

**TAYSIDE AND CENTRAL SCOTLAND TRANSPORT PARTNERSHIP****3 FEBRUARY 2009****STRATEGIC TRANSPORT PROJECTS REVIEW****REPORT BY DIRECTOR**

This report informs the Partnership of the outcome of the Strategic Transport Projects review and seeks the Partnership's approval of a proposed response to consultation on the Strategic Environmental Assessment for the STPR.

**1 RECOMMENDATIONS****1.1 That the Partnership :-**

- (i) notes the publication of the Strategic Transport Projects Review;
- (ii) welcomes the inclusion of a number of Regional Transport Strategy priorities within the STPR, as highlighted in the report;
- (iii) approves the submission of a response to consultation on the STPR Strategic Environmental Assessment, as set out in Appendix D to the report;
- (iv) remits officers to enter into discussions with Transport Scotland and Scottish Government officials on the connections between the STPR and Regional Transport Strategy and its Draft Delivery Plan, and report back to a future meeting; and
- (v) agrees to invite Transport Scotland to a future meeting of the Partnership to discuss the STPR and its future development.

**2 BACKGROUND**

- 2.1 The Minister for Transport, Infrastructure and Climate Change announced the outcome of the Strategic Transport Projects Review (STPR) on 10 December 2008. The STPR sets out the Scottish Government's priorities for investing in enhancement of the strategic transport network over the next 20 years, with particular emphasis on interventions which are expected to be delivered or developed beyond 2012 and primarily between 2012 and 2022.
- 2.2 Subsequent to publication, Ministers have confirmed that the Government's top 4 delivery priorities are the Forth Replacement Crossing (Project 14), Edinburgh – Glasgow Rail Improvements (Project 15), Highland Main Line Rail Improvements (Project 17), and Rail Improvements between Aberdeen – Inverness (Project 19), all of which are expected to be complete, or substantially complete, by 2017.
- 2.3 Documentation supporting the STPR takes the form of a series of Reports :-
  - (i) Report 1 : Review of Current and Future Network Performance
  - (ii) Report 2 : Report on Gaps and Shortfalls

- (iii) Report 3 : Option Generation and Appraisal of Interventions
  - (iv) Report 4 : Summary Report
  - (v) STPR Summary Information Leaflet
  - (vi) Strategic Environmental Assessment – Environmental Report
- 2.4 An electronic copy of the STPR Summary Information Leaflet was forwarded to all Board Members on 10 December. The full documentation can be viewed or downloaded from the Transport Scotland website at <http://www.transportscotland.gov.uk/projects/strategic-transport-projects-review>.
- 2.5 On 12 December 2008 the Proposed National Planning Framework 2 was laid before the Scottish Parliament. As discussed in a separate report, this document is currently being scrutinised through the Parliamentary Committee process, prior to publication in Spring 2009. There are direct policy and strategy linkages between the NPF2 and the STPR, in terms of ensuring close integration of spatial policy and land use/transportation planning over the next 20 – 30 years.

### **3 DISCUSSION**

- 3.1 The Partnership has been kept updated on general progress with the STPR through successive Director's Reports. As has been reported previously, Transport Scotland initially established a series of Reference Groups to inform the STPR, one of which consisted of officers from RTPs and CoSLA. These Reference Groups were regularly engaged during the early stages of the process, contributing to and commenting on the work which formed the basis of STPR Reports 1 and 2.
- 3.2 Arising from the considerable volume of work detailed in Reports 1 – 3, the STPR identifies 29 major investment priorities which Scottish Government considers to be the key surface transport network enhancements needed to support sustainable economic growth across Scotland over the next 20 years. Report 4 states that the STPR specifically excludes interventions that are the responsibility of RTPs and local authorities to deliver outwith the STPR.
- 3.3 Priorities have been identified and developed within a 3-tiered prioritisation hierarchy of :-
- (i) Maintain and Safely Operate Existing Assts
  - (ii) Make Better use of Existing Capacity
  - (iii) Targeted Infrastructure Improvements
- 3.4 The underlying principle of only bringing forward infrastructure improvements where interventions under the first two categories cannot achieve similar results is aimed at ensuring Best Value, and a more sustainable approach to investment and use of resources, and is broadly supported.
- 3.5 The 29 packages are shown in Appendix A. A summary of those individual packages which are located within the TACTRAN region, or are considered to offer economy and/or connectivity benefits to the region, is given in Appendix B. Comments and issues arising in relation to the process adopted by STPR and on a number of key specified interventions are given in paras. 3.6 - 3.26 below.

- 3.6 During the Options Generation and Sifting stage of the process some 132 potential interventions were reduced to 118, which were taken forward for more detailed appraisal, which resulted in the final 29 packages. The STPR indicates that Regional Transport Strategies were used to inform the Options Generation and Sifting process. Potential interventions within, or of relevance to the TACTRAN region, which were discarded during the initial sifting and appraisal processes are given in Appendix C, along with Transport Scotland's justification for discarding.
- 3.7 The analysis of Issues, Opportunities and Objectives was based upon 20 strategic corridors; 4 urban networks (Aberdeen, Dundee, Edinburgh and Glasgow) and 2 strategic nodes (Perth and Inverness). The approach of analysing the network in this context is broadly supported. However, during these early stages of the process, concerns were consistently expressed at the omission of Stirling as a "strategic node", given the City's role as a key node/interchange on the strategic road and rail network, and as a gateway to the Loch Lomond and Trossachs National Park, as identified in NPF2. The continuing absence of Stirling as a "strategic node" is considered to be a significant omission which is at odds with NPF2.
- 3.8 Of the 29 packages, 9 are defined as "National Transport Improvement Projects" that apply across all or most of the national rail or trunk road network. The 9 national packages are :-
- (i) **Project 1 : Strategic Road Safety Plan** - it is understood that this will be supplemented by a Road Safety Action Plan to be published in the spring of 2009
  - (ii) **Project 2 : Maintenance and Safe Operation of Scotland's Rail Network**
  - (iii) **Project 5 : Route Management** - current indications are that only the A92 from Edinburgh to Dundee through Fife will be of direct benefit to the TACTRAN region
  - (iv) **Project 6 : Electrification of the Rail Network** (see below)
  - (v) **Project 7 : Reconfiguration of National Rail Timetable** (see project 23 below)
  - (vi) **Project 8 : Strategic Park & Ride/Park & Choose** (see below)
  - (vii) **Project 12 – Rail System Enhancements**
  - (viii) **Project 22 : Targeted Road Congestion/Environmental Relief Schemes** – indications are that none of the schemes in this package currently include projects in the TACTRAN region.
  - (ix) **Project 10 : Integrated Ticketing** - the introduction of a national integrated ticketing system enabling people to travel seamlessly between all modes using one ticket.
- 3.9 The remaining 20 packages are defined as targeted "Strategic Transport Corridor Investments". Issues arising from, and observations on a number of

the “National Transport Improvement Projects” and “Strategic Transport Corridor Investments” are highlighted below.

