A CROSSROADS FOR GLASGOW’S RAIL SERVICES

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1. INTRODUCTION

I had given no thought to the presentation of a paper at this year’s STAR Conference until the closing day for the submission of abstracts. On that day, Tuesday 24th January 2012, I presented two reports to Glasgow City Council’s Regeneration and the Economy Policy Development Committee on the Scottish Government’s emerging proposals for rail services in Scotland and their implications for Glasgow.

The first report outlined the City Council’s proposed response to Network Rail’s first stage consultation on its Edinburgh Glasgow Improvement Programme (EGIP) and the second sought to elicit elected members’ views on Transport Scotland’s Rail 2014 Consultation¹. Many delegates will be aware of the issues raised in these consultations for local rail services and stations.

The debate which followed the presentation of my reports revealed strong support among members of all political persuasions for the retention and enhancement of Glasgow’s rail services and stations. Members resolved that, while improvements to inter-urban services were most welcome, any reduction in local rail service levels was too high a price to pay for faster and more frequent inter-urban train services.

I left the meeting convinced that, rather than prioritising inter-urban over local services or vice versa, the rail network should be developed to meet the demands for both. While this may not be possible across the UK network as a whole, I believe it is currently possible in and around Glasgow. The challenge is convincing those responsible for Scotland’s railways that such development is both desirable and achievable.

On the following day, I received an email from the chair of the STAR Programme Committee advising that, despite a good response to the call for abstracts, there was a lack of papers on rail matters. The email went on to ask whether I would be interested in submitting a paper. Initially uncertain as to whether mere ideas for the development of Glasgow’s railways were a sound basis for a
STAR paper, I noted the invitation in this year’s call for abstracts to submit a ‘thought piece’.

Consequently, I am taking this opportunity to present my vision for the future of rail infrastructure and services in Glasgow and beyond. This vision has been developing gradually since I arrived in the city 30 years ago and more rapidly over the past five years, during which time I have been advising Glasgow City Council on rail issues.

First setting out aspirations for the rail network and services, the paper will review the issues to be addressed in meeting these. I will touch briefly on how we got to where we are today but, for the most part, will look to the future and the way in which my vision might be realised.

2. ASPIRATIONS FOR THE RAIL NETWORK AND SERVICES

2.1 Whose aspirations?

The vision I have for future rail infrastructure and services derives from a desire to maximise rail’s contribution in the provision of passenger and goods transport across Scotland and the UK. If this vision is to be achieved, it will be necessary to provide the rail infrastructure and services necessary to meet customer aspirations, such that rail is the optimal mode of transport, wherever there is a choice.

By ‘customer’ I mean the end-user of rail services – the general public. Within the privatised UK rail industry there are other customers, for example the Train Operating Companies (TOCs) who purchase track access and lease rolling stock to provide train services. Prioritising the aspirations of these industry customers above those of the end-user is unlikely to make rail the optimal mode of travel.

Some of the end-user aspirations that I have identified in the following paragraphs apply across the UK, while others are specific to the local network and services. The UK wide aspirations have been well documented by groups such as Passenger Focus, while the local aspirations are mainly those raised with me during recent consultation exercises.

2.2 Capacity

Whereas, for the UK’s road network, it is now generally accepted that there should be a measure of demand restraint, it is my view
that the capacity of the rail network and its services should be increased as necessary to fully meet the demand for both rail passenger travel and the carriage of goods. This view stems from my belief that the movement of passengers and goods by rail has the potential to be more sustainable in the long term than either road or air transport.

This is not to say that demand peaks should necessarily be accommodated; the aim instead should be to use track and rolling stock as efficiently as possible at all times. Nor does it mean that there is no place for road and air transport. There are many destinations which will always be more efficiently accessed by road than by rail and others that can be reached only by air or sea. However, it does mean that, where there is potential for a journey to be made by rail, every effort should be made to provide the rail service required to accommodate that journey.

Surveys among both existing and potential rail passengers\(^2\) consistently show that failure to secure a seat is a major deterrent from passenger rail travel. Consequently, if customer aspirations are to be met, a seat should be available for every passenger on all but the shortest journeys. Similarly, for freight services, to meet customer aspirations that goods reach their destination on schedule, sufficient network capacity must be available to provide the requisite number of train paths to meet the demand for goods carriage on specific routes when required. However, acknowledging the interaction of passenger and freight service demands for train paths, this paper will focus on passenger services.

