

Long Term Fares & Ticketing Delivery Plan



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Executive Summary

The wide range of rail products, fares, restrictions and retail channels can present a complex and often opaque proposition for both existing and potential passengers to navigate. This can make it challenging for passengers to have confidence that the products they choose to purchase are providing them with best value for money for their travel requirements.

The issue of complexity is recognised by both passenger groups and the rail industry. The Rail Delivery Group (RDG), in the launch of its 2018 Easier Fares consultation on fares reform, stated that regulation is “outdated” and “has not kept pace with technology or how people work and travel today.” Transport Focus cite evidence from passengers describing the current system as “bewildering”.

Ultimately, the rail fares offer is a key driver of perceived value for money. The investment in services, rolling stock and station facilities currently being delivered across the North of England will help to raise perceptions of the quality of service on offer. However, these gains could be undermined if passengers continue to encounter complexities and perceived unfairness when they consider and purchase their products.

This Long Term Fares & Ticketing Delivery Plan sets out Transport for the North’s (TfN’s) priorities for addressing issues in the North of England as input into the RDG Easier Fares Initiative and their two stage approach to reforming rail fares. It sets out a series of targeted initiatives which TfN intends to develop and, subject to robust business cases, work alongside its partners to deliver. Through these initiatives, it will support the realisation of a Vision for rail fares which:

enables convenient, seamless travel across the network, and provides passengers with confidence that they will be charged the best value price for their travel. In so doing, the system should help to simplify end-to-end journeys and, alongside the Long-Term Investment Programme, increase rail’s attractiveness to current and potential passengers. In parallel, the system should continue to provide a mechanism to manage the industry’s financial and commercial risks.

Growth in employment and population, alongside the improved transport connectivity delivered by the TfN investment strategy, will see the North of England increasingly becoming a single functional economic area. In the same way as passengers can travel flexibly around larger urban areas today, there may be a requirement to cater for this type of travel market across a much broader geography.

Delivering this type of functionality will be challenging solely within the current point-to-point fare structure which exists across the network. As the economy and the transport network of the North of England evolves over time, there may be a case to migrate toward a different structure, which both simplifies the passenger offer and is better-equipped to cater for more frequent longer-distance travel patterns. The structure should enable:

- Delivery of a consistent set of products and price caps across the region;
- A consistent pricing approach, removing existing anomalies;
- The personalisation of discounts to an individual passenger’s circumstances; and

- Passengers to have greater confidence that they will always be charged the best fare for their travel requirements.

The design of such a structure will need dedicated and careful study to assess the financial and economic impact, as well as gain an understanding of how the transition could be managed, and any impact to important local products defined by the existing zonal structures. The outcomes of these studies will determine if, when and how such a migration could take place.

Delivering this future state will require a long-term programme of development and delivery. However, in the shorter term there are a series of targeted initiatives which could be progressed, both to address the existing challenges and provide progress toward the longer-term end state. These initiatives could include, subject to business cases:

- Introduction of a consistent set of daily products within certain areas;
- Targeted simplification of routeing restrictions;
- More consistent peak-time restrictions;
- Introduction of 'flexible' season products;
- Resolution of price step-changes along lines of route; and
- A migration toward single-leg pricing.

Translating this Long Term Fares & Ticketing Delivery Plan into a series of fully designed and evidenced initiatives will require a programme of further development prior to and following the next round of franchising and should be cognisant of the RDG work into fares reform.

TfN's devolved rights under the Partnership Agreement with DfT provide an opportunity to implement changes to the fares system within the Northern and TransPennine Express franchises, however changes which affect other franchises (or other transport operators) will require negotiation with their respective specifying authorities.

It is intended that this development programme will be set out in detail in a Delivery Plan – which in partnership with RDG and rail industry partners will define the tasks, timescales and resources required to develop these initiatives. The Delivery Plan will feed into the RDG work on rail fares reform and the TfN annual business plan, where close alignment with both TfN's franchise management and IST activities will be key.

1 Introduction

Long Term Fares & Ticketing Delivery Plan

- 1.1 The wide range of rail products, fares, restrictions and retail channels can present a complex and often opaque proposition for both existing and potential passengers to navigate. This can make it challenging for passengers to have confidence that the products they choose to purchase are providing them with best value for money for their travel requirements.
- 1.2 In the North of England, the unique rail and multi-modal fare systems in place around some of the larger urban areas, and the varied concessionary entitlements offered, can add further layers of complexity and choice inequality.
- 1.3 The issue of complexity is recognised by both passenger groups and the rail industry. The Rail Delivery Group (RDG), in the launch of its 2018 *Easier Fares* consultation on fares reform, stated that regulation is “outdated” and “has not kept pace with technology or how people work and travel today.” Transport Focus cite evidence from passengers describing the current system as “bewildering”.
- 1.4 Passenger satisfaction with value for money, as measured by the Spring 2018 National Rail Passenger Survey¹, stands at 57% for both of the North’s principal rail franchises – Northern and TransPennine Express. Whilst this is comparable, and even favourable, to other operators in the UK, in absolute terms it is low. Amongst commuters, satisfaction is lower – at 35% for Northern and 33% for TransPennine Express.
- 1.5 Ultimately, the rail fares offer is a key driver of perceived value for money. The investment in services, rolling stock and station facilities currently being delivered across the North of England will help to raise perceptions of the quality of service on offer. However, these gains could be undermined if passengers continue to encounter complexities and unfairness when they consider and purchase their products.
- 1.6 This Long Term Fares & Ticketing Delivery Plan sets out Transport for the North’s (TfN’s) priorities for addressing these issues in the North of England, as part of the RDG two stage approach to reform fares. It sets out a series of targeted initiatives which TfN intends to develop and, subject to robust business cases, work alongside its partners to deliver.

