



# ***Scotland Route Study***

Regional Working Group 5 - North

# *Agenda*

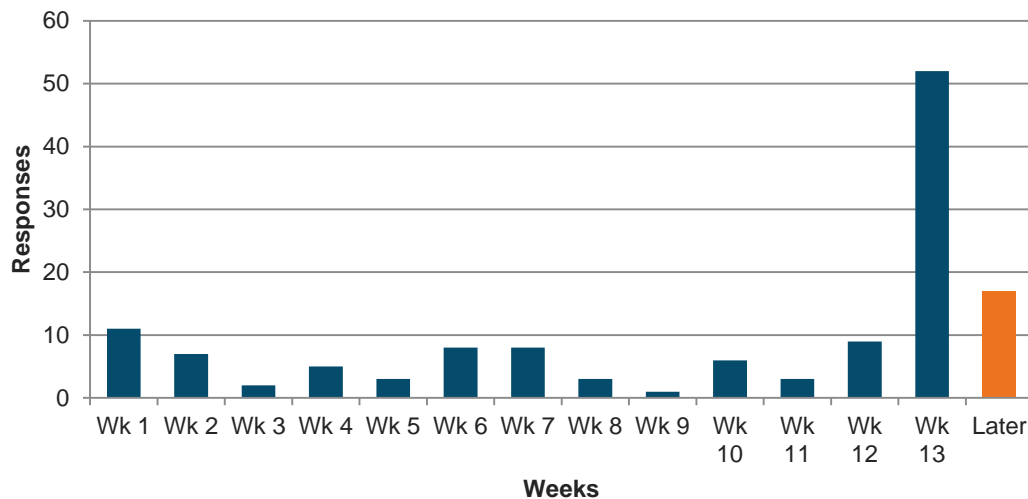
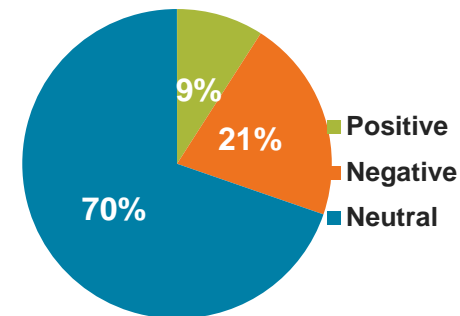
1. Welcome and Introductions
2. Summary of feedback received on the Draft for Consultation
3. Further demand forecasting undertaken
4. Further timetable development undertaken/planned
5. Further technical development undertaken/planned
6. Next steps
7. AOB

# ***Summary of feedback received on the Draft for Consultation***

# Scotland Route Study - Consultation

Scotland Route Study concluded 10th March 2016 after 3 month consultation

w/e 10/03/16 (cumulative)	Responses Received
Positive	21
Negative	24
Neutral	73
<b>Total</b>	<b>118 (135 in total)</b>



Consultation Respondee Type	
Members of the public	53
Local authorities and PTEs	17
Campaigning organisations	16
MPs, MSP's, Elected Officials	7
Rail Industry	6
Rail User Groups	4
Government departments/agencies	4
Business organisations	4
Councillors and Town Councils	4
Ports, Airports and other travel organisations	3

# Scotland Route Study - Consultation

Top 10 themes raised (from responses received by close of consultation)

w/e 10/03/15 (cumulative)*	Issues Raised
<b>Proposed enhancements</b> – comment on enhancements discussion in the Route Study – generally positive	55
<b>New Stations</b> – requests to open (or re-open) stations not mentioned in Route Study	37
<b>Electrification</b> – requests to electrify lines and discussion on timescales of proposed electrification – generally quicker	33
<b>New Railway</b> - requests to open (or re-open) lines not mentioned in Route Study	31
<b>Station Improvements</b> – comment on enhancements discussed in Route Study and requests to enhance other stations	31
<b>Freight line conversion to passenger</b> – mainly requests to open Levenmouth, Alloa-Dunfermline and Grangemouth	27
<b>Capacity</b> – comment on capacity constraints on various parts of the network, notably main stations and approaches	20
<b>Linespeed Improvements</b> - comment on proposed improvements Aberdeen/Inverness to Central Belt and requests for improvements on Rural lines	18
<b>Connectivity to Airports/Ports</b> – comment on non-inclusion of Glasgow City Deal Airport Access Project, also requests for connections to a number of Scotland's ports, particularly for freight access	16
<b>Timetable Improvements</b> – requests for timetable enhancements to services across Scotland – usually detailed	15