2.3 Journey Time

If rail is to be the optimal mode of passenger travel, door-to-door journey times must be competitive with, if not better than, those achieved by other modes. For most journeys within the UK, road travel is the obvious alternative to rail, particularly where a private car is available. Many trains already travel faster than cars, both within cities and between them. However, while a car is instantly available, waiting for a train can add significantly to the end-to-end journey time for rail travel.

For rail to be the optimal mode of travel for a particular trip, it is therefore necessary to consider both the speed at which the train travels and the frequency of the train service. A good rule of thumb used by my former colleague, Roderick McDougall, is for the sum of the rail journey time and the train service interval (headway) to be no greater than the journey time by car.
Thus, rather than determining passenger service frequency simply by dividing the total demand for a particular trip by the capacity of the rolling stock available for it, the service frequency should be calculated using the above rule of thumb, with the rolling stock capacity requirement for each train determined subsequently by dividing the total demand for the trip by the service frequency.

While a service frequency of one train every hour or two will generally be appropriate for long distance rail passenger services, local services should be more frequent. The rule of thumb suggests maximum service headways of fifteen minutes for journeys of up to twenty miles in length and thirty minutes for journeys up to forty miles long.

Where air services are the obvious alternative to rail travel, the speed of the trains is of greater significance than the service frequency as regards rail being the optimal mode. For future high speed rail (HSR) services, one or two trains each day may be sufficient for lightly trafficked routes, just as one or two flights each week are currently considered adequate for some less popular air services.

2.4 Punctuality

Punctuality is important for both passengers and freight customers. This can only be achieved when services are realistically timetabled and both the permanent way and rolling stock are extremely reliable in operation.

2.5 Value for Money

It probably goes without saying that the price paid to travel by rail is a major concern, particularly for potential passengers\(^2\). If rail is to be the optimal travel mode, the cost of rail travel must be at least comparable with that of other modes. While financial analysis of the costs of providing and using rail services is outwith the scope of this paper, an affordable railway is central to my vision. Simplistically, I take the view that making rail the optimal mode of travel, for trips where rail is a realistic option, will attract sufficient patronage to facilitate its operation with fares and public subsidy, in real terms, no higher than at present.

2.6 Network Accessibility

Clearly, if rail’s contribution in the provision of passenger transport across Scotland and the UK is to be maximised (paragraph 2.1), it is necessary to maximise customer accessibility to the network. This
means locating stations within easy reach of as many people as possible and making stations and rolling stock accessible to all sections of the population.

Ideally, where rail lines traverse ‘built up’ areas, stations should be located to maximise the number of passengers able to access them by walking or cycling. This may mean spacing stations little more than half a mile apart in densely-developed central areas. Elsewhere good connecting bus services and car parking should be readily available.

2.7 Connectivity

Access to the rail network is of little use unless egress from it is equally convenient. Passenger Focus reports that a priority both for existing rail passengers and also for those currently travelling by car is direct end-to-end journeys with no requirement to change trains en route\(^2\).

Meeting this aspiration, while also ensuring that end-to-end rail journeys take no longer than travelling by car will rarely be possible, as interchange can only be avoided by stopping trains at all stations en route, thereby increasing end-to-end journey times. A sensible compromise may be a mix of express and stopping services, with interchange between them scheduled such that the overall journey time is no greater than it would be by car. However, while it may not be possible to complete a journey without changing between slow and fast trains, it should be possible to travel from one end of the network to the other without exiting an intermediate station (other than by train).

If rail’s contribution to Scotland’s passenger transport is to be maximised, direct rail links to the country’s main airports are essential. Such links assist the integration of air and rail services, such that rail can provide an increasing share of long distance domestic travel, and also enable rail to compete with the private car and taxis for local journeys to and from the airports.

3. BARRIERS TO THESE ASPIRATIONS AND THEIR REMOVAL

3.1 Seats, Journey times and Punctuality

The principal barrier to meeting passengers’ aspirations as regards the availability of seats and punctuality is a shortage of available train paths. This lack of paths also restricts the frequency of
services on many lines, thereby increasing door-to-door journey times above those required for rail to be the optimal mode of travel.