Strategic Context

Easier Fares for All

- 1.7 The Rail Delivery Group (RDG) has been developing its own proposals for reform of the national rail fares and ticketing system. Following an earlier consultation exercise, in February

¹ <https://www.transportfocus.org.uk/research-publications/publications/national-rail-passenger-survey-nrps-spring-2018-main-report/>

2019 RDG published its proposals for fares reform². These are built around five principles of value for money, fair pricing, simplicity, flexibility and assurance. Central to RDG's approach is replacing the current Ticketing and Settlement Agreement with a new set of system regulations. RDG has been consulted during the development of this Delivery Plan and its recommendations have been developed to complement the RDG's principles.

- 1.8 The Long Term Fares & Ticketing Delivery Plan sits within a broader policy context encompassing TfN's Strategic Transport Plan³ (STP) and draft Long Term Rail Strategy⁴ (LTRS), as well as the national proposals developed by the RDG to create a more transparent and simpler to use rail fares and ticketing system. The initiatives set out in this Delivery Plan aim to satisfy the conditional outputs and strategic gaps identified in the LTRS with regard to rail fares. Alongside separate initiatives and schemes, this will support the realisation of the LTRS' vision for rail – and ensure that the rail network can fulfil its potential to support the transformation of the North's economy.

Strategic Transport Plan

- 1.9 The Strategic Transport Plan (STP)⁵ is TfN's statutory policy document. Adopted in February 2019, it sets out the case for a programme of strategic transport investment through to 2050 to support a rebalancing of the UK economy.
- 1.10 The STP builds on a body of evidence including the Northern Powerhouse Independent Economic Review (NPIER), which for the first time analysed the strengths and weaknesses of the Northern economy as a whole.
- 1.11 The NPIER found that the North has four highly-productive and internationally-competitive capabilities – Advanced Manufacturing, Energy, Health Innovation and Digital (together the “Prime capabilities”) – which if supported and better-connected will help to address underperformance and underpin a transformed Northern economy. In a ‘transformational’ scenario, the North would have 850,000 more jobs than in a ‘business as usual’ scenario, and 1.5 million new jobs in total.
- 1.12 The NPIER concluded that the ‘transformational’ scenario would require additional investment and improved performance in a number of critical areas, especially education, skills, innovation and inward investment, alongside enhanced transport infrastructure and services for passengers and freight.
- 1.13 The STP presents a Vision of:

“A thriving North of England, where modern transport connections drive economic growth and support an excellent quality of life.”

² *Easier Fares for All*, https://www.raildeliverygroup.com/files/Publications/2019-02_easier_fares_for_all.pdf

³ https://transportforthenorth.com/wp-content/uploads/TfN-Strategic-Plan_draft_lr.pdf

⁴ https://transportforthenorth.com/wp-content/uploads/Long-Term-Rail-Strategy_TfN.pdf

⁵ <https://transportforthenorth.com/wp-content/uploads/TfN-final-strategic-transport-plan-2019.pdf>

1.14 A series of pan-Northern Transport Objectives are set out in the Strategy to inform the role of the STP. These Objectives are:

- Increase efficiency, reliability and resilience in the transport system;
- Transforming economic performance;
- Improve access to opportunities across the North; and
- Promote and support the built and natural environment

1.15 To achieve these Objectives, the STP sets out an Investment Programme covering highways, rail and integrated & smart ticketing (IST). This Investment Programme is informed by the modal-specific requirements set out in the STP's key supporting policies. For rail, this includes the Northern Powerhouse Rail (NPR) programme, and the Long-Term Rail Strategy (LTRS).

Long Term Rail Strategy

1.16 The draft LTRS is TfN's primary policy document for rail in the North of England. It forms a key element of the STP and will be used to inform TfN's future programme of work and its input into wider rail industry processes. It will influence and inform the investment strategies, policies and programmes pursued by national Government, devolved bodies, Network Rail and Local Transport Authorities.

1.17 The draft LTRS sets out an ambitious series of improvements covering the rail network across the whole of the North of England. It recognises that a high-quality rail network can be an enabler of increased productivity, economic growth and improved quality of life.

1.18 The improvements prescribed in the draft LTRS are structured around the "5Cs":

- Connectivity;
- Capacity;
- Customers;
- Communities; and
- Cost-effectiveness

1.19 Fares and ticketing falls into the Customers theme – although it also has impacts across all of the other key themes. The draft LTRS recognises the complexities and inconsistencies facing passengers, and the challenge this poses when passengers seek to purchase the best value product for their travel needs. The draft LTRS suggests that these issues can contribute toward a perception of poor value for money and present a barrier to rail travel.

