# **Transport and Environment Committee**

10am, Tuesday, 18 March 2014

## Post Tram Construction – Review of Traffic Management and Interfaces

Item number Report number	7.6
Wards	07 – Sighthill/Gorgie 10 – Meadows/Morningside 11 – City Centre
Links	
Coalition pledges Council outcomes Single Outcome Agreement	P18, P47 CO9, CO22 SO1, SO4

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## **Executive summary**

## Post Tram Construction – Review of Traffic Management and Interfaces

#### Summary

This report considers the implications on pedestrian, cyclist and road traffic movements around the city now that construction works have been largely completed in respect of the Edinburgh Tram system. The INFRACO Contractor is finalising the delivery of the approved design along the route of the tram system and the Traffic Regulation Order arrangements supporting the tram are all in place. The programme, leading up to the commencement of tram passenger operations, will see an increasing number of trams operating within the city centre as part of the testing and commissioning phase during the first and second quarter of 2014.

Since removal of the tram construction related traffic diversions in October 2013, a number of consequential traffic management impacts have been noted. These have included the interface between taxis, cycles and tram tracks at Haymarket Junction. Although these have since been addressed, in recent weeks some emerging issues have become evident in areas beyond the direct curtilage of the tram route.

There is a requirement to undertake further investigation into these matters.

These can be broken down into the following component elements:

- 1 Short term measures to address immediate traffic management issues and clearance of temporary blocks, redundant traffic sign poles, all temporary traffic management measures and signage. These to be addressed prior to commencement of tram passenger services and which do not require amendments to the prevailing TRO arrangements;
- 2 Medium term measures, if required and relating to traffic management issues which may emerge following the introduction of tram services and which should be investigated following a period of operation; and

3 Edinburgh Trams Ltd has been confirmed as a transport authority under the New Roads and Streetworks Act (Scotland) 1991. As a transport authority, Edinburgh Trams will be consulted at an early stage within the statutory approval processes. This will afford the opportunity for consideration to be given to potential implications of development on tram operations.

### Recommendations

It is recommended that the Committee:

- 1 notes the contents of this report;
- 2 notes the intention to enhance the directional signage advising traffic route choices around the city centre, specifically on Lothian Road, the West Approach Road, Haymarket, the West End and on Queensferry Road;
- 3 notes the intention to enhance and reinforce road markings and signage to regulate access to trams only at the junction of Princes Street with South St Andrew Street and at the junction of North St Andrew Street with York Place; and
- 4 agrees to allow a period of 12 months after commencement of tram passenger operations to monitor traffic movements around the city centre in order to identify emerging issues after this period and that a further report be submitted to Committee which assesses the situation and brings forward proposals as appropriate.

#### **Measures of success**

A reduction in peak period congestion at key intersections, improved accessibility and journey times between the areas to the south of the city centre, the West End and the A90.

## **Financial impact**

The cost of the works in this report (£40,000) can be funded from the Roads and Transport revenue budget.

## **Equalities impact**

An Equalities and Rights Impact Assessment is being undertaken in relation to the Edinburgh Tram project to ensure that as the implementation towards commencement of passenger services progresses the equality impact assessment is maintained. There are no direct negative equalities or human rights impacts anticipated.

#### Sustainability impact

The impacts of this report have been considered in relation to the Climate Change (Scotland) Act 2009. Relevant Council sustainable development policies have been taken into account and are noted under Background Reading reference.

The proposals outlined in this report will promote a reduction in carbon dioxide and nitrogen oxide emissions by reducing travel time and distance around the city centre and in so doing, increase the city's resilience to climate change impacts and promoting a sustainable Edinburgh. The reassignment of motorised traffic to appropriate signed routes will reduce the interaction of these vehicles with pedestrians and cyclists in other parts of the city centre, thus promoting personal wellbeing.

#### **Consultation and engagement**

This report is to be referred to relevant local neighbourhood partnerships, Police Scotland and Transport for Edinburgh.

