49	15	1	142	10	11	13	1	15	89	65	15	7	0	0	0	0	0	0	0	19.9	16.1	4.3
1800 - 1900	197	57	43	48	49	19	3	134	10	10	21	1	29	86	62	17	2	0	0	0	0	0	0	0	19.7	15.3	4.3
1900 - 2000	213	49	65	57	42	7	2	149	34	12	9	3	74	84	45	4	3	0	0	0	0	0	0	0	17.7	13.2	4.4
2000 - 2100	121	30	32	26	33	4	2	93	11	7	4	0	7	42	55	15	2	0	0	0	0	0	0	0	20.1	16.9	4
2100 - 2200	107	23	32	29	23	6	1	78	10	8	4	1	21	29	39	14	3	0	0	0	0	0	0	0	21	16	5.2
2200 - 2300	110	26	33	29	22	6	2	80	9	8	5	1	15	35	49	8	1	1	0	0	0	0	0	0	19.5	16.1	4.3
2300 - 0000	99	24	29	20	26	2	0	83	6	6	2	1	11	39	37	10	1	0	0	0	0	0	0	0	19.9	15.9	4.5
0700 - 1900	2287	597	556	568	566	137	27	1404	277	165	277	31	452	899	688	189	27	1	0	0	0	0	0	0	19.7	14.9	4.6
0600 - 2200	2806	708	707	701	690	158	32	1748	350	204	314	35	558	1078	855	238	40	2	0	0	0	0	0	0	19.9	15	4.7
0600 - 0000	3015	758	769	750	738	166	34	1911	365	218	321	37	584	1152	941	256	42	3	0	0	0	0	0	0	19.9	15.1	4.6
0000 - 0000	3207	811	815	793	788	167	35	2020	412	223	350	37	586	1172	1014	337	55	6	0	0	0	0	0	0	20.4	15.4	4.8

Wednesday 29 July 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	79	19	25	16	19	0	0	64	4	7	4	1	6	20	34	15	3	0	0	0	0	0	0	0	22.6	17.9	5
0100 - 0200	44	14	10	10	10	1	0	33	7	3	0	0	5	19	14	6	0	0	0	0	0	0	0	0	19.7	16.1	4.3
0200 - 0300	39	8	15	8	8	0	0	37	2	0	0	0	8	14	14	3	0	0	0	0	0	0	0	0	19.2	15.3	4.1
0300 - 0400	42	15	12	12	3	2	0	30	10	0	0	5	18	11	5	3	0	0	0	0	0	0	0	0	17.2	11.1	5.4
0400 - 0500	20	2	3	4	11	0	1	12	3	3	1	0	0	2	5	9	4	0	0	0	0	0	0	0	25.9	22.3	3.6
0500 - 0600	22	7	1	5	9	0	0	13	1	4	4	0	0	2	5	10	4	1	0	0	0	0	0	0	25.9	22.5	4.9
0600 - 0700	70	9	16	24	21	2	0	41	8	12	7	0	3	10	23	24	7	2	1	0	0	0	0	0	25.7	20.8	5.7
0700 - 0800	132	20	31	44	37	10	5	87	10	8	12	1	2	40	61	25	3	0	0	0	0	0	0	0	21.5	17.7	3.9
0800 - 0900	189	52	35	57	45	33	5	124	13	8	6	2	27	93	55	9	3	0	0	0	0	0	0	0	18.6	15	4
0900 - 1000	182	43	45	53	41	13	2	121	23	9	14	3	30	77	60	12	0	0	0	0	0	0	0	0	18.8	14.9	4.1
1000 - 1100	182	47	42	45	48	9	0	134	19	17	3	9	67	60	32	13	1	0	0	0	0	0	0	0	18.6	12.9	5
1100 - 1200	189	45	40	57	47	11	1	140	20	9	8	3	48	104	30	2	2	0	0	0	0	0	0	0	16.6	13.2	3.8
1200 - 1300	171	47	52	51	21	15	2	119	20	10	5	4	53	75	33	6	0	0	0	0	0	0	0	0	17.7	13.1	4.1
1300 - 1400	188	36	55	51	46	19	2	130	29	5	3	0	64	85	32	6	1	0	0	0	0	0	0	0	16.6	13.1	3.8
1400 - 1500	201	49	52	46	54	17	3	144	24	6	7	6	77	68	46	4	0	0	0	0	0	0	0	0	17.9	12.7	4.2
1500 - 1600	187	44	51	45	47	17	3	133	26	3	5	1	51	78	44	13	0	0	0	0	0	0	0	0	18.6	14	4.2
1600 - 1700	201	55	55	52	39	6	8	143	21	10	13	1	20	76	77	22	5	0	0	0	0	0	0	0	20.8	16.5	4.4
1700 - 1800	212	50	50	61	51	18	4	155	13	3	19	6	38	72	69	25	2	0	0	0	0	0	0	0	19.9	15.4	4.5
1800 - 1900	181	47	50	41	43	15	5	130	17	5	9	0	25	78	57	15	5	1	0	0	0	0	0	0	19.7	15.8	4.5
1900 - 2000	175	52	49	38	36	4	4	136	14	12	5	1	18	66	73	15	1	1	0	0	0	0	0	0	19.9	16.2	4.2
2000 - 2100	135	36	41	34	24	5	2	101	12	10	5	0	11	47	58	19	0	0	0	0	0	0	0	0	20.8	16.7	4.1
2100 - 2200	120	28	32	28	32	3	1	84	20	4	8	0	5	25	68	20	1	1	0	0	0	0	0	0	21.3	18	3.7
2200 - 2300	118	30	28	33	27	6	2	86	8	10	6	0	4	24	71	18	1	0	0	0	0	0	0	0	21	17.9	3.3
2300 - 0000	116	30	25	38	23	0	3	96	7	7	3	0	5	58	39	13	1	0	0	0	0	0	0	0	20.4	16.4	3.5
0700 - 1900	2215	535	558	603	519	183	40	1560	235	93	104	36	502	906	596	152	22	1	0	0	0	0	0	0	19	14.5	4.5
0600 - 2200	2715	660	696	727	632	197	47	1922	289	131	129	37	539	1054	818	230	31	5	1	0	0	0	0	0	19.7	15	4.6
0600 - 0000	2949	720	749	798	682	203	52	2104	304	148	138	37	548	1136	928	261	33	5	1	0	0	0	0	0	19.7	15.2	4.6
0000 - 0000	3195	785	815	853	742	206	53	2293	331	165	147	43	585	1204	1005	307	44	6	1	0	0	0	0	0	19.9	15.3	4.7