1.20 The LTRS calls for the adoption of a Long-Term Fares Strategy, with "a view to removing unnecessary complexity and anomalies, and promoting the efficient use of transport infrastructure, delivering a policy which is perceived as fair, and is commercially sustainable."

1.21 This Fares Delivery Plan seeks to deliver on this ambition, satisfying a critical requirement of the draft LTRS and ultimately removing a further barrier to increased rail use. In turn, it will support rail's contribution to the wider pan-Northern transport objectives in the STP and help underpin a transformed Northern economy. It builds on earlier work undertaken by Arup for TfN that analysed in some depth the nature of rail fares across the North and identified a number of lines of inquiry for their potential development and reform.

The TfN Vision is for a rail fares system which enables convenient, seamless travel across the network, and provides passengers with confidence that they will be charged the best value price for their travel.

In so doing, the system should help to simplify end-to-end journeys and, alongside the Long-Term Investment Programme, increase rail's attractiveness to current and potential passengers. In parallel, the system should continue to provide a mechanism to manage the industry's financial and commercial risks.

The Williams Rail Review

- 1.22 The Williams Rail Review, established by Government in September 2018, will examine the structure of the whole rail industry, and recommend the most appropriate organisational and commercial frameworks to deliver the Government's vision for UK rail. In response to the Review's call for evidence, TfN have generated principles that underpin an emerging proposition for the rail industry that puts the passengers and freight customers first and delivers improved outcomes for customers, local communities, railway employees and wider society.
- 1.23 TfN are strong advocates of increased devolution and local accountability and the opportunity for TfN to act as a guiding mind and accountable body for rail in the North has the potential to support locally-specified service arrangements representing local interests, as well as ensuring greater alignment with social, environmental and economic objectives than at present.
- 1.24 Through robust analysis of national and international case studies, the TfN submission to the call for evidence noted that the identified principles will be successful in delivering a number of benefits including a simplified network with consistency in fares and ticketing which will bring efficiencies that will help to reduce costs and improve value for money.

Scope

- 1.25 This Long-Term Fares & Ticketing Delivery Plan is concerned primarily with issues affecting rail fares in the North of England supporting the work of the fares reform being undertaken by RDG.
- 1.26 Under the Partnership Agreement between TfN and DfT which governs the management of the Northern and TransPennine Express franchises, TfN have certain rights with regard to fares which enables it to propose and implement change, subject to agreement and funding. Furthermore, TfN as a statutory transport body is preparing to be a key participant in subsequent franchise procurement exercises.
- 1.27 It is important therefore that TfN has a clear policy position on rail fares with which to inform this activity.
- 1.28 However, issues affecting rail fares and ticketing in the North, and any measures put in place to address them, are likely to have an impact at a wider scale – both locally and nationally. Whilst a high-level understanding of these potential wider impacts is presented in this Delivery Plan, they will need to be explored in further depth as initiatives are developed prior to implementation.
- 1.29 This will require close working alongside wider industry partners – including TfN's partner authorities, DfT, RDG, other specifying authorities, and the TOCs serving the North - throughout the development and implementation of the initiatives described in this Delivery Plan. In particular, TfN will work with Merseytravel to understand any potential impacts on the

Merseyrail network, given the close inter-working of Northern and Merseyrail services in the Liverpool City Region.

The Balance of Risk

- 1.30 Under the current model of rail franchising, revenue risk is passed from the franchising authority to the franchisee, alongside key mechanisms with which to manage this risk – for example stewardship of the ‘brand’ and the ability to create, price and promote products in accordance with the market. Certain products within less discretionary markets - such as season tickets – are subject to regulation with a cap placed on the annual price increase, linked to inflation.
- 1.31 This provides benefits to passengers, as the franchisee is incentivised to competitively price – particularly where multiple franchisees compete for revenue. However, it has also led to some of the complexities, inconsistencies and anomalies described in this Delivery Plan. This issue is also recognised by the RDG.
- 1.32 It is likely that many measures to address these issues would require a greater degree of control to be exerted by the franchising authority – essentially reducing the ability of the franchisee to manage its risks. Whilst this may result in a simpler and more consistent fares system, it increases the risk borne by franchisees, who in turn are likely to apply greater risk premiums when bidding for future franchises.
- 1.33 This trade-off must be carefully balanced when developing the initiatives described in this Delivery Plan. Inherently, consideration of financial, commercial and deliverability issues will be key in the early development of initiatives, and the Rail North Partnership (and other franchising authorities as appropriate) must be consulted throughout the development process.

Preparing the Long-Term Fares & Ticketing Delivery Plan

- 1.34 The preparation of this Long-Term Fares & Ticketing Delivery Plan was overseen by a TfN Officer Reference Group and informed by a dedicated Development Group including officers from across TfN’s partner authorities. Consultation with Elected Members, the Rail Delivery Group, and the North’s two principal TOCs – Northern and TransPennine Express, also helped to inform the Plan and its contents.

