FORTH REPLACEMENT CROSSING
REFRESHED PUBLIC TRANSPORT STRATEGY

1 August 2012

Partner Organisations

Confederation of Passenger Transport - Scotland

The City of Edinburgh Council

Fife Council

First Bus Group - South East & Central Scotland

Lothian Buses

ScotRail

SEStran - South East of Scotland
Transport Partnership

Stagecoach East Scotland

Transport Scotland

West Lothian Council

FORTH REPLACEMENT CROSSING
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SUMMARY

This work updates the original Forth Replacement Crossing - Public Transport Strategy which was published in January 2010.

The refreshed Strategy provides background on how the existing Public Transport Strategy was prepared; a review of progress on the infrastructure interventions proposed in the existing strategy including the main Forth Replacement Crossing projects; the engagement that has taken place over the past two years with relevant stakeholders and partners; the formation of a Public Transport Working Group from the relevant Local Authorities, the Regional Transport Partnership, bus operators, the Confederation of Passenger Transport, and Transport Scotland; details of the further interventions and measures proposed in the form of a Revised Implementation Plan; and some discussion on the proposed performance indicators to be used to measure the success of this work.

1 August 2012

1 BACKGROUND TO PREPARING THE REFRESHED STRATEGY

1.1 The Forth Replacement Crossing - Public Transport Strategy was published in January 2010, with the main purpose of supporting the Forth Replacement Crossing project. This Strategy seeks to build on the Planning Objectives for the Forth Replacement Crossing particularly that of maintaining the levels of service for all transport modes to at least that which was provided in 2006.

1.2 The full objectives for the Forth Replacement Crossing are

- Maintain the cross-Forth transport links for all modes to at least the level of service offered in 2006;
- Connect to the strategic transport network to aid optimisation of the network as a whole;
- Improve reliability of journey times for all modes;
- Increase travel choices and improve integration across modes to encourage modal shift of people and goods;
- Improve accessibility and social inclusion;
- Minimise the impacts of maintenance on the effective operation of the transport network;
- Minimise the impact on people, the natural and cultural heritage of the Forth area; and
- Support sustainable development and economic growth.

1.3 The Forth Replacement Crossing has developed from a single replacement crossing project with a degree of multi-modal capacity to a **Managed Crossing Strategy**, which will make use of both the existing and the new bridge.

1.4 The **Managed Crossing Strategy** includes the following

- A new 2.7 km cable-stayed bridge with three single column towers, wind shielding and a single deck carrying two general lanes of traffic and hard shoulders in each direction.
- Use of the existing bridge as a dedicated public transport corridor for buses, taxis, pedestrians and cyclists; and also as a full dedicated public transport corridor between the Halbeath Junction and Newbridge Roundabout.
- Motorway standard connecting roads linking the A90 and M9 to the south of the Forth, and making use of the M9 spur.
- Motorway standard connecting roads linking the M90/A90 in the north, with junction enhancements at Ferrytoll.

- Use of Intelligent Transport System technology over the full 22 kilometres of the **Managed Crossing Strategy** between Halbeath and Newbridge.

- The opportunity for the introduction of Light Rapid Transit on the existing Forth Road Bridge, if required in the future.

- Preparation of a Public Transport Strategy.

1.5 In addition, with significant maintenance still being required on the existing bridge, then the removal of the vast majority of the traffic from this structure, will allow the four available lanes to be managed to ensure continual use as a public transport corridor whilst allowing maintenance work to be carried out.

1.6 The **Managed Crossing Strategy** is being provided through three specific contracts, and parts of these contribute to the Public Transport Strategy.

- **Principal Contract** - The construction of a new cable-stayed crossing with connecting roads.

- **Fife ITS** - This Contract includes the installation of Intelligent Transport System (ITS) gantries on the M90 between Admiralty and Halbeath junctions, and a temporary southbound bus lane within the hard shoulder.

- **M9 Junction 1a** - This Contract will upgrade and make improvements to Junction 1A at Kirkliston including new west facing slip roads to the M9, and a permanent southbound bus lane within the hard shoulder between the Humbie Railway Bridge and Newbridge Roundabout.