\* Please note that a response may raise more than one issue therefore a greater number of issues are raised than responses received

# ***Further demand forecasting undertaken***

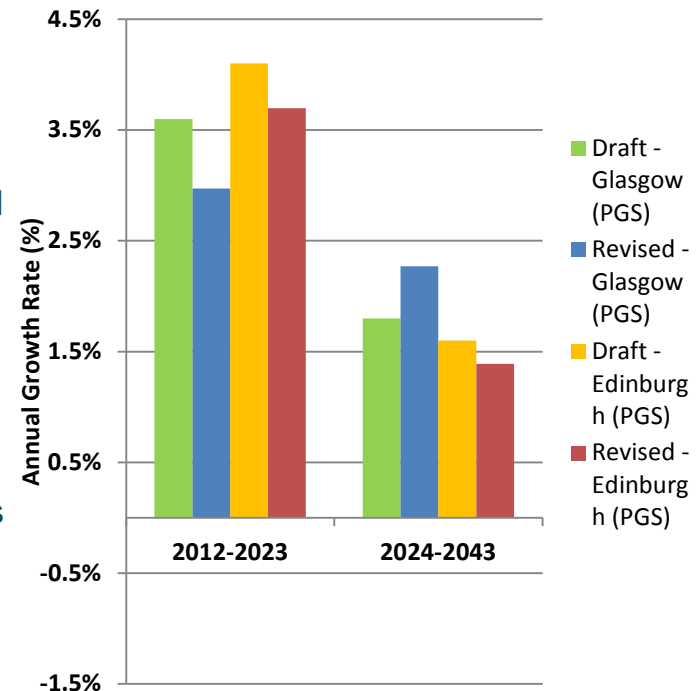
# Reminder of what has changed in the model / base line data and why

## Model/Scenarios

- Market Size scenarios (population and employment) developed further
  - Scenarios now constructed using more detailed Experian data set
  - Evidence base strengthened → analysis of historical data across a range of indicators to improve narrative
- Market share scenarios:
  - Correction of minor modelling mistakes (e.g. fuel and ticket prices)
  - Congestion scenarios now varies by region
- Demand forecasts now presented for all four scenarios

## Base data

- Known gaps in MOIRA base addressed:
  - SPT Zonecards → Uplift applied using SPT travel diary
  - E&G Flexipass → Count data preferred



# Aberdeen AM Peak

Aberdeen AM Commuter				
Scenario	Growth factor 2012-23	Compound Annual Growth Rate	Growth factor 2012-43	Compound Annual Growth Rate
		2012-23		2023-43
Prospering in Global Stability (Draft)	52%	3.9%	151%	2.5%
Prospering in Global Stability	54%	4.0%	226%	3.8%
Prospering in Isolation	47%	3.5%	163%	3.0%
Struggling in Global Turmoil	24%	1.9%	21%	-0.1%
Struggling in Isolation	20%	1.7%	3%	-0.8%

- Aberdeen employment most volatile of the three AM Peak Commuter markets considered
- This growth drives high growth in PGS and PI scenarios
- However, the impact of lower city centre employment in the lower growth scenarios is partially offset by congestion and other market share factors
- Note: Compared to Glasgow and Edinburgh, modelling based on relatively few zones which increases model volatility



# Interurban

Interurban				
Scenario	Growth factor 2012-23	Compound Annual Growth Rate	Growth factor 2012-43	Compound Annual Growth Rate
		2012-23		2023-43
Prospering in Global Stability (Draft)	156%	8.9%	206%	0.9%
Prospering in Global Stability	49%	3.7%	197%	3.5%
Prospering in Isolation	43%	3.3%	111%	2.0%
Struggling in Global Turmoil	39%	3.1%	57%	0.6%
Struggling in Isolation	38%	3.0%	30%	-0.3%

