

Licensing Sub-Committee of the Regulatory Committee

9.30am, Monday, 11 December 2023

Objections to TRO/23/17, Magdala Crescent

Executive/routine
Wards

Ward 11 - City Centre

1. Recommendations

- 1.1 It is recommended that Licensing Sub-Committee:
 - 1.1.1 Approves setting aside the 40 objections received to Traffic Regulation Order TRO/23/17 and making the Order as advertised;
 - 1.1.2 Notes the commitment provided within the report to post-implementation monitoring, including conducting traffic surveys on each of the affected streets in 'the Crescents' during Spring 2024; and
 - 1.1.3 Notes that, should these surveys record traffic levels of more than 300 vehicles per hour during the peak period in any of the affected streets, or if the level of traffic is affecting the operation of the cycleway or continuous footway, a report will be prepared for Transport and Environment Committee with proposed mitigation measures.

Paul Lawrence

Executive Director of Place

Contact: Rurighd Ahluwalia-McMeddes, Senior Project Manager – Active Travel Implementation

E-mail: Rurighd.McMeddes@edinburgh.gov.uk | Tel: 0131 469 3606

Objections to TRO/23/17, Magdala Crescent

2. Executive Summary

- 2.1 This report details the objections received in response to the Statutory Consultation for Traffic Regulation Order (TRO) TRO/23/17 and recommends setting aside the objections and making the Order as advertised. It also commits to monitoring the traffic impacts arising from the changes and bringing forward proposed mitigations if the impacts are more significant than predicted.

3. Background

- 3.1 The Council is introducing a protected cycleway along Haymarket Terrace as part of the wider City Centre West to East Cycle Link and Street Improvements (CCWEL) project. Works commenced in January 2022 and are projected to run until early 2024.
- 3.2 Traffic Regulation Order TRO/17/91 and Redetermination Order RSO/18/05 have previously been promoted for the section of CCWEL at Haymarket Terrace. Objections to these orders were reported to Transport and Environment Committee on 20 June 2018. Both Orders were subsequently made and are now in effect.
- 3.3 Many objectors to TRO/17/91 raised concerns that the proposals would increase traffic levels on Magdala Crescent and Douglas Crescent and suggested that a one-way traffic restriction should be introduced on Magdala Crescent to mitigate this. Subsequent traffic modelling undertaken by the Council confirmed that the proposals were likely to increase traffic levels on these streets and that the suggested additional traffic restriction would mitigate this.
- 3.4 In March 2023 the Executive Director of Place approved the advertisement of a further Traffic Regulation Order, TRO/23/17, to introduce a one-way traffic restriction at the southern end of Magdala Crescent as part of the ongoing CCWEL construction works.
- 3.5 TRO/23/17 is being promoted under Section 1 of the [Road Traffic Regulation Act 1984](#) (the 1984 Act). The detailed process for making a TRO is set out in the [Local Authorities Traffic Orders \(Procedure\) \(Scotland\) Regulations 1999](#) (the 1999 Regulations). Given the nature of the proposals within TRO/23/17, the 1999 Regulations permit the Council, as Roads Authority, the power to decide how to

determine any unresolved objections and to decide whether to proceed to make the Order.

- 3.6 Paragraph 86 of Appendix 6 of the Council's [Scheme of Delegation to Officers](#) delegates authority to the Executive Director of Place to make traffic orders where there have been no more than six objections received from the public and where there have been no statutory objections. In all other circumstances, objections are referred to the relevant Committee for a decision on how to proceed.
- 3.7 In these circumstances, Committee may either:
- 3.7.1 Approve making the TRO as advertised;
 - 3.7.2 Approve making the TRO with minor modifications, providing that such modifications would not extend the application of the order or increase the stringency of any prohibition or restriction contained within it (Regulation 13 of the 1999 Regulations);
 - 3.7.3 Direct that a public hearing is to be held on the proposed TRO, chaired by an independent person (Regulation 8 of the 1999 Regulations);
 - 3.7.4 Approve making the TRO in part; or
 - 3.7.5 Decide not to make the TRO.

4. Main report

- 4.1 In line with the statutory requirements for consultations being carried out under the terms of the 1984 Act and the 1999 Regulations, the draft Traffic Regulation Order TRO/23/17 was advertised between 25 August and 15 September 2023. During this period the Council received 40 representations, including one from the West End Community Council, each detailing objections to the proposed TRO.
- 4.2 Of the 40 representations, all are considered to contain material objections. There were no Statutory Objections to this TRO. The representations received and the Council's response are set out in detail in Appendix 1. The objection received from the West End Community Council is included in full in Appendix 2.
- 4.3 The primary theme of the objections is that introducing a one-way traffic restriction on Magdala Crescent will result in increased traffic flows on parallel routes, in particular Eglinton Crescent and Coates Gardens. Objectors also raise related concerns arising from higher traffic levels on these streets (such as increased noise and air pollution and perceived adverse impacts on road safety) in addition to questioning the fairness of diverting traffic currently using one street onto another.
- 4.4 In addition, objectors raise procedural concerns around the processes followed in the lead up to advertising TRO/23/17, the viability of the information which supports its inclusion in the scheme and the legality of the proposals in terms of their adherence to relevant legislation.

- 4.5 Some objectors, including the West End Community Council, make suggestions for alternative arrangements, which are presented as achieving the same or similar ends with reduced negative impacts. These suggestions are not, in themselves, material objections and would often require further TROs to be promoted to allow their implementation. Consideration of these suggestions is included in Appendix 1.

Increased traffic on Eglinton Crescent and Coates Gardens

- 4.6 Following the concerns raised in 2018 in relation to TRO/17/91 (refer to para 3.3 above), the Council conducted traffic surveys of the area, and utilised this data to conduct a traffic modelling exercise in 2019 to consider the likely effect of the proposals on traffic volumes in the affected streets. A summary of the results is presented in Appendix 3 and the full traffic modelling report is provided in Appendix 4.
- 4.7 It is acknowledged that the traffic survey data that informed this exercise is now several years old; however, as it reflects a pre-Covid baseline, it provides a 'worst case' scenario for the predicted traffic impacts of the changes that are now being implemented.
- 4.8 The modelling exercise considered the likely change in the number of vehicles travelling on a given street in both directions during both AM and PM peak traffic periods. This is expressed as the number of vehicles per peak hour (vph), which is the number of vehicles travelling in either direction during the busiest hour of the day at that location. This is normally the hour between 8.00am and 9.00am.
- 4.9 In the Edinburgh Street Design Guidance – [Street Types Map](#), each of the affected streets within the 'Crescents' are defined as 'Local Streets'. The [Edinburgh Street Design Guidance](#) notes that: *"Local streets mainly provide local access, for example for residents and employees to and from their houses and places of work. These streets will not have a significant through traffic function. They can vary substantially in width depending on when they were first built. They do not have a significant public transport role."*
- 4.10 On this basis, it is considered reasonable that each of these streets should have a comparatively low level of traffic throughput. The Edinburgh Street Design Guidance provides indication on comparative traffic volumes in the context of designing for cycle use, which is helpful in this regard. As set out in the [Factsheet for Designing for Cycling](#), streets with less than 150vph are considered 'very low flow', streets with 150 - 300vph are considered 'low flow', and streets with 300 - 800vph are considered 'medium flow'.
- 4.11 The traffic surveys conducted in 2018 provided the following baseline traffic levels at each of the four streets primarily affected by TRO/23/17:
- 4.11.1 Magdala Crescent – 347vph;
 - 4.11.2 Douglas Crescent – 266vph;
 - 4.11.3 Eglinton Crescent (w) – 148vph; and
 - 4.11.4 Coates Gardens – 141vph.

- 4.12 It can be seen that, using the thresholds set out above, in the baseline scenario Coates Gardens and Eglinton Crescent experience 'very low flow', Douglas Crescent experiences 'low flow', while Magdala Crescent experiences 'medium flow'.
- 4.13 The modelling exercise which was conducted predicted that, under the CCWEL proposals detailed in TRO/17/91, most streets in 'the Crescents' would see a reduction in traffic volume, however Magdala Crescent and Douglas Crescent would see increased levels of traffic, resulting in far higher levels of traffic than other streets as shown below:
- 4.14 Traffic levels with only TRO/17/91:
- 4.14.1 Magdala Crescent – 396vph;
 - 4.14.2 Douglas Crescent – 329vph;
 - 4.14.3 Eglinton Crescent (w) – 155vph; and
 - 4.14.4 Coates Gardens – 74vph.
- 4.15 The proposals in TRO/17/91 therefore result in a considerable imbalance between the levels of traffic on affected side streets from Haymarket Terrace, with both Magdala and Douglas Crescents experiencing increased traffic levels and 'medium flow'.
- 4.16 The modelling exercise considered the impact on traffic levels in these streets with the additional introduction of a one-way northbound traffic restriction on Magdala Crescent. Under this scenario, most streets in 'the Crescents' would see a reduction in traffic volume, including Magdala Crescent and Douglas Crescent. While Coates Gardens and Eglinton Crescent (w) would see an increase in traffic as shown below:
- 4.17 Predicted traffic levels with both TRO/17/91 and TRO/23/17:
- 4.17.1 Magdala Crescent – 201vph;
 - 4.17.2 Douglas Crescent – 235vph;
 - 4.17.3 Eglinton Crescent (w) – 165vph; and
 - 4.17.4 Coates Gardens – 196vph.
- 4.18 Under this arrangement, all four of these streets would see comparable traffic volumes of around 200vph and all streets are predicted to experience a level of traffic volume that would be considered 'low flow', consistent with their status as Local Streets under the Edinburgh Street Design Guidance.
- 4.19 The proposals contained in TRO/23/17 were requested by objectors to TRO/17/91, who expressed concerns about the introduction of one-way restrictions on Coates Gardens and Rosebery Crescent without similar restrictions being introduced on Magdala Crescent. The modelling exercise predicts that the impact of the additional traffic restriction on Magdala Crescent would be near parity between affected streets and an appropriate level of traffic on each.

- 4.20 Meanwhile the impact of not proceeding with TRO/23/17 would be a considerable imbalance in the levels of traffic between different streets; with Magdala and Douglas Crescents (already the busiest streets) subject to increased levels of traffic. On this basis, this report recommends that the objections are set aside, and the order is made as advertised.

Proposed Monitoring and Consideration of Mitigations

- 4.21 Traffic modelling is a valuable tool in assessing potential consequences of proposed alterations to the traffic network, however this does not mean that it is perfect. Several objectors have raised concerns that the predictions made in the modelling exercise may not turn out to be accurate, and that traffic on some streets in 'the Crescents' following these changes may be higher than anticipated.
- 4.22 It is also noted that Coates Gardens will have a 'continuous footway' arrangement at its junction with Haymarket Terrace where vehicles must cede priority to both pedestrians and cyclists crossing Coates Gardens. This arrangement is best suited for side roads with low traffic flows and high numbers of crossing movements. If the volume of traffic on Coates Gardens is too high, the operation of this crossing could be compromised.
- 4.23 It is therefore proposed that post-implementation traffic surveys should be conducted, utilising the same methodology as those undertaken in 2018. If the surveys record that any of the streets within 'the Crescents' are experiencing traffic volumes greater than 300vph during any peak period or is affecting the operation of the continuous footway crossing, a report will be prepared for Transport and Environment Committee at the earliest availability with proposed mitigation measures.

Concerns regarding noise pollution

- 4.24 Some objectors have raised concerns over increased noise pollution arising from displacement of traffic from Magdala Crescent onto Coates Gardens. The former is a street with buildings on one side and an asphalt surface, the latter is a street with buildings on both sides and a setted surface. As such, it is reasonable to assert that the noise impact of a given vehicle movement will be greater on Coates Gardens than on Magdala Crescent.
- 4.25 The modelling exercise predicts that traffic levels on Coates Gardens will rise by an additional 55 vehicles during the AM peak traffic period, to 196vph. While this represents a 39% increase, this level of traffic remains well within the threshold for 'low flow'. As such, the level of noise pollution experienced can still be expected to be minimal.

Concerns regarding air pollution

- 4.26 Some objectors have raised concerns over increased air pollution arising from displacement of traffic from Magdala Crescent onto Coates Gardens. The former is a street with buildings on one side, the latter is a street with buildings on both sides. As such, it is reasonable to assert that the air quality impact of tailpipe emissions

will be greater on Coates Gardens than on Magdala Crescent, due to the more limited space for pollutants to disperse.

- 4.27 As noted previously, the modelling exercise predicts that traffic levels on Coates Gardens will rise by an additional 55 vehicles during the AM peak traffic period, to 196vph. Although this represents a 39% increase, this level of traffic remains well within the threshold for 'low flow' of 300vph.
- 4.28 This can be compared with Haymarket Terrace which has high sided buildings on both sides and experiences roughly 4.5 times as much traffic as Coates Gardens is expected to, at approx. 900vph. Despite this, [the Council's air quality monitoring](#) shows that levels of air pollution on Haymarket Terrace have been within legal limits since 2018 and has been reducing consistently over the past few years. The predicted level of traffic on Coates Gardens following the introduction of TRO/23/17, if approved, is not therefore be considered to give rise to concerns in terms of poor air quality.

Other concerns regarding increased traffic on Eglinton Crescent and Coates Gardens

- 4.29 Objectors have raised various other concerns about increased levels of traffic on Eglinton Crescent and Coates Gardens, such as potential road safety impacts and impacts on vulnerable residents and those with protected characteristics. Each of these concerns however apply equally to the streets which will be most affected if Magdala Crescent retains two-way operation, i.e. Douglas Crescent and Magdala Crescent. Under the proposals in TRO/23/17 all of these streets are predicted to experience a 'low' level of traffic.
- 4.30 Objectors have also raised concerns about the 'fairness' of diverting traffic from Magdala Crescent to Coates Gardens, when the number of households on the former street is considerably lower than the number of households on the latter.
- 4.31 The two streets expected to see reduced traffic levels if TRO/23/17 is implemented are Magdala Crescent and Douglas Crescent, which have a combined total of 51 buildings (23 on Magdala Crescent, 28 on Douglas Crescent). The two streets predicted to see increased levels of traffic are Eglinton Crescent (west of Coates Gardens) and Coates Gardens. The combined number of buildings on these streets is 56 (44 on Coates Gardens, 12 on Eglinton Crescent).
- 4.32 The number of households that are predicted to experience increased traffic levels is therefore similar to those expected to experience reduced traffic.

Request for Late Consideration of Objections

- 4.33 The Council received requests from some objectors to consider additional material to supplement their original objections. These requests were received several weeks after the advertised closing date of the Objection Period and thus these requests were refused. As a standard practice, the Council does not accept late representations to TRO consultations. While discretion may sometimes be applied if

representations are received in the days immediately following the Objection Period, this was not the case in this instance.

5. Next Steps

- 5.1 If the Committee approves the recommendations in this report, Traffic Regulation Order TRO/23/17 will be made and will come into effect shortly thereafter.
- 5.2 Officers will also arrange for further traffic surveys to be undertaken during spring 2024 to inform post-implementation monitoring of traffic levels across ‘the Crescents’.

6. Financial impact

- 6.1 The proposals outlined in this report will have minimal financial impacts. The costs associated with advertising TRO/23/17, if made, are modest and the costs associated with implementing the proposed layout at Magdala Crescent are already included in the budgeted costs for construction of the CCWEL project.

7. Equality and Poverty Impact

- 7.1 An [Integrated Impact Assessment](#) was conducted for the CCWEL project and has been updated to reflect consideration of the proposals in TRO/23/17. Updates have reflected the inclusion of a northbound one-way traffic restriction on Magdala Crescent, at its junction with Haymarket Terrace.
- 7.2 Positive impacts have been updated to include the reduction in the impact of through traffic at this, and other streets on all road users. Negative impacts have been updated to include the impact of displaced traffic on air and noise pollution on alternative routes.
- 7.3 Mitigations have been updated to include the proposed traffic monitoring in affected streets, such as the Crescents, and consideration of mitigations as required.

8. Climate and Nature Emergency Implications

- 8.1 The impact of the CCWEL project, of which TRO/23/17 is proposed to form a part, is deemed to be have a positive impact on sustainability, by encouraging modal shift from private car to active modes of travel.

9. Risk, policy, compliance, governance and community impact

- 9.1 The CCWEL project has involved considerable stakeholder engagement and consultation since 2015. The proposals entailed by TRO/23/17 were suggested by

affected residents during the previous statutory consultation in 2018 for TRO/17/91, which introduced the relevant restrictions for the introduction of the CCWEL project.

- 9.2 TRO/23/17 has been subject to two periods of consultation, as required by the Local Authorities Traffic Orders (Procedure) (Scotland) Regulations 1999. The former provided an invitation to provide comment, while the latter provided an opportunity to object formally or to comment. The representations made as part of the latter consultation are detailed in Appendix 1, alongside the Council's responses to the concerns raised.

10. Background reading/external references

- 10.1 None.

11. Appendices

Appendix 1 – Objections and the Council's Responses

Appendix 2 – West End Community Council Objection

Appendix 3 – Summary of Traffic Modelling Data

Appendix 4 – Traffic Modelling Report

Appendix 1 – Objections and Council Response

Content	No.	Material Objection	Suggestion	Response
<p>Increase in Traffic - Noise Pollution</p> <p>272; 294; 299; 326: Coates Gardens has cobbles for approximately 80% of its length. The traffic currently travelling over cobbles as a result of the roadwork diversions, is extremely noisy and CCWEL's projected 40% increase in traffic will increase this noise. Additionally, as the road is residential on both sides the noise cannot escape therefore it reverberates and echoes.</p> <p>273: If the intention of this change is to reduce the effect of traffic on residents in the area then this would not seem like a rational decision, as one street over the same route is possible through Coates Gardens that affects twice the number of residents as Magdala Crescent (residents on both sides of street). The cobbled street also means the noise levels we incur are significantly higher than on Magdala Crescent, that is not cobbled.</p> <p>276: The new routes are much more susceptible to noise and vibration with buildings on both sides of the road particularly with a long stretch of noisy cobbled road instead of the current tarmac route. The current position is better suited by having open spaces, gardens and so better dissipates the traffic impact.</p> <p>282: The cobbles (or sets) on Coates Gardens means that additional traffic results in increased noise nuisance.</p> <p>283; 321; 321: TRO/23/17, if it went ahead, would divert traffic away from Magdala Crescent onto Coates Gardens, greatly increasing the noise and pollution in Coates Gardens. The proposal will benefit only a small number of properties/households in Magdala Crescent to the disadvantage of 3 to 4 times the number in Coates Gardens. There are houses on both sides of Coates Gardens which would trap extra pollution whereas this is an open space on one side of Magdala Crescent so pollution can disperse.</p>	36	Y	N	<p>Some objectors have raised concerns regarding the displacement of traffic from Magdala Crescent onto Coates Gardens in terms of noise pollution. The former is a street with buildings on one side and an asphalt surface, the latter is a street with buildings on both sides and a setted surface. As such it is reasonable to assert that the noise impact of a given vehicle movement will be greater on Coates Gardens than on Magdala Crescent.</p> <p>Nonetheless, the Traffic Modelling which has been carried out predicts that traffic levels on Coates Gardens will rise by an additional 55 vehicles during the AM peak period to 196vph, representing a 39% increase. This level of traffic remains well within the threshold for 'low flow' of 300vph. As such, the level of noise pollution can still be expected to be minimal and far below many other setted streets in the city.</p> <p>Should Coates Gardens see an increase in traffic greater than that predicted by the modelling exercise this impact could be exacerbated.</p> <p>The Council will conduct traffic monitoring post implementation and, should these surveys record traffic levels of more than 300 vehicles per hour during the peak period in any of the affected streets, or if</p>

Content	No.	Material Objection	Suggestion	Response
<p>284: we live in an area with cobbled streets with houses on both sides so the noise will be amplified</p> <p>285: the impact of effectively making Magdala Crescent a one-way will exacerbate the already elevated noise levels experienced by far more people in Coates Gardens than that in Magdala Crescent.</p> <p>1. Magdala Crescent and Douglas Crescent are bordered by green foliage, as is the majority of Eglinton Crescent. Green spaces/foliage help absorb traffic noise. Coates Gardens has no foliage whatsoever.</p> <p>2. Coates Gardens is the only road amongst those mentioned to have the majority of its length cobbled. Cobbled streets are noisier than paved ones - just ask the residents of Comley Bank & those on Brighton Place in Portobello.</p> <p>3. Of the streets mentioned, Coates Gardens is the only one that suffers from the "Canyon Effect. This is the "reverberation produced by multiple reflections of sound in streets framed by high buildings. This effect raises the ambient noise level in urban settings and makes it difficult to localize sounds".</p> <p>286: My primary concern revolves around the expected surge in southbound traffic passing through Coates Gardens as a result of the proposed one-way system on Magdala Crescent. Coates Gardens is a stunning lined terrace street, notable for its uninterrupted row of historic buildings from end to end. While this architectural feature lends our street its unique character, it simultaneously poses significant challenges in terms of noise and air pollution.</p> <p>The continuous row of buildings in Coates Gardens acts as an amplifier for noise, and I am deeply concerned that an increase in traffic, especially commercial vehicles, will significantly elevate noise levels. These buildings, dating back to the 1850s - 1870s, were never designed to endure the cacophony generated by traffic, and the soundproofing measures currently in place are insufficient to counteract any surge in noise levels.</p> <p>I must emphasise the impact this could have on my professional life. I work from home in a professional field that requires my participation in audio/visual meetings conducted in a distraction-free environment.</p>				<p>the level of traffic is affecting the operation of the cycleway or continuous footway, a report will be prepared for Transport and Environment Committee with proposed mitigation measures.</p>