Thursday 30 July 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile 85%	Average Speed	Standard deviation
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150			
0000 - 0100	81	26	13	23	19	1	1	66	5	6	2	0	6	37	35	3	0	0	0	0	0	0	0	0	18.8	15.3	3.2
0100 - 0200	66	19	19	13	15	0	0	56	5	5	0	1	1	24	33	5	2	0	0	0	0	0	0	0	19.2	17.1	3.9
0200 - 0300	49	12	17	13	7	0	0	46	0	3	0	1	3	15	22	7	1	0	0	0	0	0	0	0	21.5	16.7	4
0300 - 0400	64	27	25	6	6	2	0	50	8	4	0	4	25	22	8	3	2	0	0	0	0	0	0	0	17	12.7	5.2
0400 - 0500	14	2	5	1	6	0	0	10	2	0	2	0	0	0	2	10	2	0	0	0	0	0	0	0	25.3	23.5	2.4
0500 - 0600	28	5	9	7	7	0	1	21	0	5	1	0	0	1	7	18	2	0	0	0	0	0	0	0	24.4	22.6	2.9
0600 - 0700	98	12	15	33	38	4	1	74	9	7	3	0	3	15	58	15	6	1	0	0	0	0	0	0	23.5	19	4.4
0700 - 0800	134	17	38	33	46	7	3	100	3	9	12	0	2	42	62	23	4	1	0	0	0	0	0	0	21.3	18	4
0800 - 0900	181	53	41	39	48	19	5	130	4	9	14	1	17	76	74	11	2	0	0	0	0	0	0	0	19.7	15.9	3.8
0900 - 1000	196	40	47	58	51	25	1	141	11	12	6	2	31	92	58	12	1	0	0	0	0	0	0	0	19.5	14.8	4.1
1000 - 1100	191	52	47	48	44	11	4	143	20	10	3	3	49	87	43	8	1	0	0	0	0	0	0	0	17.9	13.8	4.1
1100 - 1200	193	52	44	59	38	18	1	133	24	11	6	10	81	71	23	6	1	1	0	0	0	0	0	0	16.1	12	4.6
1200 - 1300	178	44	42	57	35	15	1	137	19	3	3	0	61	91	23	3	0	0	0	0	0	0	0	0	15.9	12.6	3.6
1300 - 1400	174	45	47	38	44	17	1	136	9	2	9	4	65	72	28	5	0	0	0	0	0	0	0	0	16.8	12.6	4
1400 - 1500	195	49	43	53	50	7	4	137	29	6	12	5	50	83	44	13	0	0	0	0	0	0	0	0	17.7	13.7	4.3
1500 - 1600	193	42	54	47	50	19	4	130	24	8	8	1	37	84	54	14	2	1	0	0	0	0	0	0	18.8	14.9	4.6
1600 - 1700	199	50	49	56	44	16	4	147	18	6	8	3	31	83	62	16	4	0	0	0	0	0	0	0	19.2	15.3	4.5
1700 - 1800	211	58	45	53	55	13	5	152	16	4	21	2	41	66	80	16	6	0	0	0	0	0	0	0	19.9	15.5	4.7
1800 - 1900	227	52	58	66	51	12	1	178	16	6	14	3	55	92	59	16	2	0	0	0	0	0	0	0	18.3	14.3	4.3
1900 - 2000	187	57	42	41	47	19	4	141	17	3	3	0	16	81	73	15	0	0	1	1	0	0	0	0	19.5	15.9	4.4
2000 - 2100	130	41	30	33	26	9	2	107	7	2	3	0	7	51	46	14	12	0	0	0	0	0	0	0	22.6	17.4	4.8
2100 - 2200	103	23	34	26	20	5	1	83	4	3	7	1	6	20	56	19	1	0	0	0	0	0	0	0	21.5	18	3.8
2200 - 2300	113	34	25	24	30	4	0	88	11	5	5	1	4	23	50	31	4	0	0	0	0	0	0	0	23.3	18.6	4.4
2300 - 0000	88	25	28	23	12	1	0	69	8	4	6	1	13	30	31	12	1	0	0	0	0	0	0	0	20.8	16.2	4.8
0700 - 1900	2272	554	555	607	556	179	34	1664	193	86	116	34	520	939	610	143	23	3	0	0	0	0	0	0	18.8	14.4	4.5
0600 - 2200	2790	687	676	740	687	216	42	2069	230	101	132	35	552	1106	843	206	42	4	1	1	0	0	0	0	19.5	14.9	4.6
0600 - 0000	2991	746	729	787	729	221	42	2226	249	110	143	37	569	1159	924	249	47	4	1	1	0	0	0	0	19.7	15.1	4.7
0000 - 0000	3293	837	817	850	789	224	44	2475	269	133	148	43	604	1258	1031	295	56	4	1	1	0	0	0	0	19.9	15.2	4.7

Friday 31 July 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile 85%	Average Speed	Standard deviation
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150			
0000 - 0100	76	20	15	19	22	2	1	54	13	1	5	0	2	16	36	21	1	0	0	0	0	0	0	0	23.3	18.9	4.2
0100 - 0200	47	12	13	8	14	1	0	38	6	2	0	0	0	5	15	26	1	0	0	0	0	0	0	0	21.9	20.2	3
0200 - 0300	44	9	10	19	6	0	0	33	8	2	1	0	1	9	14	17	3	0	0	0	0	0	0	0	23	19.3	4.3
0300 - 0400	42	17	12	9	4	0	0	34	6	1	1	0	1	4	16	18	3	0	0	0	0	0	0	0	23.3	20.3	3.7
0400 - 0500	12	2	3	4	3	0	1	7	1	2	1	0	0	1	4	5	2	0	0	0	0	0	0	0	25.1	21.6	4.4
0500 - 0600	34	5	6	7	16	1	1	23	2	3	4	0	1	5	14	7	5	2	0	0	0	0	0	0	26.8	20.6	5.8
0600 - 0700	81	11	18	17	35	6	3	57	3	8	4	1	3	22	32	13	10	0	0	0	0	0	0	0	25.5	18.7	5
0700 - 0800	143	23	35	44	41	18	6	101	6	7	5	1	9	40	73	18	2	0	0	0	0	0	0	0	20.6	16.9	4.2
0800 - 0900	204	43	53	63	45	53	4	130	11	4	2	0	40	106	43	14	1	0	0	0	0	0	0	0	18.6	14.5	3.9
0900 - 1000	224	51	49	58	66	29	2	149	20	20	4	5	60	105	43	11	0	0	0	0	0	0	0	0	18.3	13.6	4.2
1000 - 1100	198	49	57	51	41	23	2	122	26	14	11	1	50	85	51	8	2	1	0	0	0	0	0	0	18.8	14	4.5
1100 - 1200	190	49	42	44	55	15	2	125	20	11	17	3	21	76	75	15	0	0	0	0	0	0	0	0	19.7	15.5	4
1200 - 1300	213	51	45	64	53	16	2	146	34	5	10	4	62	84	50	9	3	1	0	0	0	0	0	0	19.3	14	4.6
1300 - 1400	231	54	54	66	57	20	3	163	24	11	10	4	66	109	44	7	1	0	0	0	0	0	0	0	17	13.2	3.9
1400 - 1500	225	54	59	63	49	15	1	167	27	2	13	4	54	99	50	17	1	0	0	0	0	0	0	0	19	14	4.4
1500 - 1600	234	57	60	66	51	27	2	163	28	5	9	5	56	102	58	13	0	0	0	0	0	0	0	0	18.3	14.1	4.2
1600 - 1700	204	44	54	60	46	18	1	148	25	4	8	1	31	83	76	10	2	1	0	0	0	0	0	0	19	15.3	4.2
1700 - 1800	204	47	50	58	49	23	3	156	12	5	5	1	45	74	66	16	2	0	0	0	0	0	0	0	19.5	15	4.4
1800 - 1900	202	54	54	44	50	11	1	164	17	2	7	7	38	91	46	16	3	1	0	0	0	0	0	0	19.2	14.4	4.9
1900 - 2000	188	45	49	46	48	20	0	151	14	1	2	5	37	51	65	25	4	1	0	0	0	0	0	0	21.3	15.8	5.2
2000 - 2100	137	38	26	33	40	12	4	110	9	1	1	1	14	33	69	16	3	0	1	0	0	0	0	0	20.6	17.1	4.6
2100 - 2200	138	38	33	33	34	10	6	108	9	2	3	4	20	56	46	7	4	1	0	0	0	0	0	0	19.5	15.4	4.8
2200 - 2300	109	25	33	22	29	9	4	85	4	5	2	1	19	50	31	8	0	0	0	0	0	0	0	0	19.2	14.7	4.4
2300 - 0000	121	29	24	34	34	6	7	96	3	9	0	0	18	33	56	13	1	0	0	0	0	0	0	0	19.9	16.2	4.6
0700 - 1900	2472	576	612	681	603	268	29	1734	250	90	101	36	532	1054	675	154	17	4	0	0	0	0	0	0	19	14.4	4.4
0600 - 2200	3016	708	738	810	760	316	42	2160	285	102	111	47	606	1216	887	215	38	6	1	0	0	0	0	0	19.5	14.8	4.6
0600 - 0000	3246	762	795	866	823	331	53	2341	292	116	113	48	643	1299	974	236	39	6	1	0	0	0	0	0	19.5	14.9	4.6
0000 - 0000	3501	827	854	932	888	335	56	2530	328	127	125	48	648	1339	1073	330	54	8	1	0	0	0	0	0	19.9	15.2	4.7

