HITRANS

InverCity Rail Study

Final Report

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Introduction

1. Steer Davies Gleave has been commissioned by the Highlands and Islands Regional Transport Partnership (HITRANS) to undertake a study of inter city rail services, focusing on those from Inverness to the Central Belt and cross border services to London. The study identifies real and perceived barriers to future growth over the next 15 years. It justifies the retention of existing services and provides recommendations for some realistic future enhancements.
2. The study will be used to inform HITRANS responses to consultation for the re-letting of the East Coast and ScotRail franchises taking place over the next 3 years.

The current situation

3. From December 2011 there will be 11 trains daily in each direction between the Central Belt and Inverness. One of these services, the 'Highland Chieftain', is operated by East Coast Trains and runs to / from London via Edinburgh. ScotRail operates all other services with 5 each from Glasgow and Edinburgh to Inverness. Southbound there are 6 services from Inverness to Edinburgh and 4 to Glasgow.
4. ScotRail also operates the Highland Sleeper with one journey in each direction overnight between Inverness and London Euston.

The rail market

5. Inter city services comprise 40% of the total 1.1 million annual journeys through Inverness station with a strong upward trend in the past ten years. Total demand grew by 55% overall at an average rate of 4.5% per annum, driven by strong growth in the largest Edinburgh and Glasgow flows.
6. Currently the London-Inverness flow is just over 46,500 per annum. We estimate that 17,500 passengers each use the direct East Coast service and the Caledonian Sleeper with the remaining 11,500 interchanging at Edinburgh.
7. Around 10% of journeys are commuting, business makes up 17%, tourism is 27% with the leisure market forming the majority of travellers.

Competing modes

8. For Central Belt, the key competition is private car and coach. For cross-border trips, particularly to London, the primary competition is from air travel.
9. Car journey times and fuel costs are comparable with rail between Inverness and Glasgow / Edinburgh. Coach travel between Inverness and Edinburgh / Glasgow is significantly less expensive than rail but has a longer average journey time.

Market share

10. We estimate the total demand between Inverness and the Central Belt to be around 1.4 million journeys per annum. Private car is estimated to account for 63%, coach travel 12% and rail 25%.
11. Between Inverness and London, rail accounts for 12% of the market with air accounting for the remainder.

Benefits of the existing service

12. Inter city services provide a significant benefit in connecting Inverness and the surrounding communities to the rest of Scotland and UK positively benefiting the economy, tourism, the environment and resilience.

Barriers to growth

13. Before considering changes and improvements to rail services, we must have a good understanding of the concerns of current passengers and the factors which deter non-users.

Central Belt

14. The reliability and journey times of existing services are not perceived as a barrier but the frequency of service and the need to interchange is felt to be unsatisfactory. Current city centre to city centre journey times to/from the Central Belt are comparable to the car or the fastest coaches (Citylink Gold). There is an opportunity to grow rail's market share if rail journey times can become significantly faster than the alternatives.
15. The arrival time of the first trains in either direction is an issue with the ability to arrive in Inverness, Glasgow or Edinburgh for a 10am meeting desirable. Improvements in frequency would improve the service's attractiveness to the whole market. The December 2011 timetable does help smooth out the gaps between services with effectively an hourly southbound service being implemented from Inverness on Monday to Saturday mornings and fewer two hourly gaps between services for the rest of the day.
16. The relatively infrequent service to/from Edinburgh and Glasgow forces a high level of interchange at Perth. This is disliked by tourists in particular.
17. Connections to Far North, Kyle and Aberdeen lines at Inverness are reasonable but there can be lengthy waits due to the infrequent service on these routes.
18. The Class 170 trains operating the bulk of the Central Belt services are perceived only as adequate. Cleanliness and comfort of the train, along with the availability of seating is good. However toilet facilities, bicycle and luggage space are perceived as poor. This is consistent with the requirements of the leisure and tourism market who are the dominant users of these services.
19. On ScotRail services there is no wifi, access to tables is limited and power points are only available in First Class. These reduce the opportunity to work productively on the train which reduces a benefit for business passengers compared with driving. For tourists, there is no 'special' experience on the rail journey, particularly in First Class, for the visitor to recommend.
20. Rail is very competitive on price against private car and coach, particularly when the Friends Fare product is be used. However there is a lack of awareness of the value for money of rail compared to other modes. particularly for journeys originating in the Central Belt.

London

21. London to Inverness rail journey time is clearly uncompetitive with air travel. This will remain the case, even once the initial High Speed Rail services commence.
22. The East Coast services running to/from Inverness are valued not just for their connection to destinations further afield than the Central Belt, but are also

perceived by many regular passengers to have superior facilities on a journey between Inverness and Edinburgh.

23. The sleeper allows an earlier arrival in Central London or Inverness than the earliest flight without the need for an overnight stay. The quality of the rolling stock on sleeper services is generally acceptable. There are few 'modern conveniences' such as charging points for laptops and mobile phones in cabins or an entertainment system such as the one offered on the Great Western Sleepers. From December 2011, the sleeper also forms the first service from Aviemore and Carrbridge into Inverness.

24. For tourists coming from the south and east of England both services avoid the need to interchange. The sleeper does not make the best use of the interchange it provides with the North West of England and the Midlands.

25. Rail is competitive on price when compared to air, particularly when travelling with little notice. However there is a perception that awareness of the relative value for money of rail to the home and overseas leisure market is relatively poor.

Key Interventions

26. Interventions have been identified which can address the above barriers. To be credible, these must be deliverable rather than 'grand schemes' and the focus is to make incremental improvements around current infrastructure and TOC resources. There are a number of critical points where change can be introduced efficiently and effectively and we list our recommendations chronologically to align with these externally influenced events.

Dec 2012 – Further minor timetable/journey time improvements

27. Linespeed improvements between Perth and Inverness will allow slightly reduced journey times. Whilst departure and arrival times at Edinburgh and Glasgow are fixed because of timetable constraints, timings at Inverness have some scope for adjustment. This also brings an opportunity to further improve connections at Inverness to Far North and Aberdeen Line services.

28. A further possibility, which should be explored is for earlier Inverness-Central Belt services. Initial analysis suggests there is a possibility for an earlier Inverness - Edinburgh service which would depart around 05.45 and arrive around 09.26. This is more than 30 minutes earlier than the current service and would allow travel in time to arrive for a 10am meeting. With interchange at Perth, this service would also provide a 9.15 arrival in Glasgow.

29. Providing an earlier northbound service is more problematic due to existing freight services and having to pass southbound passenger services.

30. We recommend further investigation into this option for inclusion in the December 2012 timetable changes.

2013 – East Coast franchise re-let

31. The Highland Chieftain service is valued by Inverness-Edinburgh passengers and it carries over 40% of the total journeys between Inverness and stations in England. The Highland Chieftain is a key service should be retained to serve these markets.

2014 – ScotRail franchise re-let

32. This presents an opportunity to cost effectively include future improvements in the franchise specification as they form part of a competitive procurement.

Perhaps more importantly, the procurement provides an opportunity to highlight to bidders innovative initiatives that may help differentiate their bids.

33. A specifically marketed service, possibly only in the summer months, between Inverness and the Central Belt which gives tourists a differentiated service with a comfortable environment, ample baggage storage and specific facilities such as information on sights as the train passes, would address a number of complaints. The facilities and interior layout of the existing DMU fleet are not suitable for providing such a service. We would recommend that opportunities to use alternative trains such as loco hauled stock on at least one service in the summer months are explored along with a marketing campaign to highlight this differentiated service.

34. The Highland Sleeper fulfils a clear niche for travellers wishing to arrive in Central London or Inverness earlier than the first flights and also for tourists looking to access the Highlands as part of a wider trip. It should be retained in the next franchise. Sleeper patronage could benefit from improved marketing, which may be realised in a new franchise.

35. The sleeper allows interchange at Crewe, Preston and Carlisle. Better late night/early morning facilities and services at these stations presents an opportunity to grow the travel market with North England and the Midlands.

36. Sleeper rolling stock although refurbished, is old. The lounge and seated vehicles in particular are difficult to maintain and close to life expired. Lowland Sleepers could arguably manage without a dedicated lounge car due to the late departure of services from London, Edinburgh and Glasgow but the earlier departure time of the Highland Sleeper (20.00 from Inverness, 20.30 from London) means that a lounge car is an essential part of the service, although its use is only guaranteed for First Class passengers. We recommend a focus on retaining these facilities, possibly through using vehicles from Lowland services for spares.

2016 – Edinburgh Glasgow Improvements Programme/Class 170 refurbishment

37. Completion of EGIP at the end of 2016 will remove Class 170 DMUs from most Central Belt routes. This coincides with the Class 170 fleet reaching mid-life when refurbishment will be required. The fleet could therefore be modified to better meet the needs of long distance inter city travel. We recommend refurbishment includes provision for greater luggage and bicycle space as well as electrical sockets at all seats. An improved First Class offer would also help to improve the profile of the service and create a more standardised impression of inter city train travel to/from Inverness.

38. Wifi will also help attract business users and a combination of ground based connection and satellite link as used on East Coast services would appear to be the most obvious and proven technology to investigate.

2017 onwards – Highland Main Line Hourly Service/Electrification

39. The next major phase of HML is infrastructure improvements to deliver substantially faster journey times and close to an hourly service in each direction.

40. The improvements recommended in this report would form the basis upon which an hourly service could be justified in the future. Implementing these recommendations can only strengthen the case for an hourly service by facilitating growth in demand and market share on inter city flows and thus improving the case for further enhancements. It is likely that rail would gain further market

share in the Inverness-Central Belt market (especially assuming that A9 improvements are also not likely to occur until the longer term) and therefore the baseline against which an hourly service would be appraised would be raised, making the growth required to justify such a service less of a leap than at present.

2017 onwards – Intercity Express Programme (IEP)

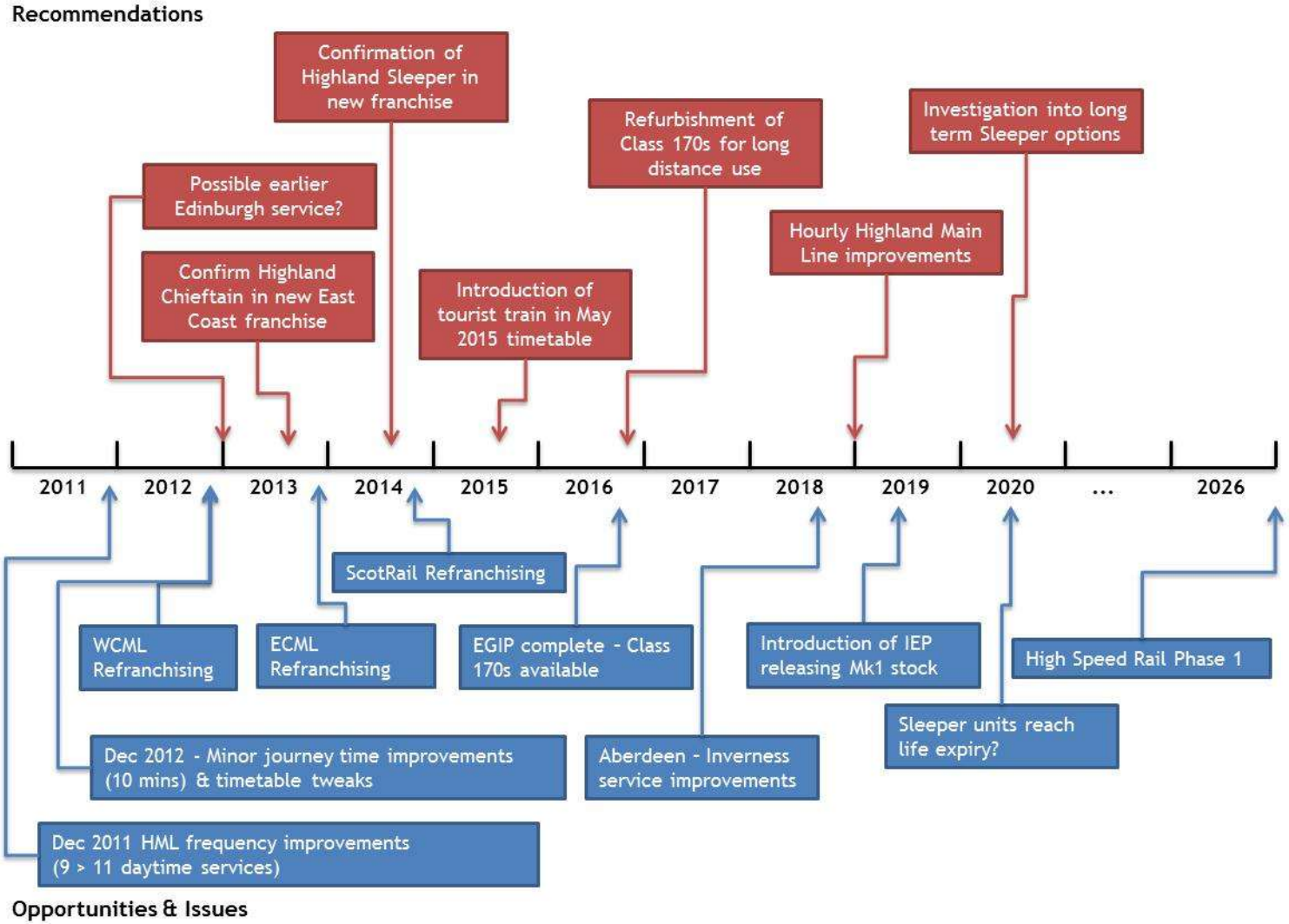
41. IEP provides an opportunity to diagram any 'spare' 5 car sets which would layover in Edinburgh to run onto Inverness. This would result in a second service each day with improved ambience and facilities when compared with the existing ScotRail DMU fleet. At best it could provide a second day time Inverness to London service. However, any additional service would only be cost effective if undertaken in the time when the rolling stock was doing nothing else.
42. There is little detail on the operation of IEP at this date and we recommend the possibility of a second IEP service to Inverness be retained and explored more fully when more details of the rolling stock and timetables are available.
43. The introduction of IEP will also release large numbers of Mk3 coaching stock, presenting an opportunity to maintain the pool of spares for the sleeper coaches. Displaced coaches could also be used to replacing the existing life expired lounge cars and seated accommodation. The ability of all stations to accommodate the slightly longer trains which would result is required to be checked.

2026 – High Speed Rail

44. Integrating the Inverness-Central Belt timetable to ensure good connections to High Speed Rail services will improve connectivity with Manchester and Birmingham as well as London. An hourly service should allow integration without significant timetable changes and these should ensure that connections are straightforward and convenient.
45. The need for a Lowland Sleeper service becomes questionable as journey times between the Central Belt and London are reduced to only 3½ hours. However Inverness does not experience the full journey time benefit because of the need to travel to Edinburgh or Glasgow first. The Highland Sleeper should therefore be retained in the long term. By 2026 the problems of ageing rolling stock will have to be addressed. In addition the redevelopment of Euston station represents both an opportunity and a threat to accommodating sleeper services. Therefore, this date works as the point to review Highland and Lowland sleeper arrangements as the impact of HSR will be more defined.

Summary

46. These recommendations, along with the opportunities and constraints have been summarised in the recommendations timeline shown on the following page.


Recommendations
Confirmation of Highland Sleeper in new franchise
Possible earlier Edinburgh service?
Confirm Highland Chieftain in new East Coast franchise
Introduction of tourist train in May 2015 timetable
Refurbishment of Class 170s for long distance use
Hourly Highland Main Line improvements
Investigation into long term Sleeper options
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
...
2026
ScotRail Refranchising
WCML Refranchising
ECML Refranchising
EGIP complete - Class 170s available
Introduction of IEP releasing Mk1 stock
High Speed Rail Phase 1
Sleeper units reach life expiry?
Dec 2012 - Minor journey time improvements (10 mins) & timetable tweaks
Aberdeen - Inverness service improvements
Dec 2011 HML frequency improvements (9 > 11 daytime services)
Opportunities & Issues

1 Introduction

This study

1.1 Steer Davies Gleave has been commissioned by the Highlands and Islands Regional Transport Partnership (HITRANS) to undertake a study of inter city rail services, focusing on those from Inverness to the Central Belt and cross border services to London.

1.2 The study purpose is to examine the benefits of inter city rail travel to and from the HITRANS area, and real and perceived barriers to future growth over the next 15 years. It will provide recommendations for realistic future enhancements of such services, or the retention of existing services where this is appropriate. The timing of the study is important as consultation will be undertaken by DfT and Transport Scotland on the East Coast and ScotRail franchises respectively between 2011 and 2013. The study will therefore form part of the background which HITRANS uses to inform its response to these consultations.

1.3 The study is broken down into the following sections:

- A review of the current level of service between Inverness and the Central Belt and Inverness and London
- An analysis of the current level of demand for inter city rail services
- A summary of competing modes and an estimate of the market share of rail compared against these other modes
- A summary of the wider benefits of inter city services
- A discussion of future changes to the rail network, both in infrastructure and governance, that are likely to have an impact on inter city rail travel from Inverness
- A discussion of the current barriers to increasing the market share of rail on the key flows
- A set of recommended improvements to overcome some of these barriers that are both affordable and feasible.

2 Current Rail Service

2.1 This chapter examines the current rail service between Inverness and the Central Belt and London. As well as looking at journey time and frequency there is an analysis of rolling stock type and facilities on the routes.

2.2 Currently there are direct services between Inverness and Edinburgh, Glasgow and London provided by ScotRail and East Coast Trains. The Central Belt services also serve Perth and Stirling and the direct daytime East Coast service to London provides a service to other major East Coast Main Line stations such as York and Newcastle. These are described in more detail below, and full timetables shown in Appendix A.

Central Belt services

2.3 In the December 2010 timetable, there were nine trains daily in each direction between the Central Belt and Inverness, split into six direct trains to Edinburgh and three to Glasgow. In addition the timetable facilitated a 15-25 minute interchange at Perth for all services from Glasgow onto the Inverness bound train from Edinburgh at times when there were no direct services and vice-versa from Edinburgh. One exception was the 17.41 from Glasgow Queen Street which had only an 8 minute connection at Perth. On Sundays the service was reduced to five trains per day in each direction.

2.4 A Ministerial announcement in November 2010, confirmed HML proposals to increase the number of daily services between Inverness and Edinburgh / Glasgow from 9 to 11 per day in each direction, with an increase in Sunday services from 5 to 7 trains. This timetable is scheduled to commence at the December 2011 timetable change. These additional services are the first phase of Highland Main Line improvements identified in the Strategic Transport Projects Review published by Transport Scotland in December 2008.

Inverness-Edinburgh

2.5 In the December 2011 timetable, there are 6 daytime direct services northbound and 7 southbound, between Inverness and Edinburgh, Monday to Saturday, with 4 services northbound and 5 southbound scheduled on Sundays. One of the daily services is operated by East Coast. All other services are operated by ScotRail.

2.6 The average journey time on weekdays between Edinburgh and Inverness is 3 hours 30 minutes with a range between 3 hours 13 minutes and 3 hours 39 minutes.

2.7 The first service to depart on a weekday from Inverness arrives in Edinburgh at 10.00. The first direct service northbound arrives at 12.03, although it is possible to arrive at 10.28 with a change at Perth. The last Monday to Saturday direct service to Inverness, departs Edinburgh at 19.36 and arrives at 23.15.

Inverness-Glasgow

2.8 There are 5 northbound and 4 southbound daily direct services in each direction between Glasgow and Inverness between Monday and Saturday with 3 services northbound and 2 southbound operating on a Sunday. All the services between Glasgow and Inverness are operated by ScotRail.

