



## Scottish Association for Public Transport

# SCOTTISH TRANSPORT MATTERS

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### Transport Seminar and SAPT AGM

Friday 24<sup>th</sup> April 2020 at 10.00 Perth

*Soutar Theatre, A.K. Bell Library, 2-8 York Place, Perth PH2 8EP*

10.00	<b>Coffee/tea</b>	
10.30	<b>Introduction</b>	<b>Stewart Stevenson MSP</b>
10.40	<b>Infrastructure Commission for Scotland "Blueprint for Scotland's Future"</b>	<b>Professor Iain Docherty – University of Stirling</b>
11.30	<b>High Speed Rail: a Scottish Perspective</b>	<b>Alastair Young – High Speed Rail, Transport Scotland</b>
11.50	<b>The challenges of rail decarbonisation</b>	<b>Fiona Hesling – Head of Rail Strategy, Transport Scotland</b>
12.30	<b>Scottish Transport Prospects in the 2020s</b>	<b>John McCormick - SAPT</b>
12.40	<b>Close of Seminar</b>	
12.45 – 13.05	<b>AGM Business Meeting (SAPT members only)</b>	

*If you are planning to attend, please email [sapt@btinternet.com](mailto:sapt@btinternet.com) or call 07760 381729*

#### Subsequent Members Meetings

<b>Inverness</b>	<b>Tuesday 16<sup>th</sup> June 1400 – 1600</b>	<b>Mercure Hotel, Church Street IV1 1QY</b>
	<b>Topics include Ferries, Rural Bus/Rail Co-ordination, Highland Railways</b>	
<b>Glasgow</b>	<b>Tuesday 6<sup>th</sup> October 1730 – 1930</b>	<b>Mercure Hotel, 201 Ingram St G1 1DQ</b>
	<b>Focus on Glasgow and Edinburgh Transport including Glasgow Metro</b>	

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The Scottish Government second Strategic Transport Project Review (STPR2) is due for release by 2021, outlining a priority programme of potential transport projects over the next 20 years.

The **Infrastructure Commission for Scotland** has called for a rewrite of Scottish Transport Appraisal Guidance as part of work on the revised NTS and STPR2 due to be announced in the coming year. The Report says '*All Scottish Government funded projects in the 2020 infrastructure Investment Plan should be prioritised against inclusive net zero carbon economy outcomes*'. The Report also calls for road demand management and a substantial rise in the modal share of active travel, more shared mobility and a greater role for public transport. There should be a presumption in favour of 'future-proofing' existing roads rather than an increase in road capacity. It calls for a managed transition in collaboration with the UK Government to a charging/payment regime replacing existing fuel and road taxation. But the official Transport Scotland position remains that dualling the A9 Perth-Inverness and A96 Inverness-Aberdeen should remain a priority.

**Professor Iain Docherty will expand on the Infrastructure Commission findings at the SAPT AGM on 24<sup>th</sup> April.**

The draft **Scottish Budget** shows a welcome increase in rail and a reduction in trunk road spending:

- Spending on rail services will go up from £989m (2019-20) to £1,259.1m (2020-21) (£520m of the 20-21 spend is revenue spend on the ScotRail franchise, with £529m on rail infrastructure)
- Motorways and trunk road spending will fall from £833.1m to £748.9m
- Bus concessionary travel rises from £210m to £230m, but bus service support drops from £57m to £54m
- Ferry service expenditure increases from £233m to £255m
- Active and low-carbon travel increases from £184m to £298m

SAPT's submission of rail projects to the STPR2 review is in line with the commission's recommendations:

1. **Scottish Inter-City Rail Electrification to Perth, Dundee and Aberdeen.** Priority is to replace refurbished InterCity diesel trains with new electric trains, with faster, greener journeys and a sub-60 minute Edinburgh-Perth journey time. Completion is crucial to decarbonising the Scottish rail network by 2035.