Content	No.	Material Objection	Suggestion	Response
<p>287: Because the road surface is sets, the noise from passing vehicles is intrusive, especially when speeding. We also have the noise of trucks reversing down the street as they collect rubbish.</p> <p>288: The noise and vibration of all that traffic on the cobbled surface (one of the few left in the west end) will be intolerable.</p> <p>289; 290: Coates Gardens is entirely unsuited for increased traffic flow. Any increase in traffic would have a vastly disproportionate impact on the street for the following reasons: As a cobbled street every vehicle creates vastly increased noise pollution compared to tarmacked streets. A 40% increase in traffic would therefore generate far greater excessive noise than were this traffic to be directed down a different adjoining street such as Magdala Crescent which is tarmacked. This has not been considered by the Council in making the TRO. The Council has confirmed in response to my Freedom of Information access request (EDIR:43742) that no noise pollution impact assessment has been undertaken. Failure to do is evidence of their failure to take into account the specific attributes of the street, and therefore of their acting unreasonably. Unlike alternative streets, Coates Gardens has houses on both sides of the street. This increases the impact of any increase in noise and pollution, with the noise echoing off the hard surfaces, and the pollution unable to disperse. In contrast, Magdala Crescent has buildings only on one side of the street and gardens on the other side of the street which helps reduce the noise and allows for pollution to better disperse. Unlike alternative streets, the buildings on Coates Gardens do not have front gardens. This increases the impact of any increase in noise. In contrast, houses on Magdala Crescent have front gardens with trees/shrubs which help absorb the noise and lessen the impact of traffic. Coates Gardens includes basement flats. These suffer particular impact from road noise. The equivalent stretch of Magdala Crescent (from Haymarket Terrace to Eglinton Crescent) does not have basement flats.</p> <p>292: I am also concerned about the noise - it is already very intrusive (I'm a resident of a ground floor property with the only living space at the front of the property facing the road) due to the number of vehicles using Coates Gardens and many speeding. I thought this situation would be temporary for the CCWEL works and so have been understanding about</p>				

Content	No.	Material Objection	Suggestion	Response
<p>that. However if this is a permanent situation and it would directly affect my living conditions. There is no acoustic support to dampen the noise from the cobbles, actually quite the opposite with stone buildings creating the perfect environment to amplify the sound of the traffic.</p> <p>293; 315: The Coates Gardens residents' concerns include a reduction in amenity, increase in vehicular traffic, pollution and noise level. No investigation appears to have taken place to assess the impact of these problems.</p> <p>295: Not only this but the corridor of buildings will trap the fumes from the vehicles and amplify the noise. The noise, particularly early in the morning will be highly intrusive.</p> <p>296: I am woken up at all hours of the night due to cars and massive lorries/other large vehicles far exceeding the speed limits and creating a great disturbance on the cobbled streets, amplified by the corridor of buildings (with no front gardens to separate us from the pollution, noise pollution and other sorts). Other streets in the area do not have cobbled streets or this corridor of buildings, so it seems to me that Coates Gardens was not the right choice to redirect traffic down. This traffic order has made our street more unsafe, noisy and polluted. It has changed the character of our street and decreased my quality of life in depriving me of sleep when I work early hours.</p> <p>297: Intrusive noise would also be inevitable</p> <p>298: I am a resident of Coates Gardens and I believe that the above traffic order will have a detrimental impact on Coates Gardens (far greater than any impact that is currently experienced on Magdala Crescent). Currently there is a two-way traffic system in place at Magdala Crescents, however if the above traffic order was to be implemented this will increase general traffic on Coates Gardens (the next street). This will have the following negative impacts:</p> <ul style="list-style-type: none"> • This will have a far greater negative impact on local residents in the area because Magdala Crescent has residential buildings on one-side of the street (the other side of the street are public gardens) whereas Coates Gardens has residents living on both sides of the streets. 				

Content	No.	Material Objection	Suggestion	Response
<ul style="list-style-type: none"> • There will be greater traffic through Coates Gardens if cars are unable to drive through Magdala Crescent. • Coates Gardens is a cobbled street whereas Magdala Crescent is not. The above traffic order will increase traffic on Coates Gardens and will increase noise pollution (due to the cobbles) on the street. This is particularly an issue at night and early in the morning. <p>301; 302; 314: I am writing to register my objection to this decision, mainly on the grounds that Coates Gardens is a cobbled street and any traffic makes substantial noise (as opposed to Magdala Crescent which is a tarmac street).</p> <p>312: As there are houses on both sides of the street, without front gardens, large trees, and open spaces (this being different from other streets in the area), traffic noise cannot be absorbed and increased traffic would worsen the road noise due to an echo effect. The same applies to air pollution.</p> <p>313: I would like to object to the above proposal on the basis of the negative effects on Coates Gardens residents: Increased traffic in a cobbled street. Increased noise pollution.</p> <p>316: The entire length of the undulating street is cobbled and the increase in traffic would significantly increase noise levels. None of this noise can be absorbed or reduced with changes to our property (conservation area prevents me from upgrading my single pane windows)</p> <p>317: A huge increase in traffic flow down a cobbled street, will cause excessive noise on a surface simply not able to withstand such an increase in traffic volume and heavy traffic too. The street of Coates Gardens has residents to both sides with no buffer of large trees or gardens like other streets in the surrounding area. Being a conservation area with listed buildings, windows are single pane glazed meaning noise is not reduced for residents.</p> <p>318: One of us suffers with tinnitus and now wakes up regularly in the middle of the night with ears ringing due to vehicles illegally speeding</p>				

Content	No.	Material Objection	Suggestion	Response
<p>across the cobbles. There is no traffic calming and no enforcement of the 20mph speed limit.</p> <p>Coates Gardens is maintained with its historic cobbles on heritage grounds. It does not make sense for the Council to effectively designate this street one of the main routes out of town.</p> <p>When one weighs for air pollution (longer route, built-up residential on both sides) and noise pollution from the Coates Gardens cobbles one sees that the negatives outweigh the positives very substantially.</p> <p>It does not directly affect us, but we would also like the Council to bear in mind the increased noise and risk to the vulnerable people housed on Coates Gardens and the impact on the trade of the Hotels on the route, particularly given their guests will have their sleep affected.</p> <p>324: Unlike the tarmac surface of other surrounding roads, Coates Gardens' cobblestone surface generate excessive noise. The noise level generated by increase in traffic flow on cobblestone surface is differently from roads with tarmac surface.</p> <p>Coates Gardens are front to front stone building, noise and fumes generated here will further echo/circulate between the stone buildings. In comparison, one side of Magdala Crescent is a big open space with no building, easily facilitate noise/fumes dissipation.</p> <p>Coates Gardens has no trees/front gardens. While, both sides of Magdala Crescent have big trees acting as acoustic insulation and the only side of Magdala Crescent with buildings all have front gardens that can absorb/isolate noise.</p> <p>Basement level residence on both sides of Coates Gardens with their windows facing cobblestone road surface will suffer more with your current proposal. Noting: no basement level residences on Magdala Crescent.</p> <p>325: The proposed changes will inevitably lead to significantly increased traffic on Coates Gardens. As a previous resident I know that Coates Gardens is a cobbled, quiet, residential street and is unsuited for significant through traffic, which would cause disproportionate detriment to the residents.</p> <p>328: There is already disturbing noise and vibration generated when a car passes along the cobbled surface of Coates Gardens even worse if a heavier vehicle.</p>				

Content	No.	Material Objection	Suggestion	Response
<p>This is a historic cobbled street not designed for modern infrastructure. Noise will echo off the buildings opposite.</p> <p>329: Unlike other streets in the area Coates Gardens is cobbled which generates excessive noise when driven on, this will impact residents as traffic volume increases.</p> <p>Coates Gardens does not have mid street gardens or front gardens to absorb traffic noise and unlike other streets in the area there are residents on both sides meaning more people will be affected by the proposed change.</p>				
<p>Increase in Traffic - Air Pollution</p> <p>272; 294; 299; 326: Coates Gardens has residential properties on both sides unlike other roads which have open spaces or gardens on one side. As a result, the increase in pollution from greater vehicle numbers will not disperse quickly.</p> <p>282: Coates Gardens has families living on both sides of the road and traffic pollution will disperse more slowly than adjacent streets where only one side of the street has housing.</p> <p>283; 321; 321: TRO/23/17, if it went ahead, would divert traffic away from Magdala Crescent onto Coates Gardens, greatly increasing the noise and pollution in Coates Gardens. The proposal will benefit only a small number of properties/households in Magdala Crescent to the disadvantage of 3 to 4 times the number in Coates Gardens. There are houses on both sides of Coates Gardens which would trap extra pollution whereas this is an open space on one side of Magdala Crescent so pollution can disperse.</p> <p>285: More traffic = more noise, never mind elevated pollution levels, elevated risk of road traffic collisions & injury, etc.</p> <p>286: My primary concern revolves around the expected surge in southbound traffic passing through Coates Gardens as a result of the proposed one-way system on Magdala Crescent. Coates Gardens is a stunning lined terrace street, notable for its uninterrupted row of historic buildings from end to end. While this architectural feature lends our street its unique character, it simultaneously poses significant challenges in terms of noise and air pollution.</p>	25	Y	N	<p>It is understandable that residents may be concerned about the impact of diverted traffic on local air quality on these streets. Tailpipe emissions are a primary factor in local air pollution and residents are correct to highlight that Coates Gardens, unlike Magdala Crescent, has high sided buildings on both sides of the street, reducing the dispersal of air pollutants. Nonetheless, it is not expected that the potential increase in traffic on Coates Gardens could worsen local air quality to an extent that would be a cause for concern.</p> <p>Air Quality in central Edinburgh has improved considerably over the past few years with levels of Nitrogen Dioxide at monitoring sites across the city showing ongoing reductions, most likely due to improving engine efficiency and fleet renewal, especially for bus fleets.</p> <p>The Council does not have an air quality monitoring station on Coates Gardens, however there are monitoring stations on Haymarket Terrace. Haymarket Terrace provides a useful comparison as it is nearby and is also a street with high sided buildings on both sides.</p>

Content	No.	Material Objection	Suggestion	Response
<p>287: It also increased pollution and reduced air quality. Unlike other streets in the West End, we have no green space and there are buildings both sides.</p> <p>289; 290: Unlike alternative streets, Coates Gardens has houses on both sides of the street. This increases the impact of any increase in noise and pollution, with the noise echoing off the hard surfaces, and the pollution unable to disperse. In contrast, Magdala Crescent has buildings only on one side of the street and gardens on the other side of the street which helps reduce the noise and allows for pollution to better disperse.</p> <p>291: I also believe the increased in traffic will result in an increase in pollution on our road. Unlike the neighbouring crescents, Coates Gardens does not benefit from open spaces or gardens to disperse the pollution.</p> <p>293; 315: The Coates Gardens residents' concerns include a reduction in amenity, increase in vehicular traffic, pollution and noise level. No investigation appears to have taken place to assess the impact of these problems.</p> <p>295: Not only this but the corridor of buildings will trap the fumes</p> <p>296: This traffic order has made our street more unsafe, noisy and polluted.</p> <p>297: The proposed changes will increase pollution, particularly given the fact both sides of our road are lined with houses so the pollution will become trapped.</p> <p>298: Increased air pollution trapped by the corridor of buildings in Coates Gardens, the impact of air pollution wouldn't be as great on Magdala Crescent given, as noted above, this street has only one side of residential buildings whereas Coates Gardens have residential buildings on both sides.</p>				<p>Following the implementation of TRO/23/17 it is predicted that Coates Gardens may experience traffic levels of up to around 200vph. In 2018 Haymarket Terrace experienced traffic levels of around 900vph, more than 4 times as much, including many buses and HGVs. At this time the monitored level of NO2 was 31µg/m3 on the north side of the road and 41 µg/m3 on the south side of the road. The legal limit is 40 µg/m3. In 2021, the most recent year of published data, these figures had fallen to 25.1 µg/m3 and 26.2 µg/m3 respectively despite Haymarket Terrace continuing to carry a considerably larger volume of traffic than Coates Gardens would ever be expected to.</p> <p>As such, while it is possible that the introduction of a one-way restriction on Magdala Crescent may result in an increase in air pollution on Coates Gardens, this would only be marginal and would not be expected to result in levels of air pollution that would be a cause for concern.</p> <p>The Council operates an Air Quality Management Area throughout the City Centre which includes Haymarket Terrace, and we have numerous Air Quality Monitoring Sites throughout the city. More information about these can be found via our website here: https://www.edinburgh.gov.uk/airquality</p> <p>It is also worth noting that the Council has introduced a Low Emission Zone across</p>

Content	No.	Material Objection	Suggestion	Response
<p>300: The massive increase of pollution to a residential area, also seems very much at odds with the overall city objectives, of cutting off "rat runs" and directing traffic towards more use of main roads.</p> <p>312: As there are houses on both sides of the street, without front gardens, large trees, and open spaces (this being different from other streets in the area), traffic noise cannot be absorbed and increased traffic would worsen the road noise due to an echo effect. The same applies to air pollution.</p> <p>313: I would like to object to the above proposal on the basis of the negative effects on Coates Gardens residents: Increased air pollution.</p> <p>318: When one weights for air pollution (longer route, built-up residential on both sides) and noise pollution from the Coates Gardens cobbles one sees that the negatives outweigh the positives very substantially.</p> <p>324: Coates Gardens are front to front stone building, noise and fumes generated here will further echo/circulate between the stone buildings. In comparison, one side of Magdala Crescent is a big open space with no building, easily facilitate noise/fumes dissipation.</p> <p>328: Furthermore the associated pollution will impact health, especially those with asthma or similar respiratory conditions.</p>				<p>the city centre and enforcement of this LEZ will commence in June 2024. While the streets affected by TRO/23/17 fall outwith the Low Emission Zone area, it is anticipated that the presence of the Low Emission Zone will encourage fleet renewal, reducing the proportion of vehicles which are non-compliant throughout the city, resulting in improvements to local air quality across a wider area. As such it is possible that Air Quality in Coates Gardens will remain stable, or improve, even in the context of a marginal increase in traffic volume on the street.</p>
<p>Impact of Current Traffic Layout Demonstrates that Modelling Incorrect/ that changes should not be made permanent 272; 294; 299; 326: The displacement of traffic from the current diversions into Coates Gardens is much greater than the number assumed in CCWEL's modelling.</p> <p>273: I live on Coates Gardens and there is already significant noise caused by traffic going down the road on the cobbles. I have moved from the front bedroom to the back due to the noise in the early hours of the morning waking me up and there is a significant worry that this will increase dramatically once the proposed traffic changes are introduced (not allowing cars onto Magdala Crescent from Haymarket Terrace).</p> <p>277: We are already experiencing Increased and dangerous traffic levels</p>	17	Y	N	<p>Some respondents have raised concerns regarding the current level of traffic using Coates Gardens while the works to build the cycleway on Haymarket Terrace are ongoing. It is noted that while the works are taking place there is already a one-way restriction on Magdala Crescent allowing for northbound traffic only and many respondents have suggested that the current layout reflects the proposal in TRO/23/17 but that the results are far worse than predicted.</p> <p>It is understandable that residents may be concerned about the current volume of</p>

Content	No.	Material Objection	Suggestion	Response
<p>Speeding vehicles Increased litter Nosy and noisy travellers that stare into our homes as though we are public display - a gross infringement of our right to enjoy our homes Higher pollution levels affecting air quality and the integrity of our listed buildings Early morning and evening traffic jams We did not pay premium property prices to live on a main thoroughfare. Millions of ratepayers money has been invested in the infrastructure to Glasgow Road and Haymarket Terrace - make use of it! Do not allow this change to be permanent.</p> <p>282: [The traffic noise on the cobbles on Coates Gardens] has been particularly noticeable through the night and early morning during the recent roadwork diversions. Noise far exceeds what would be an acceptable level for a neighbour's party or building site for example. The increase in HGVs and commercial traffic has also introduced noticeable vibration in basements flats such as mine. If the traffic volumes created by the current diversions are anything to go by, the Council's modelling of a 40% increase in traffic flow on Coates Gardens is seriously understated. Furthermore it does not take account of the impact during the night and early morning where noise disruption is a particular problem, or of the impact of the large increase in commercial traffic.</p> <p>286: Regrettably, the ongoing works to upgrade Haymarket Terrace have already introduced a considerable increase in traffic noise, affecting the quality of my work environment. Sustaining traffic levels at or beyond the current levels in the long term would significantly hinder my ability to perform effectively</p> <p>287: We have already noticed; Significant increase in traffic down Coates Gardens. We note CCWEL itself projected a 40% increase Traffic includes heavy goods vehicles unsuitable for this street Traffic frequently exceeding the speed limit</p> <p>291: There is already an increased in traffic on our street since the cycle path construction works started. The traffic is very noisy due to cars,</p>				<p>traffic. However it is important to note that this does not reflect the proposed layout. This is because while the construction works associated with the CCWEL project are ongoing Rosebery Crescent is also closed. Once these works are complete Rosebery Crescent will be open to southbound vehicles accessing Haymarket Terrace, providing a parallel route to Coates Gardens.</p> <p>It is also worth noting that the eastbound closure of Haymarket Terrace results in delivery vehicles seeking to access premises on Haymarket Terrace being required to use Coates Gardens to access loading areas. Once Haymarket Terrace has re-opened to eastbound traffic this will no longer be required.</p> <p>For these reasons the current volume of traffic on Coates Gardens does not provide a good indication of the level of traffic that could be expected under the proposals in TRO/23/17.</p> <p>The Council will conduct traffic monitoring post implementation and, should these surveys record traffic levels of more than 300 vehicles per hour during the peak period in any of the affected streets, or if the level of traffic is affecting the operation of the cycleway or continuous footway, a report will be prepared for Transport and Environment Committee with proposed mitigation measures.</p>

Content	No.	Material Objection	Suggestion	Response
<p>vans and lorries coming down the road sometimes at significant speed. This is not only unsafe, but very noisy, especially for those who have bedrooms at the front of the house like our young daughter. She has complained several times about the cars waking her up for example.</p> <p>292: Since the road works for CCWEL have started - restricting Magdala Crescent to a one way system - there has been a noticeable increase in traffic going Southbound on Coates Gardens, and particularly worrying at dangerous speeds.</p> <p>296: I am woken up at all hours of the night due to cars and massive lorries/other large vehicles far exceeding the speed limits and creating a great disturbance on the cobbled streets, amplified by the corridor of buildings (with no front gardens to separate us from the pollution, noise pollution and other sorts). Other streets in the area do not have cobbled streets or this corridor of buildings, so it seems to me that Coates Gardens was not the right choice to redirect traffic down. This traffic order has made our street more unsafe, noisy and polluted. It has changed the character of our street and decreased my quality of life in depriving me of sleep when I work early hours.</p> <p>300: As a resident of Coates Gardens, my quality of life has deteriorated significantly since a huge increase of traffic has been diverted down Coates Gardens, as a consequence of the 8 months of roadworks scheduled in the surrounding area. To be now confronted with plans to make this arrangement permanent is a bitter pill for residents to swallow. There is now a constant noise, all day and all night, of a greatly increased volume traffic, speeding down the cobbled street. Speeding on Coates Gardens has always been an irritant, but with this increased level of traffic, it presents a clear and present danger to residents moving their cars from a parking bay onto the road. I have had several near misses myself from drivers ridiculously speeding down Coates Gardens with no regard for parked cars moving off.</p> <p>312: The current road work diversions already indicate an increase in commercial goods vehicles which has increased the noise level. The traffic travelling through Coates Gardens because of the current roadwork diversions has made the street less safe for vulnerable people</p>				

Content	No.	Material Objection	Suggestion	Response
<p>and children and they are an indication of the safety implications of the proposed changes.</p> <p>318: The temporary closure of Magdala Crescent south-bound has shown that the modelling figures are wrong and there has been no decrease in traffic; it has simply shifted from one residential street to another, and now affects many more residents than previously. We live overlooking the junction with Coates Gardens and Eglinton Crescent and work from home so have had a full opportunity to observe the consequences. We have seen a large increase in noisy, polluting traffic (including many heavy / commercial vehicles) travelling down Coates Gardens. The increase overnight has been particularly significant and traffic now presents a major interference with sleep, having previously been minor.</p> <p>320: I moved here in 2015 as it was, up until this year, a quiet residential street with the odd taxi bombing down it from time to time. Now however we have constant car flow and all types of vehicle - articulated lorries, car transporters, coaches and every other type of commercial vehicle coming down the street. taking the corners badly and pulling U-turns carelessly.</p> <p>329: With the current disruptions in place we are already seeing frustrated drivers using Coates Gardens as a quick exit and speeding down with no regard for residents' safety, as someone with a young daughter it concerns me that this is an accident waiting to happen if made permanent.</p>				
<p>Increased risk of speeding / accidents on those streets with increased traffic levels or new one-way designations</p> <p>276: Increased risk of accidents particularly at the junctions and with cars parking along the longer and indirect routes. It's worrying how many near misses we see with traffic turning and going into spaces. The proposed plan has more safety issues.</p> <p>282: There is no traffic calming on Coates Gardens and speeding is commonplace, and the norm during commuting hours when Coates Gardens is used as a 'rat run'. The design of the street (downhill, wide and with an angled entrance to the North) encourages speeding.</p>	17	Y	N	<p>All of the streets affected by the proposals in TRO/23/17 have a 20mph speed limit and under the proposed changes are anticipated to experience traffic levels which can be considered 'low flow' of below 300vph. As such the risk of collisions on affected streets remains low.</p> <p>The Council will conduct traffic monitoring post implementation and, should these surveys record traffic levels of more than</p>