2.9 The average journey time between Inverness and Glasgow is 3 hours and 21 minutes. The first direct service to depart Monday to Saturday from Inverness arrives in Glasgow at 12.09. The first direct service northbound arrives at 10.28. The last direct weekly service to depart Glasgow back to Inverness is 18.11, arriving at 21.37, although it is possible to depart as late as 19.42 with a change at Perth.

Indirect Services requiring interchange at Perth

2.10 Whilst there are 6/7 direct trains per day to/from Edinburgh and 5/4 direct trains to/from Glasgow, it is possible to interchange at Perth at times where there is no direct option. For Glasgow-Inverness trips, the timetabled journey times with an interchange are only marginally slower than a direct service (3h25m-3h35m) even including a 15-25 minute interchange time. For Edinburgh-Inverness journeys the timetable the penalty is greater with average journey time of around 3h50m

2.11 Therefore if only the time for interchange is considered, there are effectively eleven possible services per day (7 on Sundays) between Inverness and both Edinburgh and Glasgow. However, the perceived penalty for an interchange can be significant to potential passengers, depending on their circumstance.

Rolling Stock Characteristics

2.12 The majority of current rolling stock operating between Inverness and the Central Belt are Class 170 DMUs for the majority of services. These are used widely across ScotRail's network for Interurban and Express services such as Edinburgh-Glasgow services via Falkirk High, Central Belt – Dunblane and Alloa and Aberdeen-Central Belt services. There are two services per day currently operated by class 158 rolling stock – 10.47 Inverness-Edinburgh and 13.35 Edinburgh–Inverness. The rolling stock characteristics of the single service operated by East Coast between Inverness and Edinburgh is described in detail in the London-Inverness section of this chapter.

Seating

2.13 For the majority of Class 170 units there is both Standard and 1st Class accommodation. The seating is airline style in a 2+2 configuration throughout Standard Class with some 4 bay seats with tables. Each unit has 18 First Class seats in a 2+1 configuration. In total there are 189 Standard Class seats in a three car unit. There are nine SPT branded units (now operated under the wider ScotRail franchise) with no First Class accommodation that are periodically used on the Inverness-Central Belt services although the lack of First Class facilities in these SPT branded units is clearly undesirable for a journey of this length. The 158 units used on this route are a specific Inverness sub-fleet and have a capacity of 14 First Class and 110 Standard Class seats.

Luggage and bicycles

2.14 In the Class 170s, there is overhead luggage storage plus limited large luggage storage and dedicated space for four bicycles per unit. The Class 158s are designed with improved luggage carrying capabilities.

Other facilities

2.15 The carriages are air conditioned with passenger information systems (information displays and PA system) and CCTV. Catering is provided by a trolley service on all journeys other than the 20.15 from Inverness to Glasgow.

2.16 Two toilets are provided per three car unit, one of which is fully accessible for persons of reduced mobility.

2.17 There are power sockets available in First Class only in both classes. There is currently no wifi connectivity available on ScotRail services.

Inverness-London

East Coast service

2.18 East Coast Trains operates one daily service from London to Inverness in each direction, known as the Highland Chieftain. From December 2011, the southbound weekday service leaves Inverness at 07.55, calling at Edinburgh at 11.17 and arrives in London at 15.54.The northbound service departs London at 12.00, calls at Edinburgh at 16.33 and arrives into Inverness at 20.11.

2.19 Journey times range from just under 8 hours to 8 hours 19.

Seating

2.20 The Highland Chieftain service is operated by diesel HST125 sets. In Standard Class these carriages are configured in a 2+2 format with a number of 4 seat tables throughout the carriages. Standard Class capacity is 429 seats.

2.21 First Class accommodation is in a 2+1 configuration with larger seats. First Class capacity is 112 seats.

Luggage and bicycles

2.22 There is luggage storage on overhead racks as well as some large luggage space at the end of the carriages.

2.23 HST rolling stock incorporates a guard's van which can be used to transport large items of luggage as well as bicycles. There is an additional charge for large items of luggage carried in the guard's van, but bicycles are carried free of charge but must be booked onto the train in advance.

Other facilities

2.24 Wireless internet connection is available on all East Coast Trains. This is provided free to First Class passengers. In Standard Class passengers get 15minutes free usage and either £4.95 per hour thereafter or £9.95 for 24hours.

2.25 Most seats have a power point for charging electrical devices. The train is equipped with a cafe bar serving drinks, snacks and hot meals. In May 2011, East Coast introduced complimentary food and drink for First Class passengers.

Sleeper Service

2.26 The Caledonian sleeper service operated by ScotRail from Inverness to London operates every day, with the exception of Saturdays, in each direction. Departure is between 19.30 and 20.30, arriving at 07.47 at London Euston and 08.31 at Inverness – a journey time of around 12 hours overnight.

2.27 The Caledonian Sleeper service between Inverness and London is a locomotive hauled service, in a 8-carriage formation consisting of First Class and Standard Class sleeper cabins, a lounge car and a Standard seated carriage. The total capacity of the Inverness portion is 139 (36 First Class, 72 Standard Class and 31 Seated). The Inverness sleeper splits and joins with the Aberdeen and Fort William sleepers at Edinburgh. Passengers can also join and leave the service at Crewe and Preston.

2.28 First and Standard Sleeper cabins were refurbished towards the beginning of the current ScotRail franchise (around 5 years ago) and are self-contained with a fully lockable door (although only from the inside) and are equipped with:

- Beds, blankets and sheets
- Air-conditioning
- Lighting with bedside controls
- Washbasin and shaver point

2.29 First Class travel guarantees the passenger a single bed berth to themselves, whilst Standard Class accommodation has two bunks and may require sharing the cabin with a stranger, although it is possible to pay an additional Standard Solo supplement to guarantee that this does not happen.

2.30 Both First and Standard cabin passengers have access to the lounge car which serves snacks and hot and cold drinks. First Class passengers are provided with a continental or hot breakfast and a newspaper. Standard Class passengers are provided with a complimentary hot or cold drink and a small snack upon arrival in the morning.

2.31 There is also a seated carriage allowing travel in a standard reclining seat with a foot rest, tray table and individual reading light.

3 Current Rail Demand

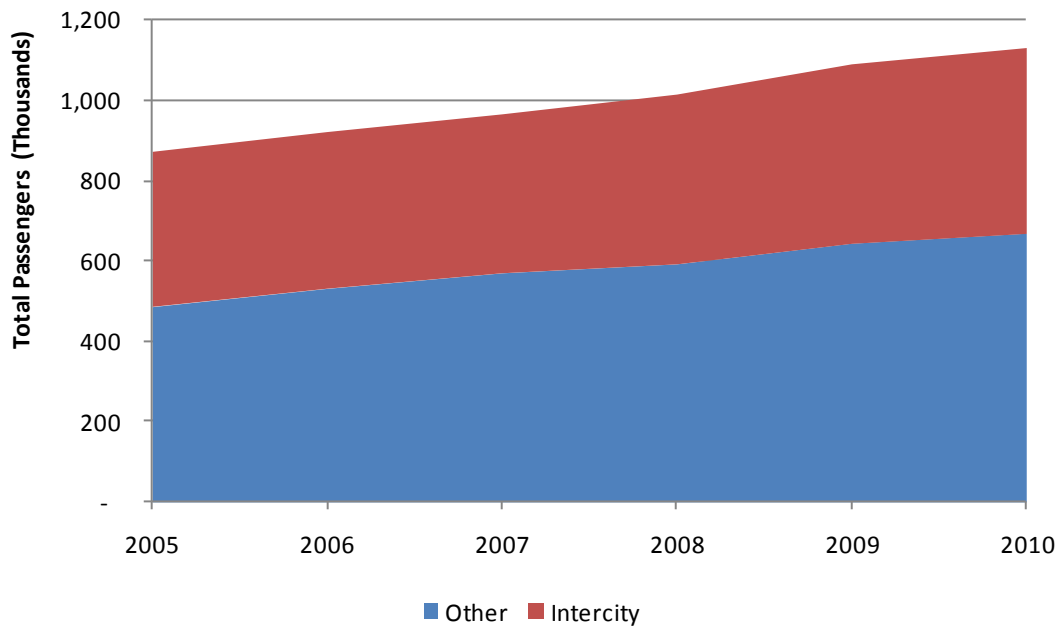
Total inter city demand

3.1 We have defined inter city demand in the Highland Mainline as travel between Inverness and destinations from Perth southwards. This includes journeys that start or end on the Far North Line, Kyle Line or east of Inverness (Nairn, Forres and Elgin) that interchange at Inverness (which have been labelled 'Feeders' below)

3.2 For the purposes of this study ScotRail has granted access to demand data from the LENNON ticket sales database via the MOIRA demand forecasting model. This data shows that inter city travel makes up a sizeable proportion of the total rail demand to and from Inverness as shown in Figure 3.1. The total demand for inter city services to and from Inverness currently makes up over 40% of the total passengers passing through Inverness station. Of the 1.1 million passengers entering, exiting or interchanging at Inverness between March 2009 and March 2010, over 460,000 were on an inter city journey.

3.3 Growth in inter-city demand since 2005 has been consistent with growth across ScotRail at around 4% per annum. Growth in demand for other services has shown higher growth (as currently being analysed in a parallel study) at 7%. Therefore, the inter city share of total demand has reduced slightly in that period from 44% to 41%

FIGURE 3.1 DEMAND GROWTH AT INVERNESS STATION 2005-2010

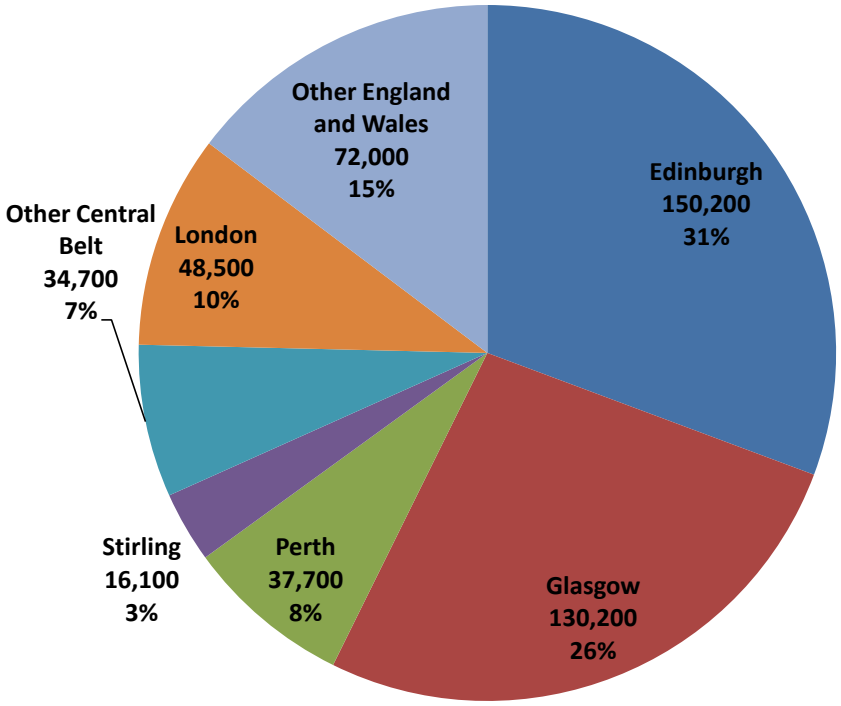


3.4 The latest figures for September 2010 show the total demand for inter city travel to, from or via Inverness has increased further to around 490,000 passengers per annum, of which some 60,000 are those interchanging, rather than originating at Inverness. Travel to/from the Central Belt makes up 75% of the total demand, 10%

is to/from London and the remaining 15% is to/from England & Wales (exc. London). The breakdown is shown in more detail in Figure 3.2.

3.5 Edinburgh and Glasgow make up 57% of total inter city demand travelling to, from or through Inverness. The third largest discrete group is flows to England and Wales outwith London (72k) which makes up 15% of the total. This is a very aggregate grouping with a large number of discreet destinations but nevertheless it shows that there is a significant proportion of inter city demand that involves cross-border travel outside London. Inverness to London demand (including all stations in the London area) totals around 48,500 journeys per annum.

FIGURE 3.2 TOTAL INTER CITY DEMAND (YEAR TO SEPTEMBER 2010)



3.6 In comparison with end-to-end inter city trips, there were also an additional 90,000 trips from stations to Dalwhinnie along the HML and the Central Belt. The distribution of these trips is almost identical to that shown above.

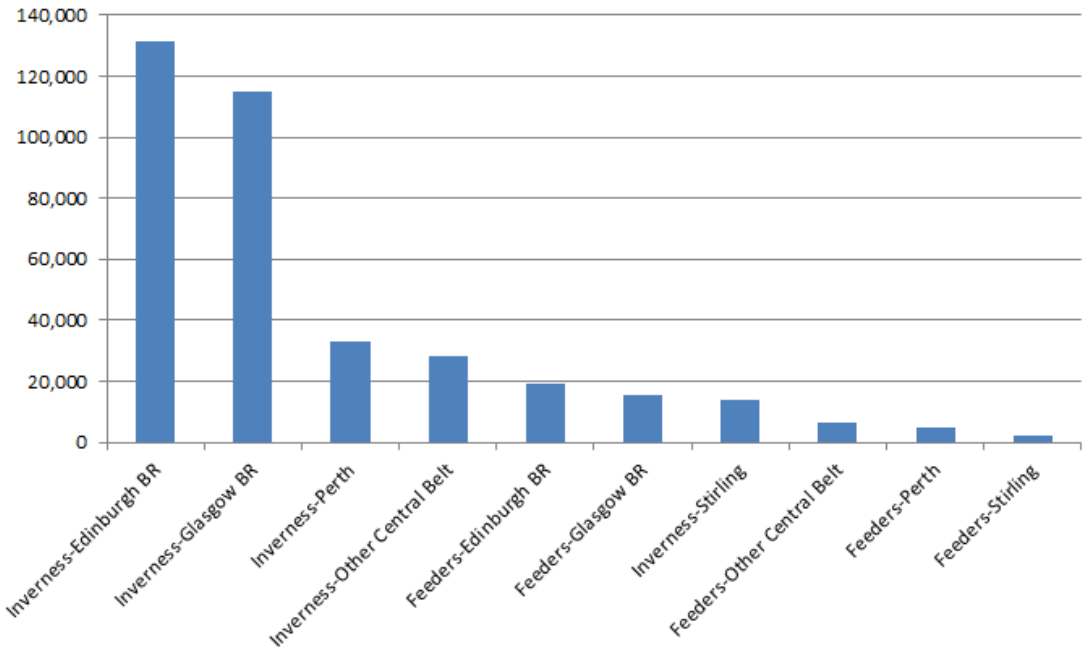
Central Belt

3.7 Three quarters of the inter city demand to/from Inverness is to/from the Central Belt. The majority of this demand is on Edinburgh and Glasgow flows - 131,000 journeys between Inverness and Edinburgh and 115,000 between Glasgow and Inverness[1]. Perth is the third biggest flow with 33,000 passengers and Inverness-Other Central Belt stations (all except Edinburgh, Glasgow, Perth and Stirling) accounts for 28,000 passengers.

[1] Source: LENNON data from Scotrail MOIRA – year to September 2010

3.8 There is some demand between 'Feeder' stations interchanging at Inverness and Edinburgh/Glasgow. This totals 34,000 journeys per annum and makes up 7% of total demand and 9% of the total Central Belt demand. Both flows from NWE Feeder stations to Edinburgh and Glasgow are larger than the flow between Stirling and Inverness.

FIGURE 3.3 CENTRAL BELT DEMAND SEP 2010



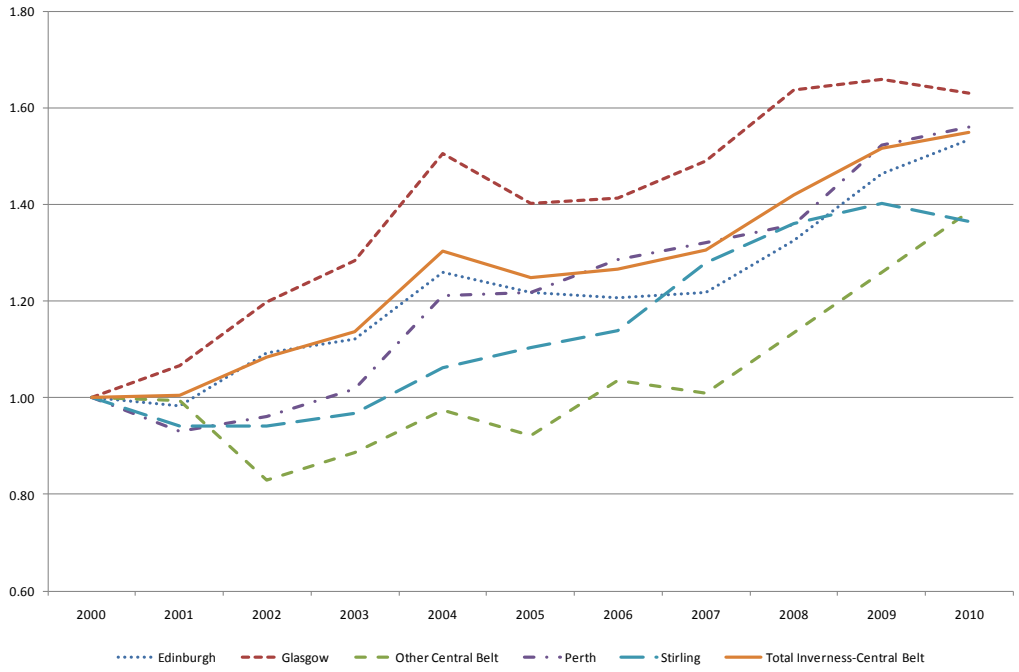
3.9 For Glasgow flows the balance between those originating in Inverness and those originating in Glasgow is 57%:43%. For Edinburgh flows the split is less pronounced, 52%:48%. This suggests that the Edinburgh/Glasgow act as slight net attractors of demand.

Demand trends

3.10 Inter city travel to/from Inverness has shown a strong upward trend in the past ten years, in keeping with the growth of rail traffic through Inverness more generally. As shown in Figure 3.4, whilst demand growth has slowed slightly in the past year as might be expected in the current economic climate, total demand grew by 55% overall at an average rate of 4.5% per annum, driven by strong growth in the largest Edinburgh and Glasgow flows.

3.11 This growth has been achieved without any major improvements on the journey time or service frequency on the Inverness to Central Belt timetable.