Structure

- 1.35 The Long-Term Fares & Ticketing Delivery Plan is structured to present a logical progression from problem definition to proposed solution. In Chapter 2, we set out the Need for Change – the “Why?”. Drawing on previous work undertaken for TfN, as well as new research to inform this Delivery Plan, we set out the evidence of the existing issues, future opportunities, and the strategic aims which this Delivery Plan seeks to realise.
- 1.36 In Chapter 3, we introduce the initiatives which TfN will seek to develop to deliver the Plan – the “What”. The process through which these initiatives were identified and assessed is set out, and a summary of their anticipated impact across a range of criteria.
- 1.37 Finally, in Chapter 4 we consider how these initiatives could be delivered, with reference to timescales, regulation and change mechanisms – the “How”.

2 Why? - The Case for Change

- 2.1 In this Chapter, we describe the challenges presented by the existing fares and ticketing system in the North of England – the structure, product suite, pricing, and retail methods, as well as the regulation and risk allocation underpinning it. We consider how these challenges may evolve in the future, specifically addressing the potential impact of Transport for the North’s (TfN’s) Northern Powerhouse Rail (NPR) and Integrated & Smart Ticketing (IST) programmes.
- 2.2 Finally, we set out a suite of Strategic Aims, seeking to address key challenges set out in this Chapter and providing a clear and logical link between the initiatives set out in this Delivery Plan, and the broader objectives of the Long-Term Rail Strategy (LTRS) and the Strategic Transport Plan (STP).

Structure

Existing Challenges

Issue 1: The existing structure, whilst offering flexibility, constrains product choice for certain passengers, and could be perceived to be complex.

- 2.3 The majority of products and fares in the North of England (as with the rest of the UK) are set based on a point-to-point structure – i.e. between a specific **Origin** and **Destination** station, with the lead operator (that most likely to be used by passengers to make the journey) setting the price of each product for each origin/destination pair, or “**flow**”. This structure provides the operator with the flexibility required to manage demand and revenue on each flow, with a view to managing franchise-wide risk and responding to market changes. This structure applies for both Daily and Season products.
- 2.4 This flexibility comes at the expense of simplicity. As products and their respective fares are set on a point-to-point basis, there can be a large number of individual products on offer. For example, the table below illustrates the available products on the Darlington – Middlesbrough flow:

Table 2.1: Available products, Darlington - Middlesbrough

Single	Anytime	Off-Peak			
Return	Anytime	Off-Peak			
Season	7-day	1 Month	3 Months	6 Months	12 Months

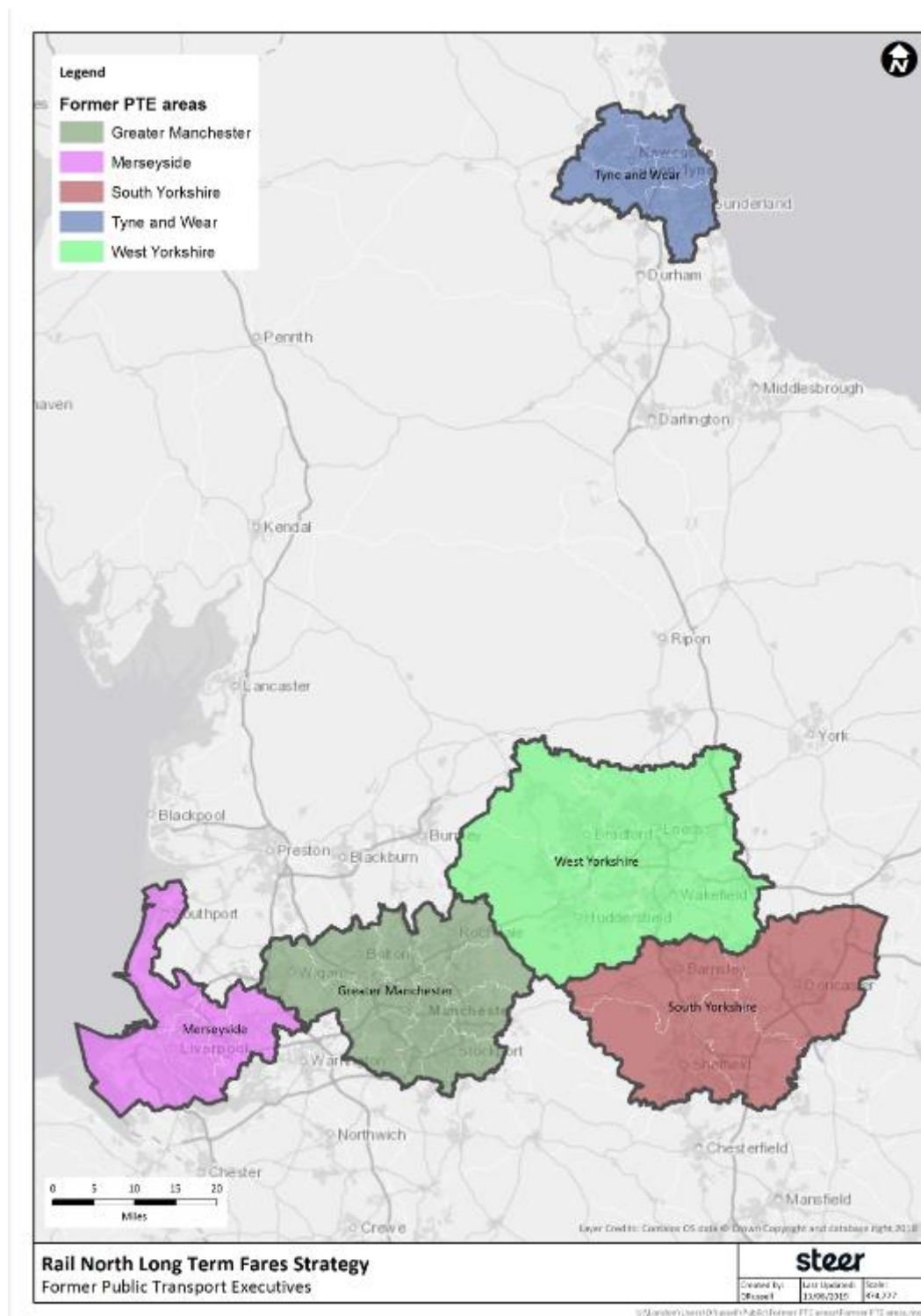
- 2.5 A separate set of products is available on the Darlington – Redcar Central, Darlington – Hartlepool, Darlington – Stockton flows and so on.