An invitation to attend a briefing on the contents of the report was sent out to the City Centre Ward Councillors, Rankin, Mowat and Doran. The briefing was held on 12 March 2014.

#### **Background reading/external references**

Local Transport Strategy 2014-2019

Climate Change Framework

Sustainable Edinburgh 2020

Transport 2030 Vision

## Post Tram Construction – Review of Traffic Management and Interfaces

## 1. Background

- 1.1 The scope of the tram construction contract was limited to those areas identified within the Edinburgh Tram Line One and Line Two Acts (2006). This defined a relatively narrow corridor within which the tram infrastructure construction has been accommodated.
- 1.2 This construction work, associated with the Edinburgh Tram System, was largely completed within the city centre during the latter part of 2013. This saw the re-opening of large sections of the city centre including Haymarket Junction, Shandwick Place and York Place which previously had been unavailable during the construction works.
- 1.3 Whilst the tram construction works were in place, traffic management arrangements were defined and governed by a series of Temporary Traffic Regulation Orders (TTROs) as set out in the Edinburgh Tram Acts. A wide range of temporary measures were applied across the city centre, including parking and loading restrictions, banned turns, the introduction of one-way systems, restricted access to certain vehicle types and changes to the traffic signal control systems. This included, at certain stages, some wide ranging diversions routes through and around the city centre.
- 1.4 Over the period of the tram works, trip making patterns and routeing across all modes of transport, within the broader city centre area, underwent several iterations as the traffic management arrangements were adjusted as the tram works progressed.

- 1.5 Since removal of these temporary traffic management arrangements on completion of the tram construction works, the prevailing pre-tram works Traffic Regulation Order (TRO) has been reinstated. Some routes used for diversions have therefore now reverted to the pre-tram TRO arrangements. This is a legal obligation on the Council. In addition to this, a series of tram specific TRO measures, required to operate the tram system, have been introduced (TRO1). These measures have been formalised and became operational from 31 January 2014.
- 1.6 Following the opening of the Haymarket Junction in October 2013, some immediate issues emerged relating to taxis over utilising the rank in front of the Haymarket Station. This led to cyclists being pushed towards the tram tracks at acute angles. A number of incidents with some cyclists falling from their bikes were reported. Steps were taken to resolve the situation, including additional road markings and signage for cyclists and the relocation of taxi rank provision around the station, in consultation with the taxi trade. This has been formalised through the Regulatory Committee process.
- 1.7 The programme leading up to the commencement of tram passenger operations will see an increasing number of trams operating within the city centre, as part of the testing and commissioning phase during the first and second quarter of 2014. It is considered prudent that the Council undertakes monitoring to assess behavioural impacts in relation to the trams themselves, pedestrians, cyclists and other road users.

## 2. Main report

- 2.1 In the three months since the removal of the temporary traffic management associated with tram, a number of issues have arisen both through monitoring of traffic movements and also via correspondence with local stakeholder groups and the general public.
- 2.2 A review of how people move and how goods are delivered around the city is recommended in view of the changes resulting from completion of the tram construction works.

- 2.3 This review can be split into the following elements:
  - A final sweep of all areas affected by the temporary traffic management arrangements associated with the tram works is required to confirm removal of all unnecessary clutter and temporary street furniture – this includes all temporary traffic management, redundant traffic sign poles (eg adjacent to the Caledonian Hotel on Lothian Road), all concrete blocks and temporary diversion signage arrangements associated with the tram works which must be removed prior to passenger services.
  - Supplementary short term measures to address immediate traffic management issues which may be addressed prior to commencement of tram passenger services and which do not require amendments to the prevailing TRO arrangements;
  - Medium term measures, if required and relating to traffic management issues which may emerge following the introduction of tram services and which should be investigated following a period of operation.
- 2.4 Edinburgh Trams Ltd has been confirmed as a transport authority under the terms of the New Roads and Streetworks (Scotland) Act 1991. As a transport authority, Edinburgh Trams will be formally consulted at an early stage within the statutory approval processes. This will afford the opportunity for consideration to be given to potential implications of development on tram operations.