FIGURE 3.4 INVERNESS-CENTRAL BELT DEMAND TRENDS 2000-2010

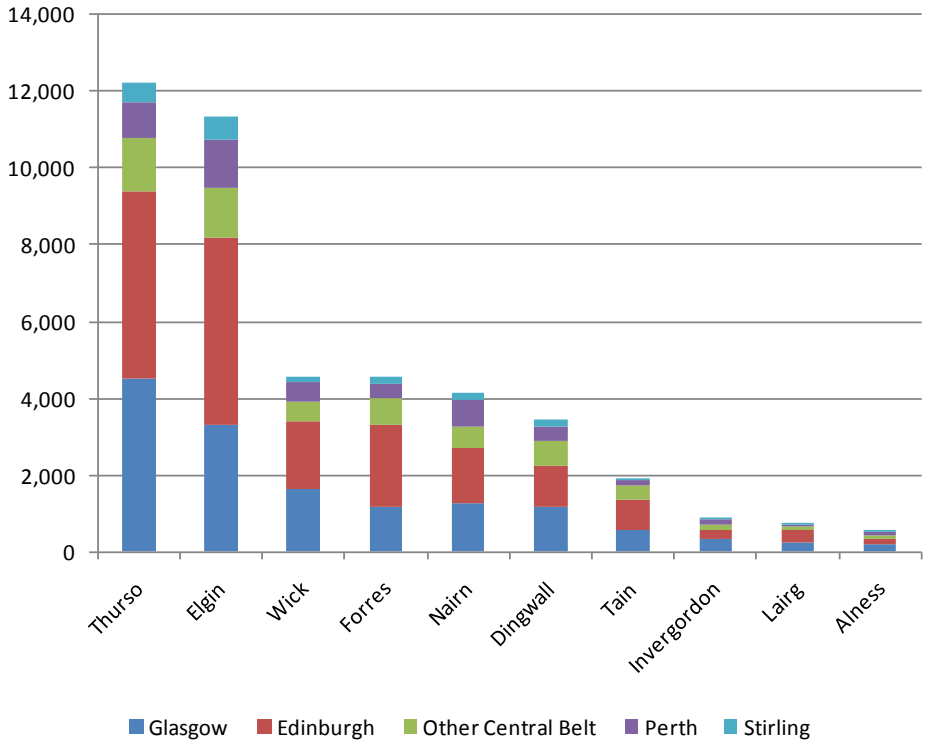


Feeder stations via Inverness to Central Belt

3.12 Feeder stations are defined as stations between Inverness and Thurso/Wick on the Far North Line and also Nairn, Forres and Elgin on the Inverness-Aberdeen Line. As noted above, 7% of total inter city demand is between the Far North and the Central Belt – nearly 48,000 journeys per annum. The biggest flows are to/from Thurso and Elgin[2] which have single flows of between 3-5,000 passengers to Edinburgh and Glasgow and over 10,000 in total to/from Central Belt stations.

[2] Elgin flows show the proportion of the total that travel via Inverness. This is 20-30% of the total flow to/from Edinburgh and Glasgow. The remainder travel via Aberdeen.

FIGURE 3.5 FEEDERS TO CENTRAL BELT DEMAND (SEP 2010)



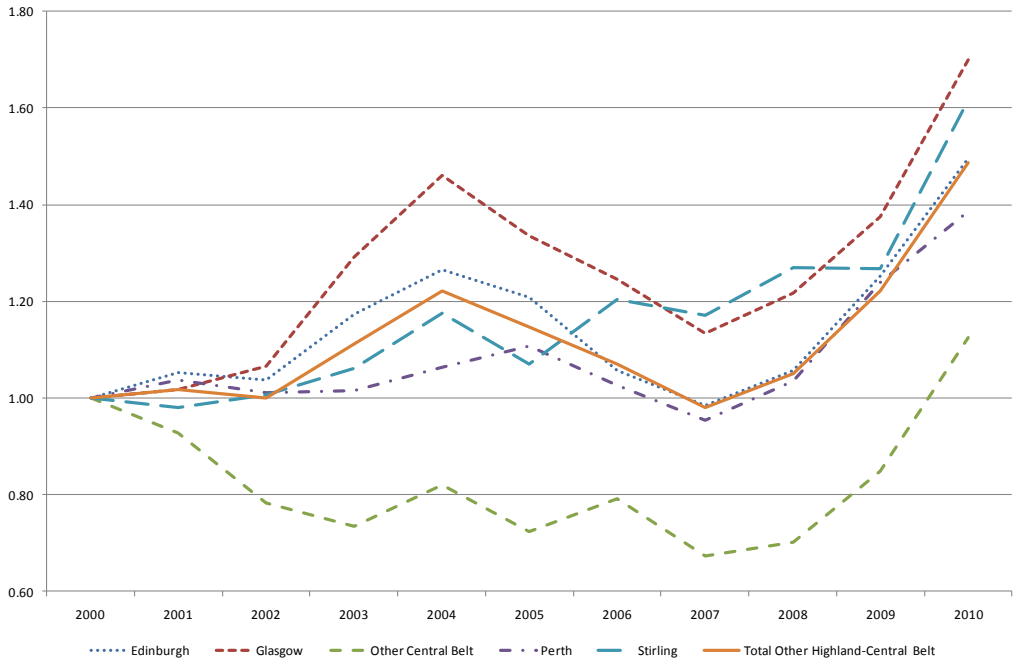
Demand Trends

3.13 Demand to/from the Central Belt via Inverness from stations further north and east shows a general trend of growth to 2004, reduction to 2007 and then strong growth from 2007 to 2010 – since the introduction of improved services on the Far North and Kyle lines. Between 2000 and 2010 there was an average of 4% per annum growth but this masks an average 5% growth 2000-2004, -7% annual growth 2004-2007 and a strong increase of nearly 15% per annum between 2007 and 2010.

3.14 The level of interchange at Inverness for journeys originating or ending on the Far North or Inverness to Aberdeen lines indicates that good connection times between these and the Central Belt and London services are vital. Examination of the timetable suggests that these interchanges have been considered in the timings of these services when stations north of Inverness received a step change in number of services in December 2005 through the introduction of the "Invernet" timetable.

3.15 This has stimulated the "local" rail demand as described in Figure 3.5, and the improved connectivity provided also seems to have positively impacted the inter city flows. It will be necessary to ensure that this connectivity is maintained with any future changes to the inter city services.

FIGURE 3.6 NORTH/WEST/EAST FEEDERS TO CENTRAL BELT DEMAND TRENDS 2000-2010



Cross border travel

London

3.16 Currently the London-Inverness flow is just over 46,500 per annum. The balance of demand origin is 55%/45% London/Inverness. We do not have access to confidential earnings data which would give the split of this demand between the operators and the day time and sleeper services. Output from the MOIRA model, which goes most of the way to replicating the standard industry revenue allocation processes, suggests that 60% of the daily demand chooses the direct East Coast service. In addition, we have produced a high level estimate of the likely sleeper demand, based on an assumed average occupancy of 50% and 55% of total Highland Main Line-London demand travelling all the way to Inverness, giving an annual demand on the Caledonian Sleeper of 17,500 with the remaining 29,000 split 60/40 between East Coast direct and interchanging and Edinburgh. We estimate the total annual flow can therefore be split approximately as follows:

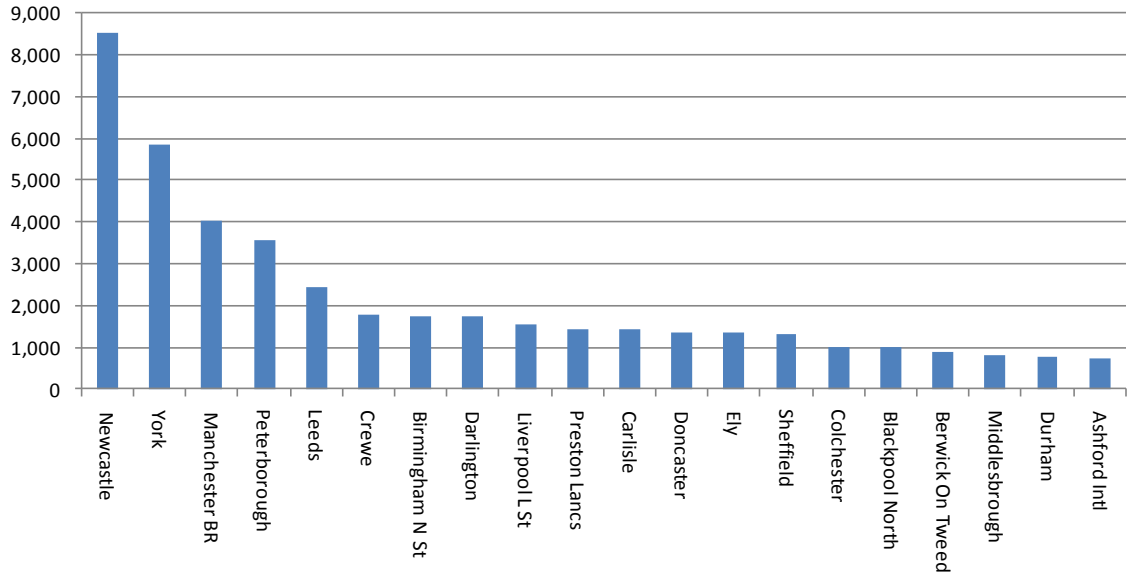
- 17,500 on the direct East Coast service;
- 17,500 on the Caledonian Sleeper; and
- 11,500 interchanging at Edinburgh.

England & Wales excluding London

3.17 Whilst demand between Inverness and other England & Wales destinations totals 62,000 journeys, this is split over a large number of small flows of less than 1,000 passengers with a few larger exceptions, as illustrated in Figure 3.7. The two flows with more than 5,000 passengers per annum are Newcastle with around 8,500 p.a. and York with 5,900 p.a..

3.18 There is a notable bias towards East Coast Main Line destinations in the bigger flows in this group, reflecting the provision of a direct service to and from Inverness on the East Coast Main Line. Outside the top five flows however, there is a mix of stations from around England.

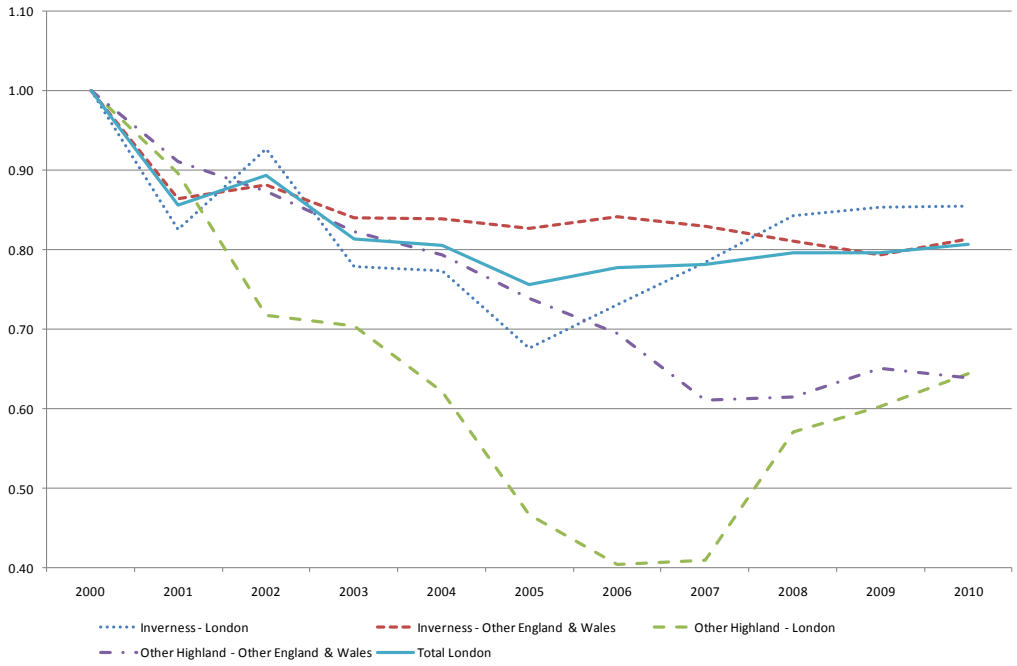
FIGURE 3.7 ANNUAL JOURNEYS INVERNESS - OTHER CROSS BORDER (TOP 20)



Demand Trends

3.19 Figure 3.8 shows the trend for on cross border flows over the past 10 years. Although the overall trend is negative over this time period, demand for cross border travel has increased by 7% in the last 5 years (1.3% per annum). On the largest single flow - Inverness-London - demand has grown by over 25% since 2005 at an average annual growth of almost 5%. This incorporates a strong increase between 2005 and 2008 with a flattening of the trend post 2008.

FIGURE 3.8 LONDON AND OTHER ENGLAND & WALES DEMAND TRENDS 2000-2010



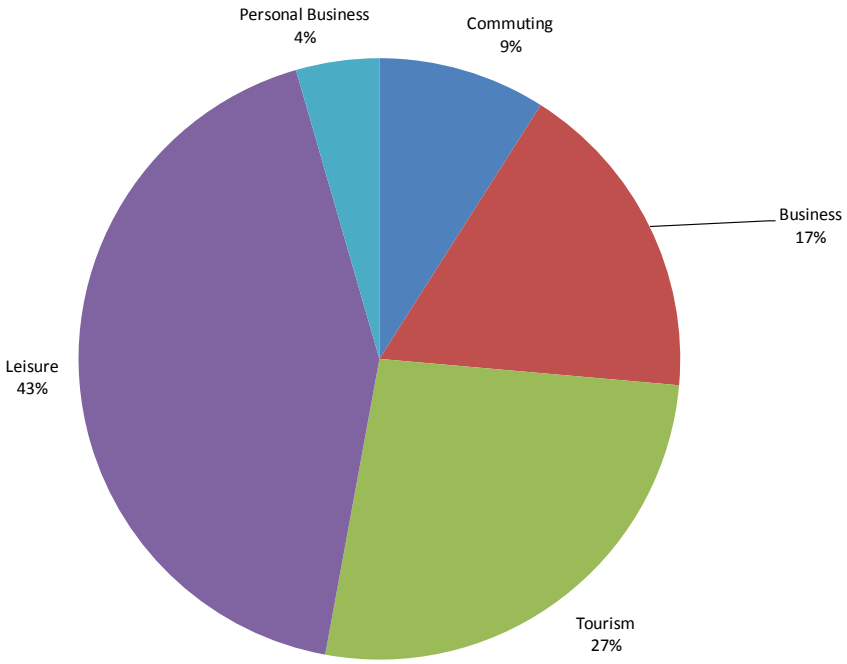
Journey purpose

3.20 In Autumn 2010 HITRANS commissioned a 'boost' survey based on the annual National Passenger Survey carried out by Passenger Focus to gain a greater understanding of passenger attitudes and satisfaction. This survey also asked respondents about the purpose of their journey. Although this survey covered all journeys along the two routes, 80-90% of the origin and destination stations of respondents were Inverness, Glasgow, Edinburgh, Perth and Stirling and so the splits can be assumed to be a reasonable estimate of inter city journey purposes.

3.21 The split of journey purpose on Edinburgh-Inverness and Glasgow-Inverness trains are broadly similar. Across the whole route, including intermediate journeys, around 10% of journeys are commuting. The business market makes up 17% of total demand. Most interesting is the share of tourism. Considering that this survey was conducted in Autumn 2010, outside of the very peak of the tourist season, the proportion of tourist passengers is still relatively high at 27%. The largest proportion of users however is the leisure market – this is made up of three main categories – 'visiting friends/relatives', 'shopping' and 'other leisure'. The largest chunk of this Leisure category is visiting friends/relatives which makes up around 30% of total demand. Whilst not specifically tourism this leisure market shares a number of the same characteristics, making the combined total leisure/tourism market 70% of total demand on the service.

3.22 It is worth noting that the Commuting split is likely to be overestimated, as it will make up a much higher share of the other, shorter, flows that have been surveyed. We also understand that the survey responses have not been weighted to reflect the loadings profile across the day and so may underestimate the Business split, as they are more likely to travel on the busier services.

FIGURE 3.9 JOURNEY PURPOSE –INVERNESS – GLASGOW/EDINBURGH SERVICES



4 Competition and Market Share

4.1 Competing modes differ between Central Belt journeys and trips further afield. For Central Belt, the key competition is by private car and coach. For cross-border trips, particularly to London, the primary competition is from air travel. This chapter makes estimates of the mode share for travel between the Central Belt and London and also examines these competing modes – comparing relative journey times, cost and frequency.

Central Belt Competing Modes

Competition by Car

4.2 An average car journey time and cost has been calculated for the journey from Inverness Station to the Central Belt stations using online journey planning tools. Table 4.1 shows the results, compared to rail journey times and costs.

TABLE 4.1 CAR JOURNEY TIMES AND COSTS IN COMPARISON TO RAIL

Journey	Average Time (One Way)		Average Return Cost					
	Train	Car	Train				Car	
			Cheapest Advance	Std Off Peak	Std Anytime	First Class Anytime	40p/mile business claim	Fuel cost only
Inverness Station - Edinburgh Waverly	3h 31m	3h23m	£20.60	£49.40	£57.70	£88.30	£125.60	£48.68
Inverness Station - Glasgow Queen St	3h21m	3h37m	£20.60	£49.40	£57.70	£88.30	£136.00	£52.71

Note: Fuel costs based on fuel price of 133p/litre (source: petrolprices.com) and average fuel economy of 39mpg

4.3 The average journey time from Inverness station to Edinburgh station is 8 minutes quicker by car than by train. However the journey time from Inverness to Glasgow is 16mins quicker from station to station by train. These times assume normal driving conditions and no problems on the train line.

4.4 The price of a ticket from the Central Belt to Inverness being purchased on the day ranges from £49.40 for a Standard Off Peak Return to £88.30 for a First Class Anytime Return. Based on a mileage rate of 40p per mile[3], the business cost of driving a return trip between Inverness and the Central Belt is 42-54% higher than a First Class return ticket.

4.5 Using the average cost of fuel only as a comparison with a leisure trip, the cost for a single driver is roughly comparable with a Standard Off Peak return. Although the comparative cost reduces with the number of passengers it is also possible to buy cheaper rail tickets in advance, including a “Friends Fare” group ticket where

[3] Average mileage rates used by HM Revenue and Customs for the first 10,000 business miles in the tax year

three or four people can travel at a substantial discount compared to individual tickets.

Competition by Coach

4.6 A number of companies operate coach services between Inverness and the Central Belt - Table 4.2 below details the services on offer. Edinburgh services run direct to/from Inverness whilst most of the Glasgow services require an interchange at Perth and passengers are required to transfer to another bus which is usually waiting at the station. The services are operated by a combination of Megabus, Citylink and Parks of Hamilton branded coaches.

4.7 The cost of a single fare ranges from the very cheapest at £4 (only available Monday-Thursday) to £10 for a Super Single (i.e. £20 return) to £43.40 for a Standard Open Return from Glasgow or Edinburgh.

4.8 The Super Single is comparable to the cheapest Advance tickets available for a train at £10.30 single, whilst a Standard Open Return is comparable to the rail Standard Off Peak ticket that can be bought on the day to travel by train. For passengers with concessionary passes coach travel is free, whereas rail travel is only offered at a discount.

TABLE 4.2 COACH SERVICES BETWEEN CENTRAL BELT AND INVERNESS

Journey	Mon - Sat	Journey Time
Glasgow <> Inverness	3 direct 12 changing at Perth	3h30m-4h30m
Edinburgh <> Inverness	13 direct	3h30m-4h30m

4.9 The first arrivals into Glasgow and Edinburgh are around half an hour later than rail at about 10.40 and coach offers later last departures from Edinburgh and Glasgow at shortly before 21.00. In the opposite direction the earliest arrival in Inverness is at around noon and the latest departure at 18.55.

4.10 The standard terms and conditions of travel for CityLink buses specify a limit of one small bag and one large suitcase per passenger, with any further luggage carried subject to space and at the discretion of the driver. Bicycles are carried only if packed in a box or bag. Coaches also have a single toilet available to passengers.

CityLink Gold

4.11 CityLink launched a new 'premium' service between Glasgow and Inverness in July 2010. The service is direct and timetabled at 3 hours 23 minutes. It offers passengers the following:

- Onboard journey attendant;
- Complimentary Snack and refreshments served at the seat (Glasgow-Perth section of the journey only);
- Free onboard Wi-fi; and
- Leather seating.

