Short Term Interventions

1. Measures to Promote/Improve Alternative Routes (via Fishwives Causeway or Portobello Promenade)

1a. Rephasing of pedestrian/cycle crossing across Sir Harry Lauder Road at Fishwives Causeway to reduce waiting times to cross.

Complete

1b. New and improved direction signing and miscellaneous improvements along routes e.g. changes to road markings, drop kerbs, temporary localised road narrowings.

Signs:

- · Proposals currently undergoing Road Safety Audit
- Audit results expected next week
- All sign plates have been manufactured by the Council's Roads Operations team
- Quotes obtained from contactors to erect the signs and work now being procured

Implementation expected early March 2021

Road markings:

- Proposals currently undergoing Road Safety Audit
- Audit results expected next week
- Implementation dependant on suitable weather
- Currently investigating options to procure a contractor to lay the markings

Implementation expected mid March 2021

Minor infrastructure interventions:

- Proposals currently undergoing Road Safety Audit
- Audit results expected next week
- Currently investigating options to procure a contractor to undertake the work

Implementation expected early April 2021

Temporary local road narrowings:

- Local engagement required with directly affected frontagers
- Road Safety Audit required

Implementation expected May 2021

2. Housing Development Construction Site Traffic

Construction traffic to use alternative site access directly onto Sir Harry Lauder Road to reduce numbers of HGVs passing through King's Road Junction.

New access completed and in use

3. Traffic Data/Modelling

Collection of traffic data at junction to allow assessment of impacts of potential interventions at King's Road junction and elsewhere:

- 12 hour traffic survey undertaken at King's Road junction on 22 December 2020
- Historic traffic survey data obtained for potential alternative traffic routes (Brighton Place and Northfield Broadway)

Key outputs from analysis of this traffic survey data is presented in Appendix 4. Full survey data for each of the three surveys can be provided on request.

A more extensive traffic survey at King's Road junction would normally be required to inform traffic modelling to assess the impacts of potential interventions but further surveys would not currently

provide representative data, as traffic levels will remain abnormally low while current lockdown restrictions are in place. Further traffic surveys may be required in due course to inform development of medium-term interventions.

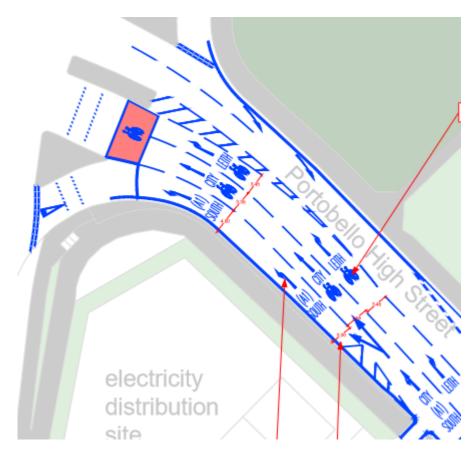
We are in the process of engaging the Council's traffic modelling consultant to undertake traffic modelling for those short-term interventions where this is required to assess their impacts. An inception meeting for this work has been arranged for next week.

4. Measures at King's Road Junction to Address Recent Fatal Collisions

4a. Five options have been identified and considered for changes to the Portobello High Street junction approach to the junction. Additional internal design resource is now in place to assist with developing these options. The current state of development varies between options, some of which arose from discussions at the last meeting of the stakeholder group on 25 January.

Further details of each option are provided below. Layout plans showing a wider area are available in Appendix 1 and a table comparing key issues for each option is provided in Appendix 2.

Option 1



Expected safety impacts:

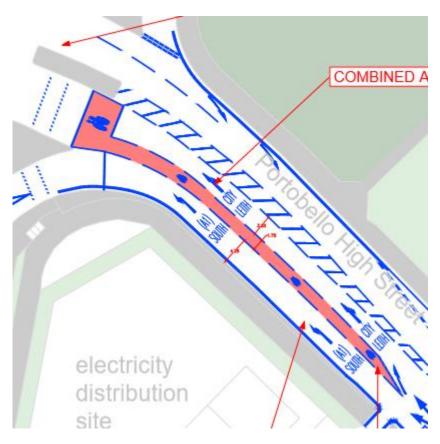
- Minimal risk of cyclists proceeding straight ahead positioning themselves inside left turning traffic, so should largely eliminate the risk of the type of conflict involved in the two recent fatal collisions.
- No diversion of traffic expected onto other routes.
- Introduces additional traffic lane and increased potential for conflicts between cyclists and vehicles in lanes 2 and 3.