Saturday 01 August 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile	Average	Standard
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	85%	Speed	deviation
0000 - 0100	112	28	28	35	21	6	3	81	13	6	3	1	25	36	37	9	3	0	1	0	0	0	0	0	20.6	15.6	5.7
0100 - 0200	86	15	21	18	32	0	2	72	3	9	0	3	26	28	24	5	0	0	0	0	0	0	0	0	19	13.9	4.9
0200 - 0300	85	21	27	20	17	1	0	68	8	8	0	1	24	35	19	6	0	0	0	0	0	0	0	0	18.8	13.9	4.6
0300 - 0400	41	12	11	9	9	0	0	33	5	3	0	0	3	24	5	6	3	0	0	0	0	0	0	0	23.5	16.2	5.4
0400 - 0500	11	4	3	1	3	0	0	9	1	1	0	0	0	3	1	5	2	0	0	0	0	0	0	0	25.7	21.1	6.3
0500 - 0600	21	3	2	7	9	0	0	15	3	1	2	0	0	0	6	12	2	1	0	0	0	0	0	0	25.1	23.2	4.1
0600 - 0700	27	4	6	6	11	1	0	13	4	1	8	0	0	5	12	3	6	1	0	0	0	0	0	0	26.4	20.5	5
0700 - 0800	61	8	8	17	28	5	0	33	8	5	10	0	1	19	23	15	3	0	0	0	0	0	0	0	22.4	18.4	4.3
0800 - 0900	115	17	31	36	31	7	1	79	15	2	11	0	5	32	46	30	2	0	0	0	0	0	0	0	22.4	17.9	4.5
0900 - 1000	143	29	34	40	40	5	2	92	12	17	15	0	20	52	50	15	5	1	0	0	0	0	0	0	20.6	16.4	4.8
1000 - 1100	143	37	38	32	36	4	1	109	13	6	10	1	17	60	49	14	0	1	1	0	0	0	0	0	20.4	16	4.7
1100 - 1200	181	40	33	54	54	5	2	118	21	10	25	6	31	71	49	22	2	0	0	0	0	0	0	0	19.7	15	4.8
1200 - 1300	198	51	36	57	54	4	1	134	28	10	21	6	49	69	50	22	2	0	0	0	0	0	0	0	19.9	14.5	4.8
1300 - 1400	204	53	49	47	55	5	2	137	20	11	29	1	49	92	47	13	1	1	0	0	0	0	0	0	18.8	14.4	4.5
1400 - 1500	177	45	50	33	49	2	1	126	24	4	20	0	49	65	50	12	1	0	0	0	0	0	0	0	19.2	14.4	4.5
1500 - 1600	189	41	45	49	54	8	7	146	18	2	8	5	43	87	48	6	0	0	0	0	0	0	0	0	17.7	13.8	3.8
1600 - 1700	169	43	43	47	36	4	1	118	24	5	17	0	22	58	67	17	5	0	0	0	0	0	0	0	20.6	16.2	4.5
1700 - 1800	202	45	59	42	56	6	2	151	18	4	21	1	38	73	66	21	2	1	0	0	0	0	0	0	19.7	15.5	4.6
1800 - 1900	177	43	40	43	51	8	2	138	17	5	7	4	23	60	67	22	1	0	0	0	0	0	0	0	20.1	16	4.6
1900 - 2000	191	49	38	49	55	11	2	148	20	4	6	2	28	69	68	23	1	0	0	0	0	0	0	0	20.1	15.6	4.5
2000 - 2100	165	48	48	31	38	8	3	136	14	2	2	2	37	80	39	5	2	0	0	0	0	0	0	0	18.3	14	4.2
2100 - 2200	153	33	41	38	41	8	2	135	7	1	0	1	28	44	59	16	4	1	0	0	0	0	0	0	20.8	15.9	5.1
2200 - 2300	157	39	44	35	39	11	2	130	11	2	1	2	44	63	40	7	1	0	0	0	0	0	0	0	17.2	13.7	4.4
2300 - 0000	189	53	57	44	35	14	2	160	10	3	0	0	53	96	36	4	0	0	0	0	0	0	0	0	16.3	13.3	3.3
0700 - 1900	1959	452	466	497	544	63	22	1381	218	81	194	24	347	738	612	209	24	4	1	0	0	0	0	0	20.1	15.4	4.7
0600 - 2200	2495	586	599	621	689	91	29	1813	263	89	210	29	440	936	790	256	37	6	1	0	0	0	0	0	20.1	15.4	4.7
0600 - 0000	2841	678	700	700	763	116	33	2103	284	94	211	31	537	1095	866	267	38	6	1	0	0	0	0	0	19.9	15.2	4.7
0000 - 0000	3197	761	792	790	854	123	38	2381	317	122	216	36	615	1221	958	310	48	7	2	0	0	0	0	0	19.9	15.2	4.8

Sunday 02 August 2015

Time	Hourly Totals	15 Minute Bin Drops				Cycles	Vehicle Classes COBA+					Vehicle Speed												P-Tile	Average	Standard
		00-15	15-30	30-45	45-00		Motor Cycle	CAR	LGV	HGV	BUS	MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	85%	Speed	deviation
0000 - 0100	140	35	46	40	19	6	2	120	5	7	0	3	33	56	39	7	2	0	0	0	0	0	0	0	19	14.2	4.8
0100 - 0200	98	24	27	25	22	2	4	85	7	0	0	5	51	29	10	0	3	0	0	0	0	0	0	0	15.2	11.3	4.6
0200 - 0300	95	17	22	32	24	2	1	84	5	3	0	5	37	24	17	10	2	0	0	0	0	0	0	0	19.5	13.1	5.4
0300 - 0400	94	25	19	36	14	2	2	83	6	1	0	9	28	29	21	6	1	0	0	0	0	0	0	0	18.1	12.7	5.2
0400 - 0500	42	16	11	7	8	0	0	36	6	0	0	2	6	3	12	6	9	4	0	0	0	0	0	0	28.4	20.4	8
0500 - 0600	30	7	10	7	6	1	0	23	2	3	1	0	0	1	12	13	4	0	0	0	0	0	0	0	25.7	22	3.4
0600 - 0700	30	8	5	10	7	0	0	25	1	1	3	0	1	2	9	14	4	0	0	0	0	0	0	0	24.6	21.1	4.4
0700 - 0800	38	8	9	4	17	1	0	28	3	3	3	0	7	12	11	5	3	0	0	0	0	0	0	0	21.3	16.8	5.7
0800 - 0900	58	8	18	13	19	4	0	45	2	0	7	0	4	16	26	10	1	1	0	0	0	0	0	0	22.4	17.4	5
0900 - 1000	85	12	24	24	25	7	1	72	2	2	1	0	13	36	26	7	3	0	0	0	0	0	0	0	19.5	15.5	4.6
1000 - 1100	178	46	39	46	47	9	0	152	12	2	3	5	33	83	42	12	2	1	0	0	0	0	0	0	19	14.3	4.8
1100 - 1200	189	48	41	50	50	12	3	162	8	3	1	8	71	84	21	5	0	0	0	0	0	0	0	0	15.4	12.1	3.7
1200 - 1300	182	41	44	50	47	8	1	151	17	3	2	3	72	77	25	5	0	0	0	0	0	0	0	0	16.6	12.3	3.8
1300 - 1400	225	51	49	60	65	5	1	201	9	1	8	10	116	81	15	3	0	0	0	0	0	0	0	0	14.1	11.1	3.5
1400 - 1500	205	57	53	45	50	6	0	175	15	3	6	9	93	66	28	8	1	0	0	0	0	0	0	0	16.3	11.9	4.4
1500 - 1600	216	48	58	48	62	9	2	185	15	2	3	20	115	58	22	1	0	0	0	0	0	0	0	0	14.5	10.5	3.9
1600 - 1700	172	47	44	47	34	11	0	146	11	1	3	5	63	63	30	9	2	0	0	0	0	0	0	0	18.1	12.9	4.7
1700 - 1800	128	33	37	26	32	18	4	92	12	0	2	2	24	53	41	7	1	0	0	0	0	0	0	0	19	14.8	4.2
1800 - 1900	131	41	35	25	30	6	5	112	6	0	2	1	15	39	61	13	2	0	0	0	0	0	0	0	20.6	16.4	4.4
1900 - 2000	94	22	25	23	24	4	1	82	5	1	1	0	5	30	40	17	2	0	0	0	0	0	0	0	22.1	17.4	4
2000 - 2100	89	31	17	20	21	3	1	78	4	1	2	1	3	29	44	9	2	1	0	0	0	0	0	0	20.4	17.1	4.1
2100 - 2200	78	24	23	13	18	5	2	59	4	1	7	0	5	20	32	15	6	0	0	0	0	0	0	0	23.3	18.4	4.8
2200 - 2300	83	23	25	18	17	0	0	58	11	3	11	0	1	17	47	15	2	1	0	0	0	0	0	0	22.8	18.7	3.8
2300 - 0000	65	14	18	20	13	0	1	51	6	3	4	0	2	24	28	10	1	0	0	0	0	0	0	0	21.7	18	3.6
0700 - 1900	1807	440	451	438	478	96	17	1521	112	20	41	63	626	668	348	85	15	2	0	0	0	0	0	0	17.9	13	4.6
0600 - 2200	2098	525	521	504	548	108	21	1765	126	24	54	64	640	749	473	140	29	3	0	0	0	0	0	0	18.8	13.7	4.9
0600 - 0000	2246	562	564	542	578	108	22	1874	143	30	69	64	643	790	548	165	32	4	0	0	0	0	0	0	19.2	14	5
0000 - 0000	2745	686	699	689	671	121	31	2305	174	44	70	88	798	932	659	207	53	8	0	0	0	0	0	0	19.5	14	5.2