**Additional loops between Huntly and Inverness** are needed for an hourly Aberdeen-Inverness service.

**The Highland Main Line** needs a new loop at **Ballinluig** to improve reliability and shorten journey times.

2. **Glasgow Metro:** The first phase would be **Glasgow-East Kilbride/Barrhead** electrification with four conventional electric trains per hour to East Kilbride. Subsequent **Light Rail Metro** phases would be:
  - **Airport Metro** from Glasgow via Hydro, Science Centre, Govan, QEUH, Braehead & Renfrew to Glasgow Airport Development Zone, Airport, and Paisley Gilmour St.
  - **South-Side Metro** converted from Neilston/Newton lines, with possible extension to Castlemilk.
  - **Maryhill Metro** from SEC via Kelvingrove and Botanic Gardens to Maryhill using disused rail tunnels
  - **East End Metro** via Parkhead to north-east Glasgow largely using disused rail tunnels
3. **Edinburgh and Borders:** Electrification and upgrading track capacity east from Waverley to Portobello and Gorebridge would support four trains per hour. The first phase of Borders Line extension to **Hawick** should be completed along with electrification to give faster journeys. The Almond Chord and creation of a new concourse at the east end of Waverley station would increase train and passenger capacity.
4. **Fife Connectivity:** In addition to the agreed re-opening of the **Levenmouth line**, a new Inverkeithing-Halbeath line, with a triangular junction towards Thornton and also Dunfermline, could reduce Edinburgh-Aberdeen train journey times and allow an **Edinburgh-Dunfermline-Longannet-Alloa-Stirling** rail service to be introduced. This could be extended to Glasgow, linking Fife directly with Glasgow.
5. **Aberdeen CrossRail:** Completion of doubling of the Aberdeen-Dyce line should facilitate re-opening of the **Dyce-Ellon** line, with bus connections from Peterhead and Fraserburgh to a P+R Ellon railhead.
6. **Rural Lines:** Electrification of the 21-mile **Ayr-Girvan** line would allow the **Stranraer** service to be operated on a two-hourly frequency by **hybrid battery/electric** trains, recharging north of Girvan.

The **Far North line** needs a re-instated loop at Lentrane to support the hourly Inverness-Tain train service recommended by the Far North Line Review Group. Hybrid electric/battery/hydrogen trains are likely to be the solution to decarbonising this line before 2035 with a hydro-powered hydrogen production plant

On the **West Highland Lines**, infrastructure upgrades are needed to support two-hourly Glasgow-Oban and Glasgow-Fort William-Mallaig train frequencies envisaged by the WHL Review Group. Hybrid electric/battery/hydrogen trains are also likely to be the best answer for the West Highland Lines.

## 2

## HS2 to Scotland

Now that the UK Government has given the green light to HS2 from London to Crewe, SAPT will be pressing for HS2 extension to Scotland.

Edinburgh-London is the busiest domestic air route in Europe. There are 100 flights daily between the two cities, with 3.5 million passengers annually equivalent to around 200,000 tonnes of CO<sub>2</sub>. Glasgow-London is not far behind. These two routes account for the majority of UK domestic aviation emissions. Flying is the fastest growing source of CO<sub>2</sub>. To cut the number of these avoidable flights a more competitive 3 hour London-Glasgow/Edinburgh rail journey time is needed.

HS2 Ltd predicts a Glasgow-London rail journey time of around 3 hours 40 minutes once Phases 1 and 2A (London-Crewe) are open, compared with 4 hours 30 minutes now. There are no plans for Edinburgh trains in this first phase.

The second phase (2B) to Manchester and Leeds is being reviewed to integrate with “Northern Powerhouse” rail plans. This is an opportunity to ensure that Phase 2B can be extended to Scotland to cut London-Glasgow /Edinburgh journeys to 3 hours.

Lower construction costs, as achieved by China Railway Construction Corporation (CRCC), are key to making a financial case for HS2 to Scotland. Transport Scotland and the DfT will no doubt be aware of this.