Content	No.	Material Objection	Suggestion	Response
<p>Neighbouring residents with young families have voiced particular concern over this. As a cyclist I am also concerned about the speed of traffic encountering the new cycle route to the South.</p> <p>283; 321: I am particularly concerned about the increased amount of traffic on a slip road outside my flat due to this proposal and ineffective traffic controls. At the moment, traffic travels at speed in both directions on this slip road even though it is only one way. This will inevitably result in a serious accident one day. Heavy lorries also use this to reverse down, in the wrong direction to turn around. The lack of routes will force more vehicles to use this slip road. greatly increasing chance of serious accident and damage to my property and maybe even risk to my own safety.</p> <p>I was travelling in the correct direction along Glencairn Crescent a few months back and a medium sized transit van was travelling towards me at great speed in the wrong direction. I have constantly seen vehicles around here travelling the wrong way down a 1 way street.</p> <p>285: More traffic = more noise, never mind elevated pollution levels, elevated risk of road traffic collisions & injury, etc.</p> <p>286: Furthermore, I have reservations about whether traffic traveling southbound through Coates Gardens will adhere to speed limits, potentially jeopardising the safety of residents.</p> <p>288: This will significantly reduce our quality of life, and make the street more dangerous to children, pets and pedestrians. In short, it's horrible and it's unfair.</p> <p>292: A main concern is the speed that many drive at - going at dangerous speeds on a street that has two sides of parking, and houses many families, residents, hotel guests and vulnerable adults.</p> <p>295: This change would significantly increase the volume of traffic and commercial traffic moving up and down this road which will have a huge impact on safety for families with children living here.</p> <p>296: This traffic order has made our street more unsafe, noisy and polluted.</p>				<p>300 vehicles per hour during the peak period in any of the affected streets, or if the level of traffic is affecting the operation of the cycleway or continuous footway, a report will be prepared for Transport and Environment Committee with proposed mitigation measures.</p>

Content	No.	Material Objection	Suggestion	Response
<p>297: already i've noticed a number of cars speeding down the road.</p> <p>312: The traffic travelling through Coates Gardens because of the current roadwork diversions has made the street less safe for vulnerable people and children and they are an indication of the safety implications of the proposed changes.</p> <p>313: I would like to object to the above proposal on the basis of the negative effects on Coates Gardens residents: Safety issues in street with many young families.</p> <p>317: The Council have no respect for residents on this street. It is a residential street with a large number of families with small children. These proposed changes will make crossing the road even more difficult and potentially cause accidents. It is already at times dangerous with small children due to the speed that people and heavy vehicles transit down the street as if it is a main trunk road, even before proposed changes. The proposed one way system for Magdala Crescent only encourages speeding along this section.</p> <p>318: We write to object to the provision pertaining to Magdala Crescent. The proposal is unsafe. The proposed change will see some 15,000 vehicles per week will exit right from Coates Gardens. The Council has stated "On quiet low speed streets, there may be no need for a cycle lane" and that "Where there is good visibility cyclists and on-coming drivers should be able to negotiate passage safely". This volume of traffic is not indicative of a quiet street. At peak times this volume of traffic will see vehicles queuing to exit. Traffic surveys show larger, heavier vehicles also use this rat-run. It is extremely likely that vehicles will queue over the cycle lane, negating the positive impact of the cycle lane and increasing the likelihood of vehicular-cyclist collisions.</p> <p>320: There is a serious need focus on the most important thing which is road safety. I would really like to see how the council will ensure the correct safety for Coates Gardens and the west end in general whilst</p>				

Content	No.	Material Objection	Suggestion	Response
<p>pushing traffic down alternate routes due to the new cycle lane restrictions.</p> <p>327: The changes to prevent southbound traffic from accessing Haymarket Terrace will effectively mean one-way vehicular traffic (North) on Magdala Crescent. One-way streets see an increase in speed and the proposal does not include any speed reduction measures in Magdala Crescent, nor any measures to ensure the safe crossing of pedestrians across the junction at Magdala Crescent and Eglinton Crescent. The diversion currently in place has seen speed restriction measures put into place in Magdala Crescent. It has seen the Magdala Crescent Junction with Eglinton Crescent narrowed and a dedicated crossing point across this junction. These are all safety measures, none of which have been incorporated into the revised design being proposed. The City Mobility Plan sets out that wide junctions will be narrowed to provide a safe crossing for pedestrians. The narrowing of the Magdala Crescent / Eglinton Crescent junction should be included in the proposals for the changes to Magdala Crescent.</p>				
<p>Fairness in Impact on Streets</p> <p>272; 294; 299; 326: The change to the flow of traffic into Coates Gardens was not in the original proposals and these have been changed as a result of Magdala Crescent's understandable representation. This decision has benefitted 11 houses (possibly 40 to 45 flats) but significantly disadvantaged 50 other households (possibly 150+ flats), without giving these disadvantaged households an opportunity for input.</p> <p>276: Increased and unacceptable traffic, noise, pollution and inconvenience to a much larger number of residents along the newly proposed routes. Relatively few residents benefit from the new plans at the expense, and greater disadvantage, of a significantly larger number of people along the longer routes. Maintaining the status quo would seem more appropriate.</p> <p>283; 321; 321: TRO/23/17, if it went ahead, would divert traffic away from Magdala Crescent onto Coates Gardens, greatly increasing the noise and pollution in Coates Gardens. The proposal will benefit only a small number of properties/households in Magdala Crescent to the disadvantage of 3 to 4 times the number in Coates Gardens. There are</p>	13	Y	N	<p>Objectors have also raised concerns about the 'fairness' of diverting traffic from Magdala Crescent to Coates Gardens, when the number of households on the former is considerably lower than the number of households on the latter. The two streets expected to see reduced traffic levels if TRO/23/17 is implemented at Magdala Crescent and Douglas Crescent, which have a combined total of 51 (23 on Magdala Crescent, 28 on Douglas Crescent).</p> <p>The two streets predicted to see increased levels of traffic if TRO/23/17 is implemented are Eglinton Crescent (west of Coates Gardens) and Coates Gardens. The combined number of buildings on these streets is 56 (44 on Coates Gardens, 12 on Eglinton Crescent).</p>

Content	No.	Material Objection	Suggestion	Response
<p>houses on both sides of Coates Gardens which would trap extra pollution whereas this is an open space on one side of Magdala Crescent so pollution can disperse. Edinburgh Council/CCWEL appears to be treating people in Magdala Crescent proportionally much better than those in Coates Gardens, it doesn't make any sense.</p> <p>289; 290: Unlike alternative streets, Coates Gardens has houses on both sides of the street. This means far greater numbers of households are affected by this change than for instance were the new regulations not brought into force and traffic able to enter and exit down Magdala Crescent as currently. To be specific, Coates Gardens consists of 39 buildings, each 4 stories high and most divided into 4 flats. The equivalent stretch of Magdala Crescent (from Haymarket Terrace to Eglinton Crescent) consists of just 10 buildings, each only 3 stories high. In short, that means likely well over 4 times the number of residents will be adversely impacted than were this traffic instead to be routed via Magdala Crescent.</p> <p>Why a proposal has been made to benefit the much smaller number of residents on Magdala Crescent, who were given far greater opportunity to input to the proposals, to the clear disadvantage of a far greater number of residents on Coates Gardens -why has this bias in decision making taken place?</p> <p>311: This TRO has been designed merely to provide an advantage to the Magdala and Douglas Crescent residents by disadvantaging those in Eglinton, Coates and Glencairn. This is neither fair nor does it address the problem, it merely moves it about.</p> <p>318: The proposal benefits 11 houses on Magdala Crescent between Haymarket Terrace and the junction with Coates Gardens / Eglinton Crescent, but negatively impacts 50 houses on Coates Gardens and Eglinton Crescent. When one weights for air pollution (longer route, built-up residential on both sides) and noise pollution from the Coates Gardens cobbles one sees that the negatives outweigh the positives very substantially.</p> <p>320: The Magdala route has long been the alternate route to Haymarket terrace. With full well laid tarmac and only 11 houses on the east side of the street. The other side is open to donaldsons college allowing for</p>				<p>As such the number of households affected is broadly equivalent between those predicted to experience increased, vs decreased levels of traffic.</p> <p>Under the proposals within TRO/23/17 to introduce a one-way restriction at the southern end of Magdala Crescent, these streets are projected to have the following levels of traffic (expressed as the number of vehicles in either direction during the peak hour in a typical week day):</p> <p>Magdala Crescent – 201vph Douglas Crescent – 235vph Eglinton Crescent (w) – 165vph Coates Gardens – 196vph</p> <p>As such, the proposals are predicted to establish a roughly even distribution of traffic between the affected streets and affect a roughly equivalent number of properties.</p>

Content	No.	Material Objection	Suggestion	Response
<p>noise and pollution to disperse much easier. This is a well known route for commuters, buses and taxis. I cannot see a good argument why this should be changed to a much more densely populated family street of Coates gardens which also has many bed and breakfasts for tourists. The population of these two streets is vastly different. Coates Gardens has cobbles and the traditions of old west accommodation. Magdala only has these few houses who are already used to the traffic flow and have bought their houses knowing this is the way it is.</p>				
<p>Construction work commencement 272; 294; 299; 326: Balfour Beatty has commenced the work to alter the road and pavement layout at the bottom of Magdala and Coates Gardens. Concerns regarding how this can be undertaken in advance of the completion of the TRO process, and that this suggests TRO consultation responses will be ignored.</p> <p>283; 321: It looks to me like Edinburgh Council/CCWEL have already made the infrastructure changes for TRO/23/17 at the bottom of Magdala Crescent, the road is not wide enough now for 2-way traffic. Please could you confirm if this is the case or not? If this is the case then that would either make a mockery of the TRO process as this would indicate Edinburgh Council expects it to go ahead regardless, or shows that Edinburgh Council/CCWEL is not spending public funds efficiently as it would involve extra cost to change it if the objections are upheld.</p> <p>285: Seeing the work that Balfour Beatty has already carried out in Haymarket Terrace has made the changes envisaged in the TRO a <i>fait accompli</i>, one can't help but wonder why the window for objections was scheduled <u>after</u> this work was carried out. To an objective observer, it would appear that the Council had no intention of taking any objections into account with respect to the TRO now that roadwork alterations have already been done. Is there another conclusion that may be drawn from this? There are sufficient court cases where a Judicial Review has found that the council in question has been in breach of the regulations in respect of the statutory consultation process and yet have refused to order the said council to reverse its decision out of concern that "cash-strapped" councils would have to incur more costs. So much for justice. No doubt the council is aware of this & ratepayers can only speculate whether this has any influence in such decisions.</p>	13	Y	N	<p>Respondents have raised concerns related to the apparent ongoing work at the junction of Magdala Crescent and Haymarket Terrace. In particular, that the current construction work implies that the decision to introduce the restrictions detailed in TRO/23/17 at the southern end of Magdala Crescent are a <i>fait accompli</i> with no option to retain two-way traffic flow at this location.</p> <p>This is not correct. The construction work undertaken at Magdala Crescent to date is consistent with both one-way and two-way traffic.</p>

Content	No.	Material Objection	Suggestion	Response
<p>291: I have also been made aware that this change of flow in traffic wasn't in the original CCWEL proposal and I can see that work on it has already started. Why is this happening if there is supposed to be a consultation period?</p> <p>293; 315; 315: Despite this being a proposal construction work at the junction is almost complete and has reduced the width of the junction from 8.00 metres to 6.00 metres prior to the consultation period. This has been pointed out to Councillor McFarlane who informed us on the West End Residents Facebook page that "I have had confirmation from the officers that whether or not the TRO is adopted it will not actually affect what is built in this location therefore they are cracking on. It won't impact public consultation." If that is the case why has the work already been carried out? This would suggest that it is a fait accompli!</p> <p>317: Despite being invited to voice our objections, it appears the work to alter to bottom on the street joining Haymarket Terrace has already been completed anyway.</p> <p>324: Infrastructure changes for TRO/23/17 already took place before TRO consultations. In my opinion, infrastructural changes for TRO/23/17 currently taking place at the bottom of Magdala Crescent should halt immediately until further study is done.</p>				
<p>Compliance with Legislation regarding impact of commercial vehicles / lack of consideration of commercial vehicles</p> <p>272; 294; 299; 326; 321: Under the 1984 act the local authority has to take into account the impact of commercial vehicles on local amenities and surroundings. Concerns that this work has not been done, and if done, has not been shared with affected residents.</p> <p>283; 321: Most of the noise and pollution comes from heavy vehicles. I believe that TRO/23/17 is demonstrating that Edinburgh Council/CCWEL isn't really considering this in respect of Coates Gardens, it is just forcing more heavy traffic along Coates Gardens rather than Magdala Crescent. As I write this a very heavy lorry reversed the wrong way down the slip road I mentioned above. Late at night these roads are used as a rat run for very heavy delivery vehicles, daisy chained to be twice the size of a normal large HGV. Edinburgh Council/CCWEL are not dealing with the issue of heavy commercial vehicles, they are just moving and</p>	12	Y	N	<p>It has been suggested by some respondents that under the Road Traffic Regulation Act 1984, the Council must <i>"take into account the impact of commercial vehicles on local amenities and surroundings"</i>. Respondent have queried what work has been undertaken in this regard.</p> <p>The above requirement is included within Section 37 of the Road Traffic Regulation Act 1984, however this only applies to any Traffic Regulation Order which is advertised with the stated purposes of a <i>"general scheme of traffic control"</i>. This is not the case for TRO/23/17 and thus</p>

Content	No.	Material Objection	Suggestion	Response
<p>concentrating the problem onto Coates Gardens and the slip road. During the summer I had a 3 day outage of my internet, phone and cable TV. This was caused by a burst water main on road junctions, likely caused by the very heavy traffic again. Most road damage/potholes are caused by heavy vehicles, yet there is no control/restriction on these in residential areas like Coates Gardens. The loss of my phone could have been fatal if I had had a fall/accident/heart attack or similar medical emergency in my home at the time and was unable to call an ambulance.</p> <p>289; 290; 324: Under the 1984 Act the local authority has to take into account the impact of commercial vehicles on local amenities and surroundings. Concerns that this has not been undertaken.</p> <p>295: This change would significantly increase the volume of traffic and commercial traffic moving up and down this road which will have a huge impact on safety for families with children living here.</p> <p>320: The change in the traffic flows recently and the long term ones proposed from the changes are of great concern. I provide some pictures and footage below of large commercial vehicles which should not be navigating Coates gardens cutting across corners and getting stuck in Coates gardens adding a health and safety risk and danger of damaging cars. (Please watch the video of the car transporter trying to reverse back up in the street and getting stuck) There is also a picture showing the damage to the corners where heavy goods vehicles are cutting across. This is really troubling what damage could be done by these vehicles and the risk they pose to the residents particularly to children and the elderly.</p>				<p>Section 37 of the Road Traffic Regulation Act 1984 does not apply.</p> <p>The impact of commercial vehicles on local amenities is also relevant to Section 122 of the Road Traffic Regulation Act 1984. Under the provisions of Section 122 the Council has a duty “to secure the expeditious, convenient and safe movement of ... traffic” but in doing so, so far as practicable should “have regard to” other matters including “the effect on the amenities of any locality affected and ... the importance of regulating and restricting the use of roads by heavy commercial vehicles, so as to preserve or improve the amenities of the areas through which the roads run.”</p> <p>The Council is satisfied that the proposals detailed in TRO/23/17 are consistent with our duties under Section 122 of the Road Traffic Regulation Act 1984, these proposals aim to establish a more even and equitable distribution of traffic between the residential streets within the affected area of ‘The Crescents’ while ensuring that each of these streets is subject to a ‘low’ level of traffic flow. This aim is supported by the traffic modelling that the Council has undertaken.</p>
<p>Lack of Opportunity for Feedback 272; 294; 299; 326: Traffic modelling has not been shared with Coates Gardens residents. This is inconsistent with the approach in 2018 where via the WECC residents in Magdala Crescent were asked for input and the proposals were subsequently changed</p> <p>282: Consultation has been very poor for Coates Gardens residents. We first heard about this earlier in the year and many of us wrote to the Council voicing our concerns. We were told that our letters would not be</p>	11	Y	N	<p>Respondents have raised concerns in relation to the degree of notification and opportunity to comment on the proposals provided to affected residents in relation to TRO/23/17. In particular respondents were concerned that traffic modelling information was not shared with the residents of Coates Gardens, and that the approach</p>

Content	No.	Material Objection	Suggestion	Response
<p>considered in the consultative process, and a letter from the Council to the Community Council misrepresented the concerns we had voiced.</p> <p>283; 321: I believe the changes and impact of TRO/23/17 have not been communicated to those in Coates Gardens who will be impacted, failure from Edinburgh Council/CCWEL to meet their responsibilities under the 1984 act. There has been no circular put out to explain the impact and the changes and impact hasn't been fully explained online. I would recommend that Edinburgh Council/CCWEL need to put a hold on this proposal , leave the road permanent traffic flow as both ways on Magdala Crescent while those in Coates Gardens are properly informed about the impact and everyone is given the chance to comment/object. Councillor Macfarlane was very patient in explaining to me how I keep up to date on the progress of TRO/23/17 online. It wasn't straightforward or easy to find in my opinion, well hidden away. I'd like to thank him for this as it helped me but only after he explained at length. The Edinburgh Council/CCWEL needs to address the issues with communication on TRO/23/17 as a matter of urgency.</p> <p>289; 290: Why traffic modelling data was not proactively shared with Coates Gardens residents (as I understand this happened with Magdala Crescent residents in 2018 when WECC residents were asked for input and the proposals subsequently changed)? I had to resort to Freedom of Information access requests to obtain the data, but many residents will not have done this and will therefore be unaware of the impacts. I believe the Council should be transparently making clear the rationale for their proposals and the key underlying evidence and data. Failure to do makes any consultations a sham.</p> <p>312: Residents have not been consulted and traffic modelling has not been shared. It is alarming, that the road contractors are already altering the pavement and road layout at the bottom of Magdala Crescent and Coates Gardens ahead of the consultation process. It looks as if a decision has already been made even before the consultation process has ended.</p> <p>324: TRO/23/17 have not been communicated to those in Coates Gardens who will be impacted. There has been no circular put out to</p>				<p>followed contrasts with previous engagement activities.</p> <p>In line with the Council's standard procedures the West End Community Council were notified of the proposed TRO/23/17 in advance of both the initial invitation for feedback, and the Statutory Consultation. Residents of Coates Gardens, and other affected streets, had the opportunity to comment on the proposals during both periods, and many residents took advantage of this opportunity. The traffic modelling proposals were shared with West End Community Council in July 2022 and have been shared with many residents of the West End via email correspondence since.</p> <p>The CCWEL project has involved considerable stakeholder engagement and consultation since 2015. The proposals entailed by TRO/23/17 were recommended by affected residents during the Statutory Consultation for the TRO/17/91, which introduced the relevant restrictions for the introduction of the CCWEL scheme, in Spring 2018.</p> <p>TRO/23/17 has been subject to two periods of consultation as required by the Local Authorities Traffic Orders (Procedure)(Scotland) Regulations 1999, the former providing an invitation to provide feedback, the latter providing an opportunity to object.</p>

Content	No.	Material Objection	Suggestion	Response
explain the impact and the changes. Equally, the impact and the changes hasn't been fully explained online.				
<p>Impact on Utilities 272; 294; 299; 326: The Haymarket Terrace watermain is continually being repaired. It is believed to link to a Victorian watermain at the bottom of Coates Gardens. Concerns about impact on this main from increased traffic on Coates Gardens.</p> <p>293; 315: Scottish Water inform us that the existing main below the road surface is in a delicate condition and ideally should be replaced as opposed to periodic patchwork repairs. An increase in traffic will only exacerbate this problem.</p> <p>312: There is a very old water mains below the road surface, which has already caused flooding, with basement properties especially affected and increased vehicular traffic will make the problem worse</p> <p>316: There is an ancient water main underneath the cobbled road. Between acquiring my basement flat in 2017 and today, I can think of two occasions when the main has burst, requiring the road to be dug up. On one occasion the burst main flooded my property. My fear is with increased traffic this will only make matters worse!</p> <p>317: Beneath the cobbles is an ancient water system which has already suffered multiple burst water mains, including the flow of high pressure mains water through my own property in recent years. This will without doubt happen again with increased strain through larger volume of traffic on the street with further wear and damage to the cobbles and underlying water mains, likely leading to yet more poorly completed works, more closures, more impact to residents with flood water.</p> <p>318: Coates Gardens has an uneven surface and a Victorian watermain beneath, it is not a suitable road for increased traffic including heavy commercial vehicles.</p>	10	Y	N	<p>Concerns have been raised regarding the Scottish Water mains pipe under Haymarket Terrace and Coates Gardens, and the risk of damage to this water main due to the increased level of traffic running across the surface of this street.</p> <p>It is not uncommon for water mains in Edinburgh to be very old and there are many Victorian water mains still in operation throughout the city. The maintenance of said water main is the responsibility of Scottish Water, rather than the Council. In any event, as outlined above, under the restrictions proposed in TRO/23/17 the volume of traffic on Coates Gardens would still be considered 'Low Flow' and this is not expected to materially increase the risk of future damage to the water main on Coates Gardens.</p>
<p>Coates Gardens is more Susceptible to Road Surface Failures due to Setted Surface 276: The cobbles are also less capable of suitably accommodating more traffic. There are many dips and uneven sections which seems to be an ongoing problem as they seem to recur even after repair.</p>	9	Y	N	The predicted increase in traffic on Coates Gardens is approximately 39%, from 141vph to 196vph. This would still be considered a street with 'low flow' and is