Monday 03 August 2015

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	65	18	13	17	17	2	0	47	10	2	4	0	5	9	38	10	3	0	0	0	0	0	0	0	22.1	18.3	4.4
0100 - 0200	39	4	15	13	7	1	0	30	7	1	0	0	3	7	20	8	1	0	0	0	0	0	0	0	22.4	18.3	4.5
0200 - 0300	31	8	5	8	10	0	0	27	4	0	0	0	0	4	20	6	1	0	0	0	0	0	0	0	21	19.2	2.9
0300 - 0400	33	10	8	6	9	0	0	25	8	0	0	0	2	5	17	4	5	0	0	0	0	0	0	0	25.1	20	5.4
0400 - 0500	26	12	2	3	9	0	1	24	0	1	0	0	0	1	14	6	3	2	0	0	0	0	0	0	26.6	21.5	5.3
0500 - 0600	31	6	7	8	10	0	1	24	2	4	0	0	1	4	11	10	4	1	0	0	0	0	0	0	24.4	20.9	4.8
0600 - 0700	65	15	11	15	24	1	0	37	8	8	11	0	4	9	22	21	7	2	0	0	0	0	0	0	25.5	20.1	5.5
0700 - 0800	143	23	37	33	50	23	2	66	20	10	22	0	10	37	53	38	5	0	0	0	0	0	0	0	22.8	18.1	4.6
0800 - 0900	203	44	51	59	49	34	4	95	24	14	32	3	20	77	79	23	1	0	0	0	0	0	0	0	20.4	16	4.2
0900 - 1000	194	52	53	45	44	12	2	106	28	21	25	1	29	83	65	15	1	0	0	0	0	0	0	0	19.5	15.2	4.3
1000 - 1100	197	49	38	55	55	13	2	101	38	20	23	5	51	72	46	22	1	0	0	0	0	0	0	0	19.9	14.4	4.9
1100 - 1200	213	56	57	50	50	13	1	121	33	17	28	3	55	66	73	15	1	0	0	0	0	0	0	0	19	14.6	4.5
1200 - 1300	205	51	54	51	49	8	6	112	39	18	22	3	60	84	43	13	2	0	0	0	0	0	0	0	18.1	13.8	4.5
1300 - 1400	196	47	43	56	50	15	2	116	21	12	30	2	49	72	60	12	1	0	0	0	0	0	0	0	18.8	14.4	4.3
1400 - 1500	194	38	62	50	44	5	1	115	35	13	25	4	41	84	50	15	0	0	0	0	0	0	0	0	19	14.2	4.3
1500 - 1600	171	37	48	38	48	5	1	101	20	13	31	0	36	75	46	13	1	0	0	0	0	0	0	0	19.7	14.7	4.4
1600 - 1700	200	50	63	45	42	12	5	123	24	7	29	4	37	69	64	21	3	2	0	0	0	0	0	0	20.4	15.4	5.1
1700 - 1800	212	69	45	52	46	16	3	138	24	8	23	0	27	92	69	20	3	1	0	0	0	0	0	0	19.9	15.7	4.2
1800 - 1900	191	60	39	48	44	13	1	132	23	5	17	0	24	70	63	30	3	1	0	0	0	0	0	0	21.3	16.5	4.7
1900 - 2000	149	43	42	33	31	9	3	108	15	2	12	2	13	54	61	16	3	0	0	0	0	0	0	0	20.6	16.6	4.4
2000 - 2100	104	24	30	23	27	4	0	68	15	3	14	0	9	34	47	14	0	0	0	0	0	0	0	0	20.4	16.5	4
2100 - 2200	89	23	18	23	25	1	0	65	10	3	10	0	3	26	38	16	5	1	0	0	0	0	0	0	23	18.1	4.8
2200 - 2300	87	19	25	21	22	1	0	67	9	1	9	0	2	15	55	14	1	0	0	0	0	0	0	0	21.5	18.4	3.2
2300 - 0000	85	20	24	21	20	3	3	67	9	2	1	1	2	33	27	19	3	0	0	0	0	0	0	0	22.4	18	4.6
0700 - 1900	2319	576	590	582	571	169	30	1326	329	158	307	25	439	881	711	237	22	4	0	0	0	0	0	0	19.9	15.2	4.6
0600 - 2200	2726	681	691	676	678	184	33	1604	377	174	354	27	468	1004	879	304	37	7	0	0	0	0	0	0	20.4	15.5	4.7
0600 - 0000	2898	720	740	718	720	188	36	1738	395	177	364	28	472	1052	961	337	41	7	0	0	0	0	0	0	20.6	15.7	4.7
0000 - 0000	3123	778	790	773	782	191	38	1915	426	185	368	28	483	1082	1081	381	58	10	0	0	0	0	0	0	20.8	15.9	4.8

Virtual Day (7.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
0000 - 0100	87	23	22	23	19	2	1	67	9	4	4	1	11	26	35	12	2	0	0	0	0	0	0	0	21.5	16.7	5
0100 - 0200	60	14	17	14	16	1	1	48	7	3	0	1	12	17	18	10	1	0	0	0	0	0	0	0	21.3	15.7	5.4
0200 - 0300	54	12	15	15	11	0	0	45	5	2	0	1	10	15	17	9	1	0	0	0	0	0	0	0	21.3	15.9	5.2
0300 - 0400	48	16	14	11	7	1	0	38	7	1	0	3	11	14	11	7	3	0	0	0	0	0	0	0	22.4	15.2	6.3
0400 - 0500	20	6	4	4	6	0	1	15	2	1	1	0	1	2	6	7	4	1	0	0	0	0	0	0	27.3	21.7	5.8
0500 - 0600	27	6	5	7	9	0	0	18	2	4	3	0	0	2	9	12	3	1	0	0	0	0	0	0	25.7	21.7	4.4
0600 - 0700	64	10	13	18	23	3	1	39	7	7	8	0	3	12	26	15	6	1	0	0	0	0	0	0	25.3	19.5	5.1
0700 - 0800	115	18	28	30	38	12	3	68	11	8	14	0	6	35	49	22	3	0	0	0	0	0	0	0	21.9	17.6	4.3
0800 - 0900	166	39	40	45	41	25	3	101	13	7	16	1	19	68	58	17	2	0	0	0	0	0	0	0	20.1	15.9	4.2
0900 - 1000	179	40	44	49	46	14	2	114	19	15	15	2	33	76	54	13	2	0	0	0	0	0	0	0	19.5	14.9	4.4
1000 - 1100	186	49	44	48	45	11	1	125	24	13	11	4	45	76	46	13	1	0	0	0	0	0	0	0	19	14.2	4.7
1100 - 1200	192	48	43	52	48	11	2	130	22	11	16	6	51	78	46	11	1	0	0	0	0	0	0	0	18.3	13.8	4.5
1200 - 1300	191	47	46	53	44	11	2	130	27	9	12	3	59	80	38	9	1	0	0	0	0	0	0	0	17.9	13.4	4.3
1300 - 1400	201	48	50	52	51	13	2	144	19	7	16	4	69	83	36	8	1	0	0	0	0	0	0	0	17.2	13	4.2
1400 - 1500	194	48	52	47	47	8	1	140	24	6	14	4	56	75	46	11	1	0	0	0	0	0	0	0	18.3	13.6	4.5
1500 - 1600	196	45	51	48	51	13	3	141	22	6	10	5	54	80	45	10	1	0	0	0	0	0	0	0	18.3	13.7	4.4
1600 - 1700	190	49	49	50	42	11	4	136	20	6	13	2	32	71	63	17	3	0	0	0	0	0	0	0	19.9	15.4	4.7
1700 - 1800	194	50	47	49	48	16	3	141	15	5	15	2	33	74	65	17	3	0	0	0	0	0	0	0	19.9	15.5	4.4
1800 - 1900	187	51	46	45	45	12	3	141	15	5	11	2	30	74	59	18	3	0	0	0	0	0	0	0	20.1	15.4	4.6
1900 - 2000	171	45	44	41	40	11	2	131	17	5	5	2	27	62	61	16	2	0	0	0	0	0	0	0	20.1	15.6	4.6
2000 - 2100	126	35	32	29	30	6	2	99	10	4	4	1	13	45	51	13	3	0	0	0	0	0	0	0	20.6	16.4	4.4
2100 - 2200	113	27	30	27	28	5	2	87	9	3	6	1	13	31	48	15	3	1	0	0	0	0	0	0	21.3	16.9	4.8
2200 - 2300	111	28	30	26	27	5	1	85	9	5	6	1	13	32	49	14	1	0	0	0	0	0	0	0	20.8	16.6	4.5
2300 - 0000	109	28	29	29	23	4	2	89	7	5	2	0	15	45	36	12	1	0	0	0	0	0	0	0	20.1	15.8	4.4
0700 - 1900	2190	533	541	568	548	156	28	1513	231	99	163	36	488	869	606	167	21	3	0	0	0	0	0	0	19.2	14.6	4.6
0600 - 2200	2664	651	661	683	669	181	35	1869	274	118	186	39	543	1020	792	227	36	5	1	0	0	0	0	0	19.7	14.9	4.7
0600 - 0000	2884	707	721	737	719	190	39	2042	290	128	194	40	571	1098	877	253	39	5	1	0	0	0	0	0	19.7	15	4.7
0000 - 0000	3180	784	797	811	788	195	42	2274	322	143	203	46	617	1173	974	310	53	7	1	0	0	0	0	0	20.1	15.2	4.8