#### Prior to Tram Passenger Services

- 2.5 It should be noted that the tram infrastructure design has been approved by CEC as Roads Authority. It has also been subject to independent Road Safety Audit at design and post-construction stage.
- 2.6 However, since removal of the traffic management arrangements associated with the tram construction works, it has become evident that certain routes across the city are less accessible than they were prior to the tram works.
- 2.7 Therefore, a review of supplementary measures to enhance the trip making experience in and around the city centre is considered necessary.

- 2.8 In broad terms, this relate to the following routes:
  - Routes northbound between Lothian Road and Queensferry Road/A90 (N);
  - Access to the West End businesses from Lothian Road;
  - Routes eastbound between Manor Place and Lothian Road;
  - Routes southbound between the Dean Bridge and Lothian Road; and
  - Access to the east side of St Andrew Square from Princes Street and York Place.
- 2.9 The cumulative effect of certain changes to previously permitted manoeuvres has resulted in apparent driver confusion and some illegal manoeuvres taking place in regard to the above routes. These are:
  - The introduction of the tram infrastructure and reinstatement of the prevailing TRO has meant that the left turn(s) at the junction of Lothian Road with Shandwick Place and at the junction of North Charlotte Street with St Colme Street, are no longer available to all road users.
  - The link between Hope Street/Charlotte Square and Queensferry Street is available for use by all road users in an eastbound direction, but only to service buses westbound. This is controlled by vehicle actuated traffic signals.
  - Access to the east side of St Andrew Square for general traffic is via the north side of the Square. Access to and from both York Place and Princes Street is limited to trams only.
- 2.10 It is proposed that these routing issues will be resolved with the installation of enhanced signage directing drivers away from these critical areas, and via the most direct route available between the identified points.
- 2.11 A detailed road signage enhancement proposal has been designed in accordance with the requirements of the Traffic Signs Manual Chapter 3. This design proposal is set out in the plans contained in Appendix A.
- 2.12 The estimated cost of the works is £40,000 and this is to be funded within existing the existing Roads and Transport revenue budget. It is expected that installation will be in place prior to tram passenger operations.

#### Post Tram Passenger Services Monitoring

- 2.13 Tram movements within the city centre will become increasingly frequent during the testing and commissioning programme which is presently underway. This will afford pedestrians, cyclists, the travelling public and visitors to Edinburgh, the opportunity to acclimatise to the new mode of transport operating within the city.
- 2.14 Equally, the testing programme is focussed on providing Edinburgh Trams, as operator of the system, the opportunity to train the tram drivers and customer services staff to integrate safely with the other road users and to test thoroughly the systems associated with efficient tram operations prior to passenger services.
- 2.15 It is likely during the lead up to, and after commencement of passenger services, that some changes to the way that people and goods move around the city may emerge.
- 2.16 A period of settlement in relation to traffic and people movement can be expected in the months following tram operations, where the suitability of the prevailing traffic arrangements and routeing options can be determined in consultation with local stakeholders and members. An example of this would be a review of the potential to open up the right-turn from Queen Street into Dundas Street.
- 2.17 It should be noted that changes of this nature would require an amendment to the prevailing Traffic Regulation Order (TRO) arrangements, which would trigger a statutory process.
- 2.18 In terms of this, it is intended that the Council monitor transport movements in and around the city centre for a period of twelve months after commencement of tram passenger operations to allow conditions to normalise and settle, and to be representative of all seasonal weather conditions.
- 2.19 This aligns with recommendations set out in the 29 October 2013 Transport and Environment Committee Report entitled 'Building a Vision for the City Centre – Consultation Outcome' which committed the Council (under para 2.37) to undertake a monitoring and evaluation exercise which will include identifying, monitoring and evaluating passenger movements in the city centre.
- 2.20 It is recognised that, should some unforeseen safety critical issues emerge, these would need to be addressed by exception.