1.7 The **Public Transport Strategy** has been prepared as part of the Managed Crossing Strategy. This will ensure that the Forth Replacement Crossing offers opportunities to maintain and enhance sustainable public transport growth, provides appropriate support for the Scottish Government's purpose of increasing sustainable economic growth, and contributes to the carbon emissions reduction targets required by the Climate Change (Scotland) Act 2009.

Work Undertaken to Support the Existing Public Transport Strategy
Analysis of the Cross-Forth Demand

1.8 The original Public Transport Strategy provides full detail on the analysis undertaken for the cross-Forth demand and the subsequent analysis techniques used to develop the Strategy.[1]

[1] http://www.transportscotland.gov.uk/road/projects/forth-replacement-crossing/about-the-scheme/public-transport

1.9 The work was informed by actual and forecast origin and destination analyses, Local Authority land use plans, and a number of committed and proposed transportation interventions throughout the area.

1.10 It is well understood that demand for travel across the Forth exceeds capacity in the peak period, resulting in both queuing and the phenomenon of peak spreading.

1.11 Two scenarios were considered to assess the potential impact of the strategy on the future performance of the road network in the vicinity of the Forth Crossing.

- The Managed Crossing Strategy with service enhancements and reduced car demand, which includes relevant projects from the Strategic Transport Projects Review (STPR).[2] These include the Edinburgh to Glasgow Rail Improvement Project; the East of Scotland Rail improvements; and Aberdeen to Central Belt Rail Improvements plus the introduction of the Halbeath Park and Choose, and Rosyth Park and Choose facilities. A number of additional bus services were included which were considered to be required to provide for changing demand patterns in the future.

- All the detail contained above, plus a number of additional infrastructure enhancements and measures were considered.

1.12 The outcome of this work identified that both the strategy alternatives would deliver benefits in relation to reduced journey times for public transport users, but most benefit would be obtained by providing all the infrastructure recommended in the STPR, plus providing additional bus services and additional infrastructure and interventions.

1.13 It was on this basis that the **Public Transport Strategy** has been refreshed.

[2] http://www.transportscotland.gov.uk/strategy-and-research/stpr

2 PROGRESS ON ANNEX C OF THE PUBLIC TRANSPORT STRATEGY

2.1 Annex C of the original **Public Transport Strategy** contains the infrastructure interventions and measures, with indicative cost, timescale and the organisations considered responsible to lead and be involved in these projects. It is this section of the original strategy, which has been used over the past two years as the Implementation Plan for the refreshed strategy. Annex C is included as Appendix 1 of this report.

2.2 The original Public Transport Strategy created the appropriate foundation for the various interventions and measures to be taken forward through the various Forth Replacement Crossing projects or by the Local Authorities, or other bodies.

2.3 There has been significant progress over the past two years, and a review of the various interventions and measures is included in Appendix 2, as the **Implementation Plan Progress Update**. The three specific Forth Replacement Crossing contracts in the Managed Crossing Strategy are now included in this review, as these projects incorporate significant elements of the Public Transport Strategy.

3 DEVELOPING A REFRESHED STRATEGY, ENGAGEMENT AND PROGRESS TO DATE

3.1 As the initial Public Transport Strategy involved substantial stakeholder engagement, it was considered important that this type of approach should be continued. As a result, it was decided to form a **Public Transport Working Group** to maximise engagement with the relevant stakeholders, as the refreshed strategy was developed.

3.2 The first meeting of the Public Transport Working Group was in December 2010. The Group meetings have included, at different times, discussions between the Local Authorities (City of Edinburgh Council, Fife Council and West Lothian Council), the Regional Transport Partnership (SEStran); the major bus operators (First Group, Lothian Buses, Stagecoach); the Confederation of Passenger Transport (CPT), and Transport Scotland.

3.3 The time between publication of the existing strategy in January 2010 and the first meeting has allowed almost a year to both reflect on the existing strategy and consider if the stated interventions were appropriate, and also to identify further and complementary interventions.

3.4 The following highlights the main points made during this engagement process and the development process to prepare the refreshed Public Transport Strategy.

3.5 Initially the work was taken forward in two separate groups. One group dealt with the infrastructure issues involving the Local Authorities and the Regional Transport Partnership, and the second group dealt with bus operations. The reason for forming two separate groups rather than just one group was because it was considered that these groups had separate aims. The first group discussed the various infrastructure interventions and measures that may be appropriate to provide, whilst the second group discussed operations and relevant working practices required once the various infrastructure measures were in place.