Other factors:

- Additional signs required to guide cyclists to use correct lanes (Get in Lane signs with Cycle symbols).
- Can be implemented more quickly than other options, as at a more advanced stage of development (design and Road Safety Audit complete).

If progressed, implementation expected March 2021

Option 1a



Expected safety impacts:

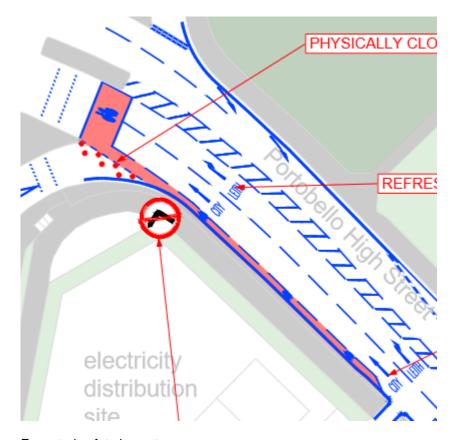
- Negligible risk of cyclists proceeding straight ahead positioning themselves inside left turning traffic, so should largely eliminate the risk of the type of conflict involved in the two recent fatal collisions.
- Retains a cycle lead-in lane, between lanes 1 and 2.
- A large increase in westbound delays at the junction would be expected, resulting in significant diversion of traffic to other available routes, impacting negatively on residents, pedestrians and cyclists. Two most likely alternative routes each pass a primary school and a secondary school.

Other factors:

- New option developed since previous stakeholder meeting.
- Expected to result in severe traffic congestion, significantly impacting on public transport services through Portobello.

If progressed, implementation expected May 2021

Option 2



Expected safety impacts:

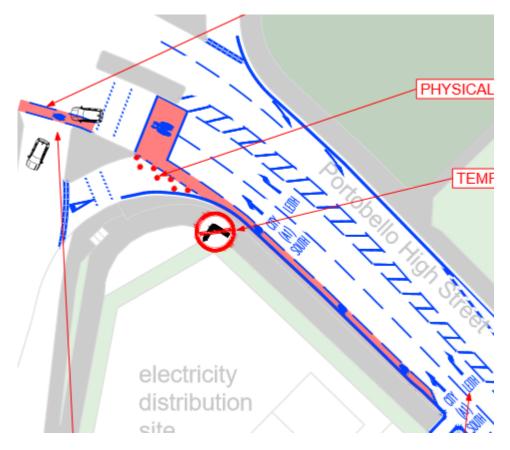
- Eliminates conflict between cyclists proceeding straight ahead and all left turning traffic.
- Retains a cycle lead-in lane.
- Diversion of traffic expected onto other routes, impacting negatively on residents, pedestrians and cyclists. Two most likely alternative routes each pass a primary school and a secondary school.
- May be some non-compliance, with vehicles illegally turning left around the front of the existing traffic island.
- Potential for conflict between any traffic illegally turning left around the front of the
 existing traffic island and cyclists proceeding straight ahead, particularly given tight
 kerb radius and street furniture within island close to kerbside.
- Potential for conflict between any traffic illegally turning left around the front of the
 existing traffic island and pedestrians crossing Sir Harry Lauder Road, as crossing
 phase currently runs at the same time as the traffic phase for Portobello High Street.

Other factors:

Left turns banned for all vehicles.

This option is not recommended for further consideration due to potential adverse safety impacts at junction (arising from potential for non-compliance) and on alternative routes (arising from significantly increased traffic levels).