- 2.21 It is proposed that the form of monitoring to be undertaken would utilise a range of data sources, including but limited to:
  - CCTV monitoring during critical peak periods at key junctions;
  - queue and delay data extracted from the Urban Traffic Control (UTC) System;
  - feedback on prevailing traffic conditions from Police Scotland, Edinburgh Trams and Lothian Buses and the relevant neighbourhood partnership teams, via the City Wide Traffic Management Group (CWTMG) and internal reporting processes within Services for Communities;
  - the selected deployment of mobile traffic counting equipment on key links leading into and out of the city centre eg the A90, the A8, Queen Street, Lothian Road, Leith Walk, North Bridge and The Mound to establish and quantify changes in demand over time. A proposal for a set of monitoring sites is set out in Plan 2, Appendix A; and
  - Co-ordination with the monitoring associated with the Experimental Traffic Regulation Order (ETRO) for George Street.
- 2.22 It is intended that the outcome of this monitoring process and any subsequent proposals would be set out in a future report to the Transport and Environment Committee in late 2015.

#### **Co-ordination with Other Projects**

- 2.23 Statutory liaison and co-ordination between the Planning Authority and the Roads Authority is an established process. Edinburgh Trams Ltd has been confirmed as a transport authority under the terms of the New Roads and Streetworks (Scotland) Act 1991. As a transport authority, Edinburgh Trams will be formally consulted at an early stage within the statutory approval processes. This will afford the opportunity for consideration to be given to potential implications of development on tram operations.
- 2.24 For imminent construction and committed projects, the Council established the CWTMG in 2010 to consider and co-ordinate the combined traffic impact of works across all neighbourhoods in the city. The group includes CEC Roads/Neighbourhoods, Police Scotland, Lothian Buses as well as Edinburgh Trams. As part of its role, the CWTMG will consider and review potential third party projects which could impact upon tram operations on an ongoing basis.

## 3. Recommendations

- 3.1 It is recommended that the Committee:
  - 3.1.1 notes the contents of this report;
  - 3.1.2 notes the intention to enhance the directional signage advising traffic route choices around the city centre, specifically on Lothian Road, the West Approach Road, Haymarket, the West End and on Queensferry Road;
  - 3.1.3 notes the intention to enhance and reinforce road markings and signage to regulate access to trams only at the junction of Princes Street with South St Andrew Street and at the junction of North St Andrew Street with York Place; and
  - 3.1.4 agrees to allow a period of 12 months after commencement of tram passenger operations to monitor traffic movements around the city centre in order to identify emerging issues after this period and that a further report be submitted to Committee which assesses the situation and brings forward proposals as appropriate.

## Mark Turley

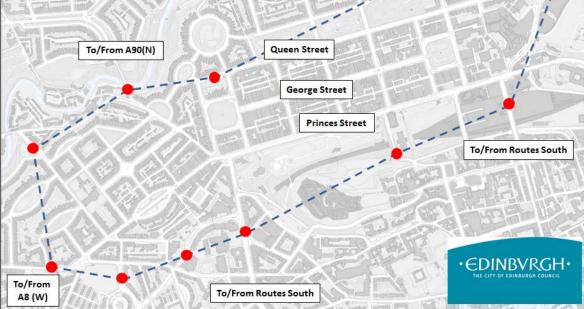
Director of Services for Communities

## Links

Coalition pledges	<ul> <li>P18 – Complete the tram project in accordance with current plans</li> <li>P47 – Set up a city-wide Transport Forum of experts and citizens to consider our modern transport needs</li> </ul>
Council outcomes	<b>CO9</b> - Edinburgh residents are able to access job opportunities <b>CO22</b> – Moving efficiently – Edinburgh has a healthy transport system that improves connectivity and is green, healthy and accessible
Single Outcome Agreement	<ul> <li>SO1 – Edinburgh's Economy delivers increased investment, jobs and opportunities for all</li> <li>SO4 – Edinburgh's communities are safer and have improved physical and social fabric</li> </ul>
Appendices	Plan 1 - Outline of City Centre Enhanced Signage & Routeing

## **Appendix A**





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