#### **Project 6 : Electrification of Rail Network**

- 3.10 Future electrification of the strategic rail network through the TACTRAN region to Aberdeen and Inverness is strongly supported. Services to Stirling will be electrified as part of the earlier EGIP project (see Project 15 below). Current proposals indicate that electrification to Dunblane and Alloa will form part of Phase 1 of this project, with electrification of the routes between Edinburgh to Perth and Dundee within Phase 2, and from Dunblane to Aberdeen and Perth to Inverness within Phase 3.
- 3.11 As a broad strategy for extension of electrification beyond the Central Belt, this proposed phasing of priorities is supported. Whilst recognising that the development of cross-border High Speed Rail links is likely to be a matter to be taken forward as a UK initiative, under the auspices of the Department for Transport, it is disappointing that no reference to the linkages between STPR Projects 6 and 15 and the potential for a future High Speed Link are included in STPR.

#### **Project 8 : Strategic Park & Ride/Park & Choose**

- 3.12 The TACTRAN Regional Park & Ride Strategy and Action Plan identifies the potential for strategic Park & Ride sites on the approaches to Dundee, and at Bannockburn, which are also identified under this element of the STPR. A copy of the TACTRAN Park & Ride Strategy has already been provided to both Transport Scotland and Scottish Government officials, to inform anticipated early discussions on the relationship between work done through the RTS and STPR.
- 3.13 The Draft RTS Delivery Plan envisages work on the delivery of Park & Ride facilities around Dundee commencing in 2009/10, whereas the STPR relates to projects beyond 2012. Given the STPR priorities which Ministers have already indicated, the prospects for early action on this strand of the STPR are unclear.
- 3.14 Park & Ride/Park & Choose offers a valuable “quick win” opportunity to improve accessibility and encourage modal shift in favour of NTS and RTS objectives at relatively modest cost. Discussions will be held with Transport Scotland on the scope for early development and delivery of the regional Park & Ride priorities which are also identified in STPR.

#### **Project 15 : Edinburgh – Glasgow Rail Improvements**

- 3.15 The priority given to electrifying the rail lines between Edinburgh - Glasgow, including the lines to Stirling, Dunblane and Alloa, is supported. The provision of a new station at Gogar to serve Edinburgh Airport is also supported. It is understood that this will also be served by non-electrified services from north of the Forth Bridge.

#### **Project 16 : A9 Upgrading from Dunblane to Inverness**

- 3.16 It is pleasing that comments submitted earlier in the STPR process, regarding the need to ensure that Government priorities on the A9 also address existing

safety and congestion “hot-spots” between Stirling and Perth, as well as north of Perth, have been recognised within STPR. The apparent commitment to provide Grade Separated Junctions at Keir Roundabout, Blackford, Auchterarder, Broxden and the Inveralmond area, as part of Phase 1 of Project 16 is strongly supported, subject to further consultation on the detailed proposals.

- 3.17 In addition the proposed early phasing of dualling the A9 between Perth and Blair Atholl within Phase 1 of Project 16 is also strongly supported. The recent announcement of early work to improve the junction at Bankfoot is also welcomed.

### **Project 17 : Improving the Highland Main Line between Inverness and Perth**

- 3.18 Inclusion of this project as one of Government’s early priorities is supported. Improved rail connectivity between Perth and Inverness will support the economy of Highland Perthshire, in particular for tourism and sustainable access to the Cairngorms National Park. The package also includes measures to enhance freight capacity on the Highland Main Line.
- 3.19 This project, coupled with the proposed improvements to rail services between Aberdeen and the Central Belt (see below), will enhance the role of Perth as a key interchange on the national rail network. It is, therefore, disappointing that the potential for developing a new multi-modal interchange at this “strategic node”, as requested by TACTRAN, has been overlooked.

### **Project 23 : Improvements to Rail Services between Aberdeen and the Central Belt**

- 3.20 Plans to provide a fast hourly rail link between Aberdeen and Glasgow are supported. However, this project raises a number of concerns regarding the future stopping pattern for “fast” services, which seem to include stops at only Dundee, with a potential loss of connectivity at intermediate stations and also the loss of direct “fast” services between Stirling and Perth, Dundee and Aberdeen.
- 3.21 Recent improvements in the rail timetable between Dundee and Edinburgh, and the further anticipated improvements under this intervention, will develop the role of Dundee as an existing key interchange point on the national rail network. It, therefore, extremely disappointing that recognition of the need to enhance Dundee Station, to reflect its current and future role as a modern rail interchange, as requested by TACTRAN, has been omitted from the STPR.
- 3.22 Work on the TERS project has recently commenced, with input from Transport Scotland, Network Rail and First ScotRail. It will clearly be important to ensure that this work is taken forward having regard to the emerging proposals for timetable enhancements under this and other rail strands of the STPR. Direct involvement of senior personnel within Transport Scotland’s Rail Directorate and the rail industry should ensure that these key national and regional projects are progress in an integrated manner.

### **Project 28 : Inverkeithing to Halbeath Railway Line**

- 3.23 In addition to improving access to the Port of Rosyth, this project also offers the potential to provide faster rail connections between Perth and Edinburgh. The recent improvements in rail frequency between Perth and Edinburgh under the December 2008 timetable have been welcomed. The provision of faster journey times, which are more competitive with travel by car, will further assist in encouraging modal shift, so is supported.