3.6 In early 2012, these groups joined to form the **Public Transport Working Group**, and it was agreed that all further public transport issues would be taken forward through this one group.

3.7 For both group meetings the existing Annex C was used as the foundation for discussions. The aim for both groups was to increase and improve public transport usage in the cross Forth area. Although, the strategy was primarily aimed at supporting the Forth Replacement Crossing's ability to support the Scottish Government's purpose of increasing sustainable economic growth, and delivering carbon emission reduction targets for the Climate Change (Scotland) Act 2009, those involved considered that this was an ideal opportunity to improve and increase public transport for all cross-Forth movements from the Fife area towards Edinburgh and the Lothians, and vice versa. This approach would support the **National Planning Framework 2**, which states that the Forth Replacement Crossing is vital to the economy of Fife, an essential link for the East Coast Corridor between Aberdeen and Newcastle, and crucial to improve the connectivity of Perth and the Highlands & Islands with the Edinburgh area. The **National Planning Framework** also includes

for the provision of a multi-modal transport corridor to increase public transport between Edinburgh and Fife, which would give reasonable purpose to extending the scope of the refreshed strategy.

3.8 In addition to road-based public transport travel, both groups indicated that consideration should be given to include rail intervention although they agreed that these should only be considered once the road-based interventions and measures were determined.

3.9 The **Public Transport Working Group** considered that the best way forward would be to prepare a **Revised Implementation Plan – August 2012** as shown in Appendix 3.

3.10 This revised Plan has been informed by both discussion and debate. It is clear from all parties that there is a need to walk and cycle more, and make greater use of fully integrated public transport. Also, it was recognised that all relevant transport strategies prepared by the Working Group should be complementary from a public transport perspective. By implementing such a vision will ensure that we are more sustainable in our travel movements. Indeed this vision ensures that there will be a clear and fully integrated public transport network.

3.11 The existing **Public Transport Strategy** was used as the foundation for discussion. All bodies involved considered that the earlier work which included traffic modelling and the preparation of the **List of Schemes and Measures** in Appendix 1 has stood the test of time. Significant work has already been undertaken and the Group supports the manner in which a number of the interventions have been seamlessly integrated into the Forth Replacement Crossing projects.

3.12 There is recognition that the construction of the Halbeath Park and Choose by the summer of 2013 will have a significant positive impact on the Strategy, especially as the Ferrytoll site which was built as a 500 space facility in 2000 was doubled in size in 2005 and reached its operational capacity in the summer of 2011.

3.13 Halbeath is an important component to the success of the **Public Transport Strategy** because it has the potential to provide a concentration of passengers to develop new bus services across the Forth.

3.14 The provision of a southbound dedicated bus corridor between the Halbeath Junction and Newbridge Roundabout, which when completed will offer the potential for bus journey time savings of up to 30 minutes during peak congestion periods, demonstrates a key benefit to the Public Transport Strategy. Accordingly, by making maximum use of the bus priority measures, this will help relieve congestion on this strategic corridor, and thereby improve the links between areas of need and areas of opportunity together with improving the local environment and local air quality.

3.15 Although the Rosyth Park and Choose is an important element to the Public Transport Strategy, it is considered that in the short term the Halbeath project will offer sufficient capacity for the growing public transport usage and therefore the works at Rosyth should follow on in due course, but only once additional assessment work has been undertaken to confirm usage levels at Halbeath and the market requirements.

3.16 None of the partners requested that additional appraisal work should be undertaken as part of the Public Transport Strategy as it is considered that it adequately models the conditions that exist and are likely to exist in the future. Rather, it was considered it was more relevant to identify appropriate interventions and measures and also provide revised timetables for delivery.

3.17 The bus operators supported the proposed new bus-only slip roads from the B800 to the M9 Spur, especially as they would provide a more direct route from the Forth Crossings to the Newbridge area, and therefore avoid any congested areas.

3.18 All parties understood that the bus lane within the southbound hard shoulder on the M90 from just south of Halbeath towards the new bridge was being provided initially on a temporary basis, principally to ensure reliability of bus services along the M90/A90 whilst the complex road construction work around Ferrytoll is undertaken. Transport Scotland has given a commitment that the operation of this facility will be reviewed on an on-going basis until 2016 when a decision will be taken on its long term future. In the meantime, the provision of a permanent bus lane within the hard shoulder would be retained in the strategy. It is recognised that should this bus lane become a permanent facility, then additional works may be required to ensure that it operates safely in the longer term, particularly in respect of the road layout/geometry combined with any increased user demand.