- 2.6 For passengers travelling between a fixed origin and destination, this does not necessarily represent a problem. However, the current structure can present a barrier to creating products for passengers requiring travel across multiple origin/destinations – for example those working across split employment sites or exploring an area as a tourist. In the above example, a passenger wishing to travel between Darlington, Middlesbrough and Stockton over the course of (say) one week would require a number of separate products, making it challenging to identify the combination offering best value for money.

Issue 2: There is a choice disparity between passengers within the zonal systems and those elsewhere in the North, and further complexity for those within the zonal systems.

- 2.7 In some of the North's urban areas, a zonal system is over-laid onto this point-to-point structure. This enables the transport authorities in these areas, alongside the TOCs and other transport providers, to create additional daily and season products (including multi-modal products) which provide a more flexible travel entitlement across an area.
- 2.8 There are five such systems in operation across the North currently –corresponding to the former Passenger Transport Executive areas in Greater Manchester, Liverpool City Region, Tyne & Wear and West Yorkshire, and the current PTE area in South Yorkshire. These areas are shown in Figure 2.1 below and Appendix A includes maps of the zonal ticketing scheme in the North, other than the one for South Yorkshire for which there is a single zone for a multi-modal bus, rail and tram ticket. The zonal ticketing schemes in the North are not identical to the Public Transport Executive areas in terms of geographical coverage having different boundaries in some cases. For example, although Chester and Ormskirk do not constitute part of the former Merseyside Public Transport Executive area, they are all included in the Merseytravel Railpass fare zone system ([Figure A-1](#) in Appendix A).

Figure 2.1: Current & Former Public Transport Executive Areas in the North



2.9 However, as the standard point-to-point structure is still in place alongside the zonal structure for certain products, it is not always simple for passengers to identify whether the point-to-point or the zonal equivalent offer best value for their travel requirements. In some cases, it is not well-advertised that both products are available. For example, regular travellers between Harrogate and the West Yorkshire Combined Authority area have the choice of purchasing a specific origin-destination product, such as a Harrogate-Leeds Monthly Season, or a West

Yorkshire zonal product which would provide the entitlement to make multiple trips across combined authority area.

Issue 3: The varying zonal structures create an inconsistent experience for travel within the urban areas in the North of England.

- 2.10 The existing systems are all structured differently. Greater Manchester and the Sheffield City Region use a single-zone structure, which provides very good value for those travelling long distances within the zonal area. West Yorkshire has “concentric rings”, Liverpool City Region uses a “patchwork quilt” and Tyne & Wear is a combination of the latter two. It is important to note here that rail-only zonal products are not universally available across the zonal systems. The fare zonal maps of Greater Manchester, West Yorkshire, Liverpool City Region and Tyne & Wear can all be found in Appendix A.

Issue 4: There is a disparity of choice for passengers travelling into zonal areas from further afield, and between the zonal systems themselves.

- 2.11 As described above, the existing zonal systems are structured within the administrative boundaries of the current and former PTE areas (with agreement in some cases for validity to extend into neighbouring areas). In many cases, travel catchments extend beyond these boundaries as the demand for longer distance travel has increased and commuting times lengthened. In some cases, the travel catchments of these urban areas now overlap, and some stations can fall within two or more catchments. Whilst this is positive for residents served by these stations, and presents greater employment, education and leisure opportunities, it has the potential to create a sense of choice inequality between different passengers travelling to the same destination (that is between those residing within and those beyond the zonal boundary), or from the same station to different destinations (for those within the catchment of two or more urban areas). In some cases, passengers from stations located at the borders of two fare zone ticketing systems/ PTE areas need more than two products to travel around their local areas/across their neighboring areas. For example, the stations of Bryn and Garwood are located at the boundary of Merseyside and Greater Manchester. As the existing zonal products are not valid in the neighbouring zonal area, customers travelling in and around one zone to the other would need to purchase three products; two zonal tickets and one bridging ticket. In addition, the existing zonal systems are centred around the largest city within the urban area – Leeds in the case of West Yorkshire, for example. However, these areas are increasingly polycentric, with significant concentrations of jobs in centres such as Bradford (West Yorkshire), Sunderland (Tyne and Wear), Doncaster (South Yorkshire) and Stockport (Greater Manchester). The existing zonal boundaries do not always reflect the catchments of these centres, which potentially presents choice inequality for those travelling to certain parts of the urban areas.