### **Project 29 : Dundee Northern Relief Road**

- 3.24 Whilst the Summary Paper simply refers to this project as a Relief Road, it should be noted that the full STPR Report 4 confirms that the project will consider the relative merits of providing a by-pass between A90 north of Dundee and A90 west of Invergowrie, and upgrading of roundabouts and associated junctions on the A90 Kingsway. Report 4 notes that this intervention is highlighted in the TACTRAN RTS.
- 3.25 The intention to appraise both options is in line with the position adopted in the RTS and the principles of STAG. Given the lead time for significant projects of this nature, it is important that early discussions on the future development and appraisal of this intervention are entered into with Transport Scotland. The need for early engagement on this, and other key projects for our region, has already been indicated to senior Transport Scotland officials.
- 3.26 In addition to the above, a number of other packages outwith the TACTRAN region, including Project 14 : Forth Replacement Crossing; Project 20 : Grangemouth Road and Rail Access Upgrades; and Project 21 : Upgrading Edinburgh Haymarket, also have direct benefits in terms of supporting the region's economy through improving both passenger and freight connectivity, and are, therefore, supported.

### **Strategic Environmental Assessment**

- 3.27 In accordance with the Environmental Assessment (Scotland) Act 2005 an SEA has been carried out to consider the likely environmental effects of plans and programmes contained in the STPR. The SEA is the subject of public consultation. Responses should be submitted to Scottish Government by 13 February 2009.
- 3.28 A "high level" analysis of the SEA has been undertaken and a proposed response is set out in Appendix D. The Partnership is asked to approve submission of this response, amended as necessary to reflect any additional input the Partnership may wish to include.

### **Next Steps**

- 3.29 The publication of the STPR and the identification of Government's key strategic priorities for the period beyond 2012 is welcomed. A number of the packages and projects included in STPR relate directly to priorities identified within the RTS, and are supported. The STPR now provides a national framework against which the Partnership can inform and progress development of its own RTS and Draft Delivery Plan.

- 3.30 There are disappointments in relation to projects which the Partnership had promoted and would have wished to have seen included within STPR, specifically the apparent lack of commitment to addressing the need for improved rail and road connections to ports outwith the Central belt, including Dundee, Montrose and Perth Harbour, all of which appear to be identified as strategic ports in the NPF2.
- 3.31 Given the acknowledged strategic role of Dundee and Perth, it is also extremely disappointing that there is no recognition of the need or opportunity to improve the existing public transport interchange facilities at these key locations. STPR implies greater national interchange roles for Dundee, Perth and also Stirling, and improving integration and the quality of interchange at these gateway nodes would support NTS and STPR objectives.
- 3.32 Clearly there are many unanswered questions and uncertainties regarding funding of the projects identified in the STPR. There is also concern over the future of other projects we would have wished to see included, as outlined in 3.30 and 3.31 above. The Draft RTS Delivery Plan approved by the Partnership on 28 October 2008, and currently the subject of ongoing consultation with partner Councils, made necessary assumptions about the inclusion of a number of the above projects as national priorities. It will be necessary to review these assumptions in light of the outcome of STPR. This will be addressed in a report to a future meeting.
- 3.33 It is understood that Transport Scotland is currently considering a process for engagement with RTPs, Councils and other stakeholders and is also mapping out the future work programmes which will be necessary to develop the STPR. The Director has made contact with senior Transport Scotland officials and an early meeting is being sought to establish a dialogue on progressing the RTS Draft Delivery Plan within the context of the STPR. The Partnership is asked to instruct officials to progress these discussions and report back on further developments to the next meeting of the Partnership.

## **4 CONSULTATIONS**

- 4.1 The report has been prepared in consultation with the TACTRAN Chief Officers Liaison Group.

## **5 RESOURCE IMPLICATIONS**

- 5.1 There are no resource implications arising directly from this report. The STPR indicates no commitment to funding of specified projects, beyond the 4 packages which have been identified as early priorities by Ministers. It is understood that the remaining packages will be prioritised on the basis of further development/analysis undertaken in advance of each successive Spending Review period. It is, therefore, critical that early discussions are entered into with Transport Scotland and Scottish Government on the appraisal, prioritisation and funding of the key priority projects within and affecting the TACTRAN region.
- 5.2 As discussed in the report, a number of the specified packages relate to priorities within the RTS. Further discussion is being sought with Transport Scotland officials on the operational and delivery connections between STPR

and the RTS, with a view to ensuring that STPR packages of importance to the future economic wellbeing and connectivity of the TACTRAN region are developed to enable appropriate consideration during future project prioritisation and funding decisions.

- 5.3 Further development of projects and packages identified in, or complementing STPR, may have resource implications for the Partnership, which will be addressed in future reports on development of the STPR.

**Eric Guthrie**  
**Director**

Report prepared by Eric Guthrie and Michael Cairns. For further information e-mail [ericguthrie@tactran.gov.uk](mailto:ericguthrie@tactran.gov.uk) or telephone 01738 475771.

**NOTE**

The following background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (and not containing confidential or exempt information) were relied on to a material extent in preparing the above Report; (list papers concerned)

Strategic Transport Projects Review

## Proposed STPR Projects

The 29 major packages of work outlined below have been recommended by the STPR:

### Maintain and safely operate existing assets

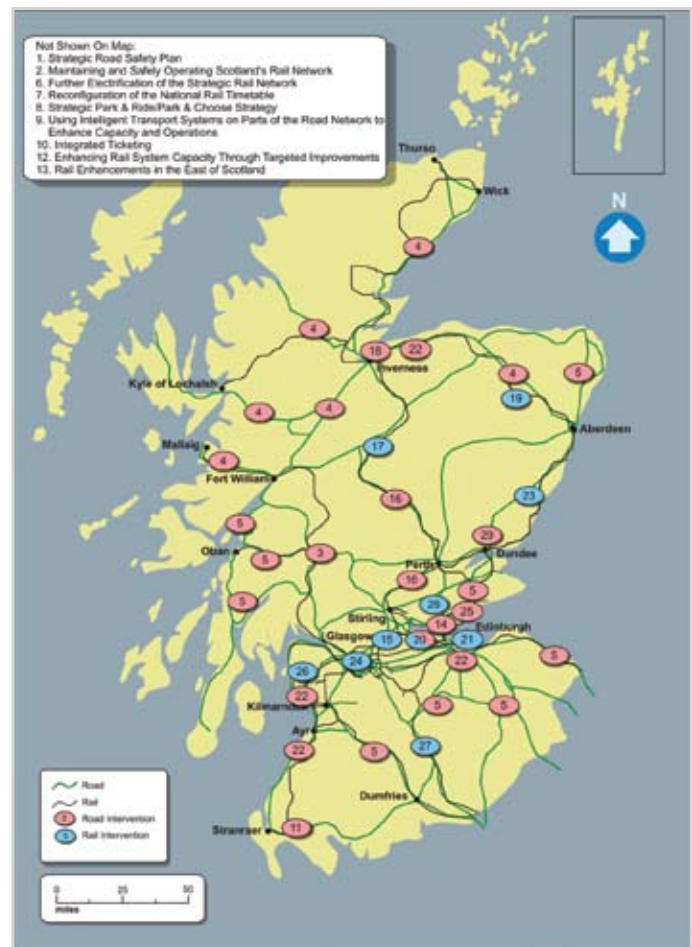
1. Strategic Road Safety Plan
2. Maintenance and safe operation of rail network
3. A82 targeted road improvements
4. Road safety improvements in North and West Scotland
5. Route management.