Option 2a



Expected safety impacts:

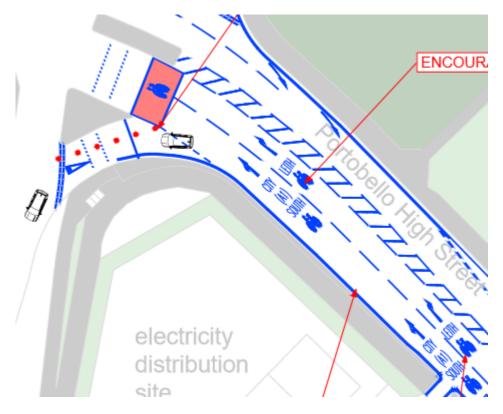
- Eliminates conflict between cyclists proceeding straight ahead and HGVs turning left.
- Potential for conflict between traffic turning left around the front of the existing traffic island and cyclists proceeding straight ahead, particularly given tight kerb radius and street furniture within island.
- Diversion of HGV traffic expected onto other routes, impacting negatively on residents, pedestrians and cyclists. Two most likely alternative routes each pass a primary school and a secondary school. However, volume of diverted traffic is much less than under Option 2.
- May result in increased waiting times for pedestrians as would require changes in the 'phasing' of the traffic lights (see below).

Other factors:

- New option developed since previous stakeholder meeting.
- Left turns banned for HGVs only. Other traffic permitted to turn left around front of current traffic island.
- Junction phasing would have to be altered, as crossing phase for pedestrians crossing Sir Harry Lauder Road currently runs at the same time as the traffic phase for Portobello High Street.

If progressed, implementation expected May 2021

Option 2b



Expected safety impacts:

- Eliminates conflict between cyclists proceeding straight ahead and HGVs turning left.
- Potential remains for conflict between non-HGV traffic turning left using the slip road and cyclists proceeding straight ahead.
- Diversion of HGV traffic expected onto other routes, impacting negatively on residents, pedestrians and cyclists. Two most likely alternative routes each pass a primary school and a secondary school. However, volume of diverted traffic much less than under Option 2.

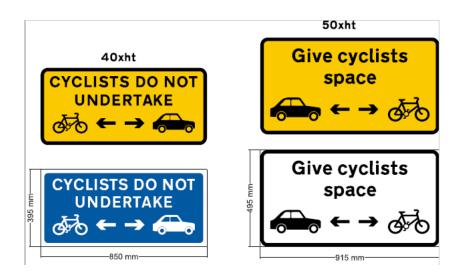
Other factors:

- New option developed since previous stakeholder meeting.
- Left turns banned for HGVs only. Other traffic turns left using slip road, which would be narrowed to prevent its use by HGVs.
- Current two- lane approach from Portobello would remain, but without the cycle lead-in lane.

If progressed, implementation expected May 2021

- 4b. Erection of new Give Cyclists Space and Cyclists Do Not Undertake warning signs on Portobello High Street and Inchview Terrace approaches to the junction:
 - These are non-standard signs and, as such, require authorisation from Scottish Ministers
 - As an interim measure, until such time as authorisation can be obtained, temporary yellow and black signs conveying the same message will be erected
 - · Proposals currently undergoing Road Safety Audit
 - Audit results expected next week
 - Sign plates have been manufactured by the Council's Roads Operations team
 - Quotes obtained from contactors to erect the signs and work now being procured

Implementation expected early March 2021



5. Other Measures at King's Road Junction

- 5a. Introduce cycle early release phases on Portobello High Street and Inchview Terrace approaches:
 - Design not yet started
 - Road safety audit to follow substantial completion of design
 - Traffic modelling required to asses likely impacts
 - Will require physical changes to signals equipment

Expected safety impacts:

 Gives a period of several seconds for cyclists to establish themselves within the junction prior to following traffic being allowed to proceed

Other factors:

• New option developed since previous stakeholder meeting.

If progressed, implementation expected summer 2021

- 5b. Bus stop relocation further to east at Aldi:
 - Lothian Buses has confirmed that this will cause them no operational issues.
 - Public Transport team currently investigating alternative location and shelter arrangements.
 - Future option to retrofit crossing facility if pedestrian demand increases sufficiently to justify.