Drivers of Change

- 2.12 A significant proportion of jobs in the North’s Prime capabilities, the three Enabling capabilities (Financial & Professional Services, Logistics and Education), and the wider economy they help to drive, are currently and in the future will continue to be located in urban centres across the North.

- 2.13 Employment growth, driven by these key sectors, will simultaneously require and stimulate further travel demand. Given challenges such as highway congestion, air quality and the price and availability of car parking, which can be experienced acutely in urban areas, public transport will need to play an increasingly important role in accommodating this growth. Policies and programmes of Local Transport Authorities across the North, as well as TfN, are designed to meet this goal.
- 2.14 In parallel, TfN, through its LTRS, will be making the case for improved rail connectivity between, into and within these urban centres, through faster and more frequent services. The NPR programme will also be a key element of these improvements. As these improvements are implemented, longer-distance commuting will become more viable, and travel to work catchments will expand further.
- 2.15 As they do so, the issues described in this section may become more pressing – with higher volumes of passengers travelling into and between the existing zonal areas. These passengers will experience choice inequality relative to those travelling wholly within the zones. This choice disparity may itself act as a barrier to travel, encourage rail-heading, and serve to undermine rail’s attractiveness, and growth more generally.
- 2.16 Furthermore, in areas where employers within key sectors are clustered, there may be demand for higher volumes of short-distance travel, particularly for business purposes. Some of these clusters, for example in the Tees Valley and Lancashire, are outside of the existing zonal systems. As these parts of the North increasingly function as single economic areas, there may be greater need to create travel products which provide flexible travel entitlements.
- 2.17 Over a longer timeframe, as the North of England becomes more akin to a single functional economic geography, there may be need for a framework which enables the creation of daily and season products enabling a more flexible travel entitlement across a much broader geographic area than is possible today, and for closer alignment with other transport modes.

Products and Restrictions

Existing Challenges

- 2.18 As described in the earlier Arup report for TfN⁶, rail fare products can be broadly grouped into four categories – Anytime, Off-Peak, Advance and Seasons. A range of validities and product types (e.g. Singles, Returns, Standard Class, First Class etc) are offered, although not all of these product types are available for each category of product (Returns are not available for Advance products, for example). The majority of these products are sold based on a point-to-point flow (a single origin to a single destination), although zonal products sold within the current and former PTE areas are an exception to this.

Issue 5: The current product suite does not fully cater for part time and flexible workers, nor those working across multiple sites.

- 2.19 The existing product suite, particularly for Season products, is designed around traditional commuting patterns – i.e. seven – eight hour working days, five days per week, to the same

⁶ ‘Rail Fares Simplification’, Arup (2017)

destination. Whilst full-time, permanent work continues to make up the majority of employment in the UK, there has been a notable shift toward part-time and self-employment⁷. Full-time employees as a percentage of total employment fell from 65% to 63% between 2008 and 2010 and has remained relatively consistent in subsequent years. Part-time working has been rising for the past 20 years and currently accounts for 26% of total employment.

- 2.20 In addition, data from the CIPD's Employee Outlook Focus on Commuting and Flexible Working (2016)⁸ reveals that 24% of employers offer the ability to work from home on a regular basis, 20% offer compressed hours, 19% offer mobile working and 34% offer flexi-time. Of those employees surveyed, 14% used home working, and 19% used flexi-time. As TfN delivers its investment programme, and rail journeys across the North become faster and more convenient, it will become increasingly viable for workers to exercise more flexibility without sacrificing productivity or being financially penalised if the right fares product is available.
- 2.21 This suggests that there is a significant proportion of the working population who may not regularly travel to work five days per week in the traditional peak times, and that this proportion could be expected to grow over time. Part-time workers and those working to one of several flexible working options are unlikely to use the railway every working day. For these travellers, rail season tickets will offer less value relative to purchasing a series of Anytime or Off-Peak products, for which no 'regular traveller' discount will be realised, and which may be perceived to be expensive relative to alternative modes.
- 2.22 The purchase of season products also requires passengers to pay in advance for travel that they expect to require during the period (whether that be a week, month or longer). The passenger essentially takes the risk that they will receive the value that they anticipated when purchasing the product.
- 2.23 For part-time and flexible workers, it can be more difficult to confidently predict travel requirements in advance, and there may be reluctance to purchase season products (particularly those longer than a week in duration) for travel which may not ultimately be required.