4.12 At present, a Standard Open Return by City Link Gold costs £37 – cheaper than travelling on a standard CityLink service requiring a change at Perth (although restricted to the CityLink Gold services), this is slightly cheaper than a Standard Off-Peak return by train. Tickets can be available for £15 if booked a few days in advance similar to advance purchase train tickets.

London

Air travel to London

4.13 The key competitor for travel between London and Inverness is air. From a review of the winter schedule, there are five services daily during the week to/from London airports in both directions – four to/from Gatwick and one to/from Luton. There are four services to/from London airports on Saturdays and Sundays. These services are summarised in Appendix A.

4.14 The first flight from Inverness lands at London Gatwick at 08.55 compared to the sleeper arrival at 07.47 (which would comfortably allow arrival at a Central London meeting for 09.00). The last flight from London to Inverness departs at 19.20 – an hour before the departure of the sleeper train to Inverness from Euston.

4.15 The first northbound mid-week flight lands at Inverness at 11.10 compared to the 08.31 arrival of the northbound Sleeper. The last southbound flight leaves Inverness at 17.10 whilst the southbound Sleeper departs at 20.00. Whilst a full day in London is possible by air, the 11.10 arrival and 17.10 departure of the first and last flights at Inverness means that an overnight stay would be more likely to be required.

4.16 In order to arrive in the city centre of either London or Inverness before 09.00 and not have to incur the time penalty and costs of travelling to and checking in at an airport, travelling by sleeper is the only option available. Table 4.3 shows the equivalent prices for this journey.

TABLE 4.3 AIR JOURNEY COSTS

	East Coast Rail Inverness - London	**Flybe Inverness-Gatwick**	**easyJet Inverness – Luton / Gatwick**
Lowest fare:	Std £54 / 1st £102	£35 Economy	£20 (Luton) £28 (Gatwick)
Highest fare:	Std £172 / 1st £217	£257 Economy plus	£190* (Luton) £175* (Gatwick)
Baggage charge:	Only for large items.	£11 or £13 extra on Economy tickets. Bags included in Economy Plus.	£9 extra.

Prices include debit card charges where applicable, exclude railcards.
**These are highest fares that could be found on easyJet.com when searched on 13/5/11. In general next day fares for weekdays are c. £60-100 and fares above £150 are exceptional.*

4.17 A return flight costs range from £40 return for an easyjet flight to Luton booked well in advance to a possible £514 for a Flybe Economy Plus flight booked on the day in both directions. Overall rail fares are relatively competitive with air and

cheaper advance fares are available if booking well in advance although the relatively limited advance booking period (12 weeks) can be a constraint, especially around holiday periods. In comparison, both airlines offer fares up to 9 months in advance.

4.18 Table 4.4 shows equivalent sleeper fares. Booking a Standard Class berth on the sleeper 3 weeks in advance will cost approximately the same amount for a return as a flight – both about £120. Booking a standard sleeper berth one day in advance is approximately £60 cheaper than booking return flights. A return First Class berth costs more than flights in both scenarios (1 day and 3 weeks in advance). However it must be noted that "Bargain Berth" sleeper tickets are released up to 3 months in advance and start from £19. Users who have regular journey patterns to and from London can make use of booking in advance. It is often the case that these tickets are Standard Class and therefore subject to sharing a berth with others an issue that may put off many potential passengers. Again, the limited advance booking period for these cheap fares is a constraint, requiring passengers to be in the know as to when these fares come online.

TABLE 4.4 SLEEPER COSTS

Journey	Ticket booked 1 day in advance		Ticket booked 3 weeks in advance	
	STD (BED)	1ST (BED)	STD (BED)	1ST (BED)
Inverness to London	£110	£149.50	£60.00	£149.50
London to Inverness	£110	£149.50	£60.00	£149.50
Return	£220	£239.70	£120	£239.70

4.19 However the flight offers the advantage of a much quicker journey time to London than the train. A flight takes approximately 2 hours whereas the ECML direct service to London takes close to 8 hours. Even including access and egress trips into Central London and Inverness and check in requirements, air is 3 to 4 hours quicker than rail. It also allows booking further in advance as detailed above.

4.20 In terms of reliability and punctuality, the sleeper option is marginally more reliable. In the last 12 months Scotrail figures show 94% of services arrived within 30 mins of their timetabled arrival compared to 90% of scheduled Inverness to London flights. Both air and the sleeper ran over 99% of the timetabled services.[4]

4.21 In practice, particularly for business travel, there is also the possibility of using the sleeper in one direction and air in the other to allow an early arrival into London but also returning the same day.

Market share

4.22 This section outlines estimates of the market share of rail for Inverness-Central Belt and Inverness-London trips. Data from various sources has been collated to

[4] Sleeper source – Scotrail punctuality figures for last 12 months: (http://www.scotrail.co.uk/aboutus/ourperformance.html), Air source – CAA punctuality figures (http://www.caa.co.uk/default.aspx?catid=80&pagetype=88&pageid=12&sglid=12)

make these estimates. These disparate data sources mean that the information should not be treated as highly accurate, but gives a useful gauge of the current level of rail market share and an idea of the potential for growing this market share in the future.

Inverness-Central Belt

4.23 Whilst there is no consistent set of travel statistics that allow the development of a mode share estimate for travel between Inverness and the Central Belt. Rail data is available from LENNON and we have used data from previous studies to calculate the likely mode share of car and coach on Inverness and points north to/from Central Belt journeys. Overall the total demand was estimated to be around 1.4 million journeys per annum.

4.24 For road data, the most current and readily available estimate comes from a 2007 report produced for HITRANS which estimated total vehicle trips on the A9 between Inverness (and Nairn) and the Central Belt to be around 457,000 per year. To this we have added the estimate for areas to the North and West of Inverness, of a further 199,000, to give a total of 656,000.

4.25 Using the estimates contained within the same report for the breakdown of vehicle types[5] and an average vehicle occupancy from the 2010 National Travel Survey[6], this translates to around 913,000 individual journeys Based on an analysis of ATC counts along the A9, it is reasonable to assume that traffic growth on the A9 has remained relatively flat and the same figure could be used for 2010.

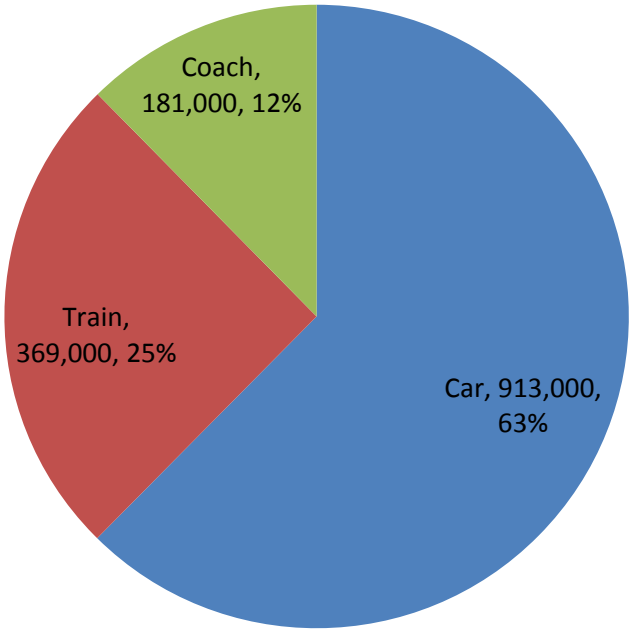
4.26 Coach data is difficult to accurately estimate, given the commercially sensitive nature of patronage data in the deregulated environment. Bus occupancy surveys undertaken for Transport Scotland in 2008 provide the latest estimate of the average occupancy of coaches travelling between Inverness and the Central Belt. Assuming that in an unsubsidised environment the operators will seek to maintain a profitable level of occupancy, this average occupancy was assumed to apply to the current level of service assuming a standard 50 seater coach capacity. It was also assumed that 50% of passengers on the coach are travelling the full route between Inverness and the Central Belt. Using these assumptions, the annual demand for coach travel was estimated to be around 180,000 passengers – just less than 50% of the total rail patronage and representing 33% of the total combined public transport market.

4.27 Overall the mode share was estimated to be over half (63%) by private car, 25% by rail and the remainder (12%) by coach. This is illustrated in Figure 4.1.

[5] Scott Wilson, A9 Perth-Inverness Economic Appraisal Study, 2007. The percentage of Cars and LGVs was estimated to be approximately 88% of the total flow

[6] DfT, National Travel Survey 2010, Table NTS0905. 2009 average vehicle occupancy is estimated at 1.58. This value has remained virtually constant since 2000.

FIGURE 4.1 INVERNESS-CENTRAL BELT MODE SHARE

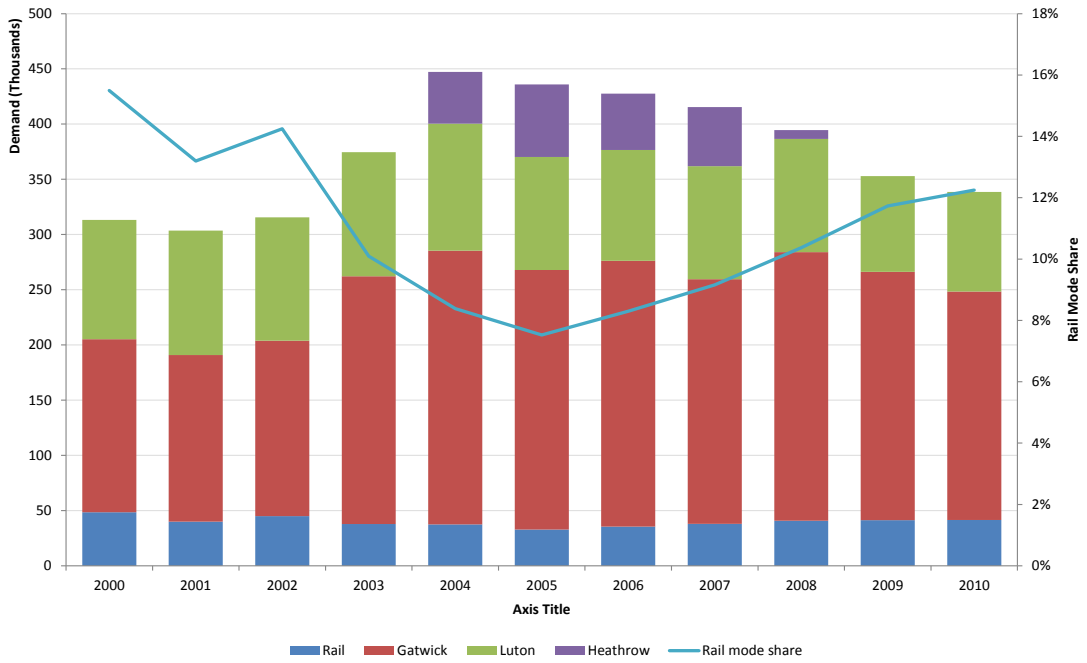


Inverness-London

4.28 Air patronage data is readily available from the CAA. This has been used to calculate the current market share for rail at around 12% of the total air/rail market to/from London. As shown in Figure 4.2, the market share of rail in the last ten years appears to have an inverse relationship to the demand for air travel with a sharp dip in the first half of the 2000s and a sustained increase in the second half of the decade as the demand for (and supply of) air travel has fallen during the recession. Whilst air travel to/from Inverness dropped by around 25% since 2005, rail patronage has increased by 25% - an average of 4% per annum and the market share for rail has increased steadily every year since 2005 from 8% to 12%[7].

[7] An ATOC press release on 5th April 2011 estimated the rail market share on the London-Inverness flow to have risen from 9% in 2006 to 14% in 2010. These figures follow the same trend as our analysis although the exact figures are slightly different. This will be due to differences in the definition of Inverness and London in the rail data.

FIGURE 4.2 MARKET SHARE OF RAIL ON INVERNESS-LONDON JOURNEYS 2000-2010



Summary

Inverness to Central Belt

4.29 Table 4.5 and Table 4.6 below summarise the competition between rail, car and coach on Inverness to Edinburgh and Glasgow routes.

Car

4.30 Car accounts nearly two thirds of the demand between Inverness and the Central Belt. It is the only option for a start before 10am in all locations and it is clearly the most flexible in terms of departure times and flexibility if the origin or destination is not in the centre of Inverness, Edinburgh or Glasgow. In price terms, a single car driver cost is more expensive than rail at the simple fuel cost level compared to an Advance ticket (the best comparison for a leisure/tourist) and the business mileage cost is roughly twice the price of a Standard Anytime Return.

4.31 Car does become more competitive on price grounds when considering a group of two or more people. Sharing a business trip between two people is equivalent to two Standard Anytime Return tickets and splitting the fuel cost of a Central Belt drive between four people reduces the cost to £12-13 per person. This is comparable with the advance purchase group tickets sold by ScotRail which offer a return for £11.25 - £15 each for groups of 3 to 4 people.

Coach

4.32 Coach accounts for around 12% of total demand. Walk up and the cheapest advance fares are cheaper than rail or an equivalent car journey and may therefore be perceived so, particularly by non-regular users – concessionary travel is free. There are also more services per day than rail – 12 direct services per day to Edinburgh and 15 services to Glasgow (although only three are direct). The

fastest timetabled coach journeys are comparable with rail and road as are the first and last departures/arrivals

4.33 The quality of the service is relatively low compared to rail – passenger space and the ability to carry luggage in the cabin is limited, there is no provision for catering and there is a single toilet on most buses.

4.34 CityLink Gold services form Glasgow are attempting to improve the image of coach travel with leather seats, attendant service and wifi provided in the coach. This service has been operating for less than a year and it remains to be seen whether it will make inroads into the most rail oriented travel market.

Rail

4.35 Rail accounts for 25% of total demand. It has competitive journey times to/from Edinburgh/Glasgow and provides a more pleasant travel environment than competing coach services with more space for passengers, some tables, First Class provision on most services and a catering trolley available throughout the journey.

4.36 Rail fares appear to be competitive with road and coach costs for the standard of journey provided, although obtaining the cheapest fare is often cited as complex or under publicised by passengers.

4.37 The current service suffers from an irregular frequency and some journeys requiring an interchange at Perth although the current timetable affords useful connections to the Far North and Aberdeen lines that have helped to widen the catchment for inter city travel in recent years.

TABLE 4.5 EDINBURGH-INVERNESS COMPETITION SUMMARY

	Typical journey time	Number of weekday services	Advance cost per person/fuel cost	Anytime walk-up cost/business mileage cost	Group ticket price per person/fuel cost divided by 4	Earliest arrival time in to:		Latest departure time from:	
						Edinburgh	Inverness	Edinburgh	Inverness
Rail	03:31	9 (6 direct/3 change at Perth)	£20.60	£57.70	£11.25	10.00	10.28 (change at Perth)	19.36	20.15 (change at Perth)
Car	03:23	n/a	£48.68	£125.60	£12.17	n/a	n/a	n/a	n/a
Coach	03:30-04:30	13 direct	£20.00	£43.40	n/a	10.40	12.10	20.45	18.55

TABLE 4.6 GLASGOW-INVERNESS COMPETITION SUMMARY

	Typical journey time	Number of weekday services	Advance cost per person/fuel cost	Anytime walk-up cost/business mileage cost	Group ticket price per person/fuel cost divided by 4	Earliest arrival time in to:		Latest departure time from:	
						Glasgow	Inverness	Glasgow	Inverness
Rail	03:21	9 (3 direct/6 change at Perth)	£20.60	£57.70	£11.25	10.14 (change at Perth)	10.28	19.41 (change at Perth)	20.15
Car	03:37	n/a	£52.71	£136.00	£13.18	n/a	n/a	n/a	n/a
Coach	03:30-04:30	15 (3 direct/12 change at Perth)	£20.00	£43.40	n/a	10.40 (change at Perth)	11.53	20.55 (change at Perth)	18.55 (change at Perth)

Inverness-London

4.38 The market share for rail appears to be strongly inversely correlated with the level of competition from air. In the early 2000s, strong expansion in the air sector clearly led to a reduction in the total demand and market share for rail. Since 2005 however, the demand for air travel has dropped by around 25% whilst rail patronage has increased by 25% (albeit from a lower base) and market share has grown from 8% to 12%. Rail cannot compete on journey time grounds for daytime travel, but the sleeper has a strong selling point in providing an earlier arrival into Central London or Inverness than the first flight and is a comparable price depending on the type of ticket booked.

4.39 Whilst air travel still dominates the market for Inverness-London travel, there is a strong niche available for rail travel, especially by Sleeper. Arrival in Central London by 8am is a strong selling point, as is the relative cost reduction of avoiding an overnight stay in London or Inverness. When assessing travel options for a full day in London without an overnight stay, it could also be possible to take a Sleeper train down to London for early meetings and fly north on a 19:20 flight, and this is also true in the opposite direction.

5 Benefits of the Existing Service

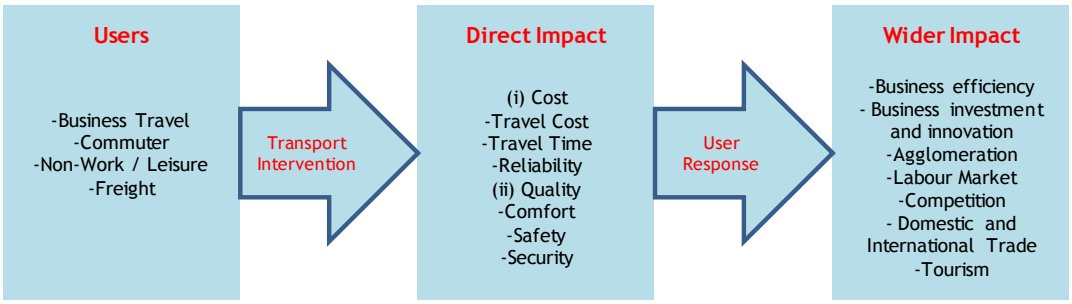
5.1 Inter city services provide a significant benefit in connecting Inverness and the surrounding communities to the rest of Scotland and UK – and vice versa. This section outlines the main benefits of maintaining and improving the existing services under a number of key headings:

- Economy
- Tourism
- Environment
- Resilience

Economy

5.2 Transport and economic development are very closely linked. The Eddington report[8] which examined the long term links between transport and the UK's economic productivity outlined how the transport network directly contributes to economic growth through several direct and wider mechanisms. Figure 5.1 shows how improvements to transport can directly impact the wider economy as they benefit transport users. In a relatively peripheral location such as the HITRANS region improving connectivity is especially important to driving economic growth.

FIGURE 5.1 LINKS BETWEEN TRANSPORT AND ECONOMIC PERFORMANCE



Source: Eddington Report

5.3 This section outlines the regional economic and policy context, illustrating how strong rail links to Edinburgh, Glasgow and London support and strengthen the economy.

Regional Context

5.4 The Highlands and Islands region is particularly isolated with underdeveloped transport infrastructure relative to both the rest of the UK and Europe. It has a unique character with a small population, highly dispersed settlements, low economic density and relatively low GDP. The Inner Moray Firth area of which Inverness is the main economic centre is however a key driver of economic growth in the region. The labour market statistics for this area present a positive picture with significantly higher employment and economic activity rates and lower

[8] The Eddington Transport Study was commissioned by the UK Government and published in December 2006. It examined the impact of transport decisions on the economy and the environment of the United Kingdom, with recommendations on how the transport network should be modernised.

unemployment than the Scotland and Highlands and Islands average as shown in Table 5.1..