Implementation expected summer 2021

5c. Inchview Terrace

Mark advisory cycle lane with red surfacing across mouth of slip road. Hatch areas on slip road to manage traffic approach speeds and angle.

- Design complete
- Implementation dependant on suitable weather
- Currently investigating options to procure a contractor to lay the markings

Implementation expected mid March 2021

Rephase junction signals to hold traffic turning left from Sir Harry Lauder Road at pedestrian crossing, except when straight ahead and right traffic flows proceed.

• Traffic modelling required to asses likely impacts of possible junction rephasing. May have a significant impact on congestion.

Expected safety impacts

- Removes potential for conflict, should left turning traffic fail to give way to westbound traffic/cyclists on Inchview Terrace.
- There have been no personal injury collisions recorded at this location due to a failure to give way since the junction was first opened in summer 2009.
- May result in diversion of traffic onto other available routes due to increased congestion.

If progressed, implementation expected March 2021

6. Communications

- 6a. CEC mixed media campaign on HGV's/turning/giving space for cyclists:
 - The Council's Communications team is currently working on this and aiming for a campaign to run in **March 2021**, with involvement from Police Scotland.
 - This will include hoardings in main locations across the city, billboards in the Portobello area, bus rears and social media.
- 6b. Police visits to local businesses:
 - Police Scotland will be undertaking visits (both in person and virtual) to various companies across the city to undertake driver education/awareness
 - These visits will also incorporate materials from the CEC communications campaign.
- 6c. Council webpage
 - Updates on the improvements will be posted on https://www.streetsaheadedinburgh.org.uk/
 - The CEC communications campaign materials will also be uploaded here.

Notes on anticipated delivery timescales:

All anticipated delivery timescales are estimated. It should particularly be noted that road markings and coloured surfacing works are weather dependant and cannot be undertaken in freezing temperatures or during periods of snow, ice or rain.

It is expected that outstanding design work for Options 1a and 2b could be completed by the end of next week, so that the designs could be submitted for Road Safety Audit. The Road Safety Audit process is likely to take around 4 weeks to complete.

An inception meeting with the Council's traffic modelling consultant is arranged for next week. Where traffic modelling of options is required, it is hoped that this could be undertaken within two-three weeks and run concurrently with the Road Safety Audits.

There are statutory notification processes that need to be followed before undertaking work on the public road network. The notification period required for the types of work involved in the short term interventions varies between one week and 28 days, depending on the nature of the work and

whether it is undertaken during traffic sensitive periods. Where possible, we will investigate undertaking works in the evenings or overnight to minimise notification requirements, but this may not be feasible for certain types of work at this time of year due to lower overnight temperatures.

We have consulted with our Roads Operations team to see whether they could undertake these works, to remove the delay involved in procuring an external contractor. Unfortunately, they are unable to do this due to their current commitments to winter weather emergency operations and emergency pothole repairs.

We are currently investigating potential options to use contractors on existing Council framework contracts or those already contracted as part of the ongoing Spaces for People programme. Should this prove to be possible, we would hope that procurement processes should take no more than two weeks to complete and that contractors would then be able to mobilise to site within a further two week period for most of the short-term interventions.

Should it not prove possible to procure contractors in this manner, we would have instead procure them via the open market. Procurement processes are then likely to take three to four weeks and the period for the contractor to mobilise to site could be between two and four weeks, depending on the nature of the work and the contractor's prior commitments.

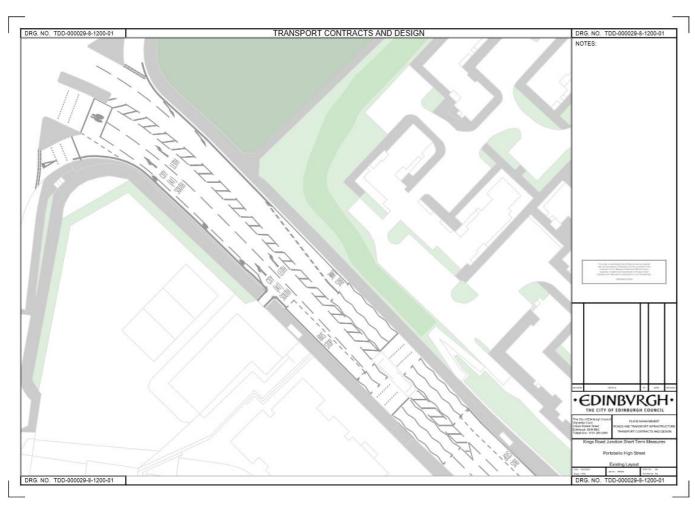
Medium Term Interventions

Additional internal design resource now in place to begin drawing up options for medium term interventions.