Content	No.	Material Objection	Suggestion	Response
<p>288: The clear result of this will be for vast amounts of all kinds of road traffic to be forced to funnel down Coates Gardens (the cobbled surface of which is currently in a dreadful state, with property railings and cope stones already being adversely affected by the existing weight of traffic).</p> <p>293; 315: The current road surface in Coates Gardens can only be described as undulating and is made up of stone setts although there are various patches of tarmac and even bricks to replace setts that have been removed.</p> <p>300: The road itself is already in a state of disrepair, and the increase in traffic, in particular HGVs, will ensure that constant, short term repairs will be the order of the day.</p> <p>312: Most of Coates Gardens has a very old surface (it is a cobbled street and one of the few left in the West End of Edinburgh) that has been patched up and which originally was not built for car traffic and thus is not suitable for extensive car and heavy goods vehicle usage.</p> <p>317: Where the cobbles have already collapsed in parts along Coates Gardens this has been completely mismanaged with no regard for the conservation status of the area by being patched in an unsightly manner with dumped lumps of tarmac on top of the collapsed areas. This only adds to the underlying damage and I suspect will become increasingly frequent with the proposed changes as more heavy vehicles use this cobbled route. This is a cheap fix, a false economy that only adds to the damage. (This as been at a time where the traffic flow is an estimated 87% less that that after proposed change!)</p> <p>324: Cobblestones are not as robust as asphalt. An increased traffic will exacerbate displacement, which lead to increased long term council road repair cost.</p> <p>Located in UNESCO world heritage site, the cobblestone surface of Coates Gardens is of special value that worth protection, rather than further introduce unnecessary stress and damage.</p>				<p>not expected to make a significant difference to the road surface.</p>

Content	No.	Material Objection	Suggestion	Response
329: By diverting traffic down Coates Gardens, traffic volume will increase significantly further damaging the cobbled street which is already in a poor condition.				
<p>Impact on Vulnerable Individuals 272; 294; 299; 326: CCWEL, like all public organisations has a responsibility to vulnerable persons. Concerns that this has not been adequately assessed or considered.</p> <p>312: The traffic travelling through Coates Gardens because of the current roadwork diversions has made the street less safe for vulnerable people and children and they are an indication of the safety implications of the proposed changes.</p> <p>318: It does not directly affect us, but we would also like the Council to bear in mind the increased noise and risk to the vulnerable people housed on Coates Gardens</p>	6	Y	N	<p>Objectors have raised concerns about the increased level of traffic on Eglinton Crescent and Coates Gardens in terms of other factors such as impact on personal safety of other road users and impact on vulnerable residents and those with protected characteristics. Each of these concerns however apply equally to the streets which will be affected if Magdala Crescent retains two-way operation, ie: Douglas Crescent and Magdala Crescent. Under the proposals in TRO.23.17 all of these streets are predicted to experience a 'low' level of traffic.</p> <p>Concerns have been raised regarding the potential impact of these proposals on vulnerable residents living in those streets which may see an increase in traffic, including those who are owner/occupiers, or those housed in safe places by the Council.</p> <p>The aim of the proposals included in TRO/23/17 in introducing a one-way restriction at the southern end of Magdala Crescent is to more evenly distribute traffic across the streets within 'The Crescent's area. Without this alteration the Council's projections suggest that both Magdala Crescent and Douglas Crescent could see increased traffic levels reaching over 300 vehicles per hour at peak time. This level of traffic would be considered 'Medium Flow'. By introducing a one-way restriction at the southern end of Magdala Crescent this traffic is divided between Magdala Crescent</p>

Content	No.	Material Objection	Suggestion	Response
				<p>and Douglas Crescent, and Eglinton Crescent and Coates Gardens. This is predicted to result in each of these streets having a level of traffic considerably below 300 vehicles per hour at peak time, which is considered 'Low Flow'.</p> <p>Any impact that an increase in traffic on Eglinton Crescent and Coates Gardens might have on vulnerable residents equally applies on Magdala Crescent and Douglas Crescent. Thus these proposals which seek to establish a low level of traffic on each of these streets are consistent with the council's responsibility to vulnerable persons.</p>
<p>Changes render Coates Gardens the 'primary route to/from the city from the west'</p> <p>285: I welcome anyone - especially the author of the letter - to explain how "TRO/23/17 does not" render "Coates Gardens the primary route to/from the city from the west".</p> <p>One wonders if the author has ever travelled from the city to the west by car. Because if they did, given the changes already made under the TRO, they almost certainly would drive from Douglas Gardens/Palmerston Place via Glencairn Crescent down Coates Gardens. The route from Palmerston Place, via Torphichen Street/Place into Morrison Street has no less than five traffic light intersections and one controlled pedestrian crossing before passing Coates Gardens on Haymarket Terrace. Previously traffic from the city would divide itself between Magdala Crescent and Coates Gardens. Now that the former is closed off, the latter is the only route to the west.</p> <p>287: We are extremely concerned that the road changes under TR23/17 will fail to deliver the proposed benefits and instead will reduce health indicators and have a negative environmental and social impact on the residents of Coates Gardens. This amendment will not reduce traffic volumes but simply divert them, in this case down our street. This will remain the case in the future as west-bound traffic avoids Haymarket</p>	5	Y	N	<p>Under TRO/17/91, which is in effect, Coates Gardens is subject to a one-way designation at its southern extent such that vehicles are not permitted to turn into Coates Gardens from Haymarket Terrace. Thus Coates Gardens is not available as a route 'to the city from the west'.</p> <p>The primary route 'from the city to the west' in the vicinity of TRO/23/17 is, and is expected to remain, Haymarket Terrace.</p> <p>The Council will conduct traffic monitoring post implementation and, should these surveys record traffic levels of more than 300 vehicles per hour during the peak period in any of the affected streets, or if the level of traffic is affecting the operation of the cycleway or continuous footway, a report will be prepared for Transport and Environment Committee with proposed mitigation measures.</p>

Content	No.	Material Objection	Suggestion	Response
<p>Terrace entirely either because it is congested or because it remains closed to non PSV traffic.</p> <p>292: I am really concerned about the proposal that would make Coates Gardens the primary route for traffic, including the to/from city rat run and the continued confusion about it being one/two way.</p> <p>316: I am writing to you to express my concern and objection to the proposed traffic order TRO/23/17. The proposal would redirect traffic through Coates Gardens, instead of sharing the flow with Magdala & Haymarket Terrace as it does currently. My objections are due to the following</p> <ol style="list-style-type: none"> 1. An 87% increase in traffic to an already busy road <p>328: I doubt this residential street was ever designed to be a primary route out of Edinburgh and would like to know who wants this to happen? It appears that no thought has been given to the people who need to live here.</p>				
<p>Environmental Impact of Traffic Re-Routing</p> <p>276: The traffic will unnecessarily navigate a longer and indirect route. This brings significantly increased pollution and environmental damage.</p> <p>283; 321: Vehicles using roads ignore one-way signs and one-way causes more pollution. Use of 1 way streets does not reduce traffic levels and it causes more pollution locally as traffic needs to travel a greater distance to get where it needs to be. That is not good for the environment or health of people living in the extra streets/route travelled. Edinburgh/CCWEL is not considering the extra pollution due to longer routes vehicles will need to travel.</p> <p>287: We are extremely concerned that the road changes under TR23/17 will fail to deliver the proposed benefits and instead will reduce health indicators and have a negative environmental and social impact on the residents of Coates Gardens. This amendment will not reduce traffic volumes but simply divert them, in this case down our street. This will remain the case in the future as west-bound traffic avoids Haymarket Terrace entirely either because it is congested or because it remains closed to non PSV traffic.</p>	4	Y	N	<p>The additional journey distance associated with re-routing from Magdala Crescent onto Coates Gardens is approximately 200m. In the context of journeys made by car this is very marginal distance which would not be expected to materially impact on pollution.</p> <p>Additionally, the reduced convenience of travelling on this route by private vehicle, combined with the presence of the high quality cycle route, may help contribute to reducing private car usage and encouraging modal shift thus providing environmental benefits.</p>

Content	No.	Material Objection	Suggestion	Response
<p>The Proposal is not consistent with Council Policy to reduce traffic in the city 289; 290; 321: Under CCWEL, the Council has a stated aim to remove intrusive traffic from the City, this proposal merely displaces traffic</p> <p>318: The proposal does not meet the City Mobility Plan objective of reducing traffic through residential streets and rat-running.</p>	4	Y	N	<p>The proposals under TRO/23/17 are intended to mitigate the impact of through traffic in the Crescents, which is achieved by establishing a low traffic volume on all affected streets, rather than an imbalance in through traffic between streets, with some local streets experiencing 'medium flow' traffic.</p> <p>It is not a requirement of TRO/23/17 that it remove through traffic. However, by introducing a restriction on Magdala Crescent this Order does reduce the convenience and attractiveness of private car journeys in the city centre, which could help to support modal shift to sustainable journeys.</p>
<p>The Council has failed to 'act reasonably' under relevant legislation 289; 290; 321: I believe that the proposals from the Council do not meet their obligations, specifically: The Council must act reasonably under the Road Traffic Regulation Act 1984</p>	3	Y	N	<p>The Council has met all relevant stipulations of the Road Traffic Regulation Act 1984, and all other relevant legislation.</p>
<p>The Proposal fails to meet its aim to 'Mitigate Traffic' 289; 290: I note that whilst as a result of this TRO traffic on Coates Gardens in peak periods is expected to increase by at least 40% compared to the baseline and 125% compared to the original CCWEL proposal, in contrast Magdala Crescent's traffic will reduce by 40% compared to the baseline, and by 50% compared to the CCWEL proposals. Note the original CCWEL proposals – and which Magdala Crescent's residents objected to, would only have increased their traffic flow by approximately 10%. This demonstrates:</p> <ul style="list-style-type: none"> the proposal fails in its stated aim of mitigating concerns about increased traffic – a 40% increase in traffic is not mitigation, it is exacerbation of the issue. The proposal is therefore flawed and the logic irrational. I note the fact that Statement of Reasons (and the Executive Director's Report that approved the proposal obtained through Freedom of Information access request) make no reference to any detrimental impacts on any street (I call a 40% increase in traffic detrimental) and therefore unbalanced and biased, and evidence of a flawed decision making process 	3	Y	N	<p>The proposals under TRO/23/17 are intended to mitigate the impact of through traffic in the Crescents, which is achieved by establishing a low traffic volume on all affected streets, rather than an imbalance in through traffic between streets, with some local streets experiencing 'medium flow' traffic.</p>

Content	No.	Material Objection	Suggestion	Response
<ul style="list-style-type: none"> the proposal is clearly unjustified by any changes brought by CCWEL. The original CCWEL proposal (envisaging a bar on northbound traffic entering Coates Gardens) would have only led to a 10% increase of traffic on Magdala Crescent. Magdala Crescent residents' original concerns could presumably have been easily addressed by not pursuing the original plan to introduce a northbound restriction preventing vehicles accessing Coates Gardens from Haymarket Terrace. Instead of a 10% increase in traffic in Magdala Crescent as under the original CCWEL proposals, these proposals will lead to a 40% increase in traffic on Coates Gardens, suggesting clearly disproportionately worse outcomes. <p>311: By plugging Magdala Crescent in the way set out in the TRO the southbound traffic will either turn off Magdala Crescent and proceed along Eglinton Crescent and down Coates Gardens or stay on Palmerston Place before turning right along Glencairn Crescent and down Coates Gardens. It will not reduce traffic rat running through the crescents. Although the plug will greatly benefit residents on Magdala and Douglas Crescents, by the displacing rather than reducing the traffic, it will severely impact the residents in Eglinton and Coates and to a lesser extent, Glencairn. This is supported by the CCWEL team's own figures.</p>				
<p>Magdala Crescent has always been a busier route</p> <p>276: Within the current position and original plan Magdala Crescent has always been a relatively busier thoroughfare and has been seen as such. Moving for the benefit of a relatively small section seems unjust. We had not expected our road to become a main thoroughfare with a significant impact of increased traffic.</p> <p>320: The Magdala route has long been the alternate route to Haymarket terrace. With full well laid tarmac and only 11 houses on the east side of the street. The other side is open to donaldsons college allowing for noise and pollution to disperse much easier. This is a well known route for commuters, buses and taxis. I cannot see a good argument why this should be changed to a much more densely populated family street of Coates gardens which also has many bed and breakfasts for tourists. The population of these two streets is vastly different. Coates Gardens has cobbles and the traditions of old west accommodation. Magdala only</p>	2	Y	N	Under the Edinburgh Street Design Guidance 'Street Types Map' both Magdala Crescent and Coates Gardens are identified as 'Local Streets'. The proposals in TRO/23/17 aim to establish a level of traffic on both of these streets which is appropriate for this designation.

Content	No.	Material Objection	Suggestion	Response
has these few houses who are already used to the traffic flow and have bought their houses knowing this is the way it is.				
<p>Concerns over reliability of traffic survey and modelling 289; 290: What reassessment has been made of the modelling – I note the Council is relying on traffic modelling done in 2018 (i.e. 5 years ago, so very dated)? I also note this modelling was done in August 2018 and therefore is likely unrepresentative taking place in the school holidays/peak summer holiday period (note significant rat run traffic maybe school runs to the schools in the north or west of the city)?</p>	2	Y	N	<p>It is acknowledged that the traffic survey data utilised for this exercise is now several years old, however as it provides a pre-covid baseline it reflects a 'worst case' scenario and thus an appropriate metric for the current assessment.</p> <p>The surveys were carried out on Tuesday 28 August 2018, during term time.</p>
<p>Proposal is unsafe for cyclists using CCWEL and Side Roads 327: As an experienced cyclist, I would consider the revised junction to be unsafe as follows: The two-way traffic on Magdala Crescent is up to the 'No Entry' sign. The section from the 'No Entry' sign to the junction of Haymarket Terrace is one way only for motorists - northbound. Cyclists heading south on Magdala Crescent will therefore face oncoming traffic between the 'No entry' sign and the cycleway on Haymarket Terrace. There are no road markings proposed to show cyclists how to navigate onto the cycle path along Haymarket. There is no physical protection proposed to separate cyclists from oncoming traffic. Whilst signage is proposed to advise vehicular traffic that cyclists may exit southbound these signs cannot be seen from Haymarket Terrace, only visible on turning into Magdala Crescent. I consider that, given the high volume of motorised traffic travelling north along Magdala Crescent, that the proposal provides insufficient protection for cyclists travelling south to join the cycleway along Haymarket.</p>	1	Y	N	<p>The design of the CCWEL has been subject to a Designer's Risk Assessment and a Stage 2 Road Safety Audit. The Council is satisfied that the design meets all relevant safety requirements and design standards.</p>
<p>Additional Traffic would require removal of cobbles Coates Gardens is a quiet residential street, and the presence of cobblestones makes it an unsuitable road surface for a higher volume of traffic, which would be diverted from Magdala Crescent. I do not wish to see the character of our street destroyed by proposals, which I am almost certain would be forthcoming, to uproot the historic cobblestones in order to lay down a surface more befitting increased traffic levels. This would fundamentally damage the character of the street and surrounding area.</p>	1	Y	N	<p>There are no plans to remove the cobbled surface of Coates Gardens and doing so would be a clear contravention of existing Council policy on setted streets.</p>
<p>Objection from West End Community Council (WECC)</p>	1	Y	N	<p>The proposals under TRO/23/17 are intended to mitigate the impact of through traffic in the Crescents, which is achieved</p>

Content	No.	Material Objection	Suggestion	Response
<p>The objection and suggestion is provided in full in Appendix 2. In summary:</p> <p>The proposals for changes to the road network for CCWEL are not the optimal solution to ensure the safety of cyclists on the cycle path, or those cyclists joining the cycle path.</p> <p>The WECC objects to the TRO on the basis that the CCWEL proposals do not adequately consider the volume of through traffic that rat runs through the Crescents and the impact this will have on the safety of cyclists. Traffic queuing across the cycle path will negate any positive impact of the path and cause frustration to cyclists.</p> <p>The WECC objects to the TRO on the basis that the proposal fails to make any meaningful or significant reduction in through traffic through the Crescents. It therefore fails to deliver on the policies set out in the City Mobility Plan to reduce or eliminate intrusive through traffic and to improve the liveability of a residential street.</p>				<p>by establishing a low traffic volume on all affected streets, rather than an imbalance in through traffic between streets, with some local streets experiencing 'medium flow' traffic.</p> <p>The Council will conduct traffic monitoring post implementation and, should these surveys record traffic levels of more than 300 vehicles per hour during the peak period in any of the affected streets, or if the level of traffic is affecting the operation of the cycleway or continuous footway, a report will be prepared for Transport and Environment Committee with proposed mitigation measures.</p>
<p>Suggestions:</p>				
<p>Proposals aim to address rat-running but fail to adequately do so 289; 290: I assume therefore this proposal is not connected to CCWEL but intended to tackle the pre-existing rat run of traffic cutting through the area coming from/ to the North of the City via Douglas Gardens and the A8 in the West. Whilst I understand concerns about this rat run, the proposals now made are profoundly flawed as they just displace this traffic southbound onto Coates Gardens and do not the tackle the real issue. If the Council wishes to actually tackle this rat run, they need to come up with solutions that actually work (e.g. turning Coates Gardens and Magdala Crescent into cul de sacs, or prohibiting southbound traffic turning right out of either Coates Gardens or Magdala Crescent onto Haymarket Terrace, with a similar restriction on the A8 eastbound preventing traffic turning left onto Coates Gardens or Magdala Crescent). Instead, these proposals just transfer traffic onto a street – Coates Gardens – the only cobbled street in the area – which is clearly unsuited to handle it.</p>	4	N	Y	<p>The proposals under TRO/23/17 are intended to mitigate the impact of through traffic in the Crescents, which is achieved by establishing a low traffic volume on all affected streets, rather than an imbalance in through traffic between streets, with some local streets experiencing 'medium flow' traffic.</p>

Content	No.	Material Objection	Suggestion	Response
<p>311: The reason put forward for plugging Magdala Crescent are that the Cycleway will significantly increase traffic rat running through Magdala and Douglas Crescents and CCWEL wish to share this around with residents in Eglinton and Coates. How the increase in traffic was not foreseen during the CCWEL planning process is difficult to understand especially given that it has been stated that during the process particular care was taken to ensure that there was minimal impact on surrounding streets. Indeed in their email 28 May 2020 the CCWEL team explicitly stated that the traffic through the West End crescents would significantly reduce after the implementation of the Cycleway! When asked repeatedly for evidence to back this up, after over a year traffic forecasts were eventually provided which showed that this was not even remotely accurate. When approached by Magdala and Douglas Crescent residents the CCWEL team decided that they would address their concerns not by discouraging or reducing the rat running, but by diverting this traffic onto residents in adjoining streets. If the Council believe that there is a rat running issue which is being exacerbated by the Cycleway (which is clearly the case) they should address the problem just as they have been happy to do in various parts of the New Town where they have closed many of the residential streets to rat running.</p> <p>The traffic currently turning off Haymarket Terrace is not local traffic but is quite clearly general traffic avoiding congestion at the Haymarket junction. The TRO proposal (and the reconfiguration of Haymarket Terrace) will further encourage and facilitate this. The congestion at Haymarket, it should be noted, is not of the residents making but has arisen as a result of the change in the road configuration to accommodate the trams and now the cycleway. People who live in the West End tend to walk and use their cars far less than people who live outwith the city centre. It is ironic that those who contribute the least to pollution and traffic congestion are being disadvantaged to allow the Council to accommodate those who contribute the most and who wish to take a short cut. It certainly makes it clear that the Council does not intend that the residential streets of the West End will be a low traffic neighbourhood especially if it impacts on the convenience of the drivers of lorries, trucks, coaches, vans and general traffic, the vast majority of which pay scant regard to the speed limit.</p> <p>The CCWEL Team (finally) admitted that rat running through many of the West End crescents will increase as a result of the Cycleway but by</p>				

Content	No.	Material Objection	Suggestion	Response
<p>spreading it about this somehow makes it alright. Is this a new traffic management principle which is being adopted by the Council? I have not noticed it being applied anywhere else in the city centre (quite the reverse) but appears to being adopted in the West End to justify pushing more and more traffic off the A8 and onto residential streets.</p> <p>327: The proposal does not reduce the volume of through traffic in “The Crescents” (ratrunning) The proposal advises “This change is proposed in order to mitigate the impact of throughtraffic in ‘The Crescents’, including on Magdala Crescent.” I would not consider that the proposal will mitigate the impact in any way. The proposal has not fully evaluated the rat-running experienced by The Crescents. The analysis is based on current levels in the Crescents and is justified on the basis there will be no increase in traffic volumes. It fails to consider that the current levels are a result of the tram works, and these levels need to be reduced or eliminated. The proposal simply moves traffic from one street to another. The City Mobility Plan states that rat-running will be reduced or eliminated. The proposal does not consider how this could be achieved though junction changes made for CCWEL.</p>				
<p>Monitoring Should be Carried Out 311: If the TRO is progressed, residents have a right to expect, not only that monitoring (to include traffic counts/speed monitoring not just, as was done with the trams, subjective appraisals) will be undertaken after implementation of the cycleway, and if traffic has increased, that steps be taken (traffic restrictions, calming etc) to bring it back down to at least if not below current projected levels. This, of course, should be the case even if the TRO is not progressed. CCWEL have failed to give categoric assurances that such steps will be taken.</p>	1	N	Y	<p>The Council will conduct traffic monitoring post implementation and, should these surveys record traffic levels of more than 300 vehicles per hour during the peak period in any of the affected streets, or if the level of traffic is affecting the operation of the cycleway or continuous footway, a report will be prepared for Transport and Environment Committee with proposed mitigation measures.</p>
<p>Traffic Calming Measures Should be Introduced 311: The TRO proposal, which acknowledges that traffic through many of the crescents will increase, does not include any traffic calming measures. From the Maybury roundabout to the West End it is difficult to turn left off the A8 into residential streets without encountering traffic calming measures until you reach the West End crescents where not one single measure has ever been put in place in living memory. The conclusion drawn is that encouraging greater volumes of traffic to divert</p>	2	N	Y	<p>The Council will conduct traffic monitoring post implementation and, should these surveys record traffic levels of more than 300 vehicles per hour during the peak period in any of the affected streets, or if the level of traffic is affecting the operation of the cycleway or continuous footway, a report will be prepared for Transport and</p>