### Make better use of existing capacity

6. Electrification of the strategic rail network
7. Reconfiguration of the National Rail Timetable
8. Strategic Park & Ride / Park & Choose sites
9. Intelligent Transport Systems
10. Integrated Ticketing
11. Improved links to Loch Ryan ports
12. Rail system enhancements
13. East of Scotland rail improvements.

### Targeted infrastructure improvements

14. Forth Replacement Crossing
15. Edinburgh to Glasgow rail improvements
16. A9 upgrade from Dunblane to Inverness
17. Highland mainline rail improvements
18. A96 Inverness to Nairn upgrade
19. Rail improvements between Aberdeen and Inverness
20. Grangemouth road and rail access upgrades
21. Upgrade Edinburgh Haymarket
22. Targeted road congestion / environmental relief schemes
23. Rail improvements between Aberdeen and the Central Belt
24. West of Scotland strategic rail enhancements
25. Light Rapid Transit between Edinburgh and Fife
26. Rail enhancements between Inverclyde, Ayrshire and Glasgow
27. West Coast mainline rail freight improvements
28. Inverkeithing to Halbeath railway line
29. Dundee Northern Relief Road.



**STRATEGIC TRANSPORT PROJECTS REVIEW:  
SUMMARY OF INTERVENTIONS WITHIN OR AFFECTING  
THE TACTRAN REGION**

**1 NATIONAL TRANSPORT IMPROVEMENT PROJECTS ( 9 Projects)**

**Project 1: Strategic Road Safety Plan**

**STPR Category: Maintain and Safely Operate Existing Assets**

- 1.1 Transport Scotland published a 10-year Strategic Road Safety Plan in 2007. Scottish Government intends to publish its Road Safety Strategy Action Plan in spring 2009.
- 1.2 This project covers development and delivery of the Plan period beyond 2012. The main focus will be on implementing measures to reduce the rate and severity of accidents across Scotland's Trunk Road network.

**Estimated Cost: £10 - £50 million**  
**Delivery Period: 10 years from 2012 - 2022**

**Project 2: Maintenance and Safe Operation of Scotland's Rail Network**

**STPR Category: Maintain and Safely Operate Existing Assets**

- 1.3 This project forms the existing ongoing commitment to manage and maintain the rail network in partnership with Network Rail, protecting the existing asset and maximising existing network capacity. Network Rail currently receives over £300 million/annum in direct grant to manage the rail network in Scotland, which broadly equates to the 10-year estimated total cost of this Project.

**Estimated Cost: £3 billion**  
**Delivery Period: 10 years from 2012 - 2022**

**Project 5: Route Management**

**STPR Category: Maintain and Safely Operate Existing Assets**

- 1.4 This is a programme of route management, road-based actions to deliver targeted improvements, including localised realignments, individual junction improvements, creating 2 + 1 lanes or, where appropriate, sections of dualling. Localised improvements would be progressed in tandem with, and driven by, trunk road maintenance contracts. The only specified route within the TACTRAN area is the A92 from Edinburgh – Dundee through Fife. Other specified routes of note which are outwith the region but have an impact on connectivity include the A1/A68/A7/A83/A85/A828.

**Estimated Cost: £100 - £250 million (with some budget already in place)**  
**Delivery Period: Not specified**

**Project 6 : Electrification of Rail Network**  
**STPR Category : Make Better Use of Existing Capacity**

- 1.5 A long term programme of rolling out electrification beyond the existing commitment to electrify the Edinburgh – Glasgow network. This project is envisaged to be undertaken in 5 phases, incorporating the committed improvements between Edinburgh – Glasgow in Phase 1, which includes electrification of the route to Stirling and Dunblane to Alloa. It is understood that Phase 1 and Phase 2, covering further elements of the Glasgow suburban network, would be completed by 2017.
- 1.6 Phase 3 includes electrification of routes between Edinburgh, Perth and Dundee. Phase 4 involves electrification from Dunblane to Aberdeen. Phase 5 covers electrification from Perth to Inverness. Phases 3 – 5 are envisaged to extend into the period beyond the STPR i.e. beyond 2022.

**Estimated Cost: £250 - £500 million for each of the 5 phases**  
**Delivery Period: Phases 1 and 2 by 2017 (implied)**  
**Phases 3 – 5 beyond 2022 (implied)**

**Project 7: Reconfiguration of National Rail Timetable**  
**STPR Category: Make Better Use of Existing Capacity**

- 1.7 Involves re-casting the national rail timetable to provide fast, limited-stop services for longer distance journeys, with an “adequate” number of semi-fast services serving intermediate destinations. The intervention is predicated on the basis of no requirement for new infrastructure or rolling stock. Reference is made in Report 4 to the possibility of “semi-fast” services being supplemented by additional local bus services, raising questions regarding maintenance of existing rail service levels at intermediate stations.
- 1.8 The intervention aims to reduce journey times between Aberdeen/Inverness and the Central Belt by up to 20 minutes. This intervention links to other rail-based measures, particularly Projects 17 and 23 (see below). Report 4 suggests that these relatively low-cost improvements might best be delivered as part of the specification for the next ScotRail franchise, which is due for renewal in 2014.