TABLE 5.1 LABOUR MARKET STATISTICS 2008

Variable	Scotland	Highlands & Islands	Inner Moray Firth
Economic activity rate - aged 16-64	79.6%	84.3%	85.2%
Employment rate - aged 16-64	75.6%	81.6%	83.5%
Unemployment rate - aged 16+	5.0%	3.2%	2.0%

Source: Annual Population Survey

5.5 Increased job opportunities in the area, particularly in the services sector, have helped to stimulate population growth. In 2009, the population of the Inner Moray Firth was 144,375 - an increase of 8.1% since 2001. This is around 2½ times more growth than the Highlands & Islands Region and over 3 times the rate of growth experienced in Scotland as a whole. Even more marked is the growth in Inverness itself – an increase of 28.5% in population between 2001 and 2008.

TABLE 5.2 POPULATION GROWTH 2001-2009

	2001	2009	Change	% change
Inner Moray Firth	133,561	144,375	10,814	8.1%
Highlands & Islands	433,448	447,043	13,595	3.1%
Scotland	5,064,200	5,190,000	125,800	2.5%

5.6 This positive comparison masks several challenges facing the wider Highlands and Islands economy. The Highlands and Islands has historically been a highly seasonal economy focussed on tourism, agriculture, energy and water with an ageing and declining population and relatively low wages. Economic activity is focused on peripheral sectors which present limited opportunities, and restrict and limit the growth and development of the area.

5.7 Investment in transport - and specifically in this case inter city services to and from Inverness – is a key requirement for supporting growth in the economy and the population. It offers equity benefits and improved connectivity to and from the Highlands and Islands providing greater opportunities for businesses, job seekers, tourists and residents to access a wider range of markets, destinations and services more easily.

Key sectors

5.8 Highlands and Islands Enterprise targets support to six key sectors as identified in the Scottish Government Economic Strategy as the sectors which have the greatest potential to boost sustainable economic growth across the Highlands and Islands. These are:

- Creative Industries
- Energy

- Financial and Business Services
- Food and Drink
- Life Sciences
- Tourism

5.9 The links from Inverness to the Central Belt and to and lesser extent London are an important factor for continuing to attract business in a number of these sectors, particularly Energy, Financial and Business Services and Life Sciences.

Financial and Business Services

5.10 The Financial and Business Services sector currently employs over 20,000 people in the Highlands and Islands region in over 580 separate businesses accounting for over 10% of total employment in the region. Connections with the financial centres of Edinburgh and London is particularly important for this sector.

Energy

5.11 The Highlands and Islands' strong legacy in the oil and gas industry and abundance of renewable energy resources means it is ideally placed to be at the forefront of the energy industry. Work to realise this substantially untapped resource is now well underway and is likely to bring significant economic development for the Highlands and Islands in the coming years.

Life Sciences

5.12 Life Sciences is an emerging sector which is rapidly growing in importance both regionally, nationally and globally. Scotland has one of the largest life sciences clusters in Europe and is ranked in the top five emerging global locations for life sciences. There are a growing number of life sciences businesses based in the Highlands and Islands, and Inverness is one of two main centres for life sciences in the region, focusing on health science (Oban is the other, focusing on marine bioscience).

5.13 The construction of the new Inverness Campus will help to stimulate growth of this sector even more in the coming years, with a new Centre for Health Science a key part of the development.

5.14 All of these sectors benefit from high quality connections for business travel to other key centres such as Edinburgh, Glasgow and London and as such the current rail service provides an important link to facilitate the further consolidation and growth of the economy in the Inner Moray Firth area and beyond.

Policy context

5.15 The Highlands and Islands is part of the European Structural Funds Convergence Objective Programme, which has identified several specific social economic issues related to access to jobs, education and training opportunities in the area. At a national level the Scottish Government's economic strategy[9] sets out several priorities relating to economic development. These include priorities relating to:

- Learning, Skills and Well Being;
- A Supportive Business Environment;

[9] The Government Economic Strategy (2007), Scottish Executive

- Infrastructure, Development and Place;
- Effective Government, and
- Equity.

5.16 Inter city rail services contribute to several of these specific economic objectives by strengthening the links between Inverness, the major centres of Scotland and the rest of the UK:

- Infrastructure Development and Place
  - To focus investment on making connections across and within Scotland better, improving reliability and journey times, seeking to maximise opportunities for employment, business, leisure and tourism
  - To provide sustainable, integrated and cost-effective public transport alternatives to the car, connecting people, places and work across Scotland.
- Equity
  - To provide the opportunities and incentives for all to contribute to Scotland's sustainable economic growth.
  - To accord greater priority to achieving more balanced growth across Scotland to give all across Scotland the chance to succeed.
  - To promote economic growth and environmental quality and responsibility as mutually advancing.

5.17 In addition to European and national objectives, at a regional level Highlands and Islands Enterprise has several priorities relating to economic development including:

- Supporting businesses and social enterprises to shape and realise their growth aspirations;
- Strengthening communities and fragile areas;
- Developing key sectors, particularly distinctive regional opportunities, and
- Creating conditions for a competitive and low carbon region.

5.18 A high quality link between Inverness and Edinburgh, Glasgow and London makes a strong contribution to all of the policy aims described above and as such supports the growth sectors in the Moray Firth economy. In turn this supports employment and population growth in the sub-region.

Tourism

5.19 Tourism is a significant industry for the Highlands and Islands worth £1.2bn in 2010[10]. Given this significant economic contribution, improved transport links to the Highlands have the potential to support further growth in the tourism sector in the future. Figure 3.9 above suggests that, even in Autumn, outside the peak tourist season, 27% of people travelling on Edinburgh and Glasgow to Inverness services were tourists. Rail services to/from the Central Belt and beyond help to deliver the economic benefits that tourism brings the Highlands.

[10] Highlands & Islands Enterprise, 2010, Sectoral Strategy: Tourism

UK Tourism

5.20 The recent "Government Tourism Policy" document (March 2011) acknowledges the huge importance of tourism as the UK's highest export earner, after chemicals and financial services, and it confirms the Government view that tourism offers one of the fastest and most efficient ways to deliver economic growth. It states that the Government aims to take tourism in Britain to a whole new level and sets a number of specific objectives.

5.21 The first objective is to increase the number of overseas visitors to Britain by 4 million (with £2 billion in spend and 50,000 jobs) by 2015. If achieved, Scotland will no doubt strive to gain its share as it pursues its own target of 50% tourism growth by 2015. Scotland already is the leading UK destination for the growth of international visitor numbers.

5.22 The second objective is to increase the proportion of domestic holidays by shifting holidays taken abroad to the domestic market. In the longer stays market (4 nights or more), which would be reasonable for the Scottish Highlands, the proposal is that the current 20% of holidays taken in the UK should be increased to 29% which is 4.5 million extra trips per annum. If achieved, this also has to be a significant area of growth potentially available to Scotland.

Scottish Tourism

5.23 Recent figures produced by Visit Scotland show that Scotland outperformed the rest of Britain in 2010, weathering the current economic downturn and making the most of the trend for 'staycations'. Whilst the number of domestic visitors taking holidays around the UK fell by five percent last year, this figure dropped by only one percent in Scotland. Visitor attraction entries dropped by only 0.3%[11].

5.24 The Scottish Government has set its target to achieve a 50% increase in revenue from tourism between 2006 and 2015[12]. Where this growth is coming from is a specific area of interest.

5.25 Several demographic facts will have implications for all parts of the economy, including tourism and travel. The number of people over 65 will soon exceed those under 21. Research suggests that tourist growth will be in the age 49/54 and 55/69 categories.

5.26 Certainly the railway must gear up to a higher percentage and number of users who are 60+, but these are not the traditional 60+ category. They are likely to be fit and healthy with time and disposable income and quite often working, at least part time, as retirement ages increase and it is said that today's 60's are the new 40's. This is true of all Europe and by 2020, 20% of Europe's population will be 60+. Products developed for these markets must be an important element of the rail offer – the Club 55 product and Senior Railcard offer are already available.

5.27 Research shows that good value and the perception of finding a bargain are important. This applies at both ends of the market. Budget travel, like budget hotels, stimulates demand, but there is no doubt that affordable luxury is

[11] 'Scotland tops UK league for staycations', scotsman.com, 14th April 2011, http://news.scotsman.com/scotland/Scotland-tops-UK-league-for.6751418.jp

[12] Scottish Tourism: The Next Decade - A Tourism Framework for Change, Scottish Government, 2006

increasingly pursued. How the latter can be delivered by railways needs consideration.

5.28 Environmental factors matter in the market place and despite many inconsistencies, rail travel is considered to be green and a rail ticket is an environmentally guilt-free purchase for a traveller. This "green travel market" is said to be growing at 25% pa.

5.29 Scottish tourism research indicates that travellers want

- customised and flexible travel (a package, but not a package holiday). The UK Government Strategy also addresses what is seen as a desire by people to be able to build their own packages.
- things to be 'made easy', taking away the hard work and with information to hand: 41% see time as their sacred resource;
- special interest holidays and breaks with particular and new experiences that are authentic;
- value for money;
- more demand for history and culture;
- dramatic scenery and changing weather (ideal for rail travel in the Highlands);
- events and festivals (potentially large traffic generators that can be developed and promoted).

Environment

5.30 As well as the economic value of the inter city rail services from Inverness, there is a clear environmental argument for the maintenance and improvement of the current rail service. This section outlines the policy background and seeks to give an indicative quantification of the environmental benefit of the existing rail services and how that might further improve with increased market share.

Policy context

5.31 The Scottish Government's Low Carbon Economic Strategy, published in November 2010, specifically sets 'Decarbonising Transport' as one of the four key sectors to be tackled. This builds on the 2006 National Transport Strategy which included 'Reducing Emissions' as one of three key strategic outcomes.

5.32 Within this Low Carbon strategy the government has set a target of 'significant decarbonisation of rail by 2050' and also set as Objective 11 in the Strategy: "*Widening travel choices. Encouraging lower carbon options, like public transport, car clubs, car sharing and cycling and walking.*". In this context, increasing the mode share of rail on the Highland Main Line corridor will contribute reducing carbon emissions and improving its services will improve travel choices. Ultimately, the electrification of the Highland Main Line will contribute significantly to decarbonising the Scottish rail network.

Potential benefits

5.33 We have undertaken a high level analysis by applying standard DEFRA emissions factors[13] to the rail, road and air patronage figures estimates from our market share estimates above to calculate the differences in CO_2 emissions per passenger

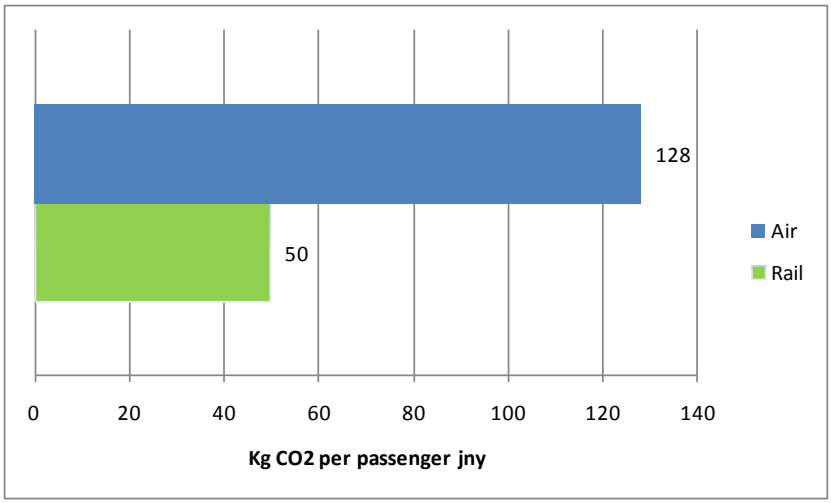
[13] Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting, October 2010

between the alternative modes: in the case of London flows – air, and in the case of Central Belt flows – car and coach. These factors represent UK averages and therefore do not take into account route-specific load factors and rolling stock.

London flows

5.34 Figure 5.2 shows the resulting estimates of CO_2 emissions per passenger journey between London and Inverness, showing rail is nearly three times as efficient as air in these terms. It is worth noting that AEA undertook a study for Highlands and Islands Enterprise (HIE) in 2008 which used more detailed information on the actual vehicles used. This study calculated a emissions per passenger journey of between 85kg and 115 kg, while confirming the rail figure of 50kg. This shows that rail is closer to twice as efficient as air.

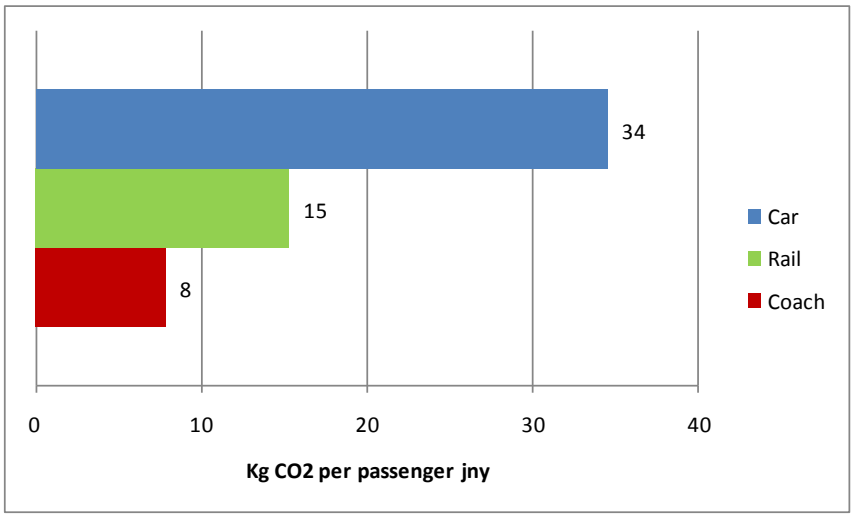
FIGURE 5.2 CO_2 EMISSIONS PER PASSENGER JOURNEY: LONDON TO INVERNESS



Central Belt flows

5.35 Figure 5.3 shows the resulting estimates of CO_2 emissions per passenger journey between Inverness and Edinburgh and Glasgow, showing rail is over twice as efficient as car in these terms, but that coach is twice as efficient as rail.

FIGURE 5.3 CO_2 EMISSIONS PER PASSENGER JOURNEY: INVERNESS TO CENTRAL BELT



Resilience

5.36 The resilience of the transport network to extreme weather conditions is currently high on the agenda of the government and the media. Two successive harsh winters and the ash cloud of May 2010 have both highlighted the need to ensure that our transport network can continue to function throughout periods of disruption. Rail services between London and Inverness have proven to be a vital link throughout periods where there has been disruption to air services. In the last 2-3 years this has happened due to the ash cloud, periods of heavy snowfall and fog. It is worth noting that some of the periods of heavy snowfall affected rail services more than roads, which the rail industry is seeking to address with its review of extreme weather.

6 Future Changes

6.1 There are a number of planned initiatives that will have an impact on inter city services in the 10-15 year time frame of this study and beyond. It is important to understand the impact that these initiatives will have on inter city services to and from Inverness as well as identifying opportunities for further improvements that these changes may present. This chapter summarises the likely impact of the following relevant UK and Scottish transport schemes

- Highland Main Line improvements (HML);
- Inter City Express Programme (IEP);
- Edinburgh-Glasgow Improvement Programme (EGIP);
- High Speed Rail;
- Rail refranchising;
- East Coast Main Line journey time improvements;
- A9 Dualling; and
- Rolling stock refurbishments.

6.2 In addition we re-iterate that we are dealing with a continually growing market and the demand for a continually growing rail service provision just to carry the underlying growth.

Highland Main Line improvements

6.3 Improvements to the Highland Main Line were identified in Transport Scotland's 2008 Strategic Transport Projects Review (STPR) as a key scheme to improve connectivity between the Highlands and the Central Belt. The rail line in the corridor is predominantly single track, with passing loops at stations between Dalwhinnie and Culloden Viaduct, and between Stanley Junction and Blair Atholl. The single track layout impacts upon the operation of rail services within the corridor, acting as a constraint on line speeds and capacity.

6.4 Intervention 17 in the STPR is named "Rail Enhancements On The Highland Main Line Between Perth And Inverness". The full set improvements proposed are:

- An increase in service frequency (minimum of hourly between Inverness and Perth with additional peak express services); and
- A reduction in journey times of approximately 35 minutes, resulting in Edinburgh to Inverness journeys of under three hours, with similar reductions for services to Glasgow.

6.5 This first phase of HML will commence at the December 2011 timetable change with eleven daily services between Inverness and Edinburgh/Glasgow and seven on Sunday. Following small line speed improvements (likely to be around 10 minutes between Inverness and Perth), a further minor adjustment to departure and arrival times at Inverness is expected in the December 2012 timetable change. Departure and arrival times at Edinburgh and Glasgow will remain similar to the December 2011 timetable because timetable paths between these cities and Perth are fixed.

6.6 The changes taking place in December 2011 and 2012 will provide a step change improvement to rail services between Inverness and the Central Belt with close to

an hourly service frequency from Inverness (to Perth) in the morning and fewer two hourly gaps between trains for the rest of the day. Realistically no further major changes will be delivered in the short and medium term.

6.7 As proposed by the STPR, there remains a long term aspiration to achieve close to an hourly service (requiring a further 2 trains per day in each direction) between Inverness and the Central Belt along with substantially faster journey times. This next phase of improvements requires major infrastructure works to improve line speeds and provide more passing loops on the single track railway between Inverness and Perth. No timescales have been presented for this second phase of HML, although it is itemised in the Initial Industry Plan for Scotland for CP5 (2014-2019) recently published (October 2010) by Network Rail – albeit with a slightly slower journey time – 2 hours Inverness to Perth.

6.8 In addition to the capital investment required, additional rolling stock is needed. The most obvious source of this additional stock would be upon completion of the Edinburgh to Glasgow Improvements Programme, currently forecast for December 2016 although other sources of DMUs from elsewhere in the UK could also be considered.

Inter City Express Programme

6.9 The Inter City Express Programme (IEP) is an initiative led by the Department for Transport (DfT) to procure new trains to replace the current HST 125 fleet that currently operate on the East Coast Main Line and the Great Western Main Line (GWML). This initiative impacts on Inverness services as the current Highland Chieftain Inverness-London service is operated by East Coast HST 125 rolling stock.

6.10 In February 2010, the then Transport Secretary Lord Adonis asked Sir Andrew Foster to conduct a review into the value for money of the IEP programme. This report was published in July 2010, the decision whether to proceed being deferred until after the Coalition Government's Spending Review in October 2010. In March 2011 the new Secretary of State for Transport, Philip Hammond, announced that an order for 533 carriages would be placed with the original preferred bidder Agility trains. No dates have been confirmed, but are likely to appear towards the end of the decade.

6.11 Crucially for the Highland Chieftain service, this order is made up of a combination of all electric **and** 'bi-mode' diesel/electric rolling stock able to be run on the non-electrified stretches of the East Coast Main Line and Highland Main Line north of Edinburgh (as well as the non-electrified parts of the GWML), thus ensuring the technical viability of the service. This was confirmed in a Parliamentary answer by Philip Hammond during the announcement of the IEP decision:

"Stewart Hosie (Dundee East) (SNP): I welcome the statement and having early sight of it. I agree with the Secretary of State that the purchase of the locomotives will represent a multi-billion pound investment that, as he said, will underpin the provision of inter-city services. May I ask him whether the decision is for bi-mode hybrid trains or for a mixed fleet of diesel and electric trains, and whether sufficient numbers will be bought on time to guarantee the continuity and frequency of direct services from London on the east coast main line north of Edinburgh, through Fife, Dundee, Angus and Aberdeen?