Content	No.	Material Objection	Suggestion	Response
<p>off the A8 and to travel at greater speeds through residential streets is part of the West End traffic management plan.</p> <p>318: The proposal has disproportionate negative impacts. It has been brought in at the legitimate request of Magdala Crescent residents to reduce traffic, but there are better ways to achieve this such as traffic controls, traffic calming and restrictive junctions.</p>				<p>Environment Committee with proposed mitigation measures.</p>
<p>Size/Weight Restriction Should be Introduced</p> <p>311: An alternative way of reducing rat running traffic through Magdala and Douglas would be if a size/weight restriction was put in place prohibiting large/heavy vehicles from turning left at the junction. The extremely small number of these vehicles that wish to access addresses in the crescents could still do so via Palmerston Place. Vehicles using the crescents as a short cut would instead be required to remain on the main roads which are much more suited for these types of vehicles. As these vehicles tend to be the most polluting and, as the crescents have been inexplicably omitted from the LEZ, it would bring a positive health (and safety) benefit to all residents. It would also have the benefit of reducing traffic turning left off Haymarket Terrace which will decrease the likelihood of accidents involving cyclists and pedestrians (as, of course, would a no left turn for all traffic). There is no credible justification for allowing/encouraging significant volumes of large commercial vehicles to turn off the A8 and take a short cut through residential streets when it can be easily prevented.</p>	1	N	Y	<p>The Council will conduct traffic monitoring post implementation and, should these surveys record traffic levels of more than 300 vehicles per hour during the peak period in any of the affected streets, or if the level of traffic is affecting the operation of the cycleway or continuous footway, a report will be prepared for Transport and Environment Committee with proposed mitigation measures.</p>
<p>Provision of Pedestrian Crossing on Coates Gardens</p> <p>316: I have two young children and we already find it difficult to cross the road safely. Will pedestrian crossing be added to ensure safe passage for those on foot?</p>	1	N	Y	<p>The introduction of the CCWEL project will create a 'continuous footway' crossing over Coates Gardens at its junction with Haymarket Terrace to provide improved crossing facilities at this junction.</p>
<p>Alternative Suggested by WECC</p> <p>The objection and suggestion is provided in full in Appendix 2. In summary:</p> <p>318: We would like to ask the Council to prefer the proposal agreed by the West End Community Council which improves safety and does not have disproportionate negative impacts: Magdala Crescent. Eastbound traffic on A8: No left turn for vehicles from A8 Haymarket Terrace. No right turn for vehicles into Haymarket Terrace (as proposed by CCWEL and supported by the WECC).</p>	1	N	Y	<p>The Council does not generally implement 'banned left turns' as these are routinely ignored and extremely difficult to enforce.</p> <p>The introduction of no-right turns onto Haymarket Terrace could be viable and could be an option considered to be taken forward as a mitigation should the post-implementation monitoring find that levels of traffic in the Crescents are unsuitable.</p>

Content	No.	Material Objection	Suggestion	Response
<p>Coates Gardens: Eastbound traffic on A8. No left turn for vehicles from A8 Haymarket Terrace (as proposed by CCWEL and supported by WECC). No right turn for vehicles into Haymarket Terrace.</p> <p>This proposal improves the safety of cyclists using the cycle path and adjoining roads is significantly improved as vehicles crossing the cycle path at these junctions will be significantly reduced. It will improve the experience of cyclists using the cycle path.</p> <p>Through traffic / rat-running will be significantly reduced /eliminated on residential streets in accordance with the objective mandated by the City Mobility Plan.</p>				<p>Introduction of such bans would need to consider the possible impact of re-routing traffic on public transport viability on Haymarket Terrace.</p>
<p>Douglas Crescent should be made 'no exit'</p> <p>327: A request was made for a change in Douglas Crescent to prevent exit at its junction with Palmerstone Place. This was refused due to the diversion works. This should be considered again as a measure to reduce through traffic</p>	1	N	Y	<p>The introduction of a 'no-exit' restriction from Douglas Crescent on to Palmerston Place could be viable and could be an option considered to be taken forward as a mitigation should the post-implementation monitoring find that levels of traffic in the Crescents are unsuitable.</p> <p>Introduction of such a bans would need to consider the possible impact of re-routing traffic on public transport viability on Haymarket Terrace.</p>
<p>Suggestion from WECC</p> <p>The objection and suggestion is provided in full in Appendix 4. In summary:</p> <p>WECC alternate proposal Magdala Crescent. Eastbound traffic on A8. No left turn for vehicles from A8 Haymarket Terrace. No right turn for vehicles into Haymarket Terrace (as proposed by CCWEL and supported by the WECC). Coates Gardens: Eastbound traffic on A8. No left turn for vehicles from A8 Haymarket Terrace (as proposed by CCWEL and supported by WECC). No right turn for vehicles into Haymarket Terrace. Rosebery Crescent: Eastbound traffic on A8. No left turn for vehicles from A8 Haymarket Terrace (as proposed by CCWEL and supported by WECC). No right turn for vehicles into Haymarket Terrace.</p> <p>Outcome of the changes proposed by the WECC:</p>	1	N	Y	<p>The Council does not generally implement 'banned left turns' as these are routinely ignored and extremely difficult to enforce.</p> <p>The introduction of no-right turns onto Haymarket Terrace could be viable and could be an option considered to be taken forward as a mitigation should the post-implementation monitoring find that levels of traffic in the Crescents are unsuitable.</p> <p>Introduction of such bans would need to consider the possible impact of re-routing traffic on public transport viability on Haymarket Terrace.</p>


Content	No.	Material Objection	Suggestion	Response
<ul style="list-style-type: none"> The safety of cyclists using the cycle path and adjoining roads is significantly improved as vehicles crossing the cycle path at these junctions will be significantly reduced. It will improve the experience of cyclists using the cycle path. Through traffic – rat running - will be significantly reduced /eliminated. 				
Other Comments not containing material objections or relevant suggestions:				
<p>Access to Coates Gardens for Refuse Vehicles 293; 315: It has come to my attention that, due to the closure of the junction allowing access from Haymarket Terrace to Coates Gardens, the vehicle that empties the communal refuse bins requires a double reversing manoeuvre to access the bins because the vehicle can only uplift from its nearside. This is a dangerous procedure at the present time which will intensify if carried out in the face of increased oncoming traffic.</p>	2	N	N	This manoeuvre was banned by TRO/17/91 which has already come into effect. It is not affected by TRO/23/17.
<p>Geometry of Junctions Layout is Flawed at Magdala Crescent 311: Although not clear from the drawings, the design of the Haymarket Terrace/Magdala junction does not appear to conform to the Edinburgh Street Design Guidance of 2015 which includes in its Guiding Principles the use of tight radii at junctions to encourage vehicles to slow down at corners. The current corner has a tight radius, a raised gate and a narrow entrance all of which help to slow traffic down. Similarly it appears the new corner will have a raised gate but the radius of the corner appears to have been increased and, by removing oncoming traffic, the entrance will be significantly wider for those turning off the main road. By increasing the radius, widening the entrance and removing any oncoming traffic, it will make it easier and encourage greater volumes of traffic to turn off the main road and at higher speeds than they can currently. This will increase the likelihood of accidents involving both cyclists and pedestrians. It should be noted that all traffic, which had previously been shared between three junctions, will now be passing through Magdala. More than 95% (probably more than 99%!) of this traffic is not, as has been claimed, local traffic but is traffic taking a short cut and is usually in a hurry. It would, therefore, appear imprudent to widen the radius and the entrance in this way. At the very least the tight radius should be maintained and a bollard or bollards should be</p>	1	N	N	<p>This layout has been established by RSO/18/05 and is not affected by the current TRO/23/17.</p> <p>The layout has been designed in accordance with Edinburgh Street Design Guidance and has been subject to a Stage 2 Road Safety Audit and a detailed Designer's Risk Assessment. A Stage 3 Road Safety Audit will be conducted following completion.</p>

Content	No.	Material Objection	Suggestion	Response
<p>placed at the right angled apex of the corner to stop vehicles from driving across the corner. This will help ensure turning traffic will have to slow down appreciably and will reduce the likelihood of collisions with cyclists and pedestrians from the increased traffic volume. It will also discourage traffic from leaving the A8 and rat running through residential streets.</p>				
<p>Traffic turning into Magdala Crescent will block the A8 311: With the closure of Coates and Roseberry, Magdala will be the only left turn off Haymarket Terrace and it will become the busiest left turn for incoming traffic between Murrayfield and Palmerston Place. As designed, there will be room for one vehicle to turn into the junction and wait while cyclists and pedestrians pass before proceeding up Magdala. If, as is likely, where there are two or more vehicles turning (or one or more large vehicles) this will block and delay traffic, including buses, from proceeding along Haymarket Terrace. This would be ameliorated if the junction is designed to discourage/limit traffic leaving the A8 and rat running through residential streets rather than, as is the case, facilitating it.</p>	1	N	N	<p>This manoeuvre turning into Coates Gardens and Roseberry Crescent were banned by TRO/17/91 which has already come into effect. They are not affected by TRO/23/17.</p> <p>The junction design does discourage traffic leaving the A8 as there is a zebra crossing where motorists turning in must cede priority to the large number of crossing pedestrians and cyclists.</p>
<p>Previously provided rationale for not pursuing a ban on HGVs in Crescents prioritises delivery companies of residents 311: It has been argued by CCWEL that an HGV/ large vehicle ban would be an inconvenience to the extremely small number of HGV drivers wishing to access addresses in the crescents from Haymarket Terrace and would have to divert by way of Palmerston Place. It appears that a minor inconvenience to a very small number of drivers is more important than the benefit to a large number of residents through the removal of significant numbers of HGV's from the residential streets. It would appear that the residents of the crescents, in this and many other issues, are at the bottom of the food chain as far as the CCWEL/Council are concerned.</p>	1	N	N	<p>Consideration of a ban on HGVs from certain streets is not related to the proposals in TRO/23/17.</p> <p>It is not standard practice to introduce bans on certain types of vehicles on given streets unless there are structural or topographical reasons why such bans are required.</p> <p>Nonetheless, such a ban would most likely not be considered proportionate given each of the streets are predicted to experience 'low flow' traffic conditions. Furthermore, this could inconvenience residents especially when organising large deliveries such as moving vans or when carrying out domestic construction work.</p>

West End Community Council Consultation Response – September 2023

TRO/23/17

**Magdala Crescent, Haymarket Terrace & St Andrew Square
Proposed CCWEL moving traffic restrictions.**

 , West End Community Council Traffic Convenor

The WECC objects to the proposal for the following reasons:

- **The proposals for changes to the road network for CCWEL are not the optimal solution to ensure the safety of cyclists on the cycle path, or those cyclists joining the cycle path.**
- **The CCWEL changes fail to mitigate the impact of through traffic as is being suggested in the TRO proposal. The proposal fails to meet the needs of residents who wish to see a significant reduction or elimination of through traffic rat-running through The Crescents***

*The Crescents comprise Magdala Crescent, Eglinton Crescent, Douglas Crescent, Glencairn Crescent, Coates Gardens, Rosebery Crescent, Grosvenor Crescent and Lansdowne Crescent.

The changes to the road network which the WECC considers optimal, to ensure both cyclists safety and reduce through traffic, is set out below. It is these changes that should be proposed by the City of Edinburgh Council.

WECC alternate proposal

Magdala Crescent. Eastbound traffic on A8. No left turn for vehicles from A8 Haymarket Terrace. No right turn for vehicles into Haymarket Terrace (as proposed by CCWEL and supported by the WECC).

Coates Gardens: Eastbound traffic on A8. No left turn for vehicles from A8 Haymarket Terrace (as proposed by CCWEL and supported by WECC). No right turn for vehicles into Haymarket Terrace.

Rosebery Crescent: Eastbound traffic on A8. No left turn for vehicles from A8 Haymarket Terrace (as proposed by CCWEL and supported by WECC). No right turn for vehicles into Haymarket Terrace.

Outcome of the changes proposed by the WECC:

- **The safety of cyclists using the cycle path and adjoining roads is significantly improved as vehicles crossing the cycle path at these junctions will be significantly reduced. It will improve the experience of cyclists using the cycle path.**
- **Through traffic – rat running - will be significantly reduced /eliminated.**

Safety of cyclists using the cycle path and adjoining roads

The CCWEL road safety audit identified (stage 2 problem ref 3.5.2) that at several locations it is proposed to have a cycle contraflow whereby only cyclists will be entering the side road, whilst all vehicles are permitted to exit the side road. Motorists intending to turn right out of the junctions are likely to position themselves within the area that a cyclist turning into the junction would wish to occupy. This could lead to vehicular-cyclist collisions. The audit recommendation made was that a section of cycle lane is marked through the raised table section of the junctions to separate cyclists from vehicles. The issue with contra-flow cycling was also raised as problem 4.4.9.

The Council rejected the recommendations made in the audit on the basis that LTN 1/20 Paragraph 6.4.21 states "There should be a general presumption in favour of cycling in both directions in one-way streets, unless there are safety, operational or cost reasons why it is not feasible." The Council argued that the guidance advises that "On quiet low speed streets, there may be no need for a cycle lane" and that "Where there is good visibility cyclists and on-coming drivers should be able to negotiate passage safely".

The WECC does not consider the safety of cyclists has been sufficiently taken into account in its proposals for road changes. The proposed changes in the TRO to the Magdala Crescent junction will displace traffic from Magdala to Coates Gardens. The volume of traffic will be high – some 15,000 vehicles per week will exit right from Coates Gardens. This volume of traffic is not indicative of a quiet street. At peak times this volume of traffic will see vehicles queuing to exit. Traffic surveys show larger, heavier vehicles also use the rat-runs. It is extremely likely that vehicles will queue over the cycle lane, negating the positive impact of the cycle lane and increasing the likelihood of vehicular-cyclist collisions.

The CCWEL road safety audit (problem 4.4.7) raised a risk with the Magdala junction that "right turning drivers, will be focussing on oncoming traffic and fail to observe westbound cyclists". Further, "the issue is exacerbated having two/three approaching lanes, their concentration may be focussed on approaching eastbound traffic, including cyclists, and the junction". For the Magdala junction the "risk may be further increased by the fact it's a through route and traffic may be less familiar with the junction."

The Magdala Crescent TRO also fails to consider the safety of cyclists wishing to exit right from Magdala Crescent and join the cycle path at this junction. A cyclist turning right from the Magdala Crescent junction to join the cycle lane would expect to have priority over vehicular traffic. Drivers will be required to give way to cyclists on the cycle lane. The WECC would query whether there is good visibility for both cyclists and motorists. Given the high volume of vehicular traffic, some 15,000 per week, this could lead to vehicular-cyclist collisions.

The WECC objects to the TRO on the basis that the CCWEL proposals do not adequately consider the volume of through traffic that rat runs through the Crescents and the impact this will have on the safety of cyclists. Traffic queuing across the cycle path will negate any positive impact of the path and cause frustration to cyclists.

Reduction / elimination of through traffic – rat running

The TRO proposal advises “This change is proposed in order to mitigate the impact of through-traffic in ‘The Crescents’, including on Magdala Crescent.”

Some street context. In addition to being residential streets the Crescents have a number of characteristics which make them unsuitable for high volumes of through traffic. The Magdala Crescent / Eglinton Crescent junction is a wide junction. Vehicular traffic crosses this junction at speed making this an unsafe crossing for pedestrians. Magdala Crescent at its junction with Douglas Crescent is a sharp bend which has seen accidents. It is also the pedestrian access to the Water of Leith pathway. Douglas Crescent has seen subsidence in the street. Coates Gardens has historic cobbles and thus traffic noise is greater than a tarmac street. Rosebery Crescent has a school and the tight bend turn in from Lansdowne Crescent.

The following information was provided to the WECC demonstrating that CCWEL would see a reduction in overall traffic.

Predicted Traffic Levels per Street Location	Baseline			CCWEL w/ Magdala C One-Way			
	AM	PM	Total Peak	AM	PM	Total Peak	Change
Magdala Cres	347	237	584	201	141	342	-242
Coates Gdns	141	95	236	196	127	323	87
Rosebery Cres	69	128	197	37	124	161	-36
Grosvenor St	22	29	51	33	20	53	2
Eglinton Cres*	148	133	281	210	144	354	73
Douglas Cres	266	153	419	235	119	354	-65
Eglinton Cres**	162	138	299	165	151	316	17
Glencairn Cres**	162	138	299	165	151	316	17
Grosvenor Cres**	96	114	210	76	133	209	-2
Lansdowne Cres**	96	114	210	76	133	209	-2
Totals:	1509	1279	2786	1394	1243	2637	-151

*Between Douglas Crescent and Coates Gardens

**50% of combined counts for both sides of garden

The reduction in traffic volumes arising from CCWEL will only see an anticipated overall reduction of 5%. With traffic volumes of some 30,000 vehicles through the Crescents each week, this is only a reduction of some 1,500 vehicles per week. The result is that 28,500 vehicles will still use the Crescents as a through route, a rat run. The mitigation being suggested is merely to move traffic between streets. The WECC was not provided with any explanation as to why traffic is expected to be reduced.

The current TRO proposal is based on analysis undertaken in 2018, which pre-dates the latest thinking as set out in the City Mobility Plan. The City Mobility Plan states that rat-running will be reduced or eliminated, with the PLACE 4 objective being to improve the liveability of a residential street. The TRO fails to deliver on these aspects.

The TRO proposal does not propose any meaningful reduction in vehicular traffic through the junction changes being proposed. The data also pre-dates the LEZ. The Crescents will sit outside the LEZ boundary which we believe will result in an increase in traffic flows through the Crescents.

The TRO proposal fails to mitigate the impact of through traffic as the changes merely displace traffic rather than significantly reduce or eliminate rat-running. Nor does the TRO include any traffic calming measures in the Crescents despite speeding being raised as a concern on numerous

occasions. Cyclists will join and leave the cycle path from the Crescents leaving a safe environment for a hostile environment.

The current diversion through part of the Crescents to facilitate the installation of the cycle path, includes a number of pedestrian safety measures. This includes a reduction in the width of the Magdala Crescent/ Eglinton Crescent junction and the installation of safe crossing points. None of these safety measures have been incorporated into the revised design being proposed.

The City Mobility Plan sets out that wide junctions will be narrowed to provide a safe crossing for pedestrians.

The WECC objects to the TRO on the basis that the proposal fails to make any meaningful or significant reduction in through traffic through the Crescents. It therefore fails to deliver on the policies set out in the City Mobility Plan to reduce or eliminate intrusive through traffic and to improve the liveability of a residential street.

Response to Objection from WECC

The Council is grateful for the considered and details objection and suggestions for alternatives from the West End Community Council. Consideration and response to these is offered below.

Safety of Cyclists

The West End Community Council submit that, should TRO/23/17 be implemented, the level of traffic on Coates Gardens will be too high, at approx. 15,000 vehicles per week, for people cycling contraflow to the one way designation to do so safely without dedicated provision.

As outlined in this report, the predicted volume of traffic on Coates Gardens following the implementation of TRO/23/17 is 196vph. Values up to 300vph are considered 'low flow', and on such streets where the speed limit is 20mph the Edinburgh Street Design Guidance factsheet on [Designing for Cycling](#) suggests that in such locations provision for cyclists can take the form of either 'quiet street' or 'cycle lanes'.

300vph equates to roughly 3,000 vehicles per day, and around 20,000 vehicles per week. As such, 15,000 vehicles per week would still be considered 'low flow'.

As such, the provision of a cycle contraflow on Coates Gardens is consistent with Edinburgh Street Design Guidance as the street is predicted to have a low level of traffic and has an existing 20mph speed limit. The introduction of the one way designation on Magdala Crescent associated with TRO/23/17 is not considered to present a meaningful risk to the safety of cyclists travelling northbound on the one-way section of Coates Crescent.

The West End Community Council also submit that traffic on Coates Gardens may queue across the cycleway while waiting to join Haymarket Terrace, and that this will undermine the value of the cycleway.

It is undoubtedly true that vehicles seeking to join Haymarket Terrace from Coates Gardens may sometimes queue across the cycleway. However, the layout of the junction will establish clearly that motorists must give-way to cyclists using the cycleway before proceeding towards Haymarket Terrace. At this point motorists may block the cycleway while waiting for a gap in traffic, however this will only be for a short period, and any following vehicles would again be required to cede priority to waiting cyclists.

The Propensity to Cycle modelling carried out as part of the Project Justification Report for the CCWEL project predicted a daily usage of the cycleway of over 3,000 cyclists, based on a 2014 baseline. As such it can be expected that cyclists crossing Coates Gardens will outnumber vehicles exiting from it.

Mitigation of Traffic in The Crescents

The West End Community Council submit that though the Statement of Reasons for TRO/23/17 states that the proposal aims to "mitigate the impact of through traffic through The Crescents", the details of the proposal will fail to achieve this, and

further, fails to meet the aims of the City Mobility Plan to reduce the impact of traffic on residential streets.

The West End Community Council submit that the proposals entailed by TRO/23/17 only displace traffic within The Crescents, with little, if any, reduction in through traffic throughout The Crescents.

West End Community Council are correct that the proposals entailed by TRO/23/17 cannot be expected to significantly reduce the volume of traffic travelling through The Crescents between Palmerston Place and Haymarket Terrace, though the modelling report does predict a small reduction (likely due to the reduced convenience of driving through these streets introduced by the restricted movements). Ultimately this is not the intention of TRO/23/17, which is instead intended to mitigate the impact of traffic through The Crescents, by establishing a 'low' level of traffic on each of these streets, rather than a notable imbalance in the level of traffic between them.

As outlined in this report, The proposals contained in TRO/23/17 were requested by objectors to TRO/17/91, who expressed concerns about the introduction of one-way restrictions on Coates Gardens and Rosebery Crescent without similar restrictions being introduced on Magdala Crescent. The modelling exercise predicts that the impact of the additional traffic restriction on Magdala Crescent would be near parity between affected streets and an appropriate level of traffic on each.