Issue 6: The terminology associated with certain products presents further complexity to potential passengers, and further requirements for retailers.

- 2.24 The majority of products in the North align with the broad categories described earlier in this report and are named accordingly. However, there are a number of products which do not conform to this naming convention. These tend to be non-flow specific products, such as those within the zonal structures of the current and former PTE areas (for example, the Greater Manchester Traincard, which provides unlimited train travel across all stations within the

⁷ Good Work: The Taylor Review of Modern Working Practices (2017)

⁸ <https://www.cipd.co.uk/knowledge/fundamentals/reasons/flexible-working/employee-outlook>

boundary⁹ for a given period of time), or geographically-based products such as Northern's Rovers, Day Rangers and Round Robins.

- 2.25 The lack of a consistent naming convention across urban zonal products and specific leisure products does not necessarily create a problem for regular passengers, who are likely to be familiar with the terminology. However, it could be perceived as opaque from a potential passenger's perspective – with the travel entitlement not immediately clear from name alone. This creates a need for:
- The entitlement associated with each product to be clearly set out at point of sale; and
 - The ability for a potential passenger to search for the product which best meets their requirements.

Issue 7: There exist some routeing restrictions which appear to serve no practical purpose – but create a more complex proposition to potential passengers.

- 2.26 Ticket routeing restrictions have built up over the years following privatisation. The general British Rail rule was that a ticket was valid using “any reasonable route”. On privatisation, this was amended to the rule that a ticket is valid using “any permitted route”. This was primarily to simplify revenue allocations between franchises. The list of permitted routes is set down by the RDG¹⁰ and has tended to become more restrictive over the years¹¹.
- 2.27 The use of routeing restrictions has also enabled non-lead TOCs to set lower fares for alternative, usually slower, routes between pairs of destinations. For example, Northern offer lower Leeds – Manchester fares routed via Hebden Bridge. In this case, it enabled the removal of a previous fare anomaly where the fare between Littleborough and Walsden was very high so as to avoid the juxtaposition of two local (lower) PTE fare scales enabling the purchase of cheaper Leeds – Manchester tickets than those set by TransPennine Express via Huddersfield.
- 2.28 Over time, as the network has developed, this has led to:
- Situations where fares differ between different routes for no useful or apparent reason.
 - Situations where lower fares are offered for slower routes giving passengers the choice of taking a slower train at a lower cost, also providing the opportunity to manage demand on the faster, more expensive corridor.

Issue 8: Restrictions for Off-Peak products can be inconsistent and contribute to perceived complexity.

⁹ The GM Traincard also provides travel to and from Disley, New Mills Newtown and New Mills Central, as well as Metrolink travel within the Metrolink City Zone

¹⁰ <http://data.atoc.org/routeing-guide>

¹¹ For example, immediately after privatisation, a Leeds-London ticket was valid via Birmingham, now it is not.

- 2.29 Peak restrictions are used to define the validity of Off-Peak products. The “Peak” can be defined in terms of a departure time or an arrival time and varies by product and by flow. Morning peak restrictions are commonplace and can be defined in terms of either the arrival time or the departure time. Evening peak restrictions are less common, however as part of their Direct Award Franchise Agreement in 2014, Northern Rail introduced evening peak restrictions for flows internal to the current and former PTE areas^{12,13}, defined as a time-band as opposed to a directional restriction.
- 2.30 Peak restrictions are considered an important tool for train operators as it delivers a number of benefits to them:
- Assists revenue split between regulated and unregulated fares;
 - Manages crowding on busy trains; and
 - Promotes travel on emptier trains (both within and outside the traditional peak)
- 2.31 However, as is documented and described at length in the Arup report, the definition of peak times, and the way that peak restrictions are applied for different products, varies significantly across the North and across the UK as a whole. This contributes to the overall complexity of the fares and ticketing system and the consequent potential to cause confusion for passengers.
- 2.32 The Arup report identified seven distinct issues regarding peak restrictions:
- Different products (Off-Peak Return/Off-Peak Day Return) can have different restrictions;
 - Different restrictions for different product routeing restrictions;
 - The restriction on some products ends so early it essentially enables travel at any time (e.g. no travel before 04:30);
 - There is a mixture of arrival-based and departure-based restrictions;
 - Departure-based restrictions can vary significantly (in terms of the time at which they are lifted);
 - Asymmetry between the restrictions applied to the outward and return portions of Return journeys; and
 - Evening peak restrictions are inconsistent across the North.