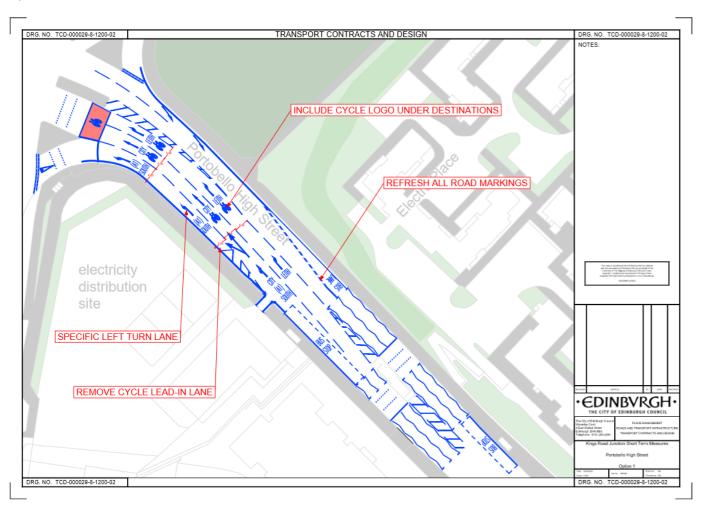
Requirements for temporary or permanent traffic orders to be identified asap, as this could dictate delivery timescales.