3.19 Bus operators also gave a commitment that they would review bus operations in the cross-Forth area and if considered feasible, would provide appropriate additional and/or enhanced frequency services to maximise the public transport potential. Although it was not possible to confirm at this stage, whether these additional services or enhanced frequency of services would be provided, the bus operators gave the commitment that new services would be provided to complement the Public Transport Strategy. The legislation requirements under the Traffic Act 1985 and revised by the Transport (Scotland) Act 2001, state that new routes must be registered giving a minimum of 56 days notice, plus another 14 days for public consultation. This is a relatively short timescale for providing new bus services and it is considered that no specific commitment need be made as part of this Strategy at present, other than the bus operators would consider new routes where sufficient additional demand is identified.

3.20 From discussion with the various partners, it was considered that the next stage for the Public Transport Strategy would be to direct public transport improvements around Newbridge Roundabout.

Newbridge Area

3.21 All Group members identified Newbridge as the main throttle point for public transport and general traffic movements, on the south side of the Forth. It has been recognised that the scope of further assessment at Newbridge should be focused on improving public transport provision and not on any specific infrastructure improvements which would benefit general traffic. Future work could focus on

general traffic movements through Newbridge, but this work would be undertaken by others.

3.22 The existing Public Transport Strategy already identifies bus lanes on the A8 westbound and A89 eastbound, in the short term; and improvements to Newbridge Roundabout, for medium term delivery.

3.23 All Group members considered that bus lanes in the vicinity of Newbridge should be maintained in the strategy and they should be extended to include an A8 eastbound bus lane. Although, further feasibility work will be required in advance of these projects, it was considered that the bus lanes should be commensurate with the extent of the queuing traffic which occurs during times of congestion. On this basis the A89 eastbound bus lane is likely to extend to Broxburn in West Lothian (2.1 kilometres) and the A8 bus lanes would extend from Eastfield Road at Edinburgh Airport (2.5 kilometres). The extent of the bus lanes to be provided should make best provision for public transport. However, these bus lanes could be provided on a phased basis once funding becomes available.

3.24 The A8 westbound bus lane can be located immediately adjacent to the nearside lane up to Station Road which is 500 metres from Newbridge Roundabout. At Newbridge, the public transport routes split in three directions and the location of any bus lane as they approach Newbridge becomes more problematic. Some additional work should be undertaken to minimise delay for buses in this location and consideration should be given to queue relocation by providing traffic signals to allow buses uncongested access to the roundabout when leaving the bus stop at Ratho, and around the Station Road area.

Additional Public Transport Interventions

3.25 The Regional Transport Partnership has prepared a report on the Edinburgh Orbital Bus Rapid Transit System and they consider that this would provide benefit for the Public Transport Strategy.

3.26 The Regional Transport Partnership is also taking forward Real Time Information to include both First Group and Stagecoach, throughout the Fife, Borders, East Lothian and West Lothian areas. At present this information is only available on Lothian Buses.

3.27 It was agreed that further work should also be undertaken to assess the feasibility of improving bus movements between Gogar Roundabout through to the Maybury Junction; westbound along the A90 in Edinburgh on Hillhouse Road; and for bus hard shoulder running on the M8 eastbound from Junction 3 towards Newbridge.

3.28 By identifying and providing appropriate interventions, this would create a public transport corridor from Fife and West Lothian into the centre of Edinburgh, and vice versa.

3.29 The Group considered that some benefit would be gained from the provision of additional park and ride sites including Newbridge (situated to the west of the

junction which would principally intercept, and reduce traffic across Newbridge in the morning peak); Livingston adjacent to Junction 3 on the M8; at Kilpunt in south east Broxburn; and at Winchburgh adjacent to the M9. However, feasibility work would be required to demonstrate a case for such facilities.

3.30 In addition, the proposed development opportunities in the Winchburgh area could lead to a Winchburgh Railway Station, and a southbound bus lane on the M9 between a new Winchburgh Junction and Junction 1A..