Mr Hammond: It is not about diesels. There will be no diesel traction locomotives in the mix; there will be bi-mode electric-diesel trains and all-electric trains. The services to Aberdeen and Inverness will be provided by the bi-mode trains, running straight off the wires at Edinburgh and on to the existing routes, so that service will be protected."[14]

6.12 The new sets will be made up of 9-car and 5-car units with the possibility of services running north of Edinburgh to Inverness and Aberdeen being made up of either 2x5-car bi-mode sets running coupled from London to Edinburgh with a single 5-car then uncoupling and running on north of Edinburgh or a single 9-car set. Network Rail's Initial Industry Plan for CP5 suggests that the IEP could be considered as a longer term replacement for the Class 170s on this route.

Edinburgh-Glasgow Improvement Programme

6.13 The Edinburgh-Glasgow Improvement Programme (EGIP) is a series of improvements designed to provide more services and shorter journey times across the Central Belt. The key upgrades include the electrification of over 350km of railway including the main Edinburgh-Falkirk High-Glasgow line and north to Stirling, Dunblane and Alloa. This will allow the journey time between Edinburgh and Glasgow to be reduced to 37 minutes (a 25% reduction over today) with an increase in frequency to 6 trains per hour. Journey times between Edinburgh / Glasgow and Dunblane will also be reduced by 5-10 minutes. The full EGIP improvement programme is scheduled to be delivered by 2016.

6.14 The electrification of these lines will also require new electric rolling stock to be introduced to the Central Belt and, although this initiative does not directly impact the Highland Main Line, there are two significant issues related to rolling stock which could impact on inter city services between Inverness and the Central Belt.

6.15 Firstly, the introduction of new rolling stock in the Central Belt will release the Class 170 rolling stock currently used on the Edinburgh-Falkirk High-Glasgow line for other use, creating a potential rolling stock resource for additional services on the Highland Main Line.

6.16 The second issue is one of perception. At present, inter city travel on the ScotRail network is undertaken predominantly by Class 170 rolling stock. As such, the Class 170 rolling stock is perceived as the current standard for long distance rail travel within Scotland. With the introduction of a brand new rolling stock on the busiest rail flow in Scotland this standard will likely be raised. It is important then that the relative standard of rolling stock is maintained across the network to ensure that there is a consistent passenger experience across the network.

High Speed Rail

6.17 The Coalition Government recently published its plans for the development of a new High Speed Rail line connecting London with the North of England, with plans to ultimately extend the network further north to Glasgow and Edinburgh.

[14] Excerpt from Hansard - Intercity Express and Rail Electrification Statement to the House by Philip Hammond, 1st March 2011

6.18 The preferred option is a 'Y' shaped network running from London to Birmingham and then splitting into two branches continuing to Manchester and Leeds. It is envisaged work would begin in 2015, with the line to Birmingham completed by 2026, and the two branches completed to Leeds and Manchester by 2032-33.

6.19 The line will be built to allow High Speed services to transfer on to the existing East Coast and West Coast Main Lines and continue on to more northerly destinations including Edinburgh and Glasgow. With the High Speed Line built to Leeds and Manchester, the journey time between London and Edinburgh and Glasgow will be cut by about an hour from 4½ down to 3½ hours.

6.20 The most obvious implication for inter-city services from Inverness is that the overall journey time to London may be reduced by an hour, although this will require interchange at Edinburgh or Glasgow. Also, ensuring timetable integration with Inverness-Central Belt services should be a priority to allow good connections to High Speed Rail destinations.

6.21 A second possibility may be that a journey time of 3½ hours between London and the Central Belt might negatively impact on the market for the Lowland Sleeper service. This could present an opportunity for redeployment of existing rolling stock onto Highland Sleeper routes although by the time of completion, there may be more issues regarding the end of life of these already ageing carriages.

6.22 Thirdly, Euston station will be comprehensively redeveloped between 2015 and 2025 in order to accommodate HS2 services. This provides an opportunity to future proof the station infrastructure for sleeper services, involving different types of rolling stock to the current, for example a full rake of Mk III coaches. It does also present a threat as space will be constrained in the new station layout and operators may seek to dedicate the longer platforms to HSR services only.

Refranchising

6.23 The two Train Operating Companies operating the inter city services to and from Inverness – East Coast and ScotRail – will both have their franchises retendered between 2013 and 2014. In 2013 the East Coast franchise is to be re-let to the private sector following a period of government control. The ScotRail franchise is to be re-let towards the end of 2014. The other franchise operating cross-border services, West Coast Mainline, is due for renewal in December 2012.

6.24 These are key dates for securing assurances on maintaining current service levels as well as service improvements as the service levels are set out in the franchise specification.

6.25 Each franchise will have a public consultation phase led by DfT (East Coast) and Transport Scotland (ScotRail) to inform the development of specifications before the tendering process commences.

6.26 Given that the East Coast service is only one train per day, out of the whole franchise, there is realistically very restricted scope to effect change through the consultation process. The minimum objective would be to preserve the current service level as a minimum.

6.27 The next ScotRail franchise may look very different to the currently heavily specified contract which is managed in a very hands on manner by Transport

Scotland. The ScotRail consultation process therefore does provide a significant opportunity for HITRANS to effect change.

East Coast Main Line journey time improvements

6.28 East Coast trains recently (May 2011) introduced improvements to their timetable that include a new early morning express journey from Edinburgh to London and mid afternoon return service with journey times of 4 hours along with an improvement in journey time of 5 minutes to a further three services in each direction.

6.29 Whilst this has benefitted Edinburgh-London travellers, it is unlikely that these improvements will impact greatly on those travelling from further north as the southbound train with the four hour journey time has no effective connections from Inverness and the total journey time with interchange penalty at Edinburgh overshadows the 5 minute saving on the other services. The Highland Chieftain service is only slightly affected by the new timetable.

Rolling stock

6.30 There are two specific issues regarding rolling stock on inter city services to/from Inverness that may present opportunities or have potential impacts on the service quality in the future:

- The requirement for a mid-life refurbishment of Class 170.rolling stock in around 5 years time.
- The age of the current Sleeper stock.

Class 170 refurbishment

6.31 The existing ScotRail rolling stock fleet will change from its current composition of mainly Diesel Multiple Unit (DMU) to a predominantly Electric Multiple Unit (EMU) fleet as STPR projects such as Edinburgh – Glasgow Improvements Programme (EGIP) and electrification of the strategic rail network are delivered. The Class 170 DMUs used on HML services are unlikely to be replaced until life expiry around 2030. It would make most economic sense for the rolling stock renewal to be aligned with the electrification of the strategic rail network on a route by route basis. The published STPR proposals indicate that Perth to Inverness will be one of the last routes to be electrified.

6.32 Class 170 rolling stock currently operates on the ScotRail express routes (Edinburgh to Glasgow, Aberdeen and Inverness and Glasgow to Aberdeen and Inverness) as well as suburban routes such as Glasgow to Dunblane / Alloa and the Fife Circle. In order to maximise their utilisation, the trains interwork between routes and as such there are only two classifications of interior layout – Suburban (no First Class) and Express (with First Class). The interworking of the trains between different routes means it is not practicable to have interior layouts which are bespoke to the differing needs of different routes.

6.33 The Class 170 rolling stock is due for a mid-life refurbishment in around 5 years time i.e. 2016. 2016 is also the scheduled completion date for the EGIP upgrade which will introduce new EMUs on the Edinburgh-Glasgow route and displace the existing Class 170 fleet. This will limit Express Class 170s to Edinburgh and Glasgow to Aberdeen and Inverness services and presents an opportunity for the mid life

refurbishment to focus on the needs of the longer distance travellers on these routes.

6.34 There is already a precedent for HITRANS working with the operator and other stakeholders to refurbish rolling stock to the specific requirements of the Highland rail passengers. In 2007 Class 158s operating into and out of Inverness were refurbished to include better spaced seating, improved luggage space and new customer information systems with the specification being led by design work and lobbying from the Highland Rail Partnership.

Sleeper stock

6.35 The current ScotRail Sleeper rolling stock was refurbished at the start of the current franchise in 2004/05 to include new washbasins and worktops, new toilet facilities and a refurbished lounge car. The stock is however over 30 years old and will become life expired towards the end of this decade. Some vehicles such as the lounge cars and seated accommodation are even older and already difficult to maintain and source spares for.

6.36 The sleeper stock is maintained at Inverness depot but is rotated between the Lowland and Highland services meaning that it has to be of a standard specification. The potential to reduce journey times between Edinburgh and Glasgow to London through the introduction of High Speed Rail in the mid 2020s is a threat to Lowland sleeper services. However travellers north of the Central Belt will not experience the same benefits from High Speed Rail and the Highland Sleeper will continue to provide an essential service.

6.37 Therefore “making do” with the existing rolling stock for a further 10 to 15 years and then scrapping it is possibly an option for the Lowland Sleeper, but not the Highland Sleeper. Furthermore, it is unlikely that the older lounge car and seated accommodation vehicles can continue to be operated for more than five or so years. Removal of both of these types of vehicle would have a negative impact on the perceived quality of the service, reduce its attractiveness to the budget traveller and also reduce revenues to the operator therefore increasing subsidy requirements.

6.38 At present it is assumed that the Sleeper will form part of the next ScotRail franchise however another possibility is to let the Sleeper service as a standalone franchise. This would allow end dates of separate sleeper and ScotRail franchises to be different and permit a better alignment of investment with the risks and opportunities presented by the different service types.

A9 dualling

6.39 The Scottish Government has made a long term commitment to dualling the A9 between Perth and Inverness. This is set out as a priority in the Strategic Transport Projects Review as a two Phase process. Phase 1 would involve fully dualling the road from Perth to Blair Atholl, grade separation of a number of junctions and the addition of climbing lanes and junction improvements between Blair Atholl and Inverness. Phase 2 would complete the dualling between Blair Atholl and Inverness.

6.40 The scheme is costed in STPR at around £500m-£1bn for Phase 1 and £1.5-3bn for Phase 2. This funding is not yet committed and as such these improvements are assumed to unlikely to be implemented in the short to medium term.

7 Barriers to Growth

7.1 Before considering changes and improvements to rail services, it is vital that we have a good understanding of the issues that current passengers have with the services, and also what deters non-users from using inter city rail services. This, combined with an understanding of the constraints and opportunities on the network, will allow the development of a set of proposed improvements that are practical, implementable and also tackle the relevant issues for current and potential users. These barriers are split into the three specific flows identified previously – Central Belt, London East Coast and London Sleeper.

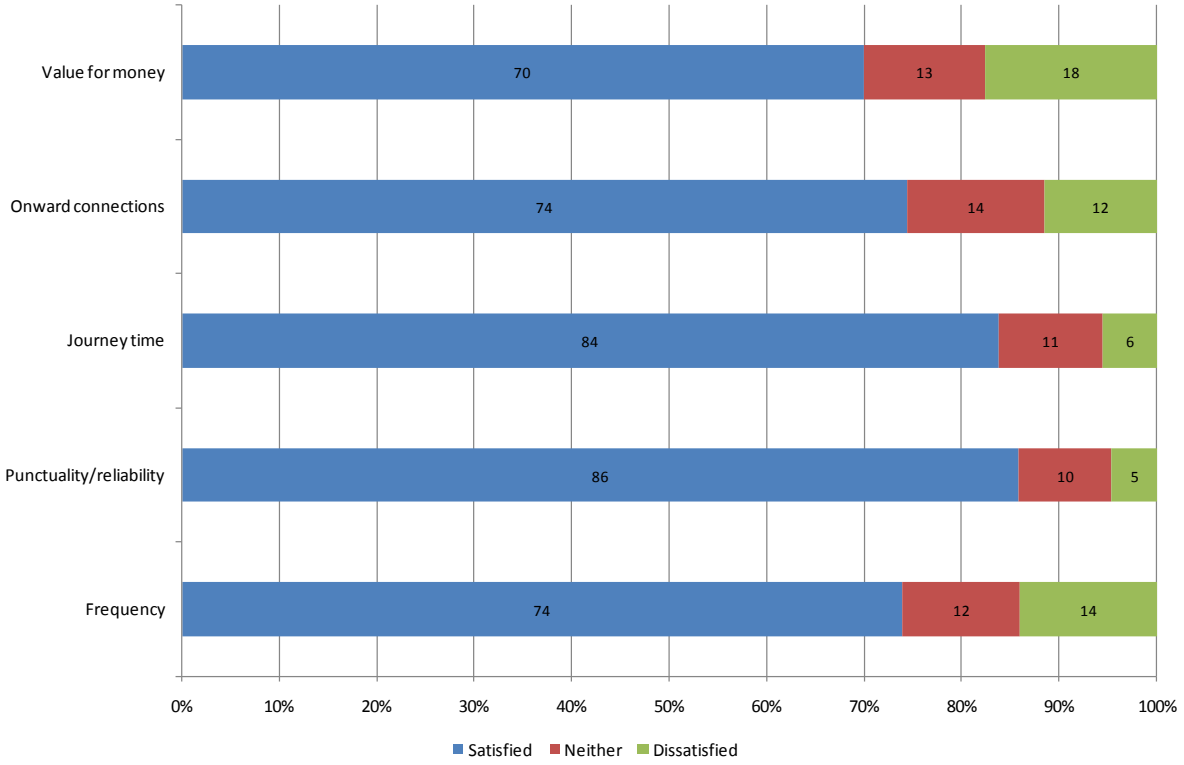
7.2 These barriers to growth have been identified in three ways. Firstly by considering the information set out in all previous chapters and each market in turn it is possible to summarise what the specific users might identify as barriers. Secondly, we have used recent work for HITRANS supplementing the latest National Passenger Survey undertaken by Passenger Focus – the so-called NPS Boost. Lastly, we have also carried out a small telephone survey of business users for Central Belt services. This survey was aimed at general business use, but businesses relating to tourism were asked further questions on the marketing of rail services to their customers. Only the first of these methods was valid for the cross-border services. A summary of the survey is included as Appendix B.

Central Belt

Journey time, frequency and reliability

7.3 There are a number of barriers around the service provision itself that are immediately apparent, as well as reported in survey data. Whilst respondents to the National Passenger Survey were in general relatively satisfied, or at least not dissatisfied with the journey time and reliability of inter city services to/from Edinburgh and Glasgow there were issues to do with interchange and frequency of services. Figure 7.1 below summarises responses to questions in the National Passenger Survey Boost. These are discussed in more detail below.

FIGURE 7.1 NATIONAL PASSENGER SURVEY BOOST – SATISFACTION WITH THE TRAIN JOURNEY



Journey time

7.4 Current city centre to city centre journey times to/from the Central Belt are comparable to the car or the fastest coaches (Citylink Gold).

7.5 Therefore, for typical business users, journey time is not likely to be a major issue. This was confirmed by our survey of business users, where there was little mention of journey time being an issue. The National Passenger Survey data confirms this – only 6% were dissatisfied with journey time of the services, although satisfaction is 5% lower than the national average (89% satisfied across the whole ScotRail network).

7.6 Clearly though there is an opportunity to grow rail's market share if rail journey times can become significantly faster than the alternatives.

Service frequency and timing

7.7 The timing of the Inverness-Central Belt services is more of an issue, particularly the arrival time of the first trains in either direction in the morning. This was an issue that was highlighted a number of times when speaking to businesses that travel regularly to and from the Central Belt. From December 2011 the first northbound train from the Central Belt arrives in Inverness from Glasgow at 10.28 and the first direct train from Edinburgh does not arrive until 12.03, although it is possible to interchange onto the first Glasgow service at Perth. Southbound, the first train arrives into Edinburgh at 10.00. Taking the same train, it is possible to arrive in Glasgow by 10.14 by changing at Perth. The first direct train to Glasgow arrives at 12.09.

7.8 Both our business survey and the NPS data confirm issues with timings. Business users commonly commented on the lack of earlier trains and the NPS data shows that 14% of respondents were dissatisfied with the service frequency. Being able to arrive in Inverness, Glasgow or Edinburgh with at least enough time to make a 10am meeting would clearly make the service more attractive for many of the businesses contacted and improvements in frequency would improve the service's attractiveness to the whole market.

7.9 The December 2011 timetable does help smooth out the gaps between services with effectively an hourly southbound service being implemented from Inverness on Monday to Saturday mornings and fewer two hourly gaps between services for the rest of the day.

Onward connections

7.10 The relatively infrequent service, along with a requirement to change at Perth to make the trip between is a clear barrier for tourist trips who are likely to be carrying heavy or large luggage which makes the experience of interchange, sometimes over a linking bridge at Perth, a poor one. 12% of people asked in the NPS survey were dissatisfied with the provision for onward connections – higher than the 7% ScotRail average. The need to interchange also introduces a risk of unreliability meaning journey times are lengthened.

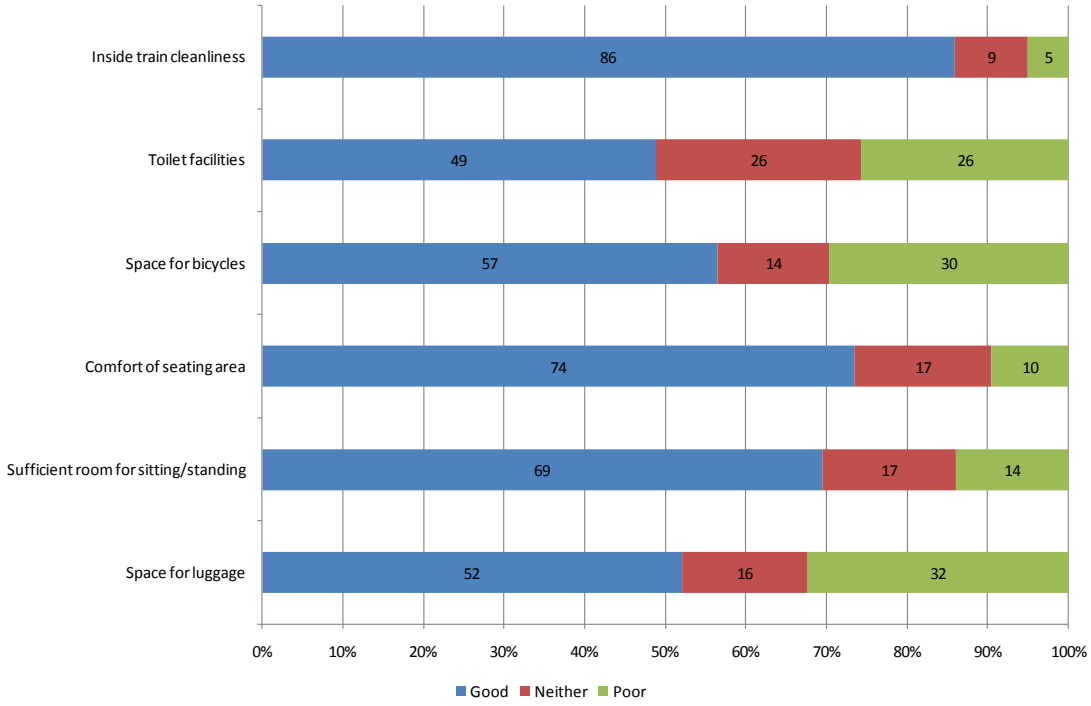
7.11 Within the constraints of the relatively infrequent services on the Far North, Kyle and Aberdeen lines the connections to these lines at Inverness are reasonable. There are no instances of timetabled near misses, but there can be lengthy waits (an hour is not uncommon), particularly with the Kyle Line, which has only 4 trains per day. This can be a barrier to use where journey time is important or where there is no onward connection at the extremes of the day – for example from and to Tain to and from the Highland Chieftain.