*Travel in China has been revolutionised by the 30,000 km High Speed Rail network. Above: High Speed trains in Chengdu East Station. Photo: John McCormick*

## 3

## Glasgow Metro

The Glasgow Connectivity Commission accepted SAPT’s suggestion of a Light Rail network for Glasgow. The first suggested route will link Paisley Gilmour Street (interchange with rail) to Glasgow Airport, with a subsequent extension via the Renfrew Riverside and Clyde Waterfront developments, QEU Hospital, and SSE Hydro to Glasgow Central and Queen Street.

The Connectivity Commission outlined other routes to Glasgow Southside, Maryhill and East End.

Glasgow and Renfrewshire councils have agreed funding for the first phase of the Glasgow Metro. £144 million from the Glasgow City Deal has been earmarked for the Paisley to Glasgow Airport section. SAPT has recommended to Transport Scotland that the Glasgow Metro extension from the airport to Glasgow should be included in STPR2, the strategic transport projects review update, so that funding for this can be included in the national transport appraisal programme.

Glasgow and Renfrew Councils, SPT and Transport Scotland should ensure that the Glasgow Metro zero emission line will be the key transport link for travel along this strategic development corridor, giving inclusive access to employment, education, healthcare and entertainment sites along the route. Reliance on car transport for such developments must be a thing of the past.

John McCormick of SAPT has had initial meetings with officials of Glasgow and Renfrew Councils. A number of issues will have to be investigated before proposals are finalised:

- What technology can be used for the airport line: automated metro, tramtrain, tram or other?
- What are the route options and potential journey times for the airport line?
- What are the cost implications and where will the funding come from?
- Should the same technology be used for all proposed Glasgow Metro routes?

The latest airport rail link scheme (fifth in a series starting 30 years ago with a Subway extension proposal) is at a preliminary stage. An update will be given at SAPT’s October 6<sup>th</sup> Glasgow meeting.

Road transport technology is on the verge of a revolution that will impact public transport. Some implications of electric road vehicles were considered in the last “Scottish Transport Matters”. The other major technological advance is driverless or autonomous vehicles.

Driverless vehicles have of course been in use for many years on airport terminal shuttles and the Docklands Light Railway. The new trains for the Glasgow Subway will be driverless. Technology companies like Google and Tesla are pushing ahead with development of autonomous road vehicles, though there is still a long way to go before people will have confidence that driverless cars can be let loose on public roads.

Driverless road vehicles could ultimately undermine the viability of taxis and traditional local buses. Initial application of the technology will be on motorways and reserved roadways where there will be no need to interact with pedestrians and cyclists.

**CAVforth:** The first CAV (Connected Autonomous Vehicle) route in Scotland will be the 14-mile CAVforth link between the Ferrytoll Park+Ride at Inverkeithing, via the (old) Forth Road Bridge, to Edinburgh Park rail/tram interchange. This £6.1 Million project, part funded by the UK Government’s £100 million Intelligent Mobility Fund, is due to start later in 2020.

CAVforth will be a public bus service operated by Stagecoach using Alexander Dennis single deck buses (pictured right).

The autonomous bus project has been developed by Fusion Processing, Alexander Dennis, Stagecoach Group, Transport Scotland, Napier University, and Bristol Robotics Laboratory.

The project could establish Larbert-based Alexander Dennis as a world leader in autonomous bus technology.



**Legal Liability:** Autonomous road vehicles raise issues of safety and legal liability. Accidents could be due to the software provider, the vehicle supplier, the operator, or be caused at least partly by another vehicle, pedestrian or cyclist. SAPT contributed to a consultation carried out by the Scottish Law Commission on autonomous public road services. Issues raised by SAPT include:

**Software:** There will be safety updates to software controlling autonomous vehicles. A central UK safety body will be needed to recall or temporarily withdraw classes of vehicles with critical safety issues. There will also have to be procedures to ensure all critical software updates are applied.

**Licensing:** All operators seeking to operate HARPS (Highly Automated Road Passenger Services) should be licensed, with separate national licensing systems for Scotland, England and Wales.