As is the case in many cities, the rail lines running into Glasgow’s main line terminal stations are required to accommodate both local stopping services and longer distance skip-stop or express trains. Historically, four tracks were provided on these ‘shared-use’ routes, allowing the faster trains to overtake the slower, stopping services.

Unfortunately, during the post-war period when rail use was steadily declining, no more than two tracks were retained on most routes. These tracks now have to accommodate both long distance and local passenger trains and, in some cases, also freight trains. Except where passing loops can be provided, it is generally necessary, in order to maximise the number of available train paths, to run all trains at the speed of the slowest services. This, in turn, reduces rail’s ability to constitute the optimal mode of passenger travel over longer distances.

Elsewhere on the network, there are locations where two railways, probably built by competing companies, ran parallel in close proximity but all traffic is now routed along one of them – the other having been abandoned to reduce on-going maintenance costs. For the same reason, track layouts at many junctions have been simplified, also reducing train path capacity.

Train path capacity is particularly constrained on the immediate approaches to and within Glasgow’s Central and Queen Street high level stations. Here again, changes to the network during the middle of the last century, when passenger rail patronage was declining, can be seen in hindsight as at least regrettable. Two such changes were the closures and demolition of Glasgow’s Buchanan and St Enoch terminal stations.

Passenger services on the Cumbernauld line, which formerly terminated at Buchanan station, now run via the Cowlairs chord into Queen Street High Level station, contributing to today’s capacity problems there. Similarly, many of the local rail services which previously terminated at St Enoch station were diverted into Central station, where there is now inadequate capacity, both within the station and on the tracks approaching it.

3.2 Glasgow’s Principal Capacity Constraints

Network Rail’s Route Plan Q for the West of Scotland lists the five most significant capacity constraints for passenger services in Glasgow as:
The congested approaches to Glasgow Central High level station, particularly the Muirhouse – Bridge Street section
The congested section between Finnieston and Hyndland
The congested section between Paisley Gilmour St and Glasgow Central High Level station
Restrictive platform lengths at a number of stations, most significantly Glasgow Central High Level and
Key single lead junctions at Bellgrove and Newton.

Taken together, these readily exemplify all the generalised capacity constraints discussed above. However, rather than bringing forward an integrated proposal to eradicate these constraints on a strategic basis, Network Rail’s Route Utilisation Strategy (RUS) approach is to address each individually, making minor adjustments to timetables and service routeing to render the degree of congestion tolerable. A possible exception is the approach being taken to reduce the Gilmour Street – Glasgow Central congestion, where the Paisley Corridor Improvements (PCI) scheme, originally proposed for the Glasgow Airport Rail Link (GARL), will add a third, bi-directional, track.

### 3.3 Platform and Station Approach Capacity

Network Rail currently plans to address capacity constraints at Queen Street High Level station, in part, by platform extensions and track layout adjustments, in association with an adjacent shopping development. Meantime, at Glasgow Central High Level station, the PCI scheme has added the platform originally proposed for GARL services. However, the platform lengths available at both stations continue to limit capacity, particularly for longer distance services.

To further relieve the current congestion at Glasgow Central High Level station and provide additional capacity for long distance inter-urban services, Transport Scotland’s Strategic Transport Projects Review, published in 2008\(^3\), suggested that the local services on the Cathcart Circle might be converted to light rail operation and diverted to a new terminus in Howard Street, ironically immediately adjacent to the site of the former St Enoch station. However, this is a costly option and brings little added benefit to the services.

Similarly, at Queen Street High Level station, Network Rail’s EGIP currently proposes to create capacity for additional express services to and from Edinburgh by removing the Cumbernauld and North Glasgow Suburban line services, which currently terminate there.

It has long been my view that the simplest means of providing capacity for additional services at Glasgow’s Central and Queen
Street high level stations would be to join some of the trains entering the city from the north with those leaving to the south; in other words, run cross-city, though services, which enter neither station. Much of the track on which these services would run is already in place as the former City Union Line and requires only upgrading and electrification to facilitate its use for passenger traffic.