**Estimated Cost: Less than £10 million**  
**Delivery Period: Post 2014 (implied)**

**Project 8: Park & Ride/Park & Choose**  
**STPR Category: Make Better Use of Existing Capacity**

- 1.9 Involves providing strategic Park & Ride/Park & Choose sites to encourage greater use of public transport for commuting and other trip purposes on approaches to Dundee, Aberdeen, Edinburgh and Glasgow. Also specifically identifies a strategic site at Bannockburn, serving Stirling, Glasgow and Edinburgh, and a site at Dalcross to serve Inverness Airport. Report 4 confirms that Scottish Government is developing a national strategy for Bus Park & Ride facilities. Mention is made of the fact that a number of RTPs have undertaken development work on Park & Ride.
- 1.10 Sites identified around Dundee include Invergowrie; Forfar Road; A92 and Forgan. Report 4 suggests that the site at Bannockburn may operate as a rail

and/or bus facility. Report 4 also indicates that the schemes identified would use common branding and marketing across Scotland and would be served by either rail services or express bus links to city centres and areas of economic activity. The need to introduce complementary bus priority measures and that, when facilities are implemented, they should be self financing, with no need for ongoing subsidy for operating costs, are also highlighted.

**Estimated Cost: £50 - £10 million**  
**Delivery Period: Not specified**

**Project 12: Rail System Enhancements**  
**STPR Category: Make Better Use of Existing Capacity**

- 1.11 This intervention is in addition to Project 2 (see above). Involves rolling out relatively small-scale operational infrastructure measures to improve efficiency, reduce journey times and allow more trains to use the network across Scotland. Measures include replacing and upgrading radio-electronic or “Token Block” signalling, improving track layout at junctions, and adding new passing loops. No specific measures within the TACTRAN region are identified.

**Estimated Cost: £100 - £250 million**  
**Delivery Period: Not specified**

**Project 22: Targeted Road Congestion/Environmental Relief Schemes**  
**STPR Category: Targeted Infrastructure Improvements**

- 1.12 Targets specific locations on the road network where improvements could resolve existing conflicts between strategic and local traffic. All of the specified examples are outwith the TACTRAN region, on A77 in Ayrshire, A737 by-pass around Dalry, A720 south of Edinburgh and the A96 in the north east.

**Estimated Costs: £10 - £250 million**  
**Delivery Period: Not specified**

**Project 10: Integrated Ticketing**  
**STPR Category: Make Better Use of Existing Capacity**

- 1.13 Introduction of a national, integrated ticketing system for all modes of public transport to allow seamless travel and improve the competitiveness and overall perception of public transport. Report 4 suggests that delivery may be through Smartcard technology, but that further detailed consideration will be required to determine the type of product used. Estimated costs are based upon initial implementation based on Smartcard technologies used for the National Concessionary Travel bus scheme.
- 1.14 It is suggested that this intervention could be taken forward in conjunction with other interventions addressing service enhancements and the provision of strategic Park & Ride/Park & Choose (Project 8). Reference is made to the recent consultation on Scottish Government’s Integrated Ticketing Strategy and that the emerging strategy will be taken forward into an implementation strategy jointly with transport operators, local authorities and RTPs.

**Estimated Cost: £50 - £100 million**  
**Delivery Period: Not specified**

## **2 STRATEGIC TRANSPORT CORRIDOR INVESTMENTS**

- 2.1 These interventions are presented in STPR Report 4 under 4 broad regional groupings, with projects/packages designed to address a number of specified key objectives, which have been defined for each of the STPR corridors.

### **THE WEST AND HIGHLANDS**

#### **Inverness – Fort William – Oban - Glasgow**

- 2.2 Key objectives include reducing accident rates and severity; reducing journey times between Inverness and the Central Belt; improving connectivity between Inverness, Inverness Airport and Aberdeen; and improving operational effectiveness of the A9 and A82.

#### **Project 16: A9 Upgrade from Dunblane to Inverness**

#### **STPR Category: Targeted Infrastructure Improvements**

- 2.3 Proposed upgrading to take place over 2 major phases. Phase 1 includes grade separation of all junctions from the Keir Roundabout north of Stirling to south of Broxden Roundabout at Perth; grade separated junctions at Broxden and Inveralmond roundabouts; dualling between Perth and Blair Atholl; and climbing lanes, 2 + 1 overtaking sections, and junction improvements between Blair Atholl and Inverness.
- 2.4 Phase 2 would address dualling between Aviemore and Inverness and from Blair Atholl to Aviemore.

**Estimated Cost: Phase 1 £500 million – £1 billion**  
**Phase 2 £1.5 - £3 billion**  
**Delivery Period: Not specified**

#### **Project 17: Highland Mainline Rail Improvements**

#### **STPR Category: Targeted Infrastructure Improvements**

- 2.5 A package consisting of additional passing loops (twin track sections), further double track sections, line gauge (freight capacity) enhancements, new and improved signalling, and increased motive power of haulage units, aimed at reducing passenger journey times by around 35 minutes to less than 3 hours between Inverness – Edinburgh/Glasgow, and removing existing freight train speed restrictions. This measure will permit introduction of an hourly service between Inverness and Perth, with additional peak express services. Freight measures include increased length of freight loops, allowing longer freight trains, and targeted gauge enhancements to enable low-floor wagons carrying standard containers. This intervention would build on Project 12. It is understood to be one Scottish Government's top 4 STPR priorities to be delivered by 2017.

- 2.6 Report 4 indicates the potential for implementation during Network Rail Control Period 4 (2009 – 2014).

**Estimated Costs:** Phase 1 £50 - £100 million  
Phase 2 £100 - £250 million  
Phase 3 £50 - £100 million  
**Delivery period:** Phase 1 by 2014 (implied)

**NORTH & NORTH EAST SCOTLAND**  
**Inverness – Aberdeen – Dundee**

- 2.7 Key objectives include reducing accident rates and severity across the network; journey time reductions by public transport between the North East and Central Belt; improving public transport connections, particularly between Aberdeen –Inverness; reducing conflict between local and strategic traffic in Dundee; improving access to Aberdeen Airport; and making rail freight more competitive with road transport.

**Project 23: Rail Improvements between Aberdeen and Central Belt**  
**STPR Category: Targeted Infrastructure Improvements**

- 2.8 A phased programme of track infrastructure and rolling stock improvements to enable re-casting of the passenger timetable, making rail more competitive than road for both passenger and freight movement. It involves delivering one express train/hour between Aberdeen - Glasgow with a 2 hour 15 minute journey time, and one express train/hour Aberdeen - Edinburgh with a journey time of two hours. Only Dundee would be included as an intermediate stop on express services.
- 2.9 Phase 1 includes linespeed improvements, additional loops for freight, upgraded signalling along entire length of route, and provision of more powerful rolling stock. Phase 2 involves the removal of the single track section at Usan, south of Montrose, and a new bridge over Montrose Basin.