Appendix 1 – Plans of Options for Portobello High Street Approach

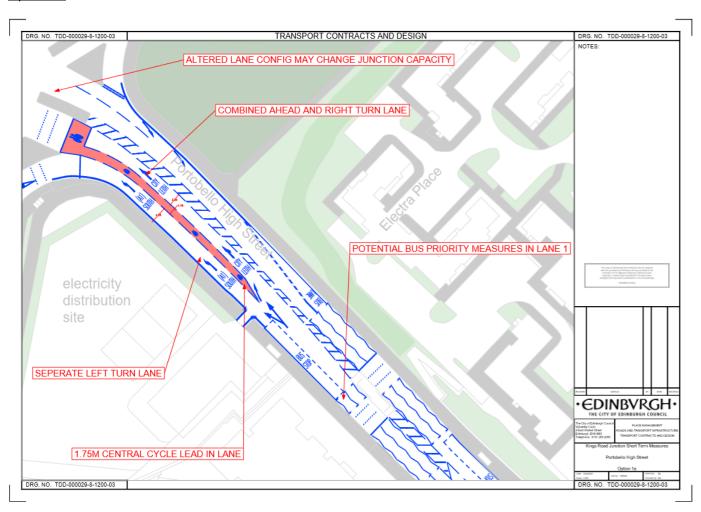
Existing Road Layout



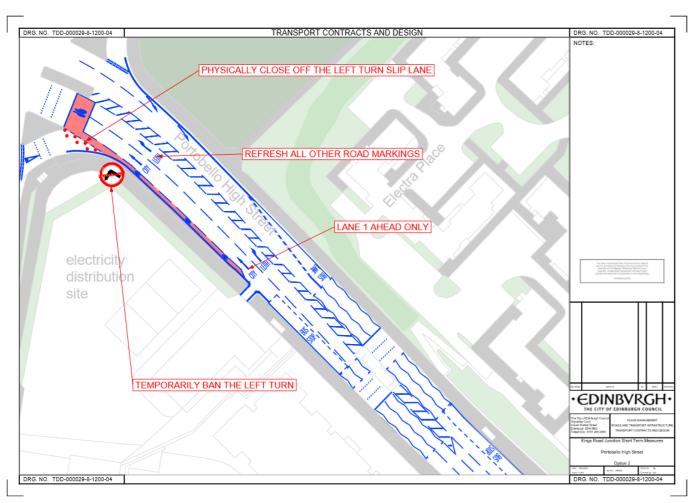
Option 1



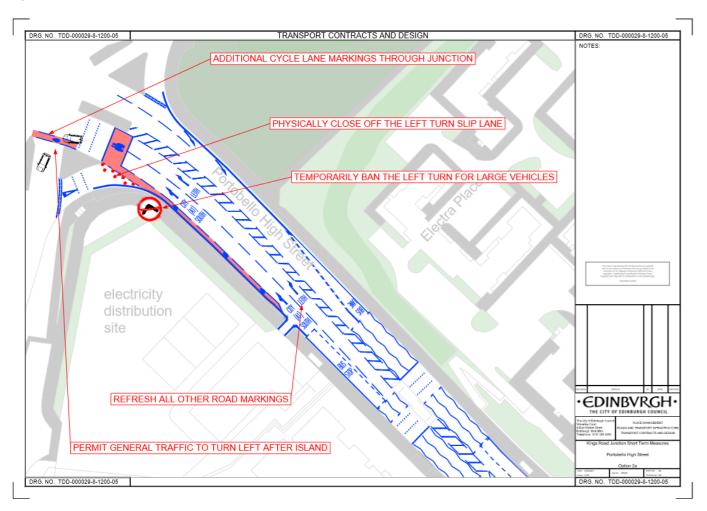
Option 1a



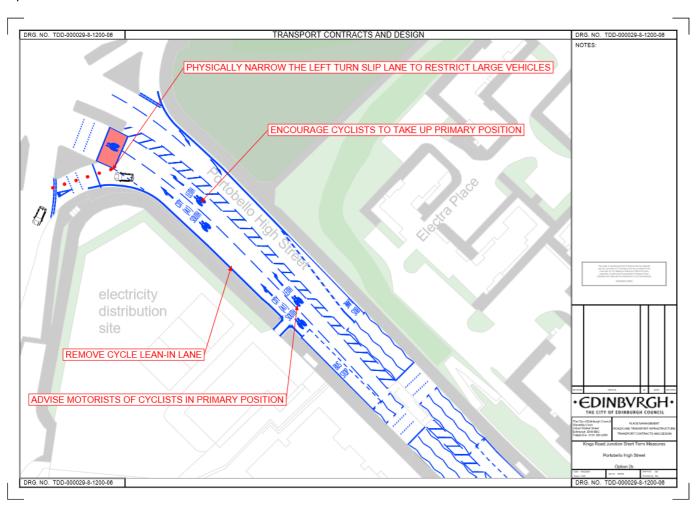
Option 2



Option 2a



Option 2b



Appendix 2 – Summary Comparison of Options for Portobello High Street Approach

Option	Cycle Lead-in Lane	Traffic Lanes	Left Turn Slip Lane	Design	Road Safety Audit	Traffic Modelling	Safety Impacts	Other Factors
1	Remove	Lane 1 – left turn only Lane 2 – straight ahead only Lane 3 – right turn only	Open to all traffic	Complete	Complete	Not required	Minimal risk of cyclists proceeding straight ahead positioning themselves inside left turning traffic, so should largely eliminate the risk of the type of conflict involved in the two recent fatal collisions. No diversion of traffic expected onto other routes. Introduces additional traffic lane and increased potential for conflicts between cyclists and vehicles in lanes 2 and 3.	Additional signs required to guide cyclists to use correct lanes (Get in Lane signs with Cycle symbols). Can be implemented more quickly than other options, as at a more advanced stage of development (design and Road Safety Audit complete).
1a	Relocate	Lane 1 – left turn only Cycle lead-in lane Lane 2 – straight ahead only	Open to all traffic	Ongoing	Required once design complete	Required – severe traffic congestion expected	Negligible risk of cyclists proceeding straight ahead positioning themselves inside left turning traffic, so should largely eliminate the risk of the type of conflict involved in the two recent fatal collisions. Retains a cycle lead-in lane, between lanes 1 and 2. A large increase in westbound delays at the junction would be expected, resulting in significant diversion of traffic to other available routes, impacting negatively on residents, pedestrians and cyclists. Two most likely alternative routes each pass a primary school and a secondary school.	New option developed since previous stakeholder meeting. Expected to result in severe traffic congestion, impacting on public transport services to and from Portobello.