3.4 Scotland’s Crossrail

A ‘Glasgow Crossrail’ scheme of this kind has been an aspiration of many organisations and individuals over the years. However, often including proposals to build the St John’s chord to enable trains from south of the river to run directly into Queen Street Low Level station, it has generally been advocated more for local cross-city services than as a route for cross-Scotland inter-urban passenger trains.

This is most likely because it was first conceived in the Greater Glasgow Transport Study but possibly because, prior to the recent re-build of the Airdrie – Bathgate line, any services running north and eastwards from the city would require to utilise the congested tracks running northwards from Cowlairs junction.

However, the re-establishment of a rail route to Edinburgh via Airdrie has made non-stop through services between the capital and towns in Ayrshire and Inverclyde a real possibility. Further development of the Crossrail scheme to include re-instatement of the ‘Strathbungo Link’ or, alternatively, the construction of a new chord at Muirhouse, would similarly provide a direct rail route between Edinburgh and Dumfries.

Until very recently, Network Rail’s EGIP included the provision of a new chord at Garnigad to enable local passenger services on the Cumbernauld line to run via Bellgrove into the low level station at Queen Street. This proposal has now been dropped from the EGIP to enable trains to continue to run via Springburn.

However, rather than being seen merely a means of re-routing Cumbernauld line trains from Queen Street High Level to the Low Level station, the Garnigad chord should be considered an integral part of Crossrail. As such, it would enable trains to run directly from south of the river via Bellgrove on to the Cumbernauld line, whence they could continue to Stirling, Perth and beyond, while avoiding the congested section of track immediately north of the Queen Street station tunnels on the Croy line.
Consequently, I suggest that Crossrail should now be promoted, without the St John’s chord, primarily as a national scheme for cross-Scotland inter-urban services. Rather than removing local services from Glasgow’s high level stations to provide more capacity for inter-urban services, consideration should instead be given to removing some of these services to provide more capacity for local train services terminating in the city centre.

3.5 Finnieston - Hyndland

Immediately west of Finnieston station, the low level Argyle line tracks join those of the Queen Street low level line. West of Hyndland station, separate branches continue via Jordanhill and Anniesland stations. This ‘bottleneck’ between Finnieston and Hyndland limits the number of trains travelling east-west across the city and halves the potential maximum capacity for services on both the Argyle and Queen Street low level lines. It also requires that this section of track operates at its maximum capacity, such that any slight problem has a disproportionate impact on the reliability of the network and threatens service punctuality.

The bottleneck is an unfortunate consequence of the success of the Strathclyde Passenger Transport Executive’s 1970’s ‘Clyderail’ scheme. At a time when rail usage was in general decline, this bold scheme re-instated cross-river heavy rail services and integrated these with Glasgow’s Underground (now Subway), forming a connection between the Central (Argyle) and Queen Street low level lines at Finnieston. Presumably, at the time, it was considered that a single pair of twin tracks running east-west between Finnieston and Hyndland would provide all the capacity needed.

This has proved not to be the case and both Strathclyde Partnership for Transport and Network Rail have examined ways to remove, or at least reduce, what is now a major capacity constraint. An appraisal undertaken in 2007 concluded that, while it is not feasible to provide four tracks to remove the bottleneck, some additional capacity could be provided by reconfiguring the tracks at Hyndland East junction and/or rebuilding Hyndland station.

This reconfiguration is being progressed as part of the EGIP, which originally also included proposals to ‘turn back’ some Queen Street low level services east of the congested section. Current EGIP proposals are for a turn back at Hyndland station but this will do little to reduce congestion through the bottleneck and will certainly not maximise the potential joint capacities of the Argyle and Queen Street Low Level lines.
On the other hand, removal of the current connection between the Argyle Line and the Queen Street Low Level line at Finnieston would enable trains to run at minimum headways on both the low level lines through the city centre. For this connection to be severed with no detrimental effect on the existing services running on the ‘Clyderail’ routes and between Larkhall and Milngavie, it is necessary first to identify an alternative route for these services.