Virtual Week (1.00)

Time	Hourly Totals	15 Minute Bin Drops 00-15	15-30	30-45	45-00	Cycles	Vehicle Classes COBA+ Motor Cycle	CAR	LGV	HGV	BUS	Vehicle Speed MPH 0 <6	MPH 6 <11	MPH 11 <16	MPH 16 <21	MPH 21 <26	MPH 26 <31	MPH 31 <36	MPH 36 <41	MPH 41 <46	MPH 46 <51	MPH 51 <56	MPH 56 <61	MPH 61 <150	P-Tile 85%	Average Speed	Standard deviation
Mon	3123	778	790	773	782	191	38	1915	426	185	368	28	483	1082	1081	381	58	10	0	0	0	0	0	0	20.8	15.9	4.8
Tue	3207	811	815	793	788	167	35	2020	412	223	350	37	586	1172	1014	337	55	6	0	0	0	0	0	0	20.4	15.4	4.8
Wed	3195	785	815	853	742	206	53	2293	331	165	147	43	585	1204	1005	307	44	6	1	0	0	0	0	0	19.9	15.3	4.7
Thu	3293	837	817	850	789	224	44	2475	269	133	148	43	604	1258	1031	295	56	4	1	1	0	0	0	0	19.9	15.2	4.7
Fri	3501	827	854	932	888	335	56	2530	328	127	125	48	648	1339	1073	330	54	8	1	0	0	0	0	0	19.9	15.2	4.7
Sat	3197	761	792	790	854	123	38	2381	317	122	216	36	615	1221	958	310	48	7	2	0	0	0	0	0	19.9	15.2	4.8
Sun	2745	686	699	689	671	121	31	2305	174	44	70	88	798	932	659	207	53	8	0	0	0	0	0	0	19.5	14	5.2
	22261	5485	5582	5680	5514	1367	295	15919	2257	999	1424	323	4319	8208	6821	2167	368	49	5	1	0	0	0	0	20.1	15.2	4.8

Total

Time	Hourly	15 Minute Bin Drops 00-15	15-30	30-45	45-00		Vehicle Classes COBA+					Vehicle Speed MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	P-Tile	Average	Standard

	Totals					Cycles	Motor Cycle	CAR	LGV	HGV	BUS	0 <6	6 <11	11 <16	16 <21	21 <26	26 <31	31 <36	36 <41	41 <46	46 <51	51 <56	56 <61	61 <150	85%	Speed	deviation
	22261	5485	5582	5680	5514	1367	295	15919	2257	999	1424	323	4319	8208	6821	2167	368	49	5	1	0	0	0	0	20.1	15.2	4.8

Transport and Environment Committee

10.00am, Tuesday, 7 June 2016

Leith Programme - Objections to Redetermination Order - Leith Walk (Brunswick Street to Iona Street)

Item number	8.5
Report number	
Executive/routine	Routine
Wards	Leith Walk

Executive Summary

The Leith Programme involves approximately £9 million worth of road, footway and cycle improvements along the whole length of Constitution Street and Leith Walk, which will transform the character of these streets. The Programme is being delivered in a number of phases, over several financial years.

The next phase of the Programme to be implemented (Phase Four) will be the section of Leith Walk between Brunswick Street and Iona Street. The proposals for this section require both a Traffic Regulation Order (TRO) and a Redetermination Order (RSO).

On 12 January 2016, objections received to the two Orders were reported to Committee, which set aside the objections received to the TRO and instructed officials to refer the objections to the RSO to Scottish Ministers.

This report informs the Committee of the Scottish Ministers' decision in relation to the RSO.

Links

Coalition Pledges	P18, P18, P44, P45
Council Priorities	CP9, CP11, CP12
Single Outcome Agreement	SO4

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THE CITY OF EDINBURGH COUNCIL

Report

Leith Programme - Objections to Redetermination Order - Leith Walk (Brunswick Street to Iona Street)

1. Recommendations

1.1 To note the Scottish Ministers' decision to confirm the Redetermination Order (RSO).

2. Background

2.1 The Leith Programme involves approximately £9 million worth of road, footway and cycle improvements along the whole length of Constitution Street and Leith Walk, which will transform the character of these streets. The Programme is being delivered in a number of phases, over several financial years.

2.2 Following the decision of the Council, on 10 December 2015, to merge the Leith Programme and the tram project, the Leith Programme will also deliver approximately £1 million worth of tram enabling works in the footways on Leith Walk.

3. Main report

3.1 The next phase of the Programme to be implemented (Phase Four) will be the section of Leith Walk between Brunswick Street and Iona Street. The proposals for this section require both a Traffic Regulation Order (TRO) and a RSO.

3.2 In line with the statutory requirements for consultations, being carried out under the terms of the Road Traffic Regulation Act 1984, the draft TRO was advertised between 20 October and 17 November 2015.

3.3 In line with the statutory requirements for consultations being carried out under the terms of the Roads (Scotland) Act 1984, the draft RSO was advertised during the same period.

3.4 In addition, approximately 2,000 letters were delivered to businesses and residents on Leith Walk and streets surrounding the area covered by the Orders, including the whole length of Iona Street.

3.5 Four objections were received to the advertised TRO, and two objections were received to the advertised RSO. On 12 January 2016, these objections were reported to Committee, which set aside the objections received to the TRO and instructed officials to refer the objections to the RSO to Scottish Ministers.

3.6 The two objections to the RSO were subsequently referred to Scottish Ministers on 14 January 2016.

3.7 The Scottish Ministers' decision on determination of the RSO was received on 26 May 2016. The Ministers decided to confirm the RSO.

3.8 The Ministers also suggested that the Council could re-examine its decision to implement a "No Entry" restriction, as opposed to a "No Right Turn" restriction, at Iona Street.

3.9 Full consideration was given to the possibility of implementing a "No Right Turn" restriction at Iona Street as part of the development of the proposals. However, the consequential impacts of this meant that a "No Entry" restriction was considered to be preferable. It is not, therefore, considered necessary to re-examine this decision.

4. Measures of success

4.1 The measure of success for the Leith Programme will be an improved, more attractive environment along Leith Walk and Constitution Street, particularly for pedestrians and cyclists.

4.2 The proposals included in Phase 4 of the Programme should also result in an improved street layout on the northern section of Leith Walk which meets the needs of all road users.

5. Financial impact

5.1 The costs associated with the statutory procedures to make the necessary Traffic Regulation Order and Redetermination Order are estimated at £6,000.

5.2 The costs for this phase of construction will be subject to the outcome of a competitive tendering process. Construction costs will be fully contained within the Place managed Capital Investment Programme and the scheme is supplemented by significant external funding awards from the Scottish Government and Sustrans Scotland.

6. Risk, policy, compliance and governance impact

6.1 The Council's tram team and the tram operator have been consulted on the design in order to ensure that a tram extension could be delivered on this section of Leith Walk without having to make significant physical changes to the proposed layout.

7. Equalities impact

7.1 An Equalities and Rights Impact Assessment (ERIA) for the Leith Programme commenced during the consultation stage of the project and will be in effect throughout its delivery.

7.2 It is likely that improvements to footways and pedestrian facilities will have a positive impact on the safety, freedom of movement and access for all who live in or use Leith Walk. This takes into account many people whose characteristics are protected under the Equalities Act 2010.

8. Sustainability impact

8.1 The impacts of this report in relation to the three elements of the Climate Change (Scotland) Act 2009 Public Bodies Duties have been considered, and the outcomes are summarised below. Relevant Council sustainable development policies have been taken into account and are noted at Background Reading later in this report.

8.2 The proposals in this report will reduce carbon emissions by contributing towards the core objectives of the Council's Active Travel Action Plan to increase the number of people walking and cycling in Edinburgh.

8.3 The proposals in this report will increase the city's resilience to climate change impacts by providing more opportunities for sustainable travel through improvements to walking and cycling infrastructure.

8.4 The proposals in this report will help achieve a sustainable Edinburgh by delivering environmental improvements which will benefit all users of Leith Walk.

9. Consultation and engagement

9.1 Extensive consultation has been undertaken for the Leith Programme, including a major public and stakeholder consultation and engagement process, undertaken between September 2012 and January 2013, on the preliminary design for the Programme. This included focus groups, an online survey that generated 482 responses and a community drop in event.

9.2 Since then, regular Key Stakeholder Group meetings have been held and an Elected Member Oversight Group was set up, which met at key stages of the project until its recent dissolution. An update on the Programme was provided to the recently formed Transport Projects Working Group at its meeting on 12 May 2016.