7.12 Onward connections also extends to reaching the ultimate origin and destination of the journey. We have shown that rail is competitive in terms of journey time on city centre to city centre journeys, but outside of certain business and tourism markets not all journeys are of this nature. Barriers to rail use at the Inverness end of the journey might also include the provision of car parking and car and taxi pick up facilities, car hire and bus interchange, although these are considered to be satisfactory.

Journey ambience/quality

7.13 The Class 170 trains operating the bulk of the Central Belt services are perceived as only adequate. National Passenger Survey responses shown in Figure 7.2 indicate that the cleanliness and comfort of the train, along with the availability of seating is generally perceived as good. However, the main areas with a higher proportion of 'poor' ratings were the toilet facilities, bicycle space and space for luggage. This is consistent with the requirements of the leisure and tourism market that the NPS data suggests is dominant on these services and must surely act as a barrier to growth in patronage for this market.

FIGURE 7.2 NATIONAL PASSENGER SURVEY BOOST – RESPONDENTS' OPINION OF TRAIN FACILITIES



7.14 It is also interesting to note that more than one respondent to our telephone survey remarked on the difference between the quality of service on the East Coast and ScotRail services and actively arranged meetings so that they could travel on the East Coast service.

7.15 There is currently no provision for wifi and power points are only available in First Class on ScotRail services, access to tables is also limited. These factors reduce the opportunity to productively work on the train and reduces a potential selling point for business passengers over driving.

7.16 Aside from the provision of power points, it was felt that there was little differentiation of First from Standard Class by respondents to our business survey. To quote one respondent: "*First Class on East Coast – you can have as much tea and coffee as you want as well as the option of dining. I quite often (well always) have a bacon sandwich served at my table on the way down. On ScotRail – you often get thrown a coffee and a shortbread and are only approached once during a 3 hour trip.*". The seat spacing in First Class is also the same as Standard Class making the small compartments feel cramped if busy.

7.17 For the tourist market, as well as the issues described above, the provision for large items of luggage is important. There is currently some provision for large luggage with racks in each carriage although anecdotal evidence that these can become very full on busy trains in the summer season is backed up by the high level of dissatisfaction with space for luggage in the NPS data (which was not undertaken at high season). 32% dissatisfied with the space for luggage is far higher than the 16% ScotRail average. Given a tourist's experience of the train journey as their first taste of the Highlands there is no 'special' experience for the visitor to recommend. This also extends to the differentiation of First Class, where

there may be an (as yet untapped) market for a Leisure Luxury product. This issue has been tackled in some parts of the network with the refurbishment of Class 158s mentioned in Chapter 6 and should be considered for future improvements to Class 170s on the Highland Main Line.

7.18 Journey ambience is also a concern on certain services which are crowded. It is perhaps surprising that the NPS score for sufficient room is lower than the national average, on what are, on average, relatively lightly loaded services. This is particularly true of the Glasgow or Edinburgh end of the journey in the evening peak, south of Stirling and Ladybank, for instance to Kirkcaldy on the 17.42 from Edinburgh. Severe crowding, such that passengers need to stand would therefore only be the case for a small proportion of the overall journey, but can act as a permanent deterrent for future travel. Anecdotally, certain summer services are also crowded and this is addressed in the parallel study on demand forecasting.

Value for Money

7.19 The analysis in Chapter 4 shows that rail is actually very competitive on price against both private car and coach, particularly when the Friends Fare product can be used. Value for money should not be considered as a barrier to use, but the awareness of the value for money can be, particularly for journeys originating in the Central Belt, where rail is regarded as an expensive alternative.

London – East Coast

7.20 The East Coast services running to/from Inverness are valued not just for their connection to destinations further afield than the Central Belt, but also, in the opinion of many of the respondents to our business survey, their superior facilities on a journey between Inverness and Edinburgh. This section discusses barriers to growth on the whole journey but also on the Central Belt section.

Journey time

7.21 In comparison with air travel, the journey time of the Highland Chieftain service is clearly uncompetitive. Whilst travelling by air requires a 30-45 minute journey at either end of the journey if travelling to and from Inverness City Centre to Central London, a door-to-door journey is likely to still be between 4-5 hours compared to 8 hours on the train.

7.22 High Speed Rail will initially only come as far as Manchester and Leeds, with the prospect of extension to Edinburgh and Glasgow a long term prospect. As such there is little prospect of cutting journey times by much more than an hour.

Service frequency and timing

7.23 There is currently one direct train per day in each direction which, given the length of the journey, is as many as is practical. They are timed to provide a useful service to and from Edinburgh with a 07.55 departure from Inverness arriving in Edinburgh at 11.17 and a northbound arrival in Inverness at 20.07, departing Edinburgh at 16.33. Discussions with business users suggests that these services are well liked and used in preference to the ScotRail services.

7.24 For tourist users for the full journey, the required interchange is a barrier to use at other times of day, with all the concerns that entails such as carrying baggage between trains and the possibility of missing the connection. For cross-border

destinations to the west of England there are clearly no direct services and the connection between trains is further hampered by the need to change between Glasgow Queen Street and Central stations.

Journey ambience

7.25 The facilities on board the Highland Chieftain were generally praised by Business users. The high quality of the surroundings and facilities such as catering, tables, wifi and power points is clearly appreciated, especially in First Class. Our discussions with Business users highlighted that this service is particularly valued and, if possible, people will specifically book the East Coast service to take advantage of the superior facilities. Clearly at other times of day, the barrier for cross-border travel is that they are run by Class 170s beyond Edinburgh, although the majority of the journey will still be in a HST or Class 225 inter city - this, may exacerbate the difference.

Value for Money

7.26 Chapter 4 shows that rail is competitive on price when compared to air, particularly for day services with little notice – which is likely to be the flexible tourist market. Again there is a perception that awareness of the relative value for money to the home and overseas leisure market is relatively poor. Improved marketing targeted at key segments, such as the over 60s focussing on other benefits such as 'green' travel, relaxation and the views, would bear fruit.

London Sleeper

Journey time

7.27 The timing of the journey currently allows an earlier arrival in Central London or Inverness than the earliest flight without the need for an overnight stay. This is a clear selling point of the Sleeper service that is used in ScotRail's current advertising of the service, at least for the southbound journey.

Journey ambience

7.28 The quality of the rolling stock on sleeper services is generally acceptable but, despite the relatively recent refurbishment, not particularly modern. Facilities provided in sleeper cabins include fully made up beds, a wash basin and shaving point provided in each cabin and two toilets per 24 person carriage, along with a small toiletry bag containing soap, travel toothbrush etc. The ambience is generally clean, tidy and well kept but there are few 'modern conveniences' such as charging points for laptops and mobile phones in cabins (although they are provided in the lounge car) or an entertainment system such as the one offered on the Great Western Sleepers.

Marketing

7.29 In discussions with tourist businesses in the Highland area, it was apparent that the option of rail travel was not well publicised, as none of the businesses outwardly promoting rail travel to Inverness. In the case of passengers from North West England joining the sleeper at Crewe and Preston, this lack of marketing and awareness extends to the actual arrival at the station. There is clearly scope for this service to be better advertised and delivered at these two key interchange points for onward travel to the rest of the North of England and the Midlands

especially given the size of the market (over 60,000 p.a.) and the variety of 'Other England' destinations shown in Figure 3.7.

8 Overcoming the Barriers

8.1 This report has examined the current level of service on inter city services from Inverness, the service provided by competing modes, the market share of rail and opportunities and barriers to growth both in the overall level of demand and increasing market share of rail. This chapter outlines the possible future interventions that could address the barriers identified, taking into account the opportunities and constraints described above.

Timeline of opportunities

8.2 The focus in the short to medium term is on making incremental improvements based around the current infrastructure. It is therefore important to identify the critical points where barriers to use can be addressed efficiently and effectively. These opportunities are set out below:

- Dec 2011: Timetable changes to improve Central Belt services from 9 to 11 weekday services and 5 to 7 Sunday services.
- Dec 2012: Planned minor journey time improvements and opportunity for optimisation of the new 11 trains per day timetable.
- Dec 2013: East Coast franchise re-let to a private sector operator
- Nov 2014: ScotRail franchise to be re-let – an opportunity to ensure that future improvements are committed through the franchise agreement or encouraging franchise bidders to improve the attractiveness of their bid through innovative initiatives.
- 2016: EGIP improvements scheduled to be completed. An opportunity to make use of Class 170 stock that will be replaced by new EMU stock. Also the latest date for Class 170 mid-life refurbishment, presenting further opportunities for Class 170 improvements.
- 2017 onwards: Committed Highland Mainline hourly service to be implemented, likely to be through electrification (Perth-Inverness is the final planned section of electrification of the rail network)
  IEP initiative resulting in new bi-mode IEP stock running on Highland Chieftain route.
- 2026: High Speed Rail Phase 1 opening: Possible review of the Lowland Sleeper service as Glasgow/Edinburgh-London service journey time is reduced to 3½ hours. Ensure integration of Inverness-Central Belt timetable where possible.

8.3 For clarity, we have grouped our recommendations to reflect forthcoming consultations on East Coast and ScotRail franchises as well as opportunities for the long term. We have linked recommendations to the relevant points on the timeline identified above.

East Coast

2013 – East Coast refranchising

8.4 Based on recent announcements regarding the IEP programme, we would expect the Highland Chieftain service to be confirmed as part of the re-let East Coast Main Line franchise. The Highland Chieftain service is valued by Inverness-Edinburgh passengers and also carries a significant proportion of the total Inverness-Cross Border demand, making it an important service to be retained into the future.

8.5 It is clear that the Highland Chieftain service is valued for its high quality service to and from Edinburgh as well as providing the only direct link further south on the East Coast Main Line. Demand is over 45,000 journeys for the biggest direct flows on the East Coast Main Line to London, Newcastle, York and Peterborough representing over 40% of the total Inverness-Cross Border market (Inverness to London and other cross border stations combined).

8.6 Given this background the Highland Chieftain service should be retained to serve this market. It is reassuring that the Transport Secretary has stated his commitment to retaining services north of Edinburgh and we agree that this service should continue in future franchise arrangements.

2017 onwards – IEP

8.7 Given the current government commitment to purchasing bi-mode IEP units there is an opportunity to explore the use of 5-car units splitting at Edinburgh to serve Inverness and Aberdeen. The present Highland Chieftain service is laid over in Inverness for almost 12 hours overnight – the northbound service arrives in Inverness at 20.08 and leaves at 07.55 the next morning.

8.8 At first glance it appears there may be an opportunity to reduce this layover time overnight with a later arrival and earlier departure in the morning and then include a further return Inverness journey during the day to take advantage of a service splitting at Edinburgh. Assuming that the new IEP units will be of equivalent quality and facilities to the current Highland Chieftain service, this presents an opportunity to improve the quality of service between Inverness and Edinburgh throughout the day.

8.9 The current timings, or indeed a later arrival and earlier departure time, take place in marginal time when this set would otherwise be laid over in Edinburgh (or elsewhere). This makes the current service relatively cheap to run as it operates in this marginal time with no opportunity cost of running a service elsewhere to consider.

8.10 Whilst possible timetables for IEP services are unavailable at present, it is likely that the majority of services to Edinburgh will continue to be operated by the current Class 91/Mark 4 electric stock, with IEP bi-mode vehicles used on Aberdeen and Inverness routes. Making these assumptions, it is likely that to reach Inverness twice daily would require either an additional set or a trade off between the number of trains operating between Aberdeen and Inverness.

8.11 However, given the lack of detail on the operation of IEP at this date, we recommend that the possibility of a second IEP service to Inverness be retained

and explored more fully when more details of the rolling stock and timetables are available.

8.12 It should also be noted here that the introduction of new rolling stock on Scottish routes will again reduce the comparative quality of services to Inverness being run by the current Class 170 stock. Although ideally refurbished Class 170s tailored to the Highland Main Line would in service by the time IEP is introduced (see para 8.23 onwards below), the likelihood of further new stock being introduced would make these improvements even more necessary to ensure that perceptions of quality on the Highland Main Line services keep up with the rest of the network.

ScotRail

Dec 2012 – Further minor timetable/journey time improvements

Journey time/timetable improvements

8.13 Following small line speed improvements (likely to be around 10 minutes between Inverness and Perth), a minor adjustment to departure and arrival times at Inverness in the December 2011 timetable will be possible in the December 2012 timetable change. Whilst departure and arrival times at Edinburgh and Glasgow will remain similar to the December 2011 timetable because timetable paths between these cities and Perth are fixed, there is an opportunity here to further optimise connections at Inverness to Far North and Aberdeen Line services allowing more integrated onward connections where possible.

Earlier services

8.14 A further possibility, linked to the desire expressed by business users for earlier Inverness-Central Belt services might be explored here, taking advantage of tweaks to the timetable where possible. Some initial analysis suggests that northbound, an earlier service may be difficult to achieve but southbound there is a possibility for an earlier Edinburgh service.

8.15 Northbound it is difficult to achieve an earlier arrival due to two freight paths between the sleeper (arr 08.37), and the first passenger service (arr 10.28). It may be that a recast of the freight trains would be possible in conjunction with the operators and their customers, but it currently appears difficult to get a passenger arrival around 09.30. In addition to the freight trains, such a service would also need to pass 4 southbound trains somewhere en route between Perth and Inverness.

8.16 Southbound is easier and a departure around 05.45 from Inverness, arriving in Edinburgh at 09.26 appears feasible taking up the path of the current 07.12 Blair Atholl to Edinburgh service. This current service currently makes a number of stops in Fife and so does not arrive Edinburgh until 09.26. This is still 36 minutes earlier arrival than the current first train and would allow travel for a 10am meeting although the journey time from Inverness would be slower than average. Speeding up the service in Fife, could perhaps give an approximately 09.00 arrival. Interchange at Perth from the Blair Atholl service, currently allows arrival into Glasgow at 9.15 – this interchange opportunity should also be retained.

8.17 We would recommend further investigation into this option for inclusion in the December 2012 timetable changes.

2014 – ScotRail franchise re-let

8.18 The re-letting of the ScotRail franchise presents an opportunity to ensure that future improvements to inter city services are included in the franchise specification, and also an opportunity to highlight to bidders the possibilities for innovative initiatives that may differentiate their bids.

Improved tourist train in summer season

8.19 The success of the Edinburgh-Oban train trialled by ScotRail for the last two summers shows that there is a market for services specifically targeted at tourists given sufficient marketing and targeting of the correct markets. The large proportion of tourists making up the demand to and from the Central Belt, along with the dissatisfaction with the provision for large luggage apparent in the NPS 'boost' survey, suggests that there would be a demand for a product aimed squarely at the tourist market between Inverness and the Central Belt. This would not necessarily have to have the shortest journey time, but should aim to give tourists a differentiated service giving a comfortable environment, ample baggage storage and specific tourist facilities such as information on the journey and sights throughout the train.

8.20 At present the Class 170 rolling stock is unsuitable to provide such a service, geared, as it is towards inter-urban services on Edinburgh-Glasgow routes. Whilst this may change with the implementation of EGIP in 2016, a service before this date would help to build on the current successes of tourism in the Highlands.

8.21 We would recommend that opportunities to use alternative rolling stock on at least one service in the summer months should be explored along with a marketing campaign to highlight this differentiated service. Loco-hauled stock is currently used on the Fife Circle to alleviate crowding at peak times and whilst there is not sufficient time between peaks to run a service using the same stock, a similar class of train, providing a guard's van with room for luggage and a relatively spacious interior would meet the expectations of a tourist service.

8.22 Currently, loco-hauled stock is available although this is unlikely to have a modern, high standard interior that would be desirable for such a tourist service and so some fit out work would be required.

2016 – EGIP/Class 170 refurbishment date

8.23 The implementation of the EGIP programme presents an excellent opportunity for the improvement of the Class 170 fleet to better meet the demands of long distance inter city travel. The Class 170 rolling stock is due for a mid-life refurbishment in 2016 and the introduction of new EMUs on the Edinburgh-Glasgow route will limit Express class 170s to Edinburgh and Glasgow to Aberdeen and Inverness services. This presents an opportunity for the mid life refurbishment to focus on the needs of the longer distance travellers on these routes.

8.24 At a minimum we would recommend ensuring that any refit included provision for greater luggage and bicycle space as well as electrical sockets at seats to provide for the increased use of laptops and mobile phones amongst all passengers, not just business users. An improved First Class offer to compete with the likes of East Coast services would also help to improve the profile of the service and create a more standardised impression of inter city train travel to/from Inverness.

8.25 Wifi services fitted to the trains would also help to encourage business users to travel by train and allow improved productivity. Whilst there may be some issues with ensuring a high quality wifi signal at all times on the Highland Main Line, a combination of ground based connection and satellite link as used on East Coast services would appear to be the most obvious and proven technology to investigate.

8.26 One risk to take account of in this recommendation is any delay to the EGIP programme. This would then require Class 170s to be refurbished whilst still operating on the Edinburgh-Glasgow line. If this became an issue, we would recommend, if at all possible, the creation of a sub-fleet aimed at operation on Inverness/Aberdeen journeys as part of the refurbishment. Class 170s are likely to be run on the Highland Main Line until life expiry in 2030. Neglecting to fit out at least some of the Class 170s specifically for the needs of long distance inter city travel would therefore be a huge missed opportunity.

2017 onwards – Highland Main Line Hourly Service/HML Electrification

8.27 In the Strategic Transport Projects Review, Transport Scotland committed to achieve close to an hourly service (requiring a further 2 trains per day in each direction to give 13 trains per day) between Inverness and the Central Belt along with substantially faster journey times and HITRANS strongly supports this aim. This next phase of improvements requires major infrastructure works to improve line speeds and provide more passing loops on the single track railway between Inverness and Perth.

8.28 Given the long term timescale, it is likely that this may be implemented as part of electrification and would fall outside the remit of this study, although Network Rail have suggested (in the IIP for Scotland) that this may be complete by 2019. However, the improvements recommended in this report would form the basis upon which an hourly service could be justified in the future. Implementing these recommendations can only strengthen the case for an hourly service by facilitating growth in demand and market share on inter city flows and thus improving the case for further enhancements. It is likely that rail would gain further market share in the Inverness-Central Belt market (especially assuming that A9 improvements are also not likely to occur until the longer term) and therefore the baseline against which an hourly service would be appraised would be raised, making the growth required to justify such a service less of a leap than at present.

2026 – High Speed Rail

8.29 High Speed Rail presents opportunities for integrating the Inverness-Central Belt timetable to ensure good connections to High Speed Rail services. This would improve connectivity between Inverness, the Highlands and intermediate stops such as Manchester and Birmingham as well as London. An hourly service should allow integration without significant timetable changes and these should ensure that connections are straightforward and convenient.

Sleeper

2014 – ScotRail Refranchising

8.30 Although there is no publicly available information on the actual usage of the sleeper service, rail currently holds 12-14% of the total market between Inverness

and London based on only two direct trains in each direction and its share has been growing since 2005. There is clearly a niche for the Highland Sleeper with travellers wishing to arrive in Central London or Inverness earlier than the first flights and also for tourists looking to access the Highlands as part of a wider trip. The Highland Sleeper should therefore be retained in the next franchise or as a standalone franchise incorporating other Sleeper services. Many also believe that there is a potential upside for sleeper patronage from improved marketing, which may be realised in a new franchise.

8.31 Refranchising also presents an opportunity for improvements to interchange at Preston and Carlisle. As shown in Chapter 3 there is a sizeable amount of demand travelling to/from Inverness from destinations outside London, much of which is concentrated in Northern England and the Midlands (see Figure 3.7). Improved interchange at Crewe and Preston along with better late night/early morning facilities at these stations presents an opportunity to further expand the market for travel to/from the Highlands and should be explored within sleeper refranchising.