3.6 The Bridgeton Link

Just such a solution – construction of the ‘Bridgeton Link’ joining the former Bridgeton Central line to the Dalmarnock line – was originally proposed by the Greater Glasgow Passenger Transport Authority as a second stage of the Clyderail proposals but not progressed. The link would connect Dalmarnock and Queen Street Low Level stations via High Street station and would run mainly in existing unused tunnels. At Bridgeton, a short length of new heavy rail track would be required. The connection with the Argyle line running westwards could be severed and the disconnected section, running between Bridgeton and Finnieston, converted to Light Rail Transit (LRT) operation.

Conversion of the Argyle line to LRT operation would bring significant benefits in addition to the potential for more frequent trains. Chief among these is the potential for additional station stops at St Enoch, Glasgow Cross, Greendyke Street and Glasgow Green. Further benefits would arise from extending the line at each end, westwards via disused rail reservations to Whiteinch, Botanic Gardens, Maryhill and beyond and eastwards via the London Road tunnel and then on-road to Tollcross and beyond.

One potential disadvantage, the loss of direct rail services from South Lanarkshire via Dalmarnock to the SECC, could be overcome by re-opening the former Finnieston station on the Queen Street low level line. This would improve accessibility between the SECC, Queen Street station and all stations to Edinburgh via Airdrie.

3.7 Accessibility and Connectivity

Although not as extensive as it once was, Glasgow’s suburban rail network remains the largest in the UK outwith London. However, there are several parts of the city where, despite the presence of rail lines, there is no access to the network. Requests for additional stations, which would improve passenger accessibility to services, have, to date, often been declined on the basis that they would increase journey times for existing rail passengers and/or operating costs.
As regards connectivity, there appears a similar reluctance to consider the introduction of passenger rail services where none presently exists. The industry’s RUSs tend to deal almost exclusively with deficiencies (or gaps) in the provision of existing services, rather than considering opportunities for new routes or services.

3.8 Additional Stations

Current barriers as regards accessibility to rail passenger services are most obviously removed by the provision of additional stations. This is especially the case where lines pass within walking distance of densely populated areas of housing and/or commercial activity. In Glasgow, Parkhead has long been identified as a potential site for a new station on the Airdrie line, while the transport sustainability of imminent residential development in Robroyston would be aided by the provision of a new/re-opened station on the Cumbernauld line. While there are other, equally justifiable, sites for additional stations in Glasgow, my vision is less concerned with individual locations than with the principles of provision: a station should be provided wherever there is sufficient demand for access to the network and the aim should be for all stations and rolling stock to be accessible to all sections of society.

While recognising the rail industry’s reasons for analysing the acceptability of a potential additional station in terms of the relative benefits to boarding/alighting passengers and those travelling through the station, my vision is for rail services that render such analysis obsolete. Few passengers on a local service where the train routinely stops at all stations will complain about an additional station stop. On the other hand, most passengers on longer distance services would ideally wish to travel non-stop between boarding and alighting. Consequently, it is necessary to strike a balance between the desire for faster journeys and the need to provide connectivity between all stations on the line. This is discussed further under ‘through services’ below.

3.9 Cross-river Services

A major connectivity deficiency in Glasgow’s rail provision is a lack of cross-river services. This is due, in part, to the manner in which rail services developed, with separate rail companies building lines north and south of the river. However, two cross-river lines were built and both still exist today.
While the former Caledonian low level line was reopened for passenger services as the Argyle line in the 1970s, the former City Union line is currently used only for freight traffic. Passenger use of the former City Union line would not only provide a south west – north east cross-river connection, complementary to the Argyle line’s north west – south east route; it would also provide an above ground route suitable for use by cross-country diesel passenger services.

3.10 Through Services

As mentioned at the outset of this paper, reconciling passengers’ desire for through services between any two stations on the network with the aspiration for end-to-end journey times no greater than those by competing modes requires a combination of local services that stop at all stations and semi-fast services that stop only at larger interchange stations. In Scotland, these semi-fast services should be designed such that it is possible to travel between any two interchange stations without a change of train en route.

While I have not undertaken the analysis required to prove the viability of this suggestion, I envisage a network-wide Scottish rail timetable providing a limited number of direct trains between any two interchange stations together with other services requiring additional changes of train. Passengers could then opt either for a direct service at a specific time or travel at a time of their choosing on a service involving changes between trains.