**Estimated Cost:** Phase 1 £100 - £250 million  
Phase 2 £100 - £250 million  
Freight Improvements: £50 - £100 million  
**Delivery Period:** Not specified

**Project 29: Dundee Northern Relief Road**  
**STPR Category: Targeted Infrastructure Improvements**

- 2.10 Provision of either a Northern Peripheral Bypass from A90 west of Invergowrie to A90 north of Dundee, or upgrades to the existing A90 Kingsway – e.g. improved roundabouts and junctions – through Dundee. Both options should incorporate bus priority, cycling and pedestrian measures. The By-pass option is estimated to remove up to 50% of traffic from the Kingsway, bringing environmental benefits, whilst reducing journey times between Aberdeen and the Central Belt by around 10 - 15 minutes. Report 4 notes that the bypass option is expected to provide more value for money than the on-line upgrade. Report 4 also refers to the inclusion of the optional upgrading of A90 through/around Dundee within the TACTRAN RTS.

**Estimated Costs: £100 - £250 million**  
**Delivery Period: Not specified**

**CENTRAL SCOTLAND**  
**Edinburgh – Glasgow – Perth – Dundee**

- 2.11 Key Objectives for this “region” include improving public transport access across the region and creating easier interchange between modes; maintaining the 60-minute commutable catchment for major employment zones in Edinburgh; increasing public transport capacity between Fife and Edinburgh and to/from Central Glasgow; reducing rail journey times between the Central Belt and Aberdeen and Inverness; reducing accidents across the road network serving all 4 cities.
- 2.12 A number of the Projects identified are outwith the TACTRAN area but will deliver connectivity benefits to the region.

**Project 5: Route Management**  
**STPR Category: Maintain and Safely Operate Existing Assets**

- 2.13 Involves a package of works to improve management and capacity on a number of corridors, including the A92 between Edinburgh and Dundee (see 1.4 above).

**Estimated Cost: Contained within broader Project 5 package estimates**  
**Delivery Period: Not specified**

**Project 9: Intelligent Transport Systems on Motorway and Trunk Road Network**  
**STPR Category: Make Better Use of Existing Capacity**

- 2.14 Improving journey time reliability and journey times for priority users through use of enhanced Intelligent Transport Systems and a phased programme of associated measures.
- 2.15 Phase 1 involves measures including variable speed limits, variable message signs, and ramp metering at key junctions. Phase 2 would consist of further ramp metering, hard shoulder running. Phase 3 would introduce targeted use of hard shoulders as an additional managed lane for priority vehicles – e.g. HOV's; buses and HGV's.
- 2.16 No measures within the TACTRAN region are included but measures on the A90/M90 approach to Edinburgh and the M80 to Glasgow will reduce congestion which impacts upon the connectivity of the region.

**Estimated Cost: Phase 1 £250 - £50 million**  
**Phase 2 £100 - £250 million**  
**Phase 3 £10 - £250 million**  
**Delivery Period: Not specified**

**Project 13: East of Scotland Rail Improvements**  
**STPR Category: Make Better Use of Existing Capacity**

- 2.17 Includes increasing service frequencies on rail services focussed on Edinburgh, and includes removal of existing extension of Dunblane services across Edinburgh to Newcraighall.

**Estimated Cost: £250 - £500 million**  
**Delivery Period: Not specified**

**Project 14: Forth Replacement Crossing**  
**STPR Category: Targeted Infrastructure Improvements**

- 2.18 Provision of a cable-stayed bridge crossing west of the existing road bridge, with associated connecting roads. The project includes a future role as a public transport corridor for the existing road bridge. A Managed Crossing Strategy for the new and existing infrastructure will be taken forward for authorisation during 2009.

**Estimated Costs: £1.72 - £2.34 billion (2016 prices)**  
**Delivery Period: By 2016**

**Project 15: Edinburgh to Glasgow Rail Improvements**  
**STPR Category: Targeted Infrastructure Improvements**

- 2.19 Consists of a range of infrastructure and service enhancements, including electrification of the lines between Edinburgh and Glasgow Queen Street, including the lines to Dunblane, Cumbernauld and Alloa, plus a new station at Gogar to serve Edinburgh Airport (via tram) and a new curve at Dalmeny to allow Edinburgh - Glasgow services to access the new station. Six trains per hour will operate between Edinburgh and Queen Street with a fastest journey time of around 35 minutes, plus three trains/hour between Edinburgh and Glasgow Central.

**Estimated Costs: £500 million - £1 billion**  
**Delivery Period: Partial implementation by 2016**

**Project 20: Grangemouth Road and Rail Access Upgrades**  
**STPR Category: Targeted Infrastructure Improvements**

- 2.20 Improved access onto the motorway network from Grangemouth by means of upgrades to Junction 6 on the M9 and upgrading A801 between Grangemouth and the M8, saving at least 20 minutes journey time for HGV's using the M8 and M9. Improved rail services through capacity enhancements at Grangemouth Junction, building on committed improvements as part of Project 15. Loading gauge enhancements would also allow larger containers to be carried to/from Grangemouth.

**Estimated Costs: £100 - £250 million**  
**Delivery Period: Not specified**

**Project 28: Inverkeithing to Halbeath Railway Line**  
**STPR Category: Targeted Infrastructure Improvements**

- 2.21 This consists of a direct double-track rail link between Halbeath and Inverkeithing, with new junctions at both locations. This would reduce journey times between Edinburgh and Perth, Inverness and Aberdeen. The journey time benefits would be greater for freight than for passenger services, through provision of a more efficient freight access to the Port of Rosyth.

**Estimated Cost: £100 - £250 million**  
**Delivery Period: Not specified**

## STRATEGIC TRANSPORT PROJECTS REVIEW

## 1 SUMMARY OF POTENTIAL INTERVENTIONS APPRAISED BUT NOT INCLUDED IN FINAL STPR

**STPR Ref. No E1: Suburban Rail Services Across Dundee**

- 1.1 Consisting of a 30-minute frequency from Arbroath to Perth; a new station at Dundee West; additional services calling at intermediate stops; changes to track layout and signalling to accommodate increased frequency and new station.