- Changes to the fuel and train fares have a relatively large impact on a relatively uncongested network (increases market share towards the back end of the forecast)
- Population growth reduced overall → greater knowledge of what was informing the TELMOS forecast
- Population growth applied differentially (i.e. by region)

# Rural

Rural				
Scenario	Growth factor 2012-23	Compound Annual Growth Rate	Growth factor 2012-43	Compound Annual Growth Rate
		2012-23		2023-43
Prospering in Global Stability (Draft)	60%	4.4%	206%	2.3%
Prospering in Global Stability	61%	4.4%	158%	2.4%
Prospering in Isolation	61%	4.4%	137%	2.0%
Struggling in Global Turmoil	61%	4.4%	97%	1.0%
Struggling in Isolation	61%	4.4%	72%	0.3%

- ScotRail forecast used up to 2026/27
- Scenarios applied thereafter
- Scenarios developed on the basis of local population and overall economic outlook
  - Growth highest on West Highland and GSW
  - Lowest on Stranraer

# Edinburgh AM Peak

Edinburgh AM Commuter				
Scenario	Growth factor 2012-23	Compound Annual Growth Rate	Growth factor 2012-43	Compound Annual Growth Rate
		2012-23		2023-43
Prospering in Global Stability (Draft)	56%	4.1%	114%	1.6%
Prospering in Global Stability	51%	3.8%	115%	1.8%
Prospering in Isolation	49%	3.7%	135%	2.3%
Struggling in Global Turmoil	40%	3.1%	52%	0.4%
Struggling in Isolation	32%	2.6%	12%	-0.8%

- PI scenario the highest growth scenario in Edinburgh, where increased market size leads to higher growth than the more environmentally constrained PGS scenario
- Although Edinburgh has a marginally less broad based economy than Glasgow, this does not feed through into the rail forecasts as it has less of an impact on congestion

# Glasgow AM Peak

Glasgow AM Commuter				
Scenario	Growth factor 2012-23	Compound Annual Growth Rate	Growth factor 2012-43	Compound Annual Growth Rate
		2012-23		2023-43
Prospering in Global Stability (Draft)	47%	3.6%	108%	1.8%
Prospering in Global Stability	39%	3.0%	128%	2.5%
Prospering in Isolation	26%	2.1%	74%	1.6%
Struggling in Global Turmoil	21%	1.8%	28%	0.3%
Struggling in Isolation	15%	1.2%	-4%	-0.9%

- Compared to draft PGS forecast, growth has become more driven by increasing importance of market share factors (congestion)
- Market size remains broadly the same in PGS as in the draft
- Of the three cities, Glasgow has the broadest based economy and therefore least volatile (although lower productivity)
- Negative growth in SI scenario due to reduction in congestion

# ***Further timetable development undertaken/planned***

## ***Further timetable development undertaken/planned***

- Edinburgh Waverley – train lengthening instead of increasing frequency
- Glasgow Central – train lengthening instead of increasing frequency
- ECML – additional infrastructure and freight scenario
- WCML – additional infrastructure, HS2 splitting/joining and freight scenario
  
- Central Belt to Aberdeen/Inverness - electrification and enhancement
- Far North – conventional signalling and additional infrastructure
- East Kilbride/Barrhead – electrification and enhancement
- Kilmarnock/Barassie - electrification and enhancement

# ***Further technical development undertaken/planned***

## ***Further technical development undertaken/planned***

- Initial internal Perth “masterplan” meeting held
  - Dunblane to Perth enhancement
  - Dunblane to Perth electrification
  - Perth Station and infrastructure remodel
- Montrose/Usan enhancement
- GRIP 2 development ongoing on Carstairs Junction remodel
- GRIP 2 development nearing completion for Portobello Junction remodel
- GRIP 3 development ongoing on Slateford Junction remodel
- GRIP 3 (inc AIP) development work about to commence for electrification of Edinburgh Suburban line
- Internal Millerhill “masterplan” meeting held
- Glasgow Central station enhancement



# ***Next steps***

## ***Next steps***

- Regional Working Group 6 (South) : 13<sup>th</sup> June
- Working Group 11: 16th June (Presentation of final document)
- Board Meeting 6: 30th June (Seek approval to publish)
- Publish final document: 14th July

# ***AOB***



# ***Scotland Route Study***