9.3 A dedicated Leith Programme webpage is in place and is regularly updated to provide information on the proposals.

9.4 Further consultation on the proposals for Phase Four of the Programme was carried out between 20 October and 17 November 2015, as part of the statutory process for the necessary Traffic Regulation and Redetermination Orders. In addition, approximately 2,000 letters were delivered to businesses and residents on Leith Walk and streets surrounding the area covered by the Orders, including the whole length of Iona Street. This gave any interested parties the opportunity to submit formally any comments or objections to the Council. The outcomes of this process were reported to the Committee on 12 January 2016.

10. Background reading/external references

10.1 The Leith Programme: Consultation and Design - Report to the Transport and Environment Committee by Director of Services for Communities, 19 March 2013.

10.2 Leith Programme, Objections to Traffic Regulation Order, Leith Walk (Brunswick Street to Dalmeny Street) and Redetermination Order, Leith Walk (Brunswick Street to Iona Street) - Report to the Transport and Environment Committee by Executive Director of Place, 12 January 2016.

10.3 Active Travel Action Plan
http://www.edinburgh.gov.uk/downloads/file/4409/active_travel_action_plan

10.4 Transport 2030 Vision

http://www.edinburgh.gov.uk//download/downloads/id/355/transport_2030_vision

Paul Lawrence

Executive Director of Place

Contact: Andrew Easson, Projects Development Manager

E-mail: andrew.easson@edinburgh.gov.uk Tel: 0131 469 3643

11. Links

Coalition Pledges	P18 - Complete the tram project in accordance with current plans
	P44 - Prioritise keeping our streets clean and attractive
	P45 – Spend 5% of the transport budget on provision for cyclists
Council Priorities	CP9 - An attractive city
	CP11 - An accessible connected city
	CP12 - A built environment to match our ambition
Single Outcome Agreement	SO4 - Edinburgh's communities are safer and have improved physical and social fabric
Appendices	Appendix 1 - Letter to Transport Scotland referring objections to Scottish Ministers
	Appendix 2 - Letter from Transport Scotland advising of Scottish Ministers' determination

APPENDIX 1

·EDINBVRGH·
THE CITY OF EDINBURGH COUNCIL

Ms Sharon Gallacher
Road Policy Team
8th Floor, Buchanan House
58 Port Dundas Road
GLASGOW
G4 0HF

Date 14 January 2016

Your ref

Our ref 672748/CS

Dear Ms Gallacher

LEITH PROGRAMME, REDETERMINATION ORDER – LEITH WALK (BRUNSWICK STREET TO IONA STREET) – RSO/15/23

The City of Edinburgh Council as Roads Authority, has promoted a Traffic Regulation Order and Redetermination Order in support of road, footway and cycling improvements on Leith Walk in Edinburgh. These works are being proposed as part of the Leith Programme, a £9.1 million package of improvements being delivered over several financial years.

In line with statutory requirements, the Orders were publicly advertised between 20 October and 17 November 2015. Four objections were received to the Traffic Regulation Order, and two objections were received to the Redetermination Order.

Those objections relating to the Traffic Regulation Order were set aside by the Council's Transport and Environment Committee at it's meeting on 12 January 2016.

Under Regulation 13 of The Stopping Up of Roads and Private Accesses and the Redetermination of Public Rights of Passage (Procedure) (Scotland) Regulations 1986, where objections to a Redetermination Order have been made and not subsequently withdrawn, these are to be remitted by the Roads Authority to Scottish Ministers for determination. Approval was given by the Committee on 12 January 2016 for Council Officers to remit these objections to Scottish Ministers.

I enclose the following background documentation:

1. A copy of the proposed Order and accompanying plan

2. The Statement of Reasons for making the Order

Andrew Easson, Projects Development Manager, Place
Planning and Transport, C2, Waverley Court, 4 East Market Street, Edinburgh EH8 8BG
Tel 0131 469 3643 Fax 0131 529 6201 transport.projectsdevelopment@edinburgh.gov.uk

INVESTORS IN PEOPLE | Gold

3. Each objection to the Redetermination Order which has not been withdrawn, and copies of all correspondence relating to each objection.

4. The Report to the City of Edinburgh Council Transport and Environment Committee on 12 January 2016, with copies of objections appended.

5. A copy of the Order advert published in the Scotsman and Edinburgh Gazette newspapers on 20 October 2015

I can confirm that both objectors to the Redetermination Order have been notified in writing that their submission has been remitted to Scottish Ministers for determination, and copies of these letters are also provided.

I would be most grateful if you would firstly acknowledge receipt of this letter, and also advise as to the possible length of time for this matter to be determined. Should you require any further information, please do not hesitate to contact me.

Yours sincerely

J. Andrew Easson

Andrew Easson
Projects Development Manager

Encs

APPENDIX 2

Road Policy Team
Trunk Road and Bus Operations

Buchanan House, 58 Port Dundas Road, Glasgow G4 0HF
Direct Line: 0141 272 7314,
david.thomson@transport.gov.scot

TRANSPORT SCOTLAND
CÒMHDHAIL ALBA

Andrew Easson
Projects Development Manager
City of Edinburgh Council,
Planning and Transport, C2,
Waverley Court,
4 East Market Street,
Edinburgh
EH8 8BG

Your ref:
RSO/15/23/ADY

Our ref:
RSO/CEC/LW

Date:
26 May 2016

Dear Mr Easson,

THE CITY OF EDINBURGH COUNCIL (LEITH WALK, EDINBURGH) (REDETERMINATION OF MEANS OF EXERCISE OF PUBLIC RIGHT OF PASSAGE) ORDER 2016 (RSO/15/23)

1. The Scottish Ministers ("Ministers") have considered an Order ("the Order") under sections 1(1) and 152(2) of the Roads (Scotland) Act 1984 ("the Act") to redetermine parts of the carriageway and footway of Leith Walk and other roads in Edinburgh to carriageway, footway and cycle track in order to allow a programme of improvements to transform the nature and operation of the whole length of Constitution Street and Leith Walk through the provision of segregated cycling facilities, dedicated cycle and motorcycle parking facilities, new and improved pedestrian crossing facilities, widening footways, reducing road width, resurfacing all road surfaces, altering parking and loading facilities and removing redundant street furniture.

2. Two objections to the published Order were lodged and maintained ([redacted] and [redacted] of [redacted] on behalf of [redacted] (collectively referred to as "the objectors"). In accordance with the provisions of section 71(2) (a) (ii) of the Act, the Council submitted the Order on 19 January 2016 to the Scottish Ministers to determine the matter.

3. The Council's stated intention is to transform the nature and operation of the streets through the provision of segregated cycling facilities, installation of a new pedestrian refuge island, re-laying of footways and alterations to parking and loading facilities. A review of existing loading and parking facilities along the section of Leith Walk had been undertaken, and recognising the importance for businesses and residents to have access to loading facilities and bus stops, the Council stated they sought to ensure that these were provided at more suitable locations to meet local demand.

Summary of Objections

4. [redacted] were supportive of the provision of cycle lanes but considered the Council had not taken sufficient account of the effect of the proposals on residents, pedestrians and bus passengers. The main issues raised by them were that the left-turn lane into Pilrig Street from Leith Walk is re-determined as footway thereby restricting access. They claim the scheme would halve the number of traffic lanes on the northbound Leith Walk approach;

precludes the current pedestrian crossing arrangement, which permits full pedestrian movement and does not delay vehicular flows; the scheme would also impact cyclists by producing a sharp cutting movement of traffic turing left into Pilrig Street across the proposed cycle lane; removes the bus stop; and moves a loading bay.

5. [redacted] of [redacted] objects on behalf of [redacted] who run a [redacted] on Iona Street. They state the traffic regulation order, proposed to support the purpose of the redetermination order, would prevent access into Iona Street from Leith Walk and will mean that all traffic is routed from Easter Road or through residential streets in the area. They consider these are less suitable routes for HGV traffic than the access from Leith Walk, thereby impacting the viability of their on-going business and creating a significantly less attractive and potentially less safe environment for pedestrians on both Iona Street and Easter Road. They have safety concerns from re- routing more commercial traffic past a play area and issues in relation to noise impacts, effects on the road condition and vehicle maintenance from increased commercial traffic over traffic humps on Iona Street. It was noted that part of the objection from [redacted] related to the traffic restrictions contained in a Traffic Regulation Order, which was published at the same time as the above named Order.

The Council's Case in Support of the Order

6. The Council responded to all of the objections. They confirmed that the layout on the northbound approach to the junction, whereby left turning traffic into Pilrig Street is required to cross the cycle lane, is a standard layout and no issues are anticipated. It advised that it had consulted with the Lothian cycling body SPOKES on the proposals and they expressed support for the scheme and confirmed that they had no concerns in relation to the proposed junction layout, which would also remove all conflicts currently facing cyclists using the junction. The Council stated the reduction of two traffic lanes to one and changing the pedestrian crossing phasing at the junction would result in a significant benefit for pedestrians because of widened footways and single stage crossings on all legs of the junction.