**Estimated Costs: £50 - £100 million**

- 1.2 **Justification** - Analysis suggests negligible modal shift from car. The potential for improved public transport service provision for Dundee is better captured by STPR Project 7: Reconfiguration of National Rail Timetable and 23: Rail Improvements between Aberdeen and Central Belt.

**STPR Ref. No E2: Co-locate Dundee Bus Station with Rail Station**

- 1.3 Relocating the existing bus station adjacent to the rail station, with associated improved pedestrian access to the City Centre.

**Estimated Capital Costs: Less than £10 million**

- 1.4 **Justification** - Unlikely to be sufficient numbers making interchange between strategic bus and rail services, coupled with potential loss of existing good integration between strategic and local bus services.

**STPR Ref. No E8: New Rail Line between Perth and Inverkeithing**

- 1.5 Provision of a direct dual-track link between Perth and Inverkeithing, offering a more direct rail connection between Perth and Edinburgh, resulting in a journey time saving of around 35 minutes.

**Estimated Capital Costs: £500 million - £1 billion**

- 1.6 **Justification** - Limited transfer of trips from road to rail and adverse environmental and heritage impacts. High cost compared with benefits. Project 28: Inverkeithing to Halbeath judged to offer better value for money.

## 2 RTP PROPOSED INTERVENTIONS DISCARDED AT INITIAL SIFTING STAGE AND STPR JUSTIFICATIONS

**STPR ID 1481: Regional Rail Freight Facilities**

- 2.1 Regional rail freight facilities would not contribute to corridor objectives and the Dundee urban network.

**STPR ID 894: Improved Road Links to Dundee Port for Freight Transfer**

- 2.2 Whilst freight priority, access and journey times are an important consideration nationally, freight accessibility has not been highlighted as a specific constraint in the urban network. Does not appear to make a significant contribution towards location objectives.

**STPR ID 2882: Additional Freight Facilities at Dundee**

- 2.3 Access to freight facilities is within scope of the STPR but the facilities themselves are not.

**STPR ID 1088: New Crossing of Tay Linking A9 to A94 North of Scone**

- 2.4 Intervention would not significantly contribute to objectives for this strategic node, which is focussed on reducing emissions and improving journey times between Aberdeen/Inverness and the Central belt.

**STPR ID 2880: Improved Road Links to Perth Harbour**

- 2.5 Whilst freight priority, access and journey times are an important consideration, freight access into Perth Harbour has not been highlighted as a constraint and there are no objectives this intervention contributes towards.

**STPR ID 2883: Additional Freight Facilities at Perth**

- 2.6 Access to freight facilities is considered to be within the scope of STPR but the facilities themselves are not.

**STPR ID 2878: Improved Links to Port of Montrose**

- 2.7 Whilst freight priority, access and journey times are important considerations, freight access into the Port of Montrose has not been highlighted as a constraint. This intervention does not address any of the objectives set for this corridor.

**STPR ID 2881: Additional Freight Facilities at Montrose**

- 2.8 Access to freight facilities is within the scope of STPR, but the facilities themselves are not.

**STPR ID 1089: New Link Road between A84 Kildean and A9 Stirling University and new M9/A811 Interchange**

- 2.9 The A84, A9 and A811 were not defined as part of the Strategic Transport Network therefore this intervention does not contribute to the objectives of this corridor.

**STPR ID 1112: Upgrading of Stirling Bus Station to Provide Full Integration with Rail Station**

- 2.10 Providing full integration between Stirling bus and rail stations would not contribute to the objectives for this corridor. Public transport interchange has not been identified as a strategic constraint.

**STPR ID 2947: New Rail Facility to serve Highland Spring at Blackford**

- 2.11 A new rail facility at Blackford would not make a significant contribution towards the objectives for this corridor. The facility would not improve public transport capacity or road safety.

**STPR ID 2744: New Rail Stations at St Madoes, Errol, Newburgh and Bridge of Earn**

- 2.12 The addition of these new stations would not contribute to corridor objectives. There are no objectives to improve access to rail services east of Perth whilst to the south of Perth the objective is to reduce journey times to Edinburgh, which this intervention would conflict with.

**STPR ID 2961: Improved Freight Terminal Provision between Edinburgh and Perth**

- 2.13 Access to freight facilities is within the scope of the STPR but the facilities themselves are not.

## STRATEGIC TRANSPORT PROJECTS REVIEW ENVIRONMENTAL REPORT – CONSULTATION

### BACKGROUND

- 1.1 Transport Scotland has undertaken a Strategic Transport Projects Review (STPR) to make recommendations on largely land-based transport interventions for the period 2012 – 2022 that would make a significant contribution to delivering the National Transport Strategy.
- 1.2 A Strategic Environmental Assessment has been undertaken for the STPR. The Environmental Report (ER) for the SEA has been published and is the subject of consultation. The ER describes the likely significant, strategic environmental effects of implementing the STPR. The consultation responses are to be submitted to Transport Scotland by 13 February 2009.

### CONTEXT (SECTION 2)

- 2.1 Figure 2.1 identifies Strategic Transport Nodes. Stirling should be included as a “strategic node”.
- 2.2 Section 2.4.2 refers to RTSs. It should be noted that TACTRAN's RTS was approved by the Scottish Government in June 2008 and launched in December 2008. The SEA Post Adoption statement has been produced and is to be advertised in January 2009.

### INITIAL AND DETAILED ENVIRONMENTAL ASSESSMENTS (SECTION 6)

- 3.1 It is noted that ***Intervention 17 – Lengthen Trains and Platforms between Edinburgh and Dunblane*** was not progressed to the detailed assessment stage as “it is considered that more considerable benefits could be delivered through alternative interventions”. There are issues of overcrowding of trains serving Dunblane, Bridge of Allan and Stirling stations in the TACTRAN region. This intervention would address these problems and allow for growth in rail travel. It is not apparent which of the other interventions would provide a comparable solution.
- 3.2 The conclusion for not progressing ***Intervention 167 – Extensive Rail Freight Enhancements between Mossend, Grangemouth and Aberdeen/Inverness via Perth*** is surprising. This stated that “only modest environmental; benefits were envisaged to material assets, human health, air quality and CO2e emissions”. In view of the AQMA designation in Dundee and Perth air quality benefits are likely to be significant. Work undertaken in connection with the Perth designation indicates that lorries are the major contributor to poor air quality. Transfer of freight from road to rail is an element of both the RTS and Perth and Kinross Council's draft Air Quality Action Plan. The RTP is working together with partners on proposals for road/rail freight terminals in both Dundee and Perth to enable modal shift. Enhancements on the rail lines connecting those sites with Mossend and Grangemouth would considerably facilitate the carriage of freight by rail. There are air quality and human health (through fewer and less severe road accidents) benefits also in removal of long distance freight originating outwith the region in North-East Scotland and the Highlands being transferred to rail carriage.