Meanwhile the impact of not proceeding with TRO/23/17 would be a considerable imbalance in the levels of traffic between different streets; with Magdala and Douglas Crescents, already the busiest streets, subject to increased levels of traffic.

It is considered that this proposal is consistent with the City Mobility Plan's aim to reduce the impact of traffic on residential streets for the reasons outlined above.

The West End Community Council are correct that further steps could possibly be taken to reduce the volume of traffic travelling between Haymarket Terrace and Palmerston Place via the Crescents, and such steps could be considered following the proposed monitoring in early 2024, should it be found that traffic levels are not in line with expectations, or affecting the operation of the crossings or the cycleway. However, any such measures would need to be considered both in terms of their impact on residential and commercial access to the affected streets, as well as the potential impact that displaced traffic could have on public transport operations, especially on Haymarket Terrace and through the Haymarket junction.

Alternate Proposal

The West End Community Council have proposed that at each of Magdala Crescent, Coates Gardens and Rosebery Crescent the Council implement a banned left turn from the A8, alongside a banned right-turn onto the A8. This would eliminate the ability to 'shortcut' through The Crescents between Haymarket Terrace and Palmerston Place as part of a journey between the west of the city and the City Centre.

Traffic is already banned from turning into Coates Gardens and Rosebery Crescent under TRO/17/91 which is in effect. Under the proposals entailed by TRO/23/17 vehicles would be banned from exiting Magdala Crescent.

Changing these proposals to permit vehicles to travel both in and out of these streets would require a further TRO. As would introducing additional banned movements to restrict vehicles from turning left into Magdala Crescent, or turning right out of Coates Gardens or Rosebery Crescent.

The Council does not generally introduce banned-left turns at side road junctions as these can be vulnerable to abuse and are very difficult to enforce.

Introducing banned right-turns at Coates Gardens and Rosebery Crescent could be appropriate options for further reducing the level of through traffic on these streets and could be considered, alongside other options, following the proposed monitoring in early 2024, should it be found that traffic levels are not in line with expectations, or affecting the operation of the crossings or the cycleway. However, any such measures would need to be considered both in terms of their impact on residential and commercial access to the affected streets, as well as the potential impact that displaced traffic could have on public transport operations, especially on Haymarket Terrace and through the Haymarket junction.

For the reasons outlined above, it is recommended that the objection from the West End Community Council is set aside.

Appendix 3 – Summary of Traffic Modelling Data (figures expressed as vehicles per hour (vph))

Predicted Traffic Levels per Street Location	Baseline			CCWEL				CCWEL w/ Magdala C One-Way			
	AM	PM	Total Peak	AM	PM	Total Peak	Change	AM	PM	Total Peak	Change
Magdala Cres	347	237	584	396	264	660	76	201	141	342	-242
Coates Gdns	141	95	236	74	69	143	-93	196	127	323	87
Rosebery Cres	69	128	197	3	85	88	-109	37	124	161	-36
Grosvenor St	22	29	51	26	12	38	-13	33	20	53	2
Eglington Cres*	148	133	281	155	142	297	16	210	144	354	73
Douglas Cres	266	153	419	329	176	505	86	235	119	354	-65
Eglington Cres**	162	138	299	142	160	302	3	165	151	316	17
Glencairn Cres**	162	138	299	142	160	302	3	165	151	316	17
Grosvenor Cres**	96	114	210	86	106	191	-19	76	133	209	-2
Lansdowne Cres**	96	114	210	86	106	191	-19	76	133	209	-2
Totals:	1509	1279	2786	1439	1280	2717	-69	1394	1243	2637	-151

*Between Douglas Crescent and Coates Gardens

**50% of combined counts for both sides of garden

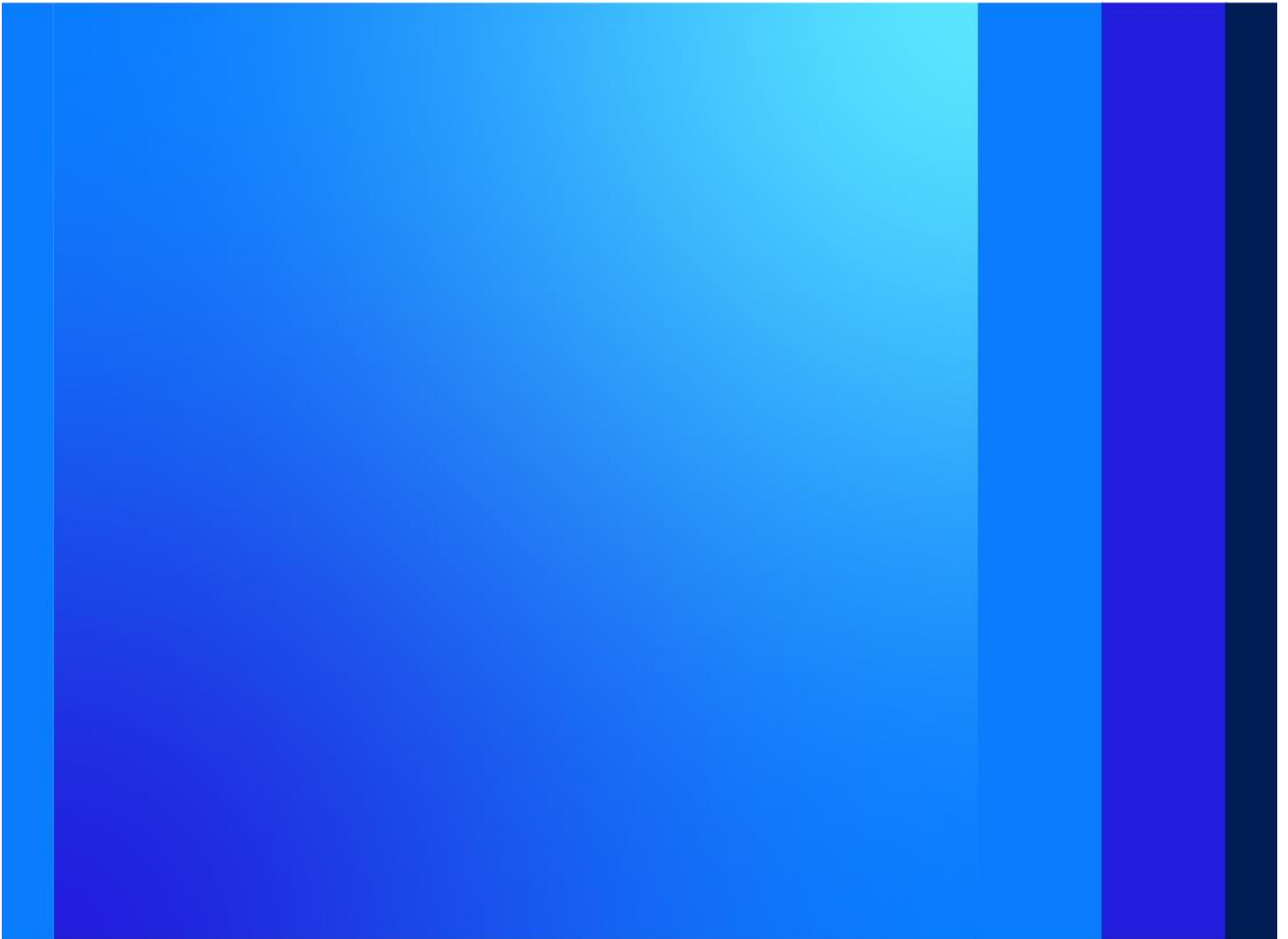


CCWEL West End Crescents

VISSIM Traffic Modelling

18 October 2023

The City of Edinburgh Council



CCWEL West End Crescents

Project No: B2284200
Document Title: VISSIM Traffic Modelling
Document No.: 001
Revision: 1
Document Status: Final
Date: 18 October 2023
Client Name: The City of Edinburgh Council
Client No:
Project Manager: Grant Davidson
Author: Lewis Murray-Zmijewski
File Name: Final West End Crescents Modelling Report.docx

Jacobs U.K. Limited

160 Dundee Street
Edinburgh
EH11 1DQ
United Kingdom
T +44 (0)131 659 1500
www.jacobs.com

© Copyright 2023 Jacobs U.K. Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright.

Limitation: This document has been prepared on behalf of, and for the exclusive use of Jacobs' client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this document by any third party.

Document history and status

Revision	Date	Description	Author	Checked	Reviewed	Approved
1	10.10.23	Draft Modelling Report	LMZ	GD	LMZ	GD
2	18.10.23	Final Modelling Report	LMZ	GD	LMZ	GD

Contents

1.	Introduction.....	1
1.1	Introduction	1
1.2	Report Structure.....	2
2.	Model Development and Calibration	3
2.1	The City of Edinburgh Council's Model Suite.....	3
2.2	VISSIM City Centre Base Model Extents.....	3
2.3	ECCT Model Cordonning.....	5
2.4	WebTAG Calibration Criteria.....	5
2.5	West End Crescents Model Calibration.....	5
3.	Scheme Proposals	7
4.	Modelling Results	10
4.1	Introduction	10
4.2	AM Traffic Flow Analysis	10
4.3	PM Traffic Flow Analysis	12
5.	Summary	13
5.1	General Summary.....	13
5.2	Conclusions	13

Appendix A. West End Crescents Model Calibration

1. Introduction

1.1 Introduction

Jacobs has been commissioned by the City of Edinburgh Council (the Council) to assess the localised impacts of potential traffic restriction measures in the West End Crescents area of Edinburgh, north of Haymarket. The purpose of the traffic restrictions is to help facilitate new cycle infrastructure that forms part of the City Centre West to East Cycle Link (CCWEL).

CCWEL creates a quiet route network between Roseburn Terrace and York Place via Haymarket Terrace, Melville Street, Charlottes Square, George Street and Queen Street. In terms of West End Crescents, the scheme passes through Rosebery Crescent and Grosvenor Crescent/ Lansdowne Crescent in addition to impacting the streets connecting with Haymarket Terrace and Palmerston Place.

The restrictions under consideration primarily consist of one-way general traffic closures and banned turning movements. They were packaged together under the following options for assessment:

- Option A:**
 - Coates Gardens closed northbound from Haymarket Terrace; and,
 - Rosebery Crescent closed northbound from Haymarket Terrace.

- Option B:**
 - Option A plus Grosvenor Street closed northbound at West Maitland Street.

- Option C:**
 - Option B plus Magdala Crescent closed southbound at West Coates/ Haymarket Terrace.

- Option C1:**
 - Option C plus banned right turn from Palmerston Place to Glencairn Crescent; and,
 - Douglas Crescent closed eastbound at Palmerston Place.

- Option C2:**
 - Option C plus removal of the traffic lights at Glencairn Crescent/ Palmerston Place junction;
 - Glencairn Crescent closed westbound at Palmerston Place; and,
 - Douglas Crescent closed eastbound at Palmerston Place.

The assessment of the above options was undertaken using the microsimulation software VISSIM and makes use of the Council's City Centre model previously developed as part of the Edinburgh City Centre Transformation project (ECCT). The western edge of the VISSIM City Centre model is at Haymarket Terrace and the key elements of the CCWEL scheme have been captured. New observed traffic surveys were undertaken in the West End Crescents area and the model was locally optimised for this study.

The CCWEL route through the West End Crescents area of Edinburgh is highlighted in Figure 1-1 below.

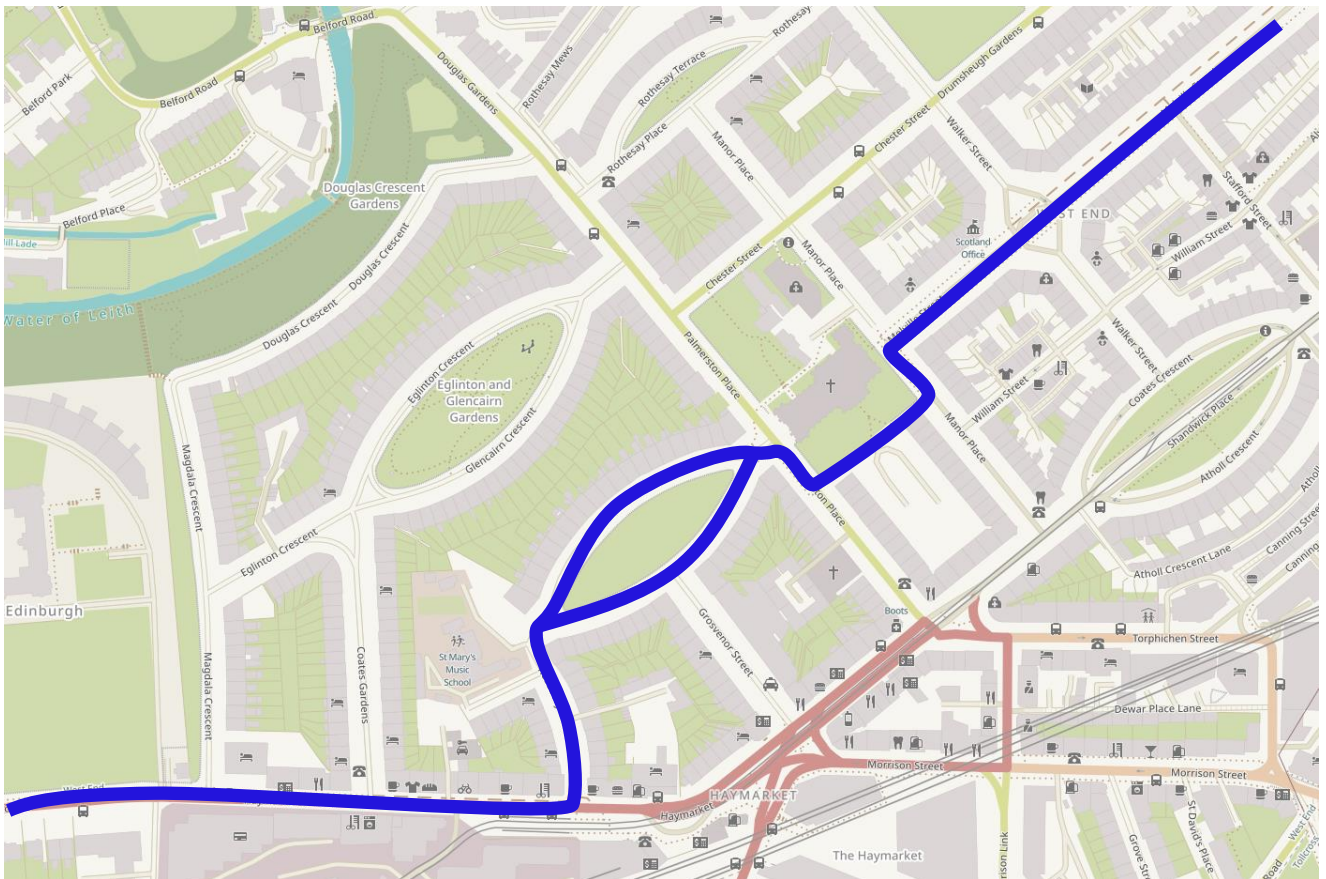


Figure 1-1: CCWEL Route Through the West End Crescents

1.2 Report Structure

This report provides a summary of the Base model development, including calibration performance. The traffic restriction options under consideration are then outlined alongside how they are represented in each VISSIM model. Model results for each option are examined before a final summary is provided.

The structure of this report is as follows:

- Chapter 2 – Model Development and Calibration
- Chapter 3 – Scheme Proposals
- Chapter 4 – Modelling Results
- Chapter 5 – Summary

2. Model Development and Calibration

2.1 The City of Edinburgh Council's Model Suite

The Council's model suite was originally developed and is currently maintained by Jacobs. It is based on a strategic VISUM model and associated VISSIM microsimulation models covering the city centre and key arterial corridors. Originally developed in 2005 to support the tram business case, models have been continually updated with new traffic survey and planning data.

The strategic model is a 4-stage incremental model, including highway and bus, rail and tram public transport modes.

Microsimulation models cover the city centre and key arterial routes. These simulate detailed traffic movements and help support more detailed junction and street design. Demand matrices are cordoned from the VISUM strategic model and assigned to the microsimulation models. By doing so, it is possible to model major changes, including mode change and vehicle rerouting at a strategic level and, through the cordoning procedure, replicate the impacts at the microsimulation level.

Microsimulation models include private and public transport vehicle movements. Unless specific schemes are being analysed, active travel is captured at pedestrian and cycle crossings but there is not a full representation of active travel demand across the network.

2.2 VISSIM City Centre Base Model Extents

The Base model used in this assessment was developed for the ECCT project and appraised the various options under consideration as part of the project. The City Centre VISSIM model originally covered the route of the tram from Haymarket to York Place and parallel diversion corridors. A subsequent extension to the north and south was designed to test the impacts of road closures required to support the redevelopment of Edinburgh St James.

The City Centre model includes a further extension to cover the whole city centre and ensures that all significant rerouting effects can be captured. The model encompasses Haymarket Station in the west, the Meadows in the south, London Road in east and Canonmills in the north. It also includes the five major east-west routes through the city centre (Meadows, Lauriston Place, Cowgate, Princes Street and Queen Street) and the three north-south corridors (Lothian Road, the Mound and the Bridges).

VISSIM model matrices have been cordoned from VISUM. The active VISUM model area, cordoned for assignment in VISSIM, is shown in Figure 2-1 and corresponds to the VISSIM network shown in Figure 2-2.

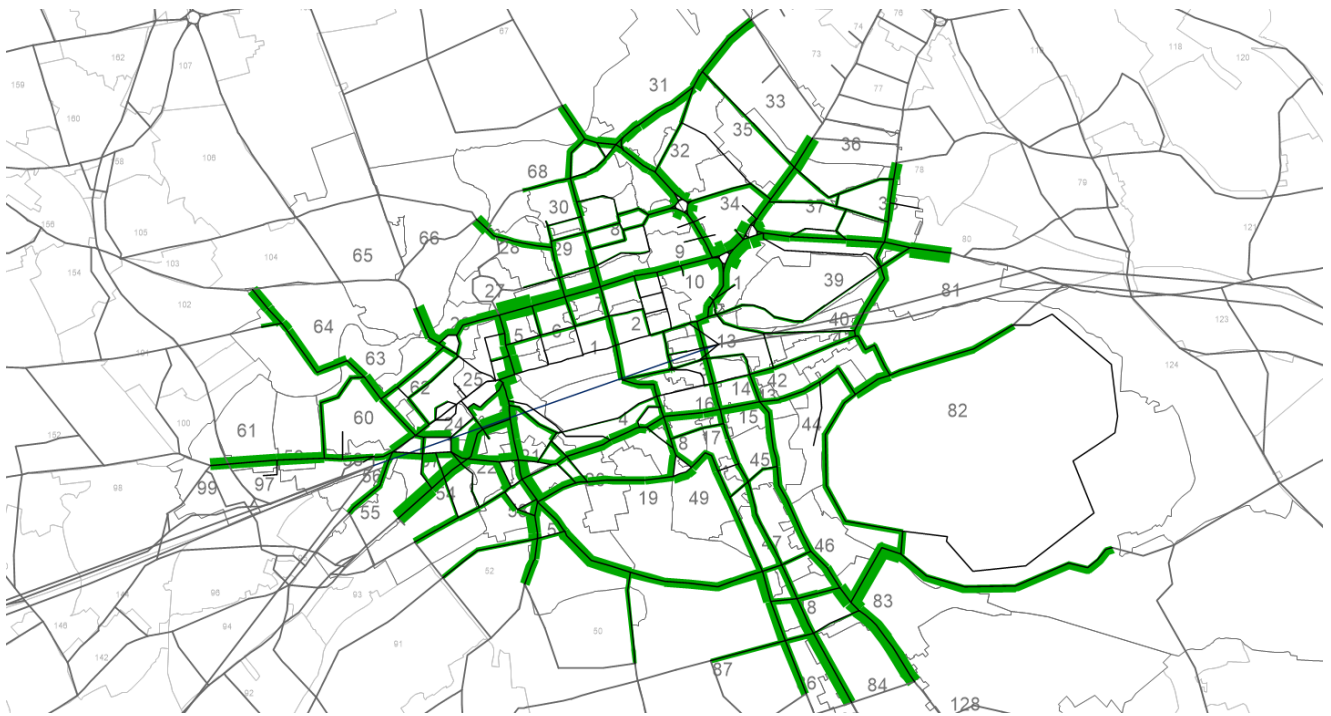


Figure 2-1: VISUM Model and Cordoned Area



Figure 2-2: VISSIM City Centre Model Extents

2.3 ECCT Model Cordoning

The Base VISUM model was recalibrated in December 2016, based on new traffic count data obtained in 2014 and 2016. Count data was extensive and encompassed the majority of key junctions throughout the city centre.

Cordoned Base VISSIM microsimulation models represent the same 2016 year and cover each one-hour peak (excluding an additional 15 minute warm up period), representing:

- AM (08:00-9:00), and
- PM (17:00-18:00)

It should be noted that model traffic demand represents a typical neutral month. Traffic flows do not reflect peak summer festival conditions when vehicle volumes can be significantly higher and resulting network performance can be poor.

2.4 WebTAG Calibration Criteria

WebTAG M3.1 provides validation guidance criteria for macroscopic models and these have been applied to the development of the City Centre VISSIM model, as far as possible.