7. The Council accepted journey times for vehicles were likely to increase but did not consider an unacceptable impact would arise. The new layout removed all cyclist conflicts with the bus stop and reduced conflicts between vehicles using the loading bay, cyclists and left turning traffic. Relocating the bus stop would remove the potential for conflict between buses and cyclists and northbound traffic; the stop was used by one service and the operator had no objection. The stop was mainly used for drop offs therefore no shelter was required and it was proposed to increase the footway to 1.8 metres wide.

8. They were of the view the proposals would not prevent vehicles leaving [redacted] from joining Leith Walk, and there remained a number of suitable alternative routes to and from the yard. They had no safety concerns in relation to the play park as that was fenced off. They accepted large goods vehicles entering Iona Street from Easter Road would require to use the other side of the carriageway on both roads however, this is a common occurrence in the city and they had no particular safety concerns. In addition, where similar vehicles turn from Leith Walk into Iona Street they also require to use the opposite side of Iona Street. Furthermore, the Council view that the vehicle calming was a standard feature and shouldn't cause issues.

Scottish Ministers' Consideration

9. The Scottish Ministers have considered the terms of the Order made by the Council, the objections made, the responses to the objections by the Council and the performance of the Council of the procedural requirements for making an Order under the Stopping Up of Roads

and Private Means of Accesses and the Redetermination of Public Rights of Passage (Procedure) (Scotland) Regulations 1986.

10. Ministers first considered the form and content of the Order to satisfy themselves that it was, on the face of it; within the powers of the Council to make and that it complied with the relevant statutory procedures. They have concluded it is within the powers of the Council to make this Order and there were no procedural failures in the making of this Order.

11. Scottish Ministers carefully considered the parties' cases both for and against the Order. They took the view that the central issue in this matter is that the redetermination is necessary to transform the nature and operation of the streets to deliver improved facilities for both pedestrians and cyclists. They agreed with the Council's position in relation to the specific objections raised. Ministers are generally content with the proposed changes.

12. However, they have noted some concerns with the traffic regulation order that was being made to support the stated purpose to be achieved through the redetermination order. The reason for the "No Entry except for cyclist" restriction at Iona Street is primarily due to the reduction in the number of northbound traffic lanes on Leith Walk because of the redetermination of areas of carriageway to footway adjacent to that location and the resulting need to reduce delays caused by right turning vehicles.

13. There was no evidence that consideration had been given to the hard measures to prevent a right turn prohibition from Leith Walk to Iona Street rather than a full prohibition of entry except cyclists. It is not known if there was full consultation with the residents of Iona Street and a balance of the need for a full prohibition of entry with the possible loss of amenity to the residents of Iona Street. Scottish Ministers make no proposals in relation to the terms of the traffic regulation order, however, as an alternative to a full prohibition of traffic may still support the accepted purpose of the Redetermination Order, Ministers suggest the Council could re-examine its decision to implement a 'No Entry' restriction as opposed to a 'No Right Turn' restriction.

Conclusion

14. In taking account of all these considerations, Ministers have therefore decided **to confirm the Order**. A copy of this decision letter will be sent to the Objectors.

Yours sincerely,

Hugh Gillies
Director, Trunk Road and Bus Operations

Transport and Environment Committee

10:00am, Tuesday, 7 June 2016

Objection to Traffic Regulation Order TRO/14/64 Braid Hills Drive - Proposed Speed Limit Reduction 50mph to 40mph

Item number	8.6
Report number	
Executive/routine	Routine
Wards	10 - Meadows/Morningside

Executive Summary

The purpose of this report is to acknowledge and set aside an objection to the proposed Traffic Regulation Order to reduce the speed limit on Braid Hills Drive from 50mph to 40mph.

Links

Coalition Pledges	P44
Council Priorities	CP4, CP9
Single Outcome Agreement	SO4

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THE CITY OF EDINBURGH COUNCIL

Report

Objection to Traffic Regulation Order TRO/14/64 Braid Hills Drive - Proposed Speed Limit Reduction 50mph to 40mph

1. Recommendations

1.1 It is recommended that the Committee:

1.1.1 notes the responses received to the advertised Traffic Regulation Order; and

1.1.2 sets aside the one objection received and gives approval to make the Traffic Regulation Order as advertised.

2. Background

2.1 Historically, representations have been made from local residents to reduce the speed limit on Braid Hills Drive from 50mph to 40mph.

2.2 This route has been investigated in the past to determine if a reduction in the speed limit was required. The results of this investigation showed that any attempt to reduce the speed limit would also require engineering measures to physically change the characteristics of the route.

2.3 Funds have been identified to introduce cycling facilities on the route.

2.4 The current road layout consists of one lane in each direction separated by a large central hatched area. This area will be removed, bringing the two traffic lanes closer together and creating wide soft segregated cycle lanes along both sides of the route.

2.5 Soft segregation provides an intermittent barrier between cyclists and vehicles, which can help protect cyclists from encroachment by moving vehicles or from illegal parking/loading. Such separation can significantly improve cyclists' feeling of safety and security. It uses measures such as intermittent raised rubber dividers to create the separation, but still allows cyclists to manoeuvre between the cycle lane and carriageway, where required, and provides gaps for people in wheelchairs or with buggies to easily cross the road.

2.6 It is considered that this change in character of the route is sufficient to justify the reduction of the current 50mph limit to 40mph.

3. Main report

3.1 A Traffic Regulation Order (TRO) is being promoted to reduce the speed limit on Braid Hills Drive from 50mph to 40mph. A plan of the route is attached in Appendix 1.

3.2 The draft TRO was advertised in January 2016. In accordance with applicable legislation, notices were erected on-street, adverts were placed in the local press and copies of all the relevant documents were made available for viewing at the reception in the City Chambers.

3.3 In addition to the legislative requirements set out in paragraph 3.2 above, electronic copies of all the relevant documents were made available on the Council's website and on the Scottish Government's public information gateway, tellmescotland.gov.uk.

3.4 At the end of the formal consultation period, six responses had been received, five of which supported the proposal, including Police Scotland - see Appendix 2.

3.5 One objection was received from a commuter who uses the route to travel to and from work and could not see why it was necessary to reduce the speed limit. This driver considered that Braid Hills Drive was a wide, fairly straight road with good visibility and little housing, making it safe to drive at speed. They did acknowledge that horses use the road, however they felt that there was time to slow down and room to pass. The objector gave a list of reasons why they considered a higher speed to be acceptable such as the road width, the width of the north pavement, the lack of a pavement on the south side, the lack of pedestrians and the lack of junctions on the route.

3.6 In response to the objection, an analysis of the collision history showed there have been five crashes on the route in the latest available five years (up to July 2015), all single vehicle crashes where speed was a factor. In addition the central hatching will be removed and cycle facilities will be introduced along with the reduced speed limit. It is considered that this change in the character of the route is sufficient to justify the reduction in the speed limit. Residents in the 30mph sections, at either end of the road, felt that a reduction in the speed limit over this middle section will aid compliance with the 30mph limit at each end. There are paths which exit onto Braid Hills Drive where walkers cross and a reduction in the speed limit will make crossing the road safer. A reduced speed limit will encourage walking and cycling.

4. Measures of success

4.1 Success will be measured through:

4.1.1 Reduction in vehicle speeds.

4.1.2 Reduction in risk to cyclists.

4.1.3 Reduction in crashes causing injury.

5. Financial impact

5.1 The administrative cost of reducing the existing speed limit is estimated to be around £2,000 and will be met by the Road Safety Capital Budget 2016/2017.

5.2 The engineering works to change the layout of the route will be met by the Cycle Team. The existing central hatching will be burnt off and a new centreline will be painted. Soft segregated cycle lanes will be installed on each carriageway. Due to the condition of the road surface around 60% of the cycle lane will need to be resurfaced. As a result the total cost of the cycle lanes is estimated at £160,000. A bid has been made to Sustrans for match funding, therefore £80,000 is required for the project which will be met from the Cycling Capital Budget in 2016/17.

6. Risk, policy, compliance and governance impact

6.1 The Road Safety Plan for Edinburgh to 2020 supports the introduction of lowered speed limits to reduce the number of casualties on Edinburgh's roads.

6.2 The recommendations in the report are expected to assist in the delivery of the Council's Active Travel Action Plan (2010-2020) and to make progress towards achieving the targets it contains. They are also complementary to a number of other Council policies, including the Transport 2030 Vision, the Sustainable Travel Plan and the Open Space Strategy.

7. Equalities impact

7.1 Consideration has been given to the relevance of the Equalities Act 2010 and there is no infringement of rights or impact on duties under this Act. No negative impacts are anticipated and it is expected that the reduction in the speed limit should improve conditions for vulnerable road users.