3.31 There is a need for improved public transport links to allow buses improved access to the M90 north of the Forth from the A921 from Dalgety Bay and the A985 in Rosyth. Possible interventions could include improved road infrastructure east of Admiralty Junction and a Rosyth Bypass.

3.32 The **Public Transport Strategy** will also complement the impact of the Edinburgh International Implementation Plan to create an International Business Gateway around Edinburgh Airport. The transport appraisal undertaken for the Business Gateway has developed transport requirements based on achieving a 50% mode share for travel to the west of Edinburgh area by public transport, cycling and walking. This appraisal has identified that there is a need to deliver bus priority on the M8, A8 and the A89. These measures complement this Public Transport Strategy.

3.33 Even with this level of proposed mode share the transport appraisal has highlighted that traffic levels in this part of Edinburgh will increase significantly to an extent that capacity at key locations on the adjoining road network will require to be increased.

The infrastructure required for the International Business Gateway will include

- reconstruction of the junction of the A8 with Eastfield Road which runs towards Edinburgh Airport;

- upgrading of Gogar Roundabout by providing an additional lane on the inside of the roundabout;

- upgrading at Newbridge Roundabout to enhance its capacity;

- public transport priority on the A89; and

- A8 widening in both directions between Eastfield Road and Newbridge Roundabout to incorporate bus lanes.

3.34 The impact of the strategy on carbon emissions is significant. It has been estimated that if the public transport measures are not implemented then the new crossing could see an increase of 11,000 tonnes per annum in carbon emissions. However, by implementing the strategy then a significant reduction would accrue.

3.35 On this basis a revised **Implementation Plan**, which is listed in Appendix 3, has been prepared taking into account all the existing and proposed schemes and measures, plus decisions from the Public Transport Working Group.

3.36 Performance Indicators will be prepared for the Public Transport Strategy which will align with those being developed for the **Forth Replacement Crossing** Project. The indicators will focus on issues specific to public transport including journey times and bus service reliability, plus patronage levels. Details of potential performance indicators are included in Appendix 4.

APPENDIX 1

SCHEMES AND MEASURES AVAILABLE TO SUPPORT THE MANAGED CROSSING STRATEGY IN DELIVERING THE PUBLIC TRANSPORT STRATEGY - (ANNEX C FROM THE ORIGINAL PUBLIC TRANSPORT STRATEGY OF JANUARY 2010)

No	Intervention	Timescale for Delivery	Indicative Cost (£)	Lead Authority
1	Halbeath Park and Choose	Short term (<5 years)	£7-10 m (from Fife Council work)	Fife Council
2	Rosyth Park and Choose	Short term (<5 years)	£4-6m (from Fife Council work)	Fife Council
3	Hard Shoulder Running for buses on M90 north of Admiralty (works arrangement)	Short term (<5 years)	£5m	Transport Scotland
4	Improvements at Admiralty Junction	Short term (<5 years)	£0.5m - £1m	Fife Council/Transport Scotland
5	Hard Shoulder Running for buses on M9 approach to Newbridge	Short term (<5 years)	£0.5m - £1m	Transport Scotland
6	Improvements to Newbridge Interchange	Medium term (5 – 10 years)	£4.5m (from Halcrow work for City of Edinburgh Council)	City of Edinburgh Council/Transport Scotland
7	New slips from B800 to M9 Spur including dedicated right turn lane.	Medium term (5 – 10 years)	£2m - £3m	City of Edinburgh Council/Transport Scotland
8	Hard Shoulder Running for buses on M90 north of Admiralty (corridor enhancement)	Medium term (5 – 10 years)	£10m	Transport Scotland
9	Bus lanes on A8 westbound Bus Lane on A89 Eastbound	Short term (<5 years)	£7.2m (from Halcrow work for City of Edinburgh Council) A8 Westbound £2m - £2.5m A89 Eastbound £0.5m -£1m	

APPENDIX 2
SCHEMES AND MEASURES AVAILABLE TO SUPPORT THE MANAGED CROSSING STRATEGY IN DELIVERING THE PUBLIC TRANSPORT STRATEGY - IMPLEMENTATION PLAN PROGRESS UPDATE.

