West of Scotland Conurbation Public Transport Study

Date of meeting 12 June 2009  Date of report 27 May 2009

Report by: Assistant Chief Executive (Business Support)

1. Object of report

To advise the Partnership of the output from the West of Scotland Conurbation Public Transport Study (WSCPTS), and recommend agreement to the actions outlined.

2. Background

2.1 Transport planning for the future, looking ahead to the next 15 years, is a fundamental cornerstone in the development of economically vibrant regions. A number of key issues (see below) have previously been identified as constraints on the key worth of the current transport system and its growth. To this end, members previously agreed the commission of consultants to provide a report looking to the longer term, which would overcome these issues, and subsequently to identify potential public transport interventions in the West of Scotland Conurbation that would address these issues:

- increasing rail patronage;
- ageing trains and rail infrastructure;
- line capacity constraints on the approaches to Central and Queen Street stations;
- how to deal with cross city suburban rail movements;
- the need to improved public transport integration, including with the Subway;
- the demand for integrated ticketing;
- how to improve bus service frequency and quality; and
- how to access proposed developments including the expansion of the Southern General Hospital; the new arena at SECC; the new riverside transport museum; the redevelopment of the Ravenscraig site; and the Commonwealth Games village.

2.2 The study looked not just at the longer term vision but also needs to be considered as an incremental approach to sound transport planning. The recommendations in the study require further assessment to assess cost, feasibility and environmental impacts and therefore must be considered at this stage as a recommended vision. The study area is the conurbation including the city of Glasgow with its contiguous built-up area, and extending to Old Kilpatrick, Milngavie, Kilsyth, Cumbernauld, Airdrie, Wishaw, Larkhall, East Kilbride, Johnstone and...
Bishopton. Although the study did not include internal trips in Ayrshire, Argyll and Inverclyde or in the outlying parts of Dunbartonshire, Lanarkshire and Renfrewshire, the trips into the conurbation from these areas were included and the outcome includes recommendations that will have significant benefit to these areas.

2.3 Radial, orbital and cross-city travel patterns were examined, using long term land-use planning forecasts and models, to arrive at a potential public transport network using a blend of different transport modes that would provide a positive benefit to the economy of the region, to social inclusion and to accessibility.

2.4 The recommendations arising from the study are wide ranging and, if accepted by the Partnership, will result in radical changes to the existing public transport system, needing the support of other organisations, including councils and Transport Scotland. The proposed network shown in Appendix 1 should be considered to be a long term goal, and can be achieved in an incremental way, and only with the support of these partners.

3. Context and high level planning considerations

3.1 The WSCPTS involved an examination of how each of heavy mass transit (rail), light rail mass transit (tram), bus rapid transit (BRT), bus and supporting cross-cutting issues (ticketing, marketing and information) might operate in an integrated way to improve the transport network. The study makes it clear that different types of vehicle and frequency of services, are suited to different ranges of passenger demand and the analysis of future demand on corridors through the city centre, and between outlying towns and villages, has led to a range of recommendations. In this report light rail means trams that run on metal rails, whilst “bus rapid transit” can be characterised as a “tram on rubber tyres”, providing all the quality of light rail but where new track need not be installed and where the vehicles do not use overhead power cables. The different types of vehicles can be categorised as:

- heavy rail, suited to the higher ranges of passenger flow demand;
- light rail, the Subway and BRT to lower levels of demand; and
- bus to still lower demand ranges.

3.2 The heavy rail network in the west of Scotland is approaching capacity in places, and it is not possible to add new or more frequent services to many of the lines. A key capacity constraint is platform availability at Central and Queen Street high level stations and the need to relieve capacity at these termini has led to a recommendation to replace some shorter distance, suburban heavy rail services with a light rail system which would not use the mainline city centre stations as a terminus. The removal of some of the heavy rail services from the network would allow additional services on the remainder of the regional network to provide a 15 minute frequency network of trains serving most of the region. This release of capacity would also allow consideration to be given to new rail stations where sufficient passenger demand is anticipated.

3.3 The heavy and light rail networks should be complemented by bus rapid transit routes that are mainly segregated from other traffic, but which are able run on normal roads where necessary. When run on roads, a high degree of priority should be provided. Light rail and bus rapid transit services should have service frequencies of 10 minutes or better during the working day and would interchange with the Subway, which is considered to be an important element of the proposed network, in the St Enoch area.

3.4 A core bus service, with at least a 10 minute frequency, making use of strengthened bus priority, real-time information and with high quality bus interchanges should radiate from the
city centre to other parts of the conurbation. Similar services should be established on key orbital routes where there is sufficient demand. The network should be supplemented by an array of local bus services which feed passengers between the primary rail, BRT and core bus network and their ultimate destinations.

4. Outline proposals to be further developed

4.1 The basic premise of the study was that travellers can be attracted to public transport if a “turn up and go” service is provided, and it is generally accepted that this can be achieved when heavy rail services operate to a fifteen minute frequency or better, and tram/BRT/bus services run to 10 minute frequency or better.