8. Sustainability impact

8.1 The impacts of this report have been considered in relation to the three elements of the Climate Change (Scotland) Act 2009 Public Bodies Duties have been considered.

8.2 The proposals in this report will reduce carbon emissions because the reduction in the speed limit will reduce traffic speeds and encourage walking, and the provision of segregated cycle lanes will encourage cycling.

8.3 The need to build resilience to climate change impacts is not relevant to the proposals in this report because the outcome is for a reduction in the speed limit only.

8.4 The proposals in this report will help achieve a sustainable Edinburgh because the proposals include the introduction of cycle facilities, which should encourage cycling leading to the associated cycling health benefits.

9. Consultation and engagement

9.1 In accordance with the applicable legislation, this TRO was advertised in the press and on-street by means of public notices, with letters also sent to statutory bodies representing persons likely to be affected by the proposals. Those letters were sent, among others, to the local Community Council, emergency services, as well as to all local ward Councillors. Details have also been made available on the Council and Scottish Government websites.

10. Background reading/external references

10.1 None.

Paul Lawrence

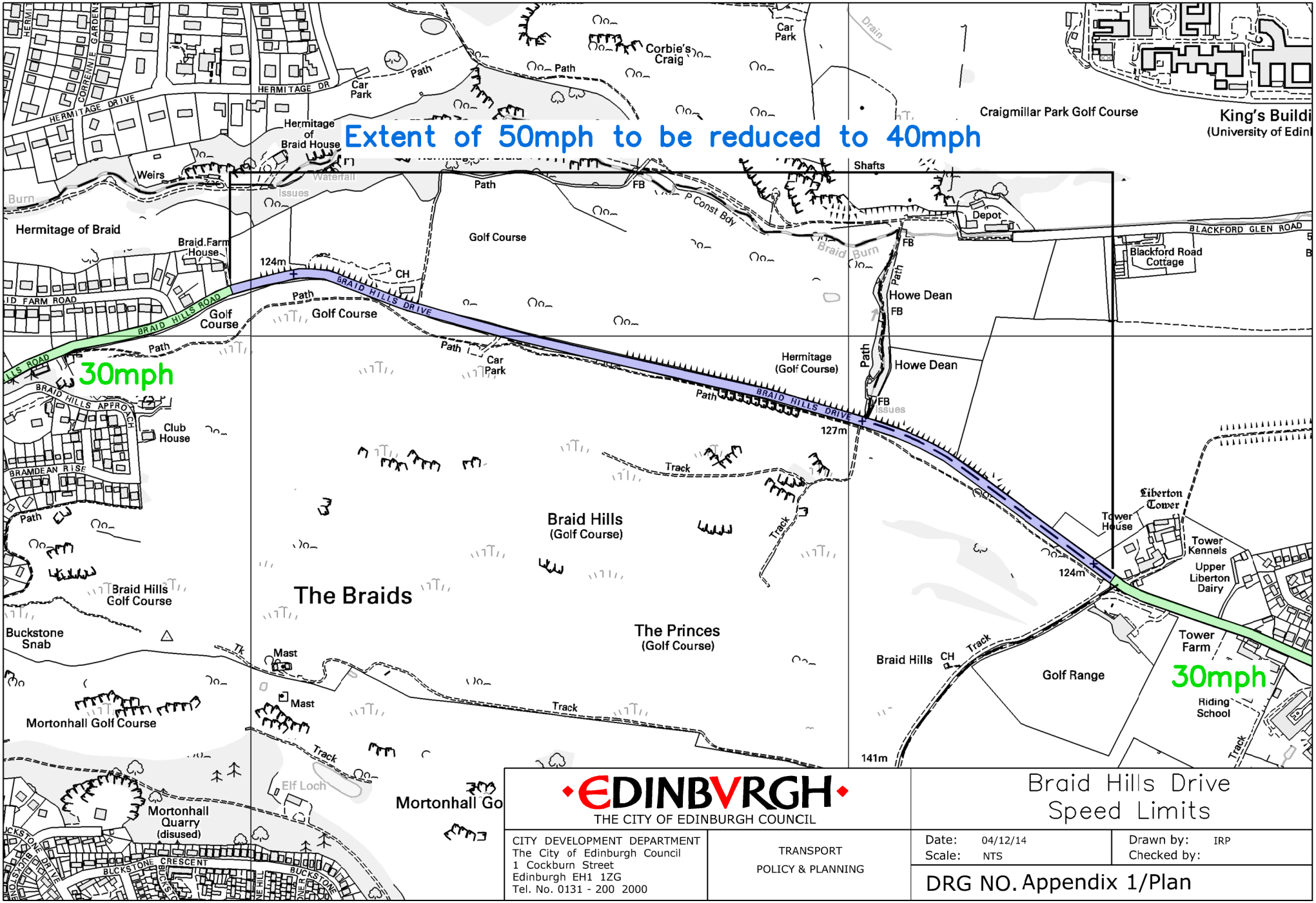
Executive Director of Place

Contact: Gary Patton, Senior Professional Officer - Road Safety

E-mail: gary.patton@edinburgh.gov.uk | Tel: 0131 469 3674

11. Links

Coalition Pledges	P44 Prioritise keeping our streets clean and attractive.
Council Priorities	CP4 -Safe and empowered communities. CP9 - An attractive city.
Single Outcome Agreement	SO4 - Edinburgh's communities are safer and have improved physical and social fabric.
Appendices	Appendix 1 - Location plan Appendix 2 - TRO14/64 Braid Hills Drive Consultation Summary



EDINBVRGH
THE CITY OF EDINBURGH COUNCIL

CITY DEVELOPMENT DEPARTMENT
The City of Edinburgh Council
1 Cockburn Street
Edinburgh EH1 1ZG
Tel. No. 0131 - 200 2000

TRANSPORT
POLICY & PLANNING

Braid Hills Drive Speed Limits

Date: 04/12/14
Scale: NTS
Drawn by: IRP
Checked by:

DRG NO. Appendix 1/Plan

Appendix 2 - TRO/14/64 Braid Hills Drive Consultation Summary

Summary	In Favour	Representation	Comments	Response
Police Scotland	Yes	No	Supports lowering of speed limit and hopes it assists the residents of Liberton Drive with regards to their complaints about speeding vehicles.	Its is considered that a reduction in the speed limit in this central section of the route will assist compliance with the 30mph speed limit at either end.
Resident and Co-chair Friends of the Braid Hills	Yes	No	Support lowering the speed limit - also asked for a pedestrian island at the Lang Linn Path entrance.	This location will be assessed for pedestrian facilities in accordance with the Council approved process. If pedestrian facilities are recommended this will be funded from the Road Safety Capital Budget.
Road User - walker/cyclist	Yes	No	Supports the reduced speed limit - traffic often exceeds the 50mph limit, currently hard to cross the road. When cycling you are pushed into the steeply cambered edge due to the wide central separation.	The current central hatched area will be removed and replaced with a centre line marking. Cycle lanes with soft segregation will be introduced on both the east bound and west bound carriageways. In addition large scale surfacing (approximately 60%) will be undertaken to ensure the lanes are satisfactory for cycling.
Commuter - car driver	No	Yes	Objects to the proposal as Braid Hills Drive provides a fast relatively quiet route across the city. Can't see the need to reduce the speed limit as: the road is wide, the width allows for a permanent marked buffer in the middle, the south side has no pavement hence no pedestrians, the south side is mainly fenced off and therefore no pedestrians crossing, the width of the road allows for driving out from the footpath, pavement on the north is unusually wide, and there are few exits off the road. Acknowledges that on one part you occasionally see horses, but feels visibility is good enough so you can slow down and pass them safely.	Representations have been made from local residents to reduce the speed limit on Braid Hills Drive from 50mph to 40mph. The reduction in the speed limit is in line with the Council's Local Transport Strategy to reduce urban speed limits, to reduce the severity of collisions, and to encourage walking and cycling. Cycle facilities will be introduced on the route along with the reduced speed limit. The current road layout consists of one lane in each direction separated by a large central hatched area. This area will be removed, bringing the two traffic lanes closer together and creating wide cycle lanes along both kerblines. It is felt that this change in the character of the route is sufficient to justify the reduction of the current 50mph limit to 40mph.
Resident	Yes	No	Resident and frequent walker - supports the lower speed limit.	
Road User - cyclist	Yes	No	Supports lowering the speed limit as it would improve safety for cyclists and horse riders. Asked if scope for resurfacing, particularly at the edges of each carriageway. Also asked if scope for creating a shared use footway.	Cycle lanes with soft segregation will be introduced on both the east bound and west bound carriageways. In addition large scale surfacing (approximately 60%) will be undertaken to ensure the lanes are satisfactory for cycling.