In addition to the local and semi-fast services, there would also be long distance high speed (LDHS) services, which stopped only at major stations on the network. Passengers on semi-fast services passing through interconnected major stations would have the option of a further change of train to a LDHS service, if this provided a more convenient option for their journey.

4. THE CURRENT OPPORTUNITY

4.1 High Speed Rail

The UK Government’s recent commitment to the development of a network of high speed rail (HSR) lines in the UK provides a new opportunity for the development of passenger rail travel in and around Glasgow. If Scotland is not to lose out to the English regions in terms of regeneration and attracting inward investment,
it is essential that the network of dedicated HSR lines extends to Glasgow and Edinburgh.

Much of the capacity being created in England by the HSR proposals is on existing lines for local and freight services and the same opportunity will arise when HSR lines are built in Scotland. For the foreseeable future, the only high speed lines likely to be built in Glasgow are for services across the Border and to Edinburgh. Fortuitously, it is precisely these services which are currently in most need of additional capacity in Glasgow’s two main stations. Removing them to a new terminus would provide additional capacity for local and regional services both within the existing stations and on the lines leading to them.

Network Rail’s Scotland RUS Generation 2 states that “current terminal capacity in Glasgow is insufficient for HSR services and that the planning for HSR routes will need to include the provision of suitable terminal capacity with adequate interchange to allow passengers to reach their ultimate destination quickly and efficiently.” The prospect of HSR services reaching Glasgow in 2026 indicates that work should begin now to find a site for the new terminal capacity required. Experience from the development of HSR in Europe suggests that benefits are maximised when stations are located within cities in areas ripe for regeneration.

4.2 A New City Centre Station

Use of the former City Union line for passenger services and the provision of additional connecting chords at Muirhouse/Strathbungo and Garngad feature strongly in the proposals outlined above as a means of both addressing current capacity restraints and also realising passengers’ aspirations for through rail services. To date, the most commonly cited reason for not running passenger services via the former City Union line has been that this line has no station in the City Centre.

Suggestions that the existing station at Bellgrove and a new station at West Street could provide excellent connections between the City Union Line and the City Centre via the Queen Street low level line and the Subway respectively have been discounted; calculations indicate that diverting existing services via this line disbenefits passengers destined for the City Centre. Despite a STAG appraisal undertaken in 2007 showing that a new half-hourly service each way between Ayr and Edinburgh via the City Union line would result in 3M passengers per year using a new station in the City Centre at Glasgow Cross, it is still contended by the rail authorities that the
majority of rail passengers wish to start or finish their journeys at Glasgow Central.

Could this be more due to its status as Glasgow’s main rail terminus than its precise location? If so, the construction of a new main station to cater for HSR services could become the destination of choice for rail passengers arriving in Glasgow. Locating this new station on the ‘Crossrail’ route would provide the interchange facility necessary to allow passengers to reach their ultimate destinations quickly and efficiently. Just such a location can be found to the east of Glasgow’s High Street. A station sited here could offer fast and direct services to Edinburgh, releasing capacity at Queen Street High Level station for more local services. And it is required now. There is no need to wait until 2024 to build it.

5. MY VISION FOR GLASGOW’S RAIL SERVICES

5.1 Glasgow International

With a working title of ‘Glasgow International’, this new station will become a physical crossroads for the City’s rail services and a terminus for all long distance high speed (LDHS) trains. Its location in the east of Glasgow City Centre will maximise the regeneration opportunities arising from the arrival of HSR services in Glasgow. It will not only revitalise the Trongate area of the City Centre but also act as a catalyst for the regeneration of Dennieston and attract further investment to the Clyde Gateway Initiative.

Conceptually, the new station will be similar to Central and Queen Street stations, with platforms at two levels. LDHS services will be accessed via high level platforms, while semi-fast regional and local stopping services will be accessed via low level platforms at the existing High Street station and on the former City Union line. At the southern ends of the City Union line platforms, escalators will connect with a re-opened Glasgow Cross station on the Argyle LRT Line.

Glasgow International, like HSR stations elsewhere, will become a retail destination in its own right. It will be developed as the terminal station for all cross-border and Edinburgh LDHS services and replace Central and Queen Street as the only ‘major’ station in Glasgow.