**Technical Competence:** Unlike current local bus operations, operators of HARPS will need a higher degree of computer expertise to maintain vehicle operating systems and report incidents.

It is likely to be many years before autonomous vehicles linked by 5G telephony can navigate single track roads in the Highlands. But it’s important that the ground rules should be established soon.

“The Times” reported that a piece of tape applied by McAfee to the “3” in a 35 mph speed limit sign caused a Tesla car on automatic cruise control to think the limit was 85 mph and rapidly accelerate! The car relies on a Mobileye camera system which is installed in several Tesla vehicles.

While autonomous cars could threaten bus usage, autonomous buses on defined routes like CAVforth could be developed as part of an integrated system linking with trams and trains.



## BUS and TRAM

First Glasgow is introducing electric buses to Glasgow. These buses will be Glasgow's first commercial electric vehicles since 1967 and will be the first electric buses operating within the city's low emission zone. The battery buses were built by Alexander Dennis Limited (ADL) at their factory in Falkirk.

Two electric buses will operate on the First Bus M3 Glasgow to Milton service. They are able to operate up to 160 miles on a single charge. Each return journey on the bus will save 4kg of carbon compared to all the passengers driving the same distance by car.

Work will start in March 2020 on Leith Walk for the Edinburgh Tram extension to Newhaven. The last construction phase to York Place should be complete by summer 2022.

The City of Edinburgh has issued proposals for an expansion of the tram network by 2030 to include:-

- an extension from Newhaven via Granton to Haymarket
- new service from Waterfront via North Bridge to the SE quarter via Edinburgh Royal Infirmary
- westward extensions to Newbridge and to Heriot-Watt University and Curriehill
- a new route from Haymarket to the SE Edinburgh line (easing pressure on Princes St)

If all buses were diverted away from Princes St, up to 32 trams an hour could operate on Princes St.

Action is also anticipated on fully integrated rail/tram/bus ticketing with several bus routes terminating on either east or west side of city centre. The plan says it would be unacceptable to exclude all buses from Princes St but there is support in some quarters for bus exclusion (LTT79024Jan, p14)

In Glasgow, Stuart Patrick of the Chamber of Commerce has been pressing for early decisions on the City Metro strategy outlined last year with priority for a route from the city centre to Glasgow Airport (see Section 3 above).

Stagecoach has introduced a new express route from Irvine to Glasgow via Kilmarnock and the M77, replacing a former route to Glasgow via the sub-standard and sparsely populated A736

Tensions continue between Lothian Buses and First over the former extending further into West Lothian and the latter into Edinburgh. Lothian Bus has also extended services into East Lothian and Midlothian, the last being in competition with the northern section of Borders Rail.

## FERRIES & SHIPPING

Prime Minister Boris Johnson has authorised study of a road bridge from Scotland to Northern Ireland replacing ferries. There are doubts over costs and benefits. It would have to be linked with improvements in road access from Dumfries and Ayr. The North Channel is much deeper than the English Channel increasing difficulty and costs in construction. Jim Steer has suggested a rail tunnel with shuttle trains and upgraded lines to Stranraer.

Dissatisfaction with Scottish Government supported Scottish vehicle ferries and related harbour improvements has continued to grow to an intense peak with calls for full Public Inquiry into why the present position has arisen and what should now be done. **Options will be discussed at the SAPT Inverness meeting on 16<sup>th</sup> June.**

CalMac services have been badly affected by the recent long period of very stormy weather, exacerbated by a breakdown of the Arran ferry "Caledonian Isles". Delivery of the urgently needed new ferries for Arran and the Uig triangle has been postponed due to the problems at Fergusons shipbuilding yard, now nationalised.