The guidelines state that a minimum of 85% of modelled hourly flows should meet any of the following criteria:

- within 15% of surveyed counts (for flows 700-2700vph)
- within 100vph of surveyed counts (for flows <700vph)
- within 400vph of surveyed counts (for flows >2700vph)

Or

- at least 85% of the modelled hourly flows achieved GEH values of 5 or less when compared to the survey data

The GEH Statistic is a formula used in traffic engineering, traffic forecasting, and traffic modelling to compare two sets of traffic volumes. It is considered a good method for analysing a model's performance as it avoids the problems that can occur when comparing two sets of volumes using simple percentages. For example, a motorway carrying 7200 vehicles per hour and a town centre high street cannot be judged by the same single variation of percentage that is acceptable to both volumes. The equation for the GEH statistic is shown below where M is the modelled traffic volume and C is the observed traffic volume.

$$GEH = \sqrt{[(Modelled-Observed)^2 / \{(Observed+Modelled)/2\}]}$$

GEH values of 5 or less can be considered as a good match; values between 5 and 10 may require further investigation and those more than 10 may not be considered as a good match.

2.5 West End Crescents Model Calibration

New traffic counts were commissioned for the West End Crescents area, which allows for the ECCT City Centre model to be locally calibrated and provide greater accuracy of traffic movements for this study. A survey of all vehicle types and pedestrians at each of the following junctions for a morning peak and an evening peak period on working days during August 2018. Junctions surveyed Include:

- Magdala Crescent/ Haymarket Terrace
- Coates Gardens/ Haymarket Terrace
- Roseberry Crescent/ Haymarket Terrace
- Grosvenor Street/ Haymarket Terrace

- Douglas Crescent/ Palmerston Place
- Glencairn Crescent/ Palmerston Place
- Grosvenor Crescent/ Palmerston Place

A summary of the calibration results for the AM and PM peaks at all surveyed junctions is given in Table 2-1. A full summary of all surveyed junction turns is given in Table A-1 (AM Peak) and Table A-2 (PM Peak).

Table 2-1: West End Crescents Base Model Calibration Summary

Percentage Pass	AM 08:00-09:00	PM 17:00-18:00
GEH Car <5	88%	90%
GEH LGV <5	86%	96%
GEH HGV <5	96%	100%
GEH Bus <5	98%	98%
GEH Total <5	80%	75%
GEH Total <7.5	98%	98%

In the morning peak, 88% of car counts (turning volumes) have a GEH value of under 5, with 86% of LGVs and 96% of HGVs under 5. Evening peak values are slightly higher at 90%, 96% and 100% respectively, which is considered good given the scale of the model.

When combined across all transport modes, several morning and evening peak GEH values are slightly above 5, but 98% of all vehicle turns have a GEH less than 7.5 in both peaks.

Overall, the model is considered to calibrate to a satisfactory level and is fit for the intended purpose to test outline scheme options.

3. Scheme Proposals

The options under consideration for the West End Crescents involve a number of one-way general traffic road closures, with the primary aim to reduce the risk of conflict with cycles on Haymarket Terrace. There are also potential options that look to simplify the interaction of the West End Crescents with Palmerston Place.

The level of intervention increases through the options with the exception of two sub-options for Option C that have alternative proposals for the Glencairn Crescent/ Palmerston Place junction.

Option A

Closes Coates Gardens and Rosebery Crescent northbound to general traffic from Haymarket Terrace. This reduces the risk of vehicles turning at speed across the two-way cycle track on Haymarket Terrace and colliding with cycles.

Option B

Builds on Option A and closes Grosvenor Street to general traffic northbound from West Maitland. This simplifies the Haymarket Terrace/ Dalry Road junction and provides cyclists from Dalry Road with a safer connection to the CCWEL route.

Option C

Includes all the restrictions under Options A and B in addition to closing the southbound exit onto Haymarket Terrace from Magdala Crescent for general traffic. This further reduces the risk of conflict between vehicles and cycles on Haymarket Terrace.

Option C1

This option pivots from Option C and includes an eastbound closure for general traffic from Douglas Crescent onto Palmerston Place. It also bans the right turn from Palmerston Place to Glencairn Crescent for general traffic. Both interventions aim to simplify the connections to Palmerston Place and improve traffic flow in this area.

The proposed traffic restrictions for Options A through to Option C1 are displayed in Figure 3-1. The black arrows indicate the direction of travel that is permitted for general traffic, while the red arrow highlights the banned turning movement from Palmerston Place to Glencairn Crescent under Option C1. The CCWEL route is also shown in blue for reference.

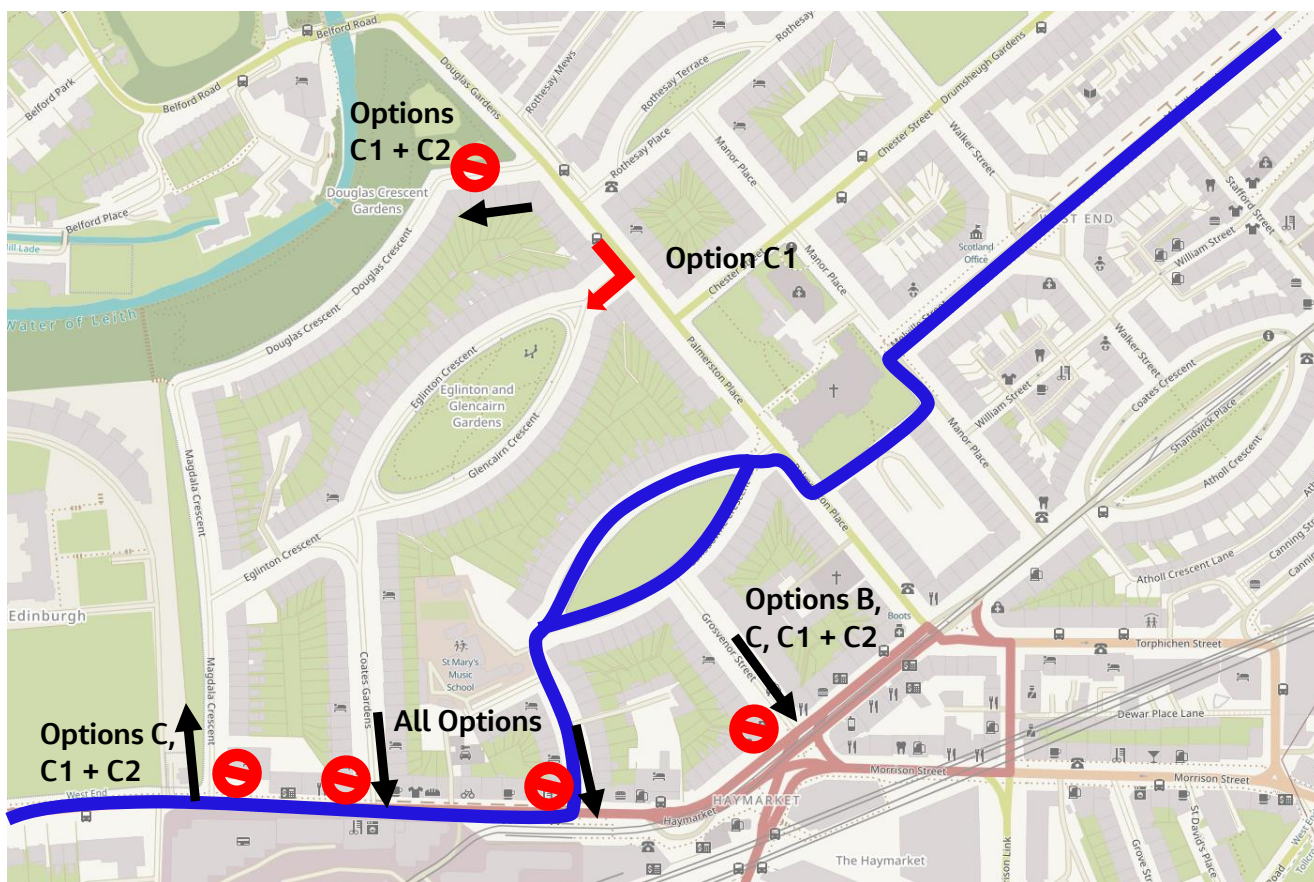


Figure 3-1: West End Crescents Options A, B, C and C1

Option C2

This option is the same as Option C1 with the exception of the Palmerston Place/ Glencairn Crescent junction. Option C2 removes the traffic signals currently in place and creates a give way junction. To improve traffic flow at this junction, north and southbound general traffic on Palmerston Place is banned from turning into Glencairn Crescent. As with Option C1 the purpose of this proposal is to simplify the West End Crescents interaction with Palmerston Place and ease traffic flow in the area.

Figure 3-2 below illustrates Option C2 and the change at the Palmerston Place/ Glencairn Crescent junction. Again, black arrows indicate the direction of travel that general traffic is permitted and the CCWEL route is also shown in blue for reference. A crossed-out traffic light symbol at the Palmerston Place/ Glencairn Crescent junction signifies the removal of the existing traffic signals.

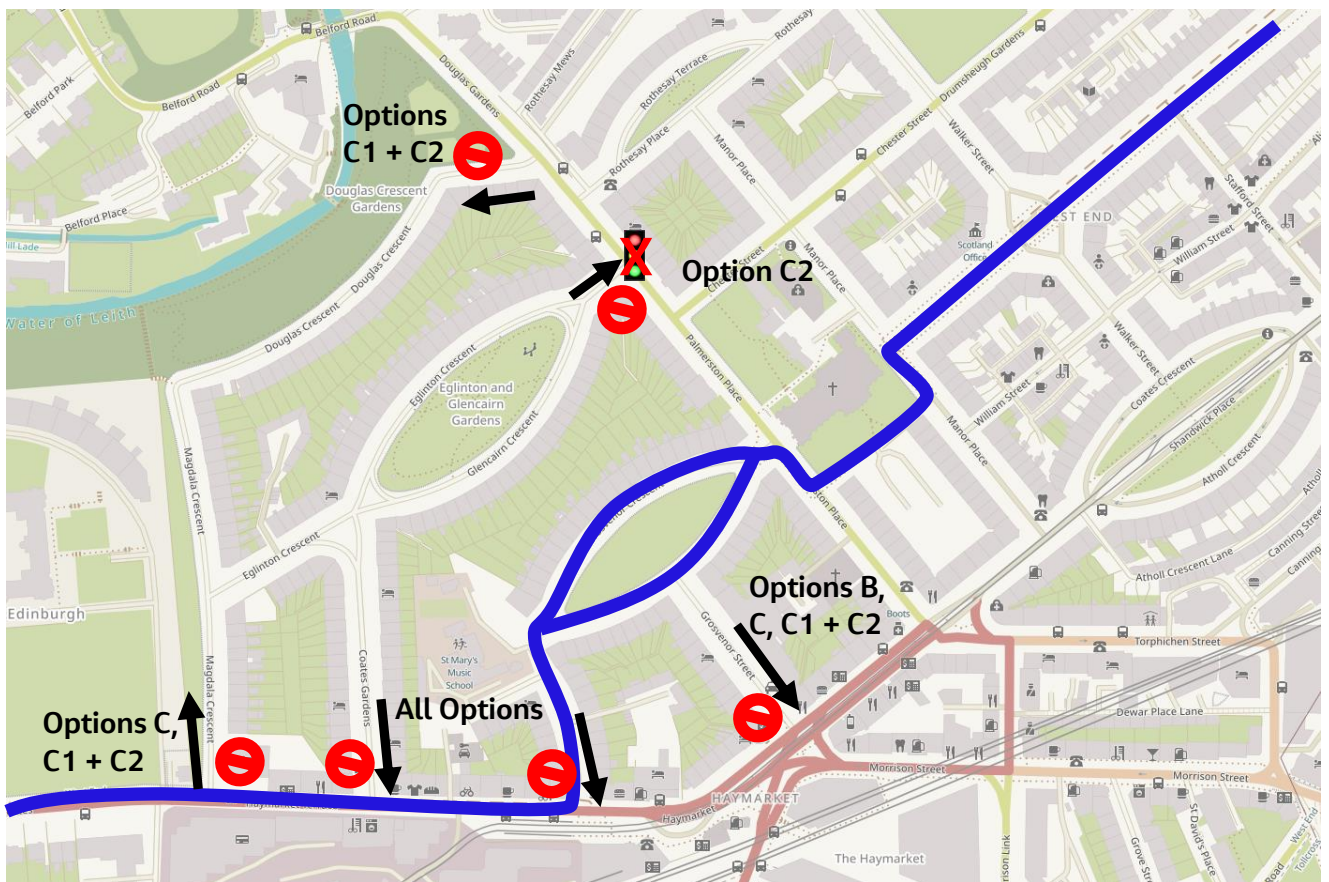


Figure 3-2: West End Crescents Options A, B, C and C2

4. Modelling Results

4.1 Introduction

The five West End Crescents options have been coded independently into the VISSIM Base model for the morning and evening peak periods. The localised impacts of the options on the West End Crescents are summarised in this section. The analysis focuses on changes in traffic flows across the options in the study area with flows compared against the Base model for reference.

The VISSIM network for the West End Crescents is shown in Figure 4-1 below. It is worth noting that there are three internal zones within the study area, as indicated in the figure. VISSIM uses zones to distribute traffic around the network and represent vehicles with an origin or destination within the West End Crescents area (e.g. travelling to/ from home or on-street parking). Inclusion of these zones explain any slight discrepancies in traffic volumes that might appear in the analysis.



Figure 4-1: VISSIM West End Crescents Network

4.2 AM Traffic Flow Analysis

Modelled hourly traffic volumes in the morning peak (08:00-09:00) are listed for all five options and the Base model in Table 4-1. The values shown are total across all vehicle classes (Car, LGV, HGV and Bus) in the study area and are separated by direction.

Table 4-1: AM Hourly Traffic Volumes (All Vehicle Types)

Location	Direction	Base	Option A	Option B	Option C	Option C1	Option C2
Magdala Crescent	NB	161	201	225	201	195	262
Magdala Crescent	SB	186	173	171	0	0	0
Coates Gardens	NB	69	0	0	0	0	0
Coates Gardens	SB	72	77	74	196	133	124
Rosebery Crescent	NB	61	0	0	0	0	0
Rosebery Crescent	SB	8	4	3	37	79	76
Grosvenor Street	NB	0	1	0	0	0	0
Grosvenor Street	SB	22	20	26	33	23	19
Eglinton Crescent (w)	EB	123	91	127	210	337	459
Eglinton Crescent (w)	WB	25	23	28	0	0	0
Douglas Crescent	EB	83	165	149	126	0	0
Douglas Crescent	WB	183	184	180	109	123	179
Eglinton Crescent (e)	EB	203	123	149	166	303	322
Glencairn Crescent	WB	120	147	135	164	113	0
Grosvenor Crescent	EB	143	85	82	72	99	58
Lansdowne Crescent	WB	49	102	89	79	140	91

The northbound closures of Coates Gardens and Rosebery Crescent results in more vehicles using Magdala Crescent as an alternative. However, overall northbound traffic through the West End Crescents reduces. In the Base model 291 vehicles per hour travel northbound on Magdala Crescent, Coates Gardens, Rosebery Terrace and Grosvenor Street. This reduces to 202 in Option A and does not go above 262 vehicles per hour across all options (195 to 262 vehicles).

There is limited traffic travelling northbound on Grosvenor Street in the Base model. The survey information indicates there should be around 14 vehicles per hour. This is not considered a significant number of vehicles and is not likely to impact the options assessment. The closure of Grosvenor Street northbound is included from Option B onwards.

The northbound closures have a direct impact on eastbound movements through the West End Crescents. Traffic volumes on Grosvenor Crescent reduce in all options due to the northbound closures of Rosebery Crescent and Grosvenor Street. There is also a notable switch of eastbound traffic using Douglas Crescent instead of Eglinton Crescent, until Options C1 and C2 when Douglas Crescent is closed eastbound at Palmerston Place. When this closure occurs in Option C1 and C2, this eastbound traffic reverts back to Eglinton Crescent and there is noticeable rise in traffic flow from the Base model.

The closure of Magdala Crescent southbound in Options C, C1 and C2 results in more vehicles using Coates Gardens and Rosebery Crescent. In the Base model overall southbound volumes through the West End Crescents is 288, which reduces to 266 in Option C, 235 in Option C1 and 219 in Option C2.

Westbound traffic volumes are consistent on Eglinton Crescent (w) until Magdala Crescent is closed southbound in Option C. This also reduces the westbound flow on Douglas Crescent until Glencairn Crescent is closed westbound from Palmerston Place in Option C2 when traffic reverts back to Douglas Crescent. In all Options traffic volumes increase on Lansdowne Crescent westbound compared to the Base model.

Option C1 bans the right turn from Palmerston Place to Glencairn Crescent, which results in a slight reduction westbound on Glencairn Crescent with vehicles opting to use Lansdowne Crescent as an alternative. Option C2 replaces the traffic signals at the Palmerston Place/ Glencairn Crescent junction with a give way. This makes it

easier for vehicles to exit Glencairn Crescent and makes this a more attractive route, increasing traffic flow eastbound on Eglinton Crescent.

4.3 PM Traffic Flow Analysis

The evening peak (17:00-18:00) modelled traffic volumes for all five options and the Base model are shown in Table 4-2. As with the morning peak, they are for all vehicle classes on the key West End Crescents links by direction.

Table 4-2: PM Hourly Traffic Volumes (All Vehicle Types)

Location	Direction	Base	Option A	Option B	Option C	Option C1	Option C2
Magdala Crescent	NB	144	217	170	141	68	129
Magdala Crescent	SB	93	113	94	0	0	0
Coates Gardens	NB	43	0	0	0	0	0
Coates Gardens	SB	52	54	69	127	138	121
Rosebery Crescent	NB	49	0	0	0	0	0
Rosebery Crescent	SB	79	91	85	124	125	126
Grosvenor Street	NB	10	67	0	0	0	0
Grosvenor Street	SB	19	23	12	20	30	25
Eglinton Crescent (w)	EB	93	135	117	144	170	271
Eglinton Crescent (w)	WB	40	35	25	0	0	0
Douglas Crescent	EB	91	117	94	72	0	0
Douglas Crescent	WB	62	85	82	47	76	117
Eglinton Crescent (e)	EB	167	144	175	163	175	156
Glencairn Crescent	WB	108	89	145	138	133	0
Grosvenor Crescent	EB	131	132	93	96	102	63
Lansdowne Crescent	WB	97	108	118	170	185	142

The modelling of the options in the evening peak follows a similar pattern to that of the morning peak. Coates Gardens and Rosebery Crescent closing northbound results in more vehicles using Magdala Crescent but overall, through the West End Crescents, there are fewer northbound vehicles in total.

With northbound and eastbound through the West End Crescents being interlinked, traffic volumes on Grosvenor Crescent reduce after the closure of Grosvenor Street northbound. Most of this traffic uses Eglinton Crescent as an alternative eastbound route.

Southbound, the closure of Magdala Crescent leads to increased traffic flow on Coates Gardens and Rosebery Crescent and more vehicles travelling westbound on Glencairn Crescent and Lansdowne Crescent.

The closure on Douglas Crescent in Options C1 and C2 places additional eastbound traffic on Eglinton Crescent. In Option C1, the banned right turn from Palmerston Place to Glencairn Crescent has minimal impact but the full westbound closure results in an increase on Douglas Crescent. Removal of the traffic signals in Option C2 improve eastbound throughput from Eglinton Crescent and makes this route more attractive to vehicles.

5. Summary

5.1 General Summary

The City of Edinburgh Council are investigating potential general traffic restrictions in the West End Crescents area of Edinburgh north of Haymarket. The purpose of the restrictions is to help facilitate new cycle infrastructure along Haymarket Terrace, Rosebery Terrace and Grosvenor Crescent/ Lansdowne Crescent, which forms part of CCWEL.

Jacobs have locally recalibrated an existing VISSIM microsimulation model of Edinburgh City Centre to test five packages of restrictions in the morning and evening peak hours to determine their anticipated traffic flow impacts on the West End Crescents. The five options are outlined below with the level of intervention increasing through the options.

- Option A:**
 - Coates Gardens closed northbound from Haymarket Terrace; and,
 - Rosebery Crescent closed northbound from Haymarket Terrace.
- Option B:**
 - Option A plus Grosvenor Street closed northbound at West Maitland Street.
- Option C:**
 - Option B plus Magdala Crescent closed southbound at West Coates/ Haymarket Terrace.
- Option C1:**
 - Option C plus banned right turn from Palmerston Place to Glencairn Crescent; and,
 - Douglas Crescent closed eastbound at Palmerston Place.
- Option C2:**
 - Option C plus removal of the traffic lights at Glencairn Crescent/ Palmerston Place junction;
 - Glencairn Crescent closed westbound at Palmerston Place; and,
 - Douglas Crescent closed eastbound at Palmerston Place.

Modelling analysis of the five options concluded that the two peak hours performed similarly. Closing Coates Gardens and Rosebery Crescent northbound under Option A results in more vehicles using Magdala Crescent northbound and Douglas Crescent eastbound. However, the northbound closures directly influence traffic volumes eastbound with reductions in flows modelled on Eglinton Crescent and Grosvenor Crescent.

Option B closes Grosvenor Street northbound and slightly amplifies the changes in traffic flows discussed above but the number of vehicles on Grosvenor Street is relatively low and the overall impact is minor.

Closing Magdala Crescent southbound in Option C has the opposite effect to the impacts modelled in Options A and B with traffic flows increasing southbound on Coates Gardens, Rosebery Crescent and Grosvenor Street, in addition to, westbound increases on Douglas Crescent, Glencairn Crescent and Lansdowne Crescent.

Options C1 and C2 both close Douglas Crescent eastbound which leads to increased usage of Eglinton Crescent eastbound. Banning the right turn from Palmerston Place to Glencairn Crescent under Option C1 has minimal impact on traffic flows through the West End Crescents. However, replacing the traffic signals at the Palmerston Place/ Glencairn Crescent junction with a give way improves throughput from Glencairn Crescent, making it more attractive to vehicles and inducing traffic.