No	Intervention	Timescale for Delivery	Indicative Cost (£)	Lead Authority	Progress to Date - As at 31 July 2012
	Forth Replacement Crossing Principal Contract Construction of new bridge and approach roads from the A90/M9 Spur Scotstoun Junction to M90 Admiralty Junction	December 2016	Tender Cost £790 million	Transport Scotland	The Forth Crossing Bridge Constructors (FCBC) consortium comprises Dragados SA, Hochtief Construction AG, American Bridge International and Morrison Construction, supported by a design team comprising Ramboll, Gifford, Grontmij and Leonhardt Andrae & Partner. The successful bid for the design and build contract was £790m, which represents a saving on the initial estimated cost range of £900m to £1,200m. The Contract facilitates the retention of the Forth Road Bridge (FRB) as a Public Transport Corridor and provides dedicated bus connections to/from the A90 at Scotstoun across the FRB to link with the Ferrytoll Park and Ride. In addition, when severe winds prevent buses from operating across the FRB then buses will be permitted to use the hardshoulders of the new bridge. Construction on the FRC began in the summer of 2011. The project is on programme.

No	Intervention	Timescale for Delivery	Indicative Cost (£)	Lead Authority	Progress to Date - As at 31 July 2012
	Fife ITS - Installation of Intelligent Transport System gantries on the M90 between Admiralty and Halbeath plus a south-bound bus lane within the hard shoulder.	Summer 2012	Tender Cost £12.9 million	Transport Scotland	The Contract was awarded on 10 June 2011 to John Graham (Dromore) Ltd at a cost of £12.9m. The completion of the project and subsequent opening of the temporary bus lane is anticipated in the summer of 2012. The project is on programme.
	M9 Junction 1a - Upgrade and improvements to this Junction including new west facing slip roads to the M9 and southbound bus lane within the hard shoulder.	Winter 2012	Tender Cost £25.6 million	Transport Scotland	The Contract was awarded to a Joint Venture of John Sisk and Roadbridge, and this was the final of the three major FRC contracts to be awarded. The tender price was £25.6m. The completion of the contract and subsequent opening of the permanent bus lane is anticipated in spring 2013. The project is on programme.

No	Intervention	Timescale for Delivery	Indicative Cost (£)	Lead Authority	Progress to Date - As at 31 July 2012
1	Halbeath Park and Choose	Short term (<5 years) Anticipated completion is the summer of 2013	£7-10m (from Fife Council work).	Fife Council	The Transport Minister, Keith Brown MSP announced on 21 March 2011 that up to £10m would be made available to fund this facility. The project management has been undertaken by Fife Council. Design work, land acquisition, planning permission and the tender documents are complete. An application was made for ERDF Priority 3 - Urban Regeneration Funding for a proportion of the project costs. A decision is still awaited.. The tender was awarded to the Robertson Group in July 2012. The facility will be managed in a similar manner to the Ferrytoll Park & Ride facility, and a Quality Partnership Agreement will be developed between Fife Council and the main bus operator, Stagecoach. Once the facility opens in summer 2013, no further work is required on this intervention.

No	Intervention	Timescale for Delivery	Indicative Cost (£)	Lead Authority	Progress to Date - As at 31 July 2012
2	Rosyth Park and Choose	Short term (<5 years) Unknown at present.	£4-6m (from Fife Council work)	Fife Council	Fife Council has targeted resources at the Halbeath project in preference to the Rosyth site. A flood risk assessment has been undertaken which will allow the planning application to be determined later this year. This intervention to be retained in **Public Transport Strategy.**
3	Hard Shoulder Running for buses on M90 north of Admiralty (Works arrangement - temporary) (Southbound only)	Short term (<5 years) This work will be completed by the summer of 2012.	£5m Included in Fife ITS contract with a tender cost of £12.9m. The actual cost of this intervention has not been evaluated.	Transport Scotland	This element of the Strategy is included in the **Fife ITS Project**. This Contract was awarded on 10 June 2011 to John Graham (Dromore) Ltd at a cost of £12.9m. The completion of the project and the subsequent opening of the temporary bus lane within the hard shoulder is anticipated in the summer of 2012. The Contract is on programme. The temporary bus lane will be monitored until 2016, when a decision will be made on whether there would be benefits on retaining this facility. On completion of this work, no further work is required on this intervention.
4	Improvements at Admiralty Junction	Short term (<5 years)	£0.5m - £1m	Fife Council, Transport Scotland	No further development of this intervention is required, as “through-junction” running for buses has now been included as part of the Fife ITS contract.