Western Ferries Gourock-Dunoon ferry route provided 32,500 sailings with only 56 cancellations in the year ending March 31, 2019, a reliability rate of almost 100%. Around 400 extra sailings were provided to meet peak demand. The route, which is the busiest in Scotland, gets no government subsidy and generated a profit of £2.7 million. 90% of the company's workforce are based locally in the Dunoon area. A new fleet of four vessels built by Fergusons and Cammell Laird is fuel efficient and claimed to be the most environmentally friendly in the country. A £3.5M upgrade in the Hunter's Quay terminal funded by Western Ferries has been brought into service. Future plans could include a dedicated freight link from Islay to Ayrshire

## **RAIL**

ScotRail regulated fares rose by 2.8% and off-peak ones by 1.8% at the beginning of 2020. The Scottish Government said those fare increases are 20% lower than in the rest of Britain, but Green spokesman John Finnie MSP said it was wrong to ask passengers to pay when so many had to deal with poor services over the last year.

ScotRail introduced a £17 go anywhere return for Club 50 holders. Fife Council officers proposed as part of budget-cutting the abolition of its remaining rail concessionary fares for internal journeys.

The soaring cost to the public purse of running Scotland's railways reached record levels last year, as the public handout to operators hit £482.8M. New figures show that beleaguered rail operator Abellio ScotRail received the cash while also posting record losses of £11M. Financial performance details showed the Dutch-owned firm had an increase in subsidy of nearly £200M in a year, mostly to cover a rise in the charge imposed by Network Rail to use the track system of more than £150M. The autumn National Passenger Survey found satisfaction with ScotRail up from the fifteen-year low of 79% in 2018 to 89%, second largest rise in Britain, with 78% satisfied by punctuality and reliability but only 45% content with handling of delays.

In the league table of Britain's least-used stations last year, the fourth, seventh and eight were Barry Links, Kildonan and Lochluichart. Borders stations reached the 2M mark for the first time.

Highlands and Islands MSP John Finnie called for urgent improvements to Highland rail infrastructure after the scale of cancellations in the last year was revealed. The figures obtained by him showed there were a total of 595 trains fully cancelled in the last year on the Aberdeen to Inverness route, an average of just under 50 per month, and the Highland Main Line experienced 342 cancellations, an average of 29 per month. Work was underway to protect the railway from potential landslips and rock-falls from the hillsides and embankments around Glenfinnan viaduct, with Network Rail investing £1.7m to remove loose vegetation and install rock netting.

A study of flood risks and rising sea levels has suggested that, in addition to local flood protection measures, 100 miles of coastal road and 40 miles of coastal rail may have to be relocated along with harbour adjustments and a Clyde Barrage at Erskine to reduce risks of flooding along the Clyde which could extend as far as Glasgow Airport.

## **WALKING & CYCLING**

George St in Edinburgh is to become fully pedestrian but will increase pressure on adjacent streets unless much larger shifts to public transport and active travel are delivered. Glasgow is proposing similar plans for Blythswood Square and adjacent area. A firm decision has also been taken on major amenity improvements in George Square – parking spaces will be removed though through motor and bus traffic will remain permitted on the north and south sides of the square.

A new cycle/pedestrian bridge from Govan to the Riverside Museum has been approved. It will be a lifting bridge allowing taller vessels to pass through.

## **AVIATION**

The ruling by the Court of Appeal that expansion of Heathrow is unlawful has been welcomed by campaigners. The government did not take account of its commitment to the Paris Agreement on climate change when setting out its support for the plans.

The environmental charity Hubbub has carried out a survey that showed that 49% of flights taken by men aged from 20 to 45 were for stag parties. The carbon emissions could be cut by 98% by swapping overseas trips for a UK stag party using land transport. About half of UK people do not fly in any one year, whereas 15% of people account for 70% of flights. Scrapping air miles schemes and instead applying a levy on frequent fliers could discourage "frivolous flights" (Times 21Feb).

A recent analysis by 1<sup>st</sup> Move International has found that a 12,400 mile round trip from Edinburgh to Thailand would require planting of 19 trees at between £6 and £15 per tree to offset the carbon. Friends of the Earth Scotland believe that most tree-planting schemes lack credibility and people should fly less instead (S3Jan).