5.2 Conclusions

In general, the more restrictions that are in place the less permeable the West End Crescents become, and overall traffic volumes through these streets reduce slightly. Table 5-1 shows the total peak time (AM + PM) modelled two-way traffic flows on each street within the West End Crescents and summarises the total vehicles entering/ exiting the study area from Haymarket Terrace and Palmerston Place.

Table 5-1: Combined AM and PM Two-way Hourly Traffic Volumes (All Vehicle Types)

Location	Base	Option A	Option B	Option C	Option C1	Option C2
Magdala Crescent	584	704	660	342	263	391
Coates Gardens	236	131	143	323	271	245
Rosebery Crescent	197	95	88	161	204	202
Grosvenor Street	51	111	38	53	53	44
Eglinton Crescent (w)	281	284	297	354	507	730
Douglas Crescent	419	551	505	354	199	296
Eglinton Crescent (e)/ Glencairn Crescent	598	503	604	631	724	478
Grosvenor Crescent/ Lansdowne Crescent	420	427	382	417	526	354
Total Entering/ Existing from Haymarket Terrace	1068	1041	929	879	791	882
Total Entering/ Existing from Palmerston Place	1437	1481	1491	1402	1449	1128

Two-way traffic volumes on most streets through the West End Crescents remain relatively consistent between Options A and B when compared to the Base model. However, due to the northbound closures there is a decrease in traffic volumes on the northbound routes through the West End Crescents from Rosebery Crescent and Coates Gardens. This traffic instead uses the northbound route via Magdala Crescent and Douglas Crescent.

Closing Magdala Crescent southbound (Option C) leads to two-way traffic volumes reducing on Douglas Crescent at the expense of Eglinton/ Glencairn Crescent. Closing Douglas Crescent eastbound (Options C1 and C2) add to these impacts.

Observed traffic counts indicate a relatively small volume of vehicles undertake the right turn from Palmerston Place to Glencairn Crescent. Banning this movement under Option C1 therefore has minimal impact on traffic flow through the West End Crescents. The changes at the Palmerston Place/ Glencairn Crescent junction in Option C2 may increase traffic volumes in the West End Crescents due to an easier exit from Glencairn Crescent onto Palmerston Place.

Although there are some positive or negative traffic flow impacts on individual streets, modelling suggests that, overall, there is a slight reduction in traffic volumes through the West End Crescents. Therefore, it is recommended that the decision to promote one option over another should be based on the benefits to the CCWEL scheme and/ or opportunities to improve the streetscape of the individual streets in the West End Crescents area.

Appendix A. West End Crescents Model Calibration

Table A-1: AM Peak 08:00-09:00

From	To	Count					Model					Difference					GEH				
		Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total
Site 1 - Magdala Cres / W Coates / Haymarket Ter																					
Magdala Cres	W Coates	106	11	1	2	120	111	32	6	0	149	5	21	5	-2	29	0.5	4.5	2.7	2.0	2.5
Magdala Cres	Haymarket Ter	7	2	0	0	9	23	8	0	0	31	16	6	0	0	22	4.1	2.7	0.0	0.0	4.9
W Coates	Magdala Cres	182	43	11	0	236	143	13	1	0	157	-39	-30	-10	0	-79	3.1	5.7	4.1	0.0	5.6
W Coates	Haymarket Ter	297	53	11	49	410	360	93	16	54	523	63	40	5	5	113	3.5	4.7	1.4	0.7	5.2
Haymarket Ter	Magdala Cres	5	3	0	1	9	12	2	0	0	14	7	-1	0	-1	5	2.4	0.6	0.0	1.4	1.5
Haymarket Ter	W Coates	368	36	8	48	460	362	32	10	44	448	-6	-4	2	-4	-12	0.3	0.7	0.7	0.6	0.6
Site 2 - Coates Gdns / Haymarket Ter (W) / Haymarket Ter (E)																					
Coates Gdns	Haymarket Ter (W)	88	13	1	0	102	68	3	1	0	72	-20	-10	0	0	-30	2.3	3.5	0.0	0.0	3.2
Coates Gdns	Haymarket Ter (E)	15	3	0	0	18	5	0	1	0	6	-10	-3	1	0	-12	3.2	2.4	1.4	0.0	3.5
Haymarket Ter (W)	Coates Gdns	15	12	1	0	28	45	3	0	0	48	30	-9	-1	0	20	5.5	3.3	1.4	0.0	3.2
Haymarket Ter (W)	Haymarket Ter (E)	289	43	10	49	391	338	99	16	54	507	49	56	6	5	116	2.8	6.6	1.7	0.7	5.5
Haymarket Ter (E)	Coates Gdns	11	1	0	0	12	6	0	0	0	6	-5	-1	0	0	-6	1.7	1.4	0.0	0.0	2.0
Haymarket Ter (E)	Haymarket Ter (W)	280	27	8	49	364	306	31	9	44	390	26	4	1	-5	26	1.5	0.7	0.3	0.7	1.3
Site 3 - Rosebery Cres / Haymarket Ter (W) / Haymarket Ter (E)																					
Rosebery Cres	Haymarket Ter (W)	37	3	0	0	40	4	2	0	0	6	-33	-1	0	0	-34	7.3	0.6	0.0	0.0	7.1
Rosebery Cres	Haymarket Ter (E)	9	0	1	0	10	1	0	0	0	1	-8	0	-1	0	-9	3.6	0.0	1.4	0.0	3.8
Haymarket Ter (W)	Rosebery Cres	27	5	0	0	32	9	7	1	0	17	-18	2	1	0	-15	4.2	0.8	1.4	0.0	3.0
Haymarket Ter (W)	Haymarket Ter (E)	260	43	11	51	365	278	68	8	50	404	18	25	-3	-1	39	1.1	3.4	1.0	0.1	2.0

From	To	Count					Model					Difference					GEH				
		Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total
Haymarket Ter (E)	Rosebery Cres	19	3	1	0	23	41	4	0	0	45	22	1	-1	0	22	4.0	0.5	1.4	0.0	3.8
Haymarket Ter (E)	Haymarket Ter (W)	283	27	8	49	367	333	30	9	43	415	50	3	1	-6	48	2.8	0.6	0.3	0.9	2.4
Site 4 - Grosvenor St / Clifton Ter / W Maitland St																					
Grosvenor St	Clifton Ter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Grosvenor St	W Maitland St	7	0	2	2	11	18	0	2	0	20	11	0	0	-2	9	3.1	0.0	0.0	2.0	2.3
Clifton Ter	Grosvenor St	14	2	2	0	18	0	0	0	0	0	-14	-2	-2	0	-18	5.3	2.0	2.0	0.0	6.0
Clifton Ter	W Maitland St	242	38	10	51	341	279	67	8	50	404	37	29	-2	-1	63	2.3	4.0	0.7	0.1	3.3
W Maitland St	Grosvenor St	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
W Maitland St	Clifton Ter	0	0	0	37	37	36	0	0	43	79	36	0	0	6	42	8.5	0.0	0.0	0.9	5.5
Site 5 - Palmerston Pl (N) / Douglas Cres / Palmerston Pl (S)																					
Palmerston Pl (N)	Douglas Cres	30	5	1	1	37	61	4	1	0	66	31	-1	0	-1	29	4.6	0.5	0.0	1.4	4.0
Palmerston Pl (N)	Palmerston Pl (S)	505	49	8	5	567	470	47	33	0	550	-35	-2	25	-5	-17	1.6	0.3	5.5	3.2	0.7
Douglas Cres	Palmerston Pl (N)	45	3	1	0	49	49	0	0	0	49	4	-3	-1	0	0	0.6	2.4	1.4	0.0	0.0
Douglas Cres	Palmerston Pl (S)	34	14	2	0	50	34	0	0	0	34	0	-14	-2	0	-16	0.0	5.3	2.0	0.0	2.5
Palmerston Pl (S)	Palmerston Pl (N)	385	46	4	4	439	429	51	12	0	492	44	5	8	-4	53	2.2	0.7	2.8	2.8	2.5
Palmerston Pl (S)	Douglas Cres	64	7	0	0	71	74	36	6	0	116	10	29	6	0	45	1.2	6.3	3.5	0.0	4.7
Site 6 - Palmerston Pl (N) / Glencairn Cres / Palmerston Pl (S)																					
Palmerston Pl (N)	Glencairn Cres	33	6	1	1	41	28	2	3	0	33	-5	-4	2	-1	-8	0.9	2.0	1.4	1.4	1.3
Palmerston Pl (N)	Palmerston Pl (S)	455	53	7	4	519	475	43	30	0	548	20	-10	23	-4	29	0.9	1.4	5.3	2.8	1.3
Glencairn Cres	Palmerston Pl (N)	30	12	2	0	44	105	1	0	0	106	75	-11	-2	0	62	9.1	4.3	2.0	0.0	7.2
Glencairn Cres	Palmerston Pl (S)	115	18	6	0	139	79	8	2	0	89	-36	-10	-4	0	-50	3.7	2.8	2.0	0.0	4.7
Palmerston Pl (S)	Palmerston Pl (N)	333	43	3	4	383	303	54	8	0	365	-30	11	5	-4	-18	1.7	1.6	2.1	2.8	0.9
Palmerston Pl (S)	Glencairn Cres	73	13	0	0	86	76	14	1	0	91	3	1	1	0	5	0.3	0.3	1.4	0.0	0.5
Site 7 - Palmerston Pl (N) / Grosvenor Cres / Palmerston Pl (S)																					
Palmerston Pl (N)	Grosvenor Cres	43	5	1	0	49	27	7	2	0	36	-16	2	1	0	-13	2.7	0.8	0.8	0.0	2.0
Palmerston Pl (N)	Palmerston Pl (S)	545	66	10	3	624	542	44	16	0	602	-3	-22	6	-3	-22	0.1	3.0	1.7	2.4	0.9
Grosvenor Cres	Palmerston Pl (N)	97	22	1	0	120	126	16	1	0	143	29	-6	0	0	23	2.7	1.4	0.0	0.0	2.0
Grosvenor Cres	Palmerston Pl (S)	7	4	1	0	12	1	0	0	0	1	-6	-4	-1	0	-11	3.0	2.8	1.4	0.0	4.3

From	To	Count					Model					Difference					GEH				
		Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total
Palmerston Pl (S)	Palmerston Pl (N)	400	54	8	4	466	457	66	5	0	528	57	12	-3	-4	62	2.8	1.5	1.2	2.8	2.8
Palmerston Pl (S)	Grosvenor Cres	6	3	3	1	13	10	0	0	0	10	4	-3	-3	-1	-3	1.4	2.4	2.4	1.4	0.9
Historic Count 30.07.15 - Haymarket Ter (E) / Haymarket Yards / Haymarket Ter (W)																					
Haymarket Ter (E)	Haymarket Yards	22	1	1	0	24	40	16	4	0	60	18	15	3	0	36	3.2	5.1	1.9	0.0	5.6
Haymarket Ter (E)	Haymarket Ter (W)	349	26	11	58	444	294	16	5	40	355	-55	-10	-6	-18	-89	3.1	2.2	2.1	2.6	4.5
Haymarket Yards	Haymarket Ter (E)	4	4	0	0	8	7	7	0	0	14	3	3	0	0	6	1.3	1.3	0.0	0.0	1.8
Haymarket Yards	Haymarket Ter (W)	14	0	1	0	15	18	15	4	4	41	4	15	3	4	26	1.0	5.5	1.9	2.8	4.9
Haymarket Ter (W)	Haymarket Ter (E)	319	44	17	44	424	286	68	8	50	412	-33	24	-9	6	-12	1.9	3.2	2.5	0.9	0.6
Haymarket Ter (W)	Haymarket Yards	36	3	0	0	39	58	30	9	4	101	22	27	9	4	62	3.2	6.6	4.2	2.8	7.4
Historic Counts 30.07.15																					
Haymarket Ter (EB)		281	43	17	43	384	279	67	8	50	404	-2	24	-9	7	20	0.1	3.2	2.5	1.0	1.0
Clifton Ter (EB)		277	41	17	41	376	279	67	8	50	404	2	26	-9	9	28	0.1	3.5	2.5	1.3	1.4
Morrison St (WB)		482	58	22	51	613	337	34	9	0	380	145	-24	-13	-51	-233	7.2	3.5	3.3	10.1	10.5

Table A-2: PM Peak 17:00-18:00

From	To	Count					Model					Difference					GEH				
		Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total
Site 1 - Magdala Cres / W Coates / Haymarket Ter																					
Magdala Cres	W Coates	52	8	0	0	60	72	6	1	0	79	20	-2	1	0	19	2.5	0.8	1.4	0.0	2.3
Magdala Cres	Haymarket Ter	4	1	0	0	5	14	0	0	0	14	10	-1	0	0	9	3.3	1.4	0.0	0.0	2.9
W Coates	Magdala Cres	155	9	0	0	164	133	7	0	0	140	-22	-2	0	0	-24	1.8	0.7	0.0	0.0	1.9
W Coates	Haymarket Ter	244	20	3	40	307	324	52	7	54	437	80	32	4	14	130	4.7	5.3	1.8	2.0	6.7

From	To	Count					Model					Difference					GEH				
		Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total
Haymarket Ter	Magdala Cres	5	3	0	0	8	4	0	0	0	4	-1	-3	0	0	-4	0.5	2.4	0.0	0.0	1.6
Haymarket Ter	W Coates	413	38	3	49	503	449	42	7	47	545	36	4	4	-2	42	1.7	0.6	1.8	0.3	1.8
Site 2 - Coates Gdns / Haymarket Ter (W) / Haymarket Ter (E)																					
Coates Gdns	Haymarket Ter (W)	81	10	0	0	91	47	2	0	0	49	-34	-8	0	0	-42	4.3	3.3	0.0	0.0	5.0
Coates Gdns	Haymarket Ter (E)	8	1	0	0	9	3	0	0	0	3	-5	-1	0	0	-6	2.1	1.4	0.0	0.0	2.4
Haymarket Ter (W)	Coates Gdns	8	3	0	0	11	27	3	0	0	30	19	0	0	0	19	4.5	0.0	0.0	0.0	4.2
Haymarket Ter (W)	Haymarket Ter (E)	239	18	3	40	300	311	49	7	54	421	72	31	4	14	121	4.3	5.4	1.8	2.0	6.4
Haymarket Ter (E)	Coates Gdns	17	0	0	0	17	10	2	1	0	13	-7	2	1	0	-4	1.9	2.0	1.4	0.0	1.0
Haymarket Ter (E)	Haymarket Ter (W)	340	27	3	49	419	406	40	7	47	500	66	13	4	-2	81	3.4	2.2	1.8	0.3	3.8
Site 3 - Rosebery Cres / Haymarket Ter (W) / Haymarket Ter (E)																					
Rosebery Cres	Haymarket Ter (W)	30	4	0	1	35	53	16	4	0	73	23	12	4	-1	38	3.6	3.8	2.8	1.4	5.2
Rosebery Cres	Haymarket Ter (E)	23	1	0	1	25	6	0	0	0	6	-17	-1	0	-1	-19	4.5	1.4	0.0	1.4	4.8
Haymarket Ter (W)	Rosebery Cres	28	3	0	0	31	44	4	0	0	48	16	1	0	0	17	2.7	0.5	0.0	0.0	2.7
Haymarket Ter (W)	Haymarket Ter (E)	227	16	4	39	286	294	42	3	53	392	67	26	-1	14	106	4.2	4.8	0.5	2.1	5.8
Haymarket Ter (E)	Rosebery Cres	24	2	1	0	27	1	0	0	0	1	-23	-2	-1	0	-26	6.5	2.0	1.4	0.0	6.9
Haymarket Ter (E)	Haymarket Ter (W)	299	25	3	48	375	340	34	1	47	422	41	9	-2	-1	47	2.3	1.7	1.4	0.1	2.4
Site 4 - Grosvenor St / Clifton Ter / W Maitland St																					
Grosvenor St	Clifton Ter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Grosvenor St	W Maitland St	16	5	1	1	23	17	2	0	0	19	1	-3	-1	-1	-4	0.2	1.6	1.4	1.4	0.9
Clifton Ter	Grosvenor St	18	2	0	2	22	0	0	0	0	0	-18	-2	0	-2	-22	6.0	2.0	0.0	2.0	6.6
Clifton Ter	W Maitland St	229	15	4	38	286	295	40	4	54	393	66	25	0	16	107	4.1	4.8	0.0	2.4	5.8

From	To	Count					Model					Difference					GEH				
		Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total
W Maitland St	Grosvenor St	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
W Maitland St	Clifton Ter	0	0	0	44	44	39	0	0	47	86	39	0	0	3	42	8.8	0.0	0.0	0.4	5.2
Site 5 - Palmerston Pl (N) / Douglas Cres / Palmerston Pl (S)																					
Palmerston Pl (N)	Douglas Cres	26	2	0	0	28	10	0	0	0	10	-16	-2	0	0	-18	3.8	2.0	0.0	0.0	4.1
Palmerston Pl (N)	Palmerston Pl (S)	506	19	0	4	529	433	16	6	0	455	-73	-3	6	-4	-74	3.4	0.7	3.5	2.8	3.3
Douglas Cres	Palmerston Pl (N)	56	4	0	0	60	44	1	0	0	45	-12	-3	0	0	-15	1.7	1.9	0.0	0.0	2.1
Douglas Cres	Palmerston Pl (S)	22	2	0	0	24	42	4	0	0	46	20	2	0	0	22	3.5	1.2	0.0	0.0	3.7
Palmerston Pl (S)	Palmerston Pl (N)	462	25	1	3	491	471	29	4	0	504	9	4	3	-3	13	0.4	0.8	1.9	2.4	0.6
Palmerston Pl (S)	Douglas Cres	19	0	0	0	19	46	5	1	0	52	27	5	1	0	33	4.7	3.2	1.4	0.0	5.5
Site 6 - Palmerston Pl (N) / Glencairn Cres / Palmerston Pl (S)																					
Palmerston Pl (N)	Glencairn Cres	20	2	0	0	22	13	1	0	0	14	-7	-1	0	0	-8	1.7	0.8	0.0	0.0	1.9
Palmerston Pl (N)	Palmerston Pl (S)	454	18	0	2	474	446	14	6	0	466	-8	-4	6	-2	-8	0.4	1.0	3.5	2.0	0.4
Glencairn Cres	Palmerston Pl (N)	31	2	0	0	33	73	5	0	0	78	42	3	0	0	45	5.8	1.6	0.0	0.0	6.0
Glencairn Cres	Palmerston Pl (S)	83	6	0	0	89	85	3	1	0	89	2	-3	1	0	0	0.2	1.4	1.4	0.0	0.0
Palmerston Pl (S)	Palmerston Pl (N)	415	26	2	3	446	437	24	4	0	465	22	-2	2	-3	19	1.1	0.4	1.2	2.4	0.9
Palmerston Pl (S)	Glencairn Cres	101	12	0	0	113	91	3	0	0	94	-10	-9	0	0	-19	1.0	3.3	0.0	0.0	1.9
Site 7 - Palmerston Pl (N) / Grosvenor Cres / Palmerston Pl (S)																					
Palmerston Pl (N)	Grosvenor Cres	52	2	0	2	56	75	17	4	0	96	23	15	4	-2	40	2.9	4.9	2.8	2.0	4.6
Palmerston Pl (N)	Palmerston Pl (S)	579	31	1	2	613	694	43	8	0	745	115	12	7	-2	132	4.6	2.0	3.3	2.0	5.1
Grosvenor Cres	Palmerston Pl (N)	129	11	1	0	141	115	4	0	0	119	-14	-7	-1	0	-22	1.3	2.6	1.4	0.0	1.9

From	To	Count					Model					Difference					GEH				
		Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total	Car	LGV	HGV	Bus	Total
Grosvenor Cres	Palmerston Pl (S)	9	1	1	0	11	12	0	0	0	12	3	-1	-1	0	1	0.9	1.4	1.4	0.0	0.3
Palmerston Pl (S)	Palmerston Pl (N)	456	28	4	1	489	444	23	0	0	467	-12	-5	-4	-1	-22	0.6	1.0	2.8	1.4	1.0
Palmerston Pl (S)	Grosvenor Cres	8	3	0	0	11	1	0	0	0	1	-7	-3	0	0	-10	3.3	2.4	0.0	0.0	4.1
Historic Count 30.07.15 - Haymarket Ter (E) / Haymarket Yards / Haymarket Ter (W)																					
Haymarket Ter (E)	Haymarket Yards	5	0	0	0	5	10	12	0	0	22	5	12	0	0	17	1.8	4.9	0.0	0.0	4.6
Haymarket Ter (E)	Haymarket Ter (W)	400	26	6	48	480	384	38	5	47	474	-16	12	-1	-1	-6	0.8	2.1	0.4	0.1	0.3
Haymarket Yards	Haymarket Ter (E)	17	0	1	0	18	35	10	0	0	45	18	10	-1	0	27	3.5	4.5	1.4	0.0	4.8
Haymarket Yards	Haymarket Ter (W)	33	1	0	0	34	32	4	3	0	39	-1	3	3	0	5	0.2	1.9	2.4	0.0	0.8
Haymarket Ter (W)	Haymarket Ter (E)	343	21	4	44	412	302	36	3	54	395	-41	15	-1	10	-17	2.3	2.8	0.5	1.4	0.8
Haymarket Ter (W)	Haymarket Yards	9	1	1	0	11	14	13	4	0	31	5	12	3	0	20	1.5	4.5	1.9	0.0	4.4
Historic Counts 30.07.15																					
Haymarket Ter (EB)		318	18	5	43	384	295	40	4	54	393	-23	22	-1	11	9	1.3	4.1	0.5	1.6	0.5
Clifton Ter (EB)		319	19	5	43	386	295	40	4	54	393	-24	21	-1	11	7	1.4	3.9	0.5	1.6	0.4
Morrison St (WB)		658	45	11	52	766	301	34	1	0	336	357	-11	-10	-52	-430	16.3	1.8	4.1	10.2	18.3