No	Intervention	Timescale for Delivery	Indicative Cost (£)	Lead Authority	Progress to Date - As at 31 July 2012
		Included elsewhere.	Included in the Fife ITS project. The actual cost of this intervention has not been evaluated.		On completion of this Contract, no further work is required on this intervention.
5	Hard Shoulder Running for buses on the M9 approach to Newbridge. (Southbound only)	Short term (<5 years) This work will be completed by December 2013.	£0.5m - £1m Included in the M9 J1A project with a tender cost of £25.6m. The actual cost of this intervention has not been evaluated	Transport Scotland	The project was awarded to a Joint Venture of John Sisk and Roadbridge, and this was the final of the three major FRC contracts to be awarded. The tender price was £25.6m. This intervention is included in the M9 Junction 1A contract. The bus hard shoulder running will extend from just south of the Humbie Railway Bridge on the M9 Spur, to just short of Newbridge roundabout where priority signals will be installed for bus movements. The completion of the contract and subsequent opening of the bus lane is anticipated in the winter of 2013. The Contract is currently on programme. On completion of this Contract, no further work is required on this intervention. However, intervention 7 in this Appendix will complement these works by providing a continuous bus link with the B800.

No	Intervention	Timescale for Delivery	Indicative Cost (£)	Lead Authority	Progress to Date - As at 31 July 2012
6	Improvements to Newbridge Interchange	Medium term (5 – 10 years)	£4.5m (from Halcrow work for City of Edinburgh Council)	City of Edinburgh Council/ Transport Scotland	There has been some progress. As part of the West of Edinburgh Transport Appraisal work Halcrow, on behalf of City of Edinburgh Council, have submitted preliminary plans which are being reviewed by Transport Scotland on improving the circulatory carriageway on the roundabout and widening on the A8 westbound and the M9 north towards Junction 1A. This intervention will be retained in the refreshed strategy but to be undertaken outwith the Public Transport work.
7	New slips from B800 to M9 Spur including dedicated right turn lane.	Medium term (5 - 10 years) Unknown at present.	£2m - £3m	City of Edinburgh Council/ Transport Scotland	No progress to date. This intervention is to be retained in the Public Transport Strategy.
8	Hard Shoulder Running for buses on M90 north of Admiralty (corridor enhancement) (Southbound only)	Medium term (5 - 10 years)	£10m (Subject to monitoring study on the facility provided under the Fife ITS contract)	Transport Scotland	The introduction of the bus lane within the hard shoulder as a permanent feature will be subject to a monitoring exercise on the temporary facility until the completion of the Forth Replacement Crossing project in 2016. No decision will be taken on making this intervention permanent until then. This intervention is to be retained in the Public Transport Strategy.

No	Intervention	Timescale for Delivery	Indicative Cost (£)	Lead Authority	Progress to Date - As at 31 July 2012
9	Bus lane on A8 westbound A89 eastbound	Short term (<5 years)	£7.2m A8 westbound £2m - £2.5m A89 eastbound £0.5m - £1m	City of Edinburgh Council	No known progress. Costs are only indicative as the extent of the bus lanes are still to be confirmed. This intervention is to be retained in the Public Transport Strategy but it is noted that appraisal work is required to determine the extent of the facility.

APPENDIX 3
SCHEMES AND MEASURES AVAILABLE TO SUPPORT THE MANAGED CROSSING STRATEGY IN DELIVERING THE PUBLIC TRANSPORT STRATEGY - REVISED IMPLEMENTATION PLAN - AUGUST 2012.

No	Intervention	Timescale for Delivery	Indicative Cost (£)	Lead Authority
1	Halbeath Park and Choose	Short term (<5 years)	£10m	Fife Council
2	Rosyth Park and Choose	Short term (<5 years)	£4-6m	Fife Council
3	Hard Shoulder Running for buses on M90 north of Admiralty - Southbound (Works arrangement)	Short term (<5 years)	£5m	Transport Scotland
4	Improvements at Admiralty Junction. Included in Fife ITS Contract.	Short term (<5 years)	£0.5m - £1m	Fife Council/Transport Scotland
5	Hard Shoulder Running for buses on M9 approach to Newbridge	Short term (<5 years)	£0.5m - £1m	Transport Scotland
6	Improvements to Newbridge Interchange to improve both general and public transport	Medium term (5-10 years)	£4.5m	City of Edinburgh Council, Transport Scotland