King's Road Junction
Short/Medium Term Measures to Improve Safety for Vulnerable Road Users
Progress Update – 12 February 2021

Option	Cycle Lead-in Lane	Traffic Lanes	Left Turn Slip Lane	Design	Road Safety Audit	Traffic Modelling	Safety Impacts	Other Factors
2	Retain	Lane 1 - straight ahead only Lane 2 - right turn only	Closed to all traffic	Ongoing	Required once design complete	Not required	Eliminates conflict between cyclists proceeding straight ahead and all left turning traffic. Retains a cycle lead-in lane. Diversion of traffic expected onto other routes, impacting negatively on residents, pedestrians and cyclists. Two most likely alternative routes each pass a primary school and a secondary school. May be some non-compliance, with vehicles illegally turning left around the front of the existing traffic island. Potential for conflict between any traffic illegally turning left around the front of the existing traffic island and cyclists proceeding straight ahead, particularly given tight kerb radius and street furniture within island close to kerbside. Potential for conflict between any traffic illegally turning left around the front of the existing traffic island and pedestrians crossing Sir Harry Lauder Road, as crossing phase currently runs at the same time as the traffic phase for Portobello High Street.	Left turns banned for all vehicles. This option is not recommended for further consideration due to potential adverse safety impacts at junction (arising from potential for noncompliance) and on alternative routes (arising from significantly increased traffic levels).

King's Road Junction
Short/Medium Term Measures to Improve Safety for Vulnerable Road Users
Progress Update – 12 February 2021

Option	Cycle Lead-in Lane	Traffic Lanes	Left Turn Slip Lane	Design	Road Safety Audit	Traffic Modelling	Safety Impacts	Other Factors
2a	Retain	Lane 1 - straight ahead and left turn only Lane 2 - right turn only	Closed to all traffic	Ongoing	Required once design complete	Not required	Eliminates conflict between cyclists proceeding straight ahead and HGVs turning left. Potential for conflict between traffic turning left around the front of the existing traffic island and cyclists proceeding straight ahead, particularly given tight kerb radius and street furniture within island. Diversion of HGV traffic expected onto other routes, impacting negatively on residents, pedestrians and cyclists. Two most likely alternative routes each pass a primary school and a secondary school. However, volume of diverted traffic is much less than under Option 2. May result in increased waiting times for pedestrians as would require changes in the 'phasing' of the traffic lights.	New option developed since previous stakeholder meeting. Left turns banned for HGVs only. Other traffic permitted to turn left around front of current traffic island. Junction phasing would have to be altered, as crossing phase for pedestrians crossing Sir Harry Lauder Road currently runs at the same time as the traffic phase for Portobello High Street.

King's Road Junction
Short/Medium Term Measures to Improve Safety for Vulnerable Road Users
Progress Update – 12 February 2021

Option	Cycle Lead-in Lane	Traffic Lanes	Left Turn Slip Lane	Design	Road Safety Audit	Traffic Modelling	Safety Impacts	Other Factors
2b	Remove	Lane 1 - straight ahead and left turn only Lane 2 - right turn only	Open to non-HGV traffic only. Narrowed to prevent use by HGVs.	Ongoing	Required once design complete	Not required	Eliminates conflict between cyclists proceeding straight ahead and HGVs turning left. Potential remains for conflict between non-HGV traffic turning left using the slip road and cyclists proceeding straight ahead. Diversion of HGV traffic expected onto other routes, impacting negatively on residents, pedestrians and cyclists. Two most likely alternative routes each pass a primary school and a secondary school. However, volume of diverted traffic much less than under Option 2.	New option developed since previous stakeholder meeting. Left turns banned for HGVs only. Other traffic turns left using slip road, which would be narrowed to prevent its use by HGVs. Current two- lane approach from Portobello would remain, but without the cycle lead-in lane.