8.32 There are however issues regarding rolling stock that need to be addressed to ensure that the service continues to offer the current level of service. As detailed above, the current sleeper stock was refurbished at the start of the current franchise in 2005. However, the stock is mostly based on Mark 3 coaching stock and is over 30 years old and will become life expired by the end of the decade. Of particular concern are the lounge cars and seated accommodation that are even older (based on Mark 1 coaching stock) and already difficult to maintain and source spares for.

8.33 Lowland Sleepers could arguably manage without a dedicated lounge car due to the late departure of services from London, Edinburgh and Glasgow but the earlier departure time of the Highland Sleeper (20.00 from Inverness, 20.30 from London) means that a lounge car is an essential part of the service. This is a particular issue as the current layout of sleeper cars does not allow for seated accommodation in cabins, especially an issue for Standard Class travellers potentially sharing with a stranger. Based on this requirement, we would recommend further investigation into the provision of lounge car and seated accommodation on the Highland Sleeper services to ensure that there is a continuity of service as the current stock becomes life expired. This may be a matter of combining the best parts of Highland and Lowland lounge and seated cars to extend their life.

2017 onwards – IEP

8.34 The introduction of IEP replacing HSTs across the UK towards the end of this decade will release large numbers of Mk3 coaching stock, which will also present an opportunity for replacing all of the sleeper stock. Replacing the lounge cars and seated accommodation with Mk3 coaching stock would also seem sensible, although as that lengthens each Mk1 coach by 3m we understand that this presents a platform length issue at London Euston, which is unlikely to be resolved until Euston is redeveloped as part of High Speed Rail proposals.

2026 – High Speed Rail

8.35 The case for a Lowland Sleeper service may be reduced by High Speed Rail as journey times between the Central Belt and London are reduced to only 3½ hours,

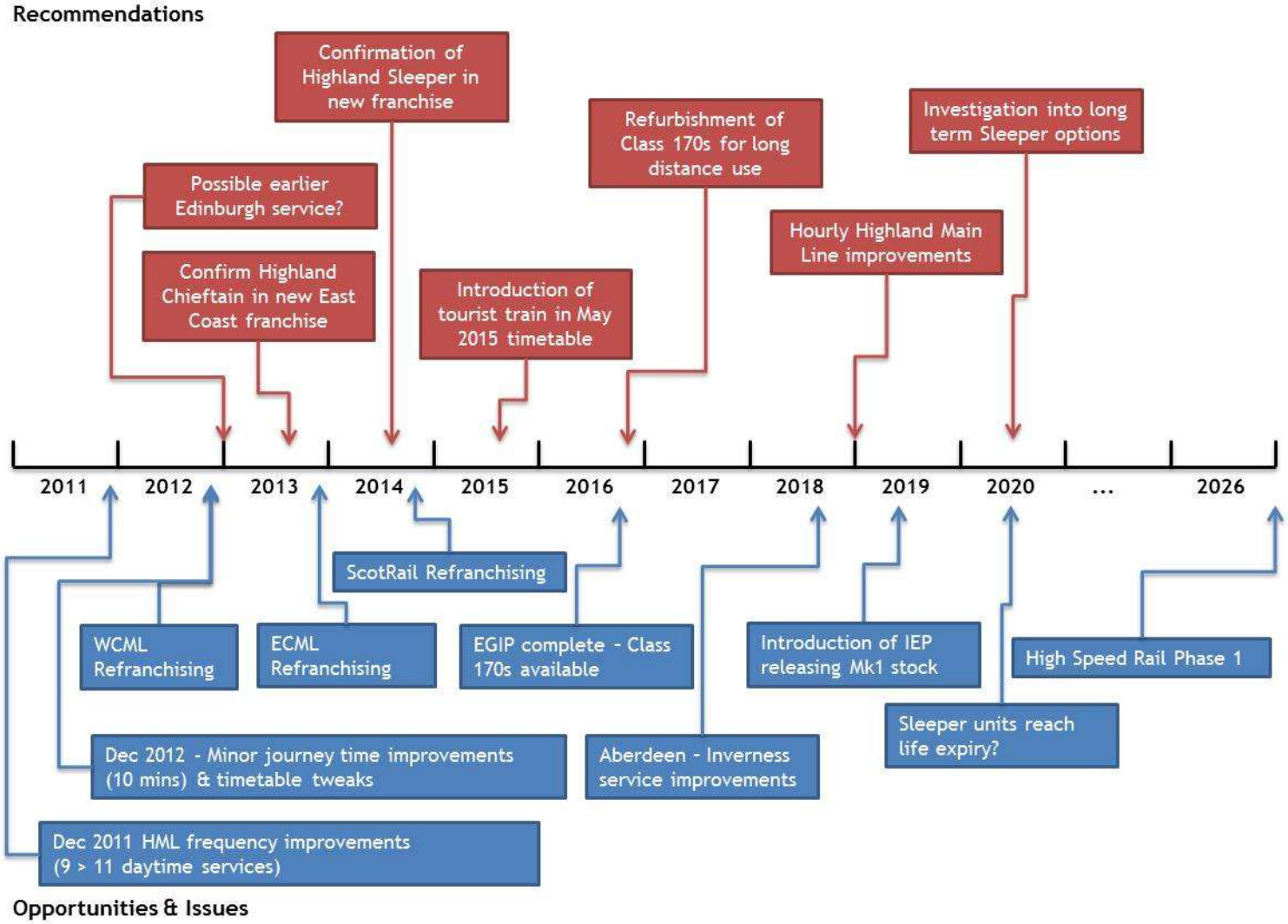
this benefit will not be felt up to Inverness due to the additional journey time required to reach Edinburgh or Glasgow. Based on this, and the fact that there is growing market share for rail travel between Inverness and London it is clear that, the Highland Sleeper should be retained in the long term. By 2026 the issues of rolling stock provision will have to be addressed, but this date may be a useful one at which to address this based on possible review of the sleeper arrangements across the network in response to HSR.

8.36 In addition, as noted above the redevelopment of Euston station as part of the HS2 proposals represents both an opportunity and a threat to the accommodation of sleeper services. As the preliminary designs for Euston are developed, it is suggested these are monitored to ensure future sleeper requirements are accommodated during and after the construction period.

Summary

8.37 These recommendations, along with the opportunities and constraints have been summarised in the recommendations timeline shown in Figure 8.1.

FIGURE 8.1 TIMELINE OF RECOMMENDATIONS



APPENDIX

A

DETAILED TIMETABLES

RAIL TIMETABLES

APPENDIX TABLE A.1 EDINBURGH-INVERNESS DEC 2011 TIMETABLE

Direct Services	Day	Trains per day	Departs	Arrives	Journey Time	Operator
Northbound	Mon - Sat	6	08.34	12.03	3h 29m	ScotRail
			10.35	14.13	3h 38m	ScotRail
			13.35	17.04	3h 29m	ScotRail
			16.32	20.11	3h 39m	East Coast
			17.42	21.02	3h 20m	ScotRail
			19.36	23.15	3h 39m	ScotRail
	Sun	4	09.36	13.15	3h 39m	ScotRail
			13.50	17.37	3h 47m	ScotRail
			15.50	19.21	3h 31m	ScotRail
			16.30	20.19	3h 49m	East Coast
Southbound	Mon - Sat	7	06.47	10.00	3h 13m	ScotRail
			07.55	11.17	3h 22m	East Coast
			09.41	13.20	3h 39m	ScotRail
			10.45	14.19	3h 34m	ScotRail
			12.46	16.21	3h 35m	ScotRail
			15.50	19.22	3h 32m	ScotRail
			18.44	22.19	3h 35m	ScotRail
	Sun	5	09.40	13.19	3h 39m	East Coast
			10.44	14.12	3h 28m	ScotRail
			13.25	16.42	3h 17m	ScotRail
			15.20	18.35	3h 15m	ScotRail
			18.30	22.01	3h 31m	ScotRail

APPENDIX TABLE A.2 GLASGOW-INVERNESS DEC 2011 TIMETABLE

Direct Services	Day	Trains per day	Departs	Arrives	Journey Time	Operator
Northbound	Mon - Sat	5	07.06	10.28	3h 22m	ScotRail
			10.10	13.25	3h 15m	ScotRail
			12.10	15.23	3h 13m	ScotRail
			15.10	18.28	3h 18m	ScotRail
			18.11	21.37	3h 26m	ScotRail
	Sun	3	11.09	14.26	3h 17m	ScotRail
			14.40	17.49	3h 9m	ScotRail
			18.10	21.33	3h 23m	ScotRail
Southbound	Mon - Sat	4	08.43	12.09	3h 26m	ScotRail
			14.48	18.09	3h 21m	ScotRail
			17.22	20.45	3h 23m	ScotRail
			20.15	23.39	3h 24m	ScotRail
	Sun	2	12.33	15.56	3h 23m	ScotRail
			16.15	19.39	3h 24m	ScotRail

APPENDIX TABLE A.3 LONDON-INVERNESS DEC 2011 EAST COAST TIMETABLE

Direct Services	Day	Trains per day	Departs	Arrives	Journey Time	Operator
Northbound	Mon - Sat	1	12.00	20.11	8h 11m	East Coast
	Sun	1	12.00	20.19	8h 9m	East Coast
Southbound	Mon - Sat	1	07.55	15.54	7h 59m	East Coast
	Sun	1	09.40	17.57	8h 17m	East Coast

APPENDIX TABLE A.4 LONDON-INVERNESS DEC 2011 CALEDONIAN SLEEPER TIMETABLE

Direct Services	Day	Daily Frequency	Departs	Arrives	Journey Time	Operator
Inverness to London	Mon - Fri	1	20.47	07.47	11h 0m	ScotRail
Inverness to London	Sun	1	20.25	07.47	11h 22m	ScotRail
London to Inverness	Mon - Fri	1	21.15	08.38	11h 23m	ScotRail
London to Inverness	Sun	1	20.55	08.38	11h 43m	ScotRail

AIR TIMETABLES

APPENDIX TABLE A.5 FLIGHT TIMETABLE (WINTER 2010/11): LONDON TO INVERNESS

Arrivals at Inverness	Day	Daily Frequency	Departs	Arrives	Journey Time	Operator
London Gatwick	Mon - Fri	4	09:30	11:10	1hr 40m	Flybe
			13:50	15:25	1hr 35m	Easyjet
			15:00	16:40	1hr 40m	Flybe
			19:20	21:00	1hr 40m	Flybe
London Luton	Mon - Fri	1	10:50	12:30	1hr 40m	Easyjet
London Gatwick	Sat	3	09:30	11:25	1hr 55m	Flybe
			13:20	14:55	1hr 25m	Easyjet
			14:40	16:35	1hr 55m	Flybe
London Luton	Sat	1	11:10	12:40	1hr 30m	Easyjet
London Gatwick	Sun	3	11:30	13:25	1hr 55m	Flybe
			13:50	15:25	1hr 35m	Easyjet
			19:20	21:20	2hrs	Flybe
London Luton	Sun	1	14:40	16:10	1hr 30m	Easyjet

APPENDIX TABLE A.6 FLIGHT TIMETABLE (WINTER 2010/11): INVERNESS TO LONDON

Departures from Inverness	Day	Daily Frequency	Departs	Arrives	Journey Time	Operator
London Gatwick	Mon – Fri	4	07:10	08:55	1hr 45m	Flybe
			12:50	14:30	1hr 40m	Easyjet
			15:55	17:30	1hr 35m	Easyjet
			17:10	18:50	1hr 40m	Flybe
London Luton	Mon – Fri	1	12:50	14:10	1hr 20m	Easyjet
London Gatwick	Sat	3	07:10	09:05	1hr 55m	Flybe
			12:15	14:10	1hr 55m	Flybe
			15:25	17:00	1hr 35m	Easyjet
London Luton	Sat	1	13:10	14:35	1hr 25m	Easyjet
London Gatwick	Sun	3	09:05	11:00	1hr 55m	Flybe
			15:55	17:30	1hr 35m	Easyjet
			16:55	18:50	1hr 55m	Flybe
London Luton	Sun	1	16:40	18:00	1hr 20m	Easyjet

APPENDIX

B

BUSINESS SURVEY SUMMARY

steer davies gleave

memo

To	Mark Shilton		
Cc			
From	Christina Lindsay		
Date	7 April 2011		
Project	HITRANS Intercity Study	**Project No.**	22362801

Subject Business Survey Summary

Business survey

1.1 To understand business perceptions of the current Inverness to Central Belt options, a small telephone survey of businesses based in Inverness and the Central Belt was undertaken. Respondents were asked about their current usage of the inter-city train services, their opinion of the service and what would encourage them to use the service more in the future. This helped to inform this section examining the current barriers to growth on inter-city routes to/from Inverness.

1.2 Out of the 26 businesses contacted, 15 telephone interviews were completed giving a 57% response rate. Four of the respondents interviewed were from the following tourism organisation: Destination Loch Ness, Jacobite Cruises and Kingsmills Hotel & Kingsclub spa. These respondents were also asked about their customers' use of rail and the extent to which they promoted the use of rail for tourism purposes.

1.3 Nine of the 15 respondents were from non tourism businesses based in the Highlands and two of the responded were from non tourism businesses based in the Central Belt.

1.4 There was no significant variance found between the opinions of those representing tourism businesses and those not. The results below collate the feedback from all companies together

Reasons for choosing rail over car

1.5 Whilst respondents would like to see a lot of things about the current rail service between Inverness and the Central Belt rectified in order to encourage them to use it more, they stated they used it because it was less stressful than taking the car and gave them the opportunity to spend the time more productively for example, at work on a laptop.

Journey Time

1.6 Journey time received a varied response. Some said they found the rail journey from Inverness to the Central Belt to take the same time as travelling by car. Whilst some respondents noted that they could complete the journey quicker by car and that an improvement in journey time would encourage them to use the train more. One respondent in particular noted that he felt that more money should be spent improving the speed of services on the railway than spending money dualling the A9.

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Frequency

1.7 The frequency of the service was heavily criticised. Unanimously respondents felt that the current timetable was unsuitable for business needs because there is no train that arrives into the central belt in time for a 9am meeting. The only option is to drive down early in the morning or stay down in the central belt the night before. Equally the last direct train from Glasgow during the week days is 16:11, this was felt to limit the ability to use the service for business trips.

Flexibility

1.8 For some businesses, driving to the central belt is a more convenient method due to the requirement to travel to a range of locations during the day. The rail service was noted to only be practical for those who are attending city centre meetings as often respondents were not willing to rely on onward connections.

1.9 Advanced fares were noted to reduce flexibility further because they have to be used on a certain service. This presents a problem to business users if they miss the train.

1.10 One responded noted that when travelling by car to a business trip in the central belt there is the ability to leave immediately after the meeting finishes. Whereas those who travel by rail must wait until the next train, which can add up to up to a few hours.

Cost

1.11 The cost of the train tickets were not generally viewed by respondents as an issue and were felt to be an equivalent to driving costs. It was recognised that planning a trip ahead made the journey cheaper. It was stated by one respondent however that more promotion could be done by the rail industry to advertise sites such as raileasy and better promote advanced fares to encourage people to see the competitiveness of rail.

1.12 A few respondents did think that the cost of the journey was a barrier to using rail. One respondent for example noted that it was cheaper if 3 or 4 people were travelling to the central belt for a meeting for them to club together and hire a car or use the company car to travel. That way they also have the flexibility of leaving straight from a meeting.

Awareness of options

1.13 Of the tourism respondents interviewed no one outwardly promoting rail access to Inverness. However should a tourist ask about it, they would assist with the relevant information. One company website links the customer to a google map and directions, which encourages car trips over rail. It was commented that if the rail link was improved, and journey times were reduced, the perception of a great distance between the Central Belt and the Highlands would be reduced and encourage more visitors to travel North.

1.14 With regards to promoting the use of rail to tourists one respondent quoted “it is my perception that Scotrail aren’t interested in tourists – they could easily advertise days out and joint promotions but they seem so unwieldy and hard to get to that it is hard to make happen. They certainly aren’t proactive.”

1.15 Some businesses actively promoted staff to travel by public transport but only where reasonable and practice. It was felt by many businesses that rail travel

for business meetings to and from Inverness was not always a reliable, flexible or a practical option.

Service quality

1.16 The quality of service for passengers on Scotrail services was heavily criticised by respondents in comparison to the ECML services. Two respondents noted that they opted to arrange meetings around the ECML services so that they did not have to travel on Scotrail trains.

1.17 Scotrail trains were considered to be less than comfortable, have not enough room for luggage, expensive catering trolleys and cramped conditions due to small uncomfortable seats.

1.18 Overcrowding on Scotrail services was noted but not addressed as an issue on the East Coast services. Lack of seating between Perth and Glasgow in particular was highlighted as an issue.

1.19 East Coast services were generally favoured by business community because of the WiFi facilities, electric charging points, a comfortable and pleasant environment and ample space at tables to work on a laptop.

1.20 The condition of the rolling stock was noted to be a deterrent to using rail, in respondents felt it was dated and there was an inconsistency in terms of internal cleanliness e.g (dirty seats).

1.21 One respondent discussed that he now drives to Perth to catch the train due to the poor customer service he has experienced on the trains. His bad experiences included there frequently being no heating on the carriages and no hot water to serve tea and coffee on the catering service.

1.22 One respondent made the point that by reserving a seat you are often subjected to cramped conditions because all seat reservations are placed in the one carriage. The respondent would prefer if reserved seats could be spaced out to avoid cramped conditions.

1.23 It was highlighted that there was very little differentiation on Scotrail services between standard class and first class. Respondents stated that they were not willing to pay more for a first class ticket for very little benefit. To quote one respondent, "First Class on ECML – you can have as much Tea and coffee as you want as well as the option of dining. I quite often (well always) have a bacon sandwich served at my table on the way down. On Scotrail – you often get thrown a coffee and a shortbread and are only approached once during a 3 hour trip."

Interchange/travel beyond rail destination

1.24 Few issues were noted on the facilities at any of the stations presenting a problem for passengers. One respondent noted that the ticket booking office at Inverness Station could be upgraded.

1.25 One respondent commented that driving to Edinburgh was easier because it was easier to park but it was more appealing to take a train to Glasgow because it is harder to park there.

Other Services

1.26 One respondent regularly travelled on the service from Aberdeen to Inverness and finds that there are not enough carriages on the 17.18 or 18.18 services, often leading to passengers standing for 1 hour.

1.27 A further respondent said if they were travelling from Inverness to Aberdeen they would rather drive than take the train due to the poor frequency of services. One respondent stated that they thought a greater frequency between Inverness to Aberdeen would be widely used in particular by students as far as Elgin.

1.28 One respondent felt it would be useful to have a request stop at Kincraig because it was close to their business premises.

Summary

1.29 Key Improvements the respondents would like to see include:

- Wifi availability and electric charging points on Scotrail services;
- Improvements to the internal furnishings of Scotrail's rolling stock to be more in line with the ECML service (warmer, comfier seating, more space, better customer service);
- Trains that arrive into the central belt before 9am and depart Glasgow after 5pm – note that this has been improved in the Dec 2011 timetable;
- Larger trains (to reduce overcrowded Scotrail services); and
- More direct trains not stopping at Perth;

1.30 In summary the barriers noted to using the rail service more frequently included:

- Poor customer service;
- Poor frequency;
- Lack of flexibility;
- Expensive refreshment facilities;
- Change over at Perth;
- Journey time;
- Reliability of service;
- Expense of tickets not purchased in advance; and
- Waiting times at Inverness or Aberdeen when making a connection.

CONTROL SHEET

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