No	Intervention	Timescale for Delivery	Indicative Cost (£)	Lead Authority
7	New slips from B800 to M9 Spur including dedicated right turn lane.	Medium term (5-10 years)	£2m - £3m	City of Edinburgh Council, Transport Scotland.
8	Hard Shoulder Running for buses on M90 north of Admiralty - Southbound (Corridor enhancement) Intervention dependent on success of Item 3.	Medium term (5-10 years)	£10m	Transport Scotland
9	Newbridge and M9 Public Transport Improvements • Bus lane on the A8 westbound towards Newbridge, • Bus lane on the A8 eastbound from Newbridge, • Bus lane on the A89 eastbound towards Newbridge • New park and ride facility at Kilpunt in south east Broxburn • Provision of traffic signals at Station Road Ratho on A8, incorporating queue relocation towards Newbridge Roundabout • Newbridge Park and Ride • M9 Junction at Winchburgh • Winchburgh Park and Rides • Potential Winchburgh Railway Station • Southbound bus lane on the M9 between Winchburgh and Junction 1A	Medium term (5-10 years)	£35m	City of Edinburgh Council, West Lothian Council, Developers, Transport Scotland.

No	Intervention	Timescale for Delivery	Indicative Cost (£)	Lead Authority
10	M8 Public Transport Improvements • Bus hard shoulder running on the M8 eastbound from Junction 3 towards Newbridge. • Livingston Park and Ride -adjacent to Junction 3 on the M8.	Long term (> 10 years)	£15 million	Transport Scotland, West Lothian Council
11	Improved public transport links to the M90 at Masterton and Admiralty Junctions, along the A823(M), A985 and A921. This could include a Rosyth Bypass and improvements to the road infrastructure on the A921.	Long term (> 10 years)	£30 million	Transport Scotland, Fife Council
12	Edinburgh Orbital Bus Project	Medium term (5-10 years)	£50 million	SEStran
13	Improve public transport connections between Gogar Roundabout and Maybury Junction.	Short term (<5 years)	Not yet known	City of Edinburgh Council
14	Improve public transport connections westbound along A90 in Edinburgh on Hillhouse Road.	Short term (<5 years)	Not yet known	City of Edinburgh Council

No	Intervention	Timescale for Delivery	Indicative Cost (£)	Lead Authority
15	Additional and amended bus services	Short term (<5 years)	Not yet known	Bus Operators, Local Authorities and SEStran
16	Review and maximise rail service patronage across the Forth	Medium term (5-10 years)	Not yet known	Transport Scotland, Network Rail, First ScotRail
17	Real Time Passenger Information	Short term (<5 years)	£5.5m	SEStran
18	Development of One Ticket with potential migration to Smart Ticketing	Short term (<5 years)	-	Bus Operators, ScotRail and SEStran
19	Marketing	Short term (<5 years)	-	Local Authorities, SEStran, Transport Scotland, CPT-Scotland, Bus Operators and ScotRail.

APPENDIX 4

PROPOSED PERFORMANCE INDICATORS FOR THE FORTH REPLACEMENT CROSSING - PUBLIC TRANSPORT STRATEGY

As part of an exercise in March 2012, the **Public Transport Working Group** identified a number of potential areas for measuring performance which would align with those measures being developed for the Forth Replacement Crossing. These are as follows

1 Journey times.
2 Bus service reliability & punctuality.
3 Corridor reliability.
4 Accessibility to public transport by mode.
5 Measure the increased demand.
6 Increased service provision.
7 More destinations for public transport.
8 Park and Ride level of usage. Including the number of overnight parking spaces.
9 Forth Crossings Patronage - vehicles & people; person trips.
10 Equality issues.
11 Rail - local patronage; check cross Forth usage levels.
12 Rail - increased utilisation; increased capacity.
13 Climate change issues.
14 Disabled access to vehicles including public transport.
15 Performance of hard shoulder running both north and south of the Forth on the M90 and M9.
16 Usage of the existing Forth Road Bridge. Number of buses crossing FRB and FRC.
17 Length of queues on M90 and M9 on the main carriageway.
18 Number of staff employed at the Halbeath Park & Choose site.
19 General accident statistics.
20 General traffic volumes.