Appendix 3 - Junction Collision History

Standard 3 year collision data retrieval

In the most recent 3 years for which collision data is currently available, to the end of September 2020, there have been a total of 7 collisions reported to Police Scotland that resulted in personal injury - 1 Fatal (cyclist), 2 Serious (both pedestrians) and 4 Slight.



Collision data retrieval for period since junction first became operational in summer 2009

In the period from 1 July 2009 to the end of September 2020 there have been a total of 19 collisions reported to Police Scotland that resulted in personal injury - 1 Fatal (cyclist), 3 Serious (two pedestrians) and 15 Slight.



These retrievals use all available data on 24 January 2021.

Appendix 4 - Key Traffic Survey Data

12 hour traffic survey undertaken at King's Road junction on Tuesday 22 December 2020

The total numbers travelling straight ahead from Portobello High Street onto Inchview Terrace in the 12 hour period was 2,839. This included 31 HGV's and 7 cyclists:

- AM Peak (0700 1000) 628 vehicles. 9 HGV's. 0 cyclists.
- AM School Run (0800- 0900) 199 vehicles. 5 HGV's. 0 cyclists.
- PM Peak (1600 1900) 636 vehicles. 4 HGV's. 0 cyclists.
- PM School Run (1500- 1600) 269 vehicles. 2 HGV's. 1 cyclists.

The total numbers turning left from Portobello High Street onto Sir Harry Lauder Road in the 12 hour period was 1,132. This included 21 HGV's and 0 cyclists:

- AM Peak (0700 1000) 188 vehicles. 5 HGV's. 0 cyclists.
- AM School Run (0800- 0900) 74 vehicles. 1 HGV's. 0 cyclists.
- PM Peak (1600 1900) 261 vehicles. 2 HGV's. 0 cyclists.
- PM School Run (1500- 1600) 118 vehicles. 2 HGV's. 0 cyclists.

So, over the course of the two school run periods, we can assume an average of 96 vehicles per hour making the left turn manoeuvre.

Historic traffic surveys undertaken at Northfield Broadway and Brighton Place

Northfield Broadway - 7 day survey undertaken in March/April 2019

Southbound free flow traffic volume over the same 12 hour period on the Tuesday during the survey was 1,607 vehicles:

- AM Peak (0700 1000) 300 vehicles. 0 HGV's.
- AM School Run (0800- 0900) 111 vehicles. 0 HGV's.
- PM Peak (1600 1900) 508 vehicles. 0 HGV's.
- PM School Run (1500- 1600) 186 vehicles. 0 HGV's.

If the left turn from Portobello High Street into Sir Harry Lauder Road were to be banned for all vehicles (Option 2), and we assume that half of this traffic would then use Northfield Broadway instead, over the 12 hour period this would represent an additional 566 vehicles using the street (a 35% increase in southbound traffic).

The two way average free flow traffic speed recorded in the March/April 2019 survey was 26.3 mph in this 20mph street.

Brighton Place - 7 day survey undertaken in November 2020

Southbound free flow traffic volume over the same 12 hour period on the Tuesday during the survey was 1,973 vehicles (this survey did not record different vehicle classifications):

- AM Peak (0700 1000) 407 vehicles.
- AM School Run (0800- 0900) 125 vehicles.
- PM Peak (1600 1900) 707 vehicles.
- PM School Run (1500- 1600) 261 vehicles.

If the left turn from Portobello High Street into Sir Harry Lauder Road were to be banned, and we assume that half of this traffic would then use Northfield Broadway instead, over the 12 hour period this would represent an additional 566 vehicles using the street (a 29% increase in southbound traffic).

The two way average free flow traffic speed recorded in the November 2020 survey was 25.5 mph in this 20mph street.

Full survey data for each of the three traffic surveys can be provided on request.

On 28 January 2021 the Transport & Environment Committee approved a trial closure of Brunstane Road and associated measures to mitigate intrusive traffic in the Coillesdene area. It is possible that these proposals could also result in an increase in traffic levels on Brighton Place.