5.2 High Speed Rail Services
The early development of Glasgow International is likely to accelerate the construction of dedicated HSR lines in England north of Manchester and/or Leeds. The first stage of a cross border HSR line could be constructed to connect the new station with the West Coast Main Line at Carstairs. A spur from this line, also constructed to HSR specifications, would connect into the Carstairs – Edinburgh line to provide fast and frequent non-stop services between Edinburgh and Glasgow.

Existing LDHS cross-border services using the first stage of this new cross-border route (between Glasgow and Carstairs) will be able to travel at their maximum speeds throughout, due to the absence of local services on the same tracks. This will immediately reduce journey times of WCML services to and from Glasgow by at least ten minutes. A future, dedicated, cross-border HSR line would branch southwards from this new LDHS route to connect with England’s HS2 lines.

5.3 Regional Cross-Scotland Services

For destinations outwith the City Centre, a mix of local and semi-fast services will run from Glasgow International’s low level platforms via the Bridgeton Link and Dalmarnock to South Lanarkshire, via the Cumbernauld and Croy lines to Stirling and beyond, via the Queen Street low level line to East and West Dunbartonshire and via the former City Union line to Ayrshire, Renfrewshire, Inverclyde and Dumfries and Galloway.

The semi-fast cross-Scotland services will be timetabled to facilitate interchange with the HSR cross-border and Edinburgh services. The reinstatement of proposals to build a rail link from the Paisley line to Glasgow Airport will enable heavy rail services to run directly between the new station and the airport terminal, ultimately facilitating seamless transfer between Glasgow’s HSR and air services.

5.4 City Centre and Suburban Rail Services

The existing heavy rail service on the Argyle Line will be replaced by lighter LRT rolling stock running every few minutes, initially between Bridgeton and Finnieston. This will provide easy interchange to the Subway at St Enoch and local rail services at Central Station, while also providing convenient access to the southern half of the city centre at frequent station stops.

A combination of semi-fast cross-Scotland services and local heavy rail trains will similarly run every few minutes on the Queen Street
low level line, providing connections to local rail services at Queen Street High Level station and access to the northern half of the city centre at Queen Street and Charing Cross stations.

The removal of LDHS services from Glasgow Central and Queen Street high level stations will release capacity both on the platforms and on the approach tracks for the additional local and suburban rail services necessary to provide services at optimal frequencies.

6. CONCLUSION

A crossroads has been reached as regards the delivery of rail services in Glasgow. Capacity constraints at pinch points on the network and in Glasgow’s main high level stations are forcing choices to be made between the provision of local and inter-urban services. Meantime, a long-standing problem of providing convenient interchange between services terminating at these main stations remains unresolved.

The prospect of HSR services arriving in Glasgow in 2026 and needing new terminal capacity to accommodate them provides an opportunity to rethink current plans to remove local services from the main high level stations. Instead a new main station – Glasgow International – could provide a physical crossroads for rail services in Glasgow. From here high speed services could depart to Edinburgh, England and Europe and regional services to almost every station in Scotland.

Meantime, Glasgow’s Central and Queen Street stations could develop as termini for services to other Scottish towns and cities and suburban services. LRT operation of the Argyle Line could provide high frequency cross-city services between Bridgeton and Finnieston and beyond, while heavy rail services at a similar frequency would operate between Glasgow international and Hyndland.

I trust that the vision that I have set out demonstrates that it is not only possible to meet in full the current demand for both inter-urban and local rail services in Glasgow but also essential that the current opportunity, provided by the imminent arrival of High Speed Rail services, is taken to do so.

The views expressed in this paper are those of the author and do not necessarily represent those of Glasgow City Council.
Notes

1 Rail 2014 – Public Consultation, Transport Scotland, November 2011 (web only)
2 Future priorities for the West Coast Main Line, Passenger Focus, 2012
3 Strategic Transport Projects Review, Transport Scotland, 2008
4 Greater Glasgow Transport Study, Volume 2, SWK 1968
6 Paragraph 8.5.8, Scotland RUS Generation 2, June 2011
7 Crossrail STAG Appraisal, Faber Maunsell 2007