4.2 The study examined potential passenger flows for each corridor and makes recommendations on the mode that can best provide the appropriate “turn up and go” service for that corridor. However the capacity constraints at Central and Queen Street stations mean that additional train services cannot be provided without first relieving line capacity on the approaches to these stations. The study recommends that this should be done by converting some of the shorter distance suburban heavy rail lines to light rail, and providing a new city centre terminus for these services in the St Enoch area.

4.3 The study further recommends that the following heavy rail lines should be converted to light rail:

- the Cathcart Circle together with the spurs to Neilston and Newton;
- East Kilbride which would divert onto the Neilston line between Muirend and Williamwood;
- the Paisley Canal line;
- the Cumbernauld line, using a new chord at Garngad;
- spurs could be provided to serve Newton Mearns, the Royal Alexandra Hospital, Stobhill Hospital, Castlemilk and Giffnock.
- on the approach to the city centre, the southern light rail system would divert onto the City Union line, using two tracks of the City Union Bridge but leaving the other two tracks available for heavy rail trains; and
- a new terminus would be created in the St Enoch area to interchange with BRT, core bus and the Subway.

4.4 To complement the possible light rail network, BRT routes should be established:

- between the city centre and Clydebank via SECC;
- the city centre and Renfrew via the new South Glasgow Hospital;
- the city centre and Drumchapel/Duntocher via Great Western Road; and
- the city centre to Carmyle/Easterhouse via Parkhead.

These would run on segregated off-road bus-ways, where possible, but could also run on surface streets if necessary, when the highest level of priority would be provided to the vehicles. There would be interchanges with the Subway at Govan, Partick and St Enoch.
4.5 A core bus network of high capacity, high frequency services would be provided on radial and some orbital corridors, including the following:-

- City Centre – Clydebank – Faikey;
- City Centre – Milngavie via Maryhill;
- City Centre – Springburn;
- City Centre – Possilpark – Bishopbriggs – Kirkintilloch – Lenzie;
- East Kilbride – Airdrie; Hamilton – Ravenscraig;
- City Centre – East Kilbride;
- City Centre – Newton via Dalmarnock;
- City Centre – Cumbernauld;
- City Centre – Summerston via Maryhill;
- City Centre – Nitshill via Paisley Road West and Pollok; and
- Neilston – Southern General Hospital via Paisley

Each of these routes should be provided with high levels of bus priority and supporting street infrastructure including traffic signal priority, real time information, level entry to buses and high quality stops and interchanges. Bus feeder services to these main corridors would be provided by a network of local buses that penetrated deeper into outlying residential and business areas.

5. **Summary**

5.1 The West of Scotland Conurbation Public Transport Study has been an extensive and detailed investigation into how the region’s transport system could be adapted on an incremental basis over the next 15 years to meet the challenges of increasing congestion and pollution. Continental experience is evidence that commuters can be persuaded to use public transport if it is fast, frequent and reliable and it is our challenge to provide that in the west of Scotland. Conversion of some of the suburban rail network to light rail lines which terminate away from Central and Queen Street stations would have the twin benefit of firstly improving the quality of these services and secondly providing capacity at the main stations to allow for more frequent longer distance rail services from Ayrshire, Inverclyde and parts of Renfrewshire and Lanarkshire. This recommended public transport network for the conurbation would provide a transport network that would support economic growth and contribute to social inclusion.

5.2 In addition to the recommended improvements to services and infrastructure, it will be necessary to improve other aspects of the public transport experience to attract new patronage. The report recommends that a higher priority should be given to providing sufficient and timely information to enable passengers to make informed choices about their journey. Finally, a new integrated ticketing system should be developed to ensure fast and effective interchange between all modes of public transport.
6. Partnership action

The Partnership is recommended to:

• Note the content of this report;

• Endorse the principle of providing a “turn-up-and-go” integrated public transport network that includes heavy rail; light rail; the Subway; Bus Rapid Transit; core bus services; and feeder bus services;

• Approve the commencement of development work on the parts of the network that can be delivered by SPT;

• Approve further discussions with Transport Scotland on the proposed heavy rail network and light rail conversions; and

• Approve further discussions with councils, other key stakeholders and transport operators on the details of the proposals including how these could be delivered and funded over the next 15 years.

7. Consequences

Policy consequences  The recommendations of the study fit with approved Regional Transport Strategy in terms of providing improved accessibility, support for economic development and improved social inclusion.

Legal consequences  None identified

Financial consequences  Detailed discussions to be held with the government and Transport Scotland

Personnel consequences  None identified

Social Inclusion consequences  Better access to job opportunities will be provided

Risk consequences  None directly at this stage

Name  Valerie Davidson  Ron Culley
Title  Assistant Chief Executive  Chief Executive
(Business support)

For further information, please contact Rodney Mortimer on 0141 333 3470