- 3.3 TACTRAN agrees with the assessment for Intervention ***D3e Route Management between: Aberdeen and North East Scotland (A90); Edinburgh and Dundee (A92); Ayrshire and Dumfries (A76); Edinburgh and North West England (A68/A7/A702); Edinburgh and North East England (A1), the A83, A85, A828***, particularly with regard to the A92 and A85 which provide key links between the region and other parts of Scotland, and supports its implementation.
- 3.4 TACTRAN agrees with the assessment for Intervention ***D5 Targeted Programme of Measures to Improve Road Standards between Glasgow and Oban/Fort William (A82)*** and supports its implementation.
- 3.5 The broad conclusions of the environmental assessment of intervention ***D6 Using Intelligent Transport Systems on Parts of the Road Network to Enhance Capacity and Operations*** are agreed, though it is considered that the reduction of journey times would not just result in accessibility improvements but also encourage modal shift from the private car thereby generating benefits particularly in terms of reduced air pollution.
- 3.6 TACTRAN supports the Phase 1 proposal of intervention ***D7 Further Electrification of the Strategic Rail Network*** to extend electrification to Dunblane and Alloa and would hope that, at the least, design work could start on Phases 3 – 5 which would result in electrification of all of the region's railways with consequent benefits in terms of reduced noise and air pollution, increased accessibility and greater modal shift from road transport.
- 3.7 TACTRAN supports intervention ***D8 Enhancing Rail System Capacity through Targeted Improvements***. It is considered that the environmental benefits would be wider than stated as faster and more frequent rail journeys will promote modal shift away from private car use.
- 3.8 Intervention ***D9 National Integrated Ticketing Scheme*** is supported by TACTRAN, in particular through the Regional Buses Strategy Action NP5. This indicates that TACTRAN will work with Transport Scotland, operators and local authorities to explore opportunities for the provision of multi-operator, multi-modal and multi-journey tickets, including the use of Smartcard technology.
- 3.9 It is considered that intervention ***D10 Reconfiguration of the National Rail Timetable*** under-estimates the potential impact on modal shift, particularly on the Highland Main Line where journey times are longer currently by train than for driving. This intervention is broadly supported by TACTRAN though if no new infrastructure or roiling stock is proposed then intermediate stations are likely to suffer significantly reduced levels of service. This issue can be addressed through progressing the intervention with other complementary actions such as electrification and, in the context of the TACTRAN region, the RTP and partners' TERS proposals.
- 3.10 TACTRAN supports intervention ***D11 (Strategic) Park & Ride/Park & Choose Strategy***. This is complemented by TACTRAN's Park and Ride Strategy which has also been subject to an SEA. Strategic park and ride is considered to offer a relatively low cost means of improving accessibility and encouraging modal shift.

- 3.11 TACTRAN is supportive of appropriate means of easing traffic flow around Dundee by means of either Intervention ***D19 Dundee Northern Relief Road – Bypass Option*** or ***D19 Dundee Northern Relief Road – A90 Upgrade Option*** subject to more detailed consideration of both options in accordance with STAG.
- 3.12 TACTRAN does not agree with the assessment of intervention ***E1 – Suburban Rail Services across Dundee***. It is believed that this should have been undertaken based on the updated TERS proposals which would envisage a 60 minute frequency between Arbroath and Glasgow through the extension of existing Dunblane – Glasgow services. These would significantly reduce the need for additional rolling stock and signalling compared with the STPR proposals. The comment on page 131 of the Environmental Report is not accepted. The environmental impacts of enhanced rail services would generally not overlap with those accruing to the Dundee Northern Relief Road and therefore proceeding with both sets of interventions would generate greater net benefits particularly in terms of air quality.
- 3.13 It is accepted that intervention ***E8 New Rail between Perth and Inverkeithing*** is unlikely to proceed due to practical difficulties of negotiating the Ochil Hills, not least as significant lengths of the former Perth – Cowdenbeath railway line were used in the alignment of the M90 motorway. Nevertheless there is a need to consider measures to significantly improve line speeds to reduce the Perth – Edinburgh times from the current 1 hour 20 minutes which compares unfavourably with car journey times of under an hour outwith the peak periods. The final paragraph of the assessment does not satisfactorily reflect the environmental aspects of the proposal. There is no evidence that the intervention would have an “adverse substantial contribution to the region’s population, its health and air quality”. The intervention would significantly improve these aspects but could have adverse localised impacts on the natural environment.
- 3.14 TACTRAN supports the principle of faster rail connections as contained within interventions ***D15 Rail Enhancements on the Highland Mainline between Perth and Inverness, D18 Rail Enhancements between Aberdeen and the Central Belt*** and ***E7 Rail Freight Enhancements between Mossend, Grangemouth and Aberdeen/Inverness***. TACTRAN has concerns regarding the future stopping pattern for “fast” services, which seems to include stops at only Dundee and Perth, with a potential loss of connectivity at intermediate stations and the loss of direct “fast” services between Stirling and Perth, Dundee and Aberdeen. With regard to E7 it is believed that consideration should be given to enabling the operation of larger gauge “piggyback” wagons when upgrading rail infrastructure.
- 3.15 TACTRAN supports the safety and congestion relief benefits of intervention ***D14 A9 Upgrading from Dunblane to Inverness*** while noting the adverse environmental assessment and the proposed alternatives and mitigation in Section 7, with the consequent recommendation for inclusion in the next stage of the STAG appraisal processes.
- 3.16 TACTRAN agrees with the assessment for ***E2 Co-locate Dundee Bus Station with Rail Station*** and the intention not to proceed with this proposal.