Issue 9: The deterrent to fraudulent travel is inconsistent across the North

- 2.33 A Penalty Fare can be issued when a passenger does not comply with the normal ticket purchasing rules. They can be issued on trains or on stations by any authorised collector, acting on behalf of a TOC. Current guidance requires penalty fares to be set at £20, or twice the cost of the undiscounted Single fare for the journey, whichever is greatest.
- 2.34 Northern is rolling-out a penalty fare scheme across their franchise, having previously trialled it on the Airedale and Wharfedale routes in West & North Yorkshire. This will align the franchise with Merseyrail, who has operated a penalty fare scheme for many years.
- 2.35 However, TransPennine Express, Cross Country, Virgin Trains (West Coast), East Coast, and Arriva Trains Wales do not currently operate a penalty fare scheme, instead requiring

¹² Also including a small number of ‘cross-boundary’ flows, such as Skipton – Leeds

¹³ Note these do not apply to the Merseyrail network

passengers to purchase either an excess fare (the difference between their fare and the correct one for the journey taken) or a new ticket. Passengers unable to pay can be issued with an Unpaid Fare Notice, providing 21 days to pay or appeal. East Midlands Trains operate a penalty fare scheme across some of their network, including between Sheffield and Derby, and Sheffield and Nottingham.

Pricing & Concessions

Issue 10: The range of price ratios between products can present a challenge to securing best value.

- 2.36 The earlier report by Arup for TfN highlighted some of the varying price relationships between different products. In particular, it was noted that price ratios between the following products can vary significantly across the North:
- Seven-Day Seasons and Anytime Day Returns
 - Anytime/Anytime Day Returns and Off-Peak/Off-Peak Day Returns
 - Anytime/Off-Peak Returns and Anytime/Off-Peak Day Returns
 - First Class and Standard Class
 - Returns and Singles
- 2.37 Having flexibility in the pricing of products enables operators to respond to market conditions and manage revenue risk within fare regulations set by Government, but the last issue is routinely cited by passenger groups when highlighting inconsistencies with rail fares and ticketing¹⁴. The Arup report states that the average price of an Anytime Single product in the North of England is 75% of the price of an Anytime Return, and an Off-Peak Single is 95% of an Off-Peak Return. Currently, this is used by TOCs as a deterrent to fraudulent travel – removing the price incentive to purchase Single products when attempting to evade payment.
- 2.38 These differences in price ratios across the North (and further afield) can mean that it is not always clear to passengers which product offers the best value for money for their travel requirements and may create a sense of unfairness for those who perceive to be receiving less value relative to others travelling using the same product in a different area.

Issue 11: Step-changes in price along lines of route create a sense of “unfairness” and lead to behaviours which place pressure on local communities.

- 2.39 The most often-cited pricing anomalies affecting passengers in the North are the step-changes in price along lines of route. These can be particularly acute at the boundaries of the current and former PTE areas. These step changes can serve to make fares into urban centres from across the historic boundaries significantly more expensive than the equivalent fare within the boundary. The most significant contributor to this issue is the historic regulation of fares within the former PTE baskets, which has led prices to increase at differing rates inside and outside of the boundaries.

¹⁴ Passenger (Transport) Focus response to the Government’s fares and ticketing review (2012)

- 2.40 As well as creating a perception of “unfairness”, and a potential affordability challenge for those seeking access to employment and other opportunities within the largest centres, this has led to some undesirable secondary impacts. These include rail-heading to stations just within the boundary (which remain free of charge), placing pressure on car parking, highways and local communities, which in turn can place demands on local authorities (e.g. to enforce parking regulations). It also serves to under-state potential demand from stations outside of the boundary, which can undermine the case for future investment.
- 2.41 Other anomalies include the ability to ‘split’ tickets, whereby a passenger travelling between two points can secure savings by purchasing a series of products between intermediate stations, and loopholes in routeing restrictions creating the ability to purchase products for alternative destinations whilst still travelling to the intended destination.

Issue 12: Concessions and discounts to address affordability challenges are inconsistent across the North.

- 2.42 Regardless of how rail products are defined and priced, there will always be an affordability challenge for certain members of society. As it is likely that there will always be a relationship between distance/time and price, this can act as a significant barrier to employment, education and other opportunities - particularly for those in communities more remote from urban centres, for whom alternative public transport options may be less viable. In this way, the affordability of transport can contribute to social and economic isolation, and the associated impact on quality of life and wellbeing.
- 2.43 To help address these challenges, concessions are offered to certain cross-sections of society for whom affordability is likely to present more of a barrier.
- 2.44 The English National Concessionary Travel Scheme (ENCTS) offers a standard base concessionary travel offer for the disabled and elderly, across the North on local bus services, which is funded at an English national level (though administered by local authorities).
- 2.45 Some local transport authorities (mostly in former PTE areas), have decided to supplement this with additional concessions in a variety of ways including:
- extending the valid hours for the concession;
 - adding additional travel modes; and
 - including further groups (e.g. younger people, job seekers, apprentices) within the scheme.
- 2.46 The details of the extended scheme vary between authorities, but they almost all involve restricting the concessionary entitlement to local residents (those who contribute via local council tax arrangements), rather than applying the concession to all qualifying passengers travelling within the authority area. They also only apply to services within their respective boundaries (with the exception of some products available to South Yorkshire residents, which permit travel to/from West Yorkshire).
- 2.47 All of the schemes offer some form of discounted off-peak rail travel for younger travellers, although the maximum age for concessionary entitlement varies (16 and under in Greater Manchester & Tyne & Wear, 18 and under in Merseyside and South Yorkshire, 25 and under in West Yorkshire). The entitlement is often sub-divided into age bands (e.g. 16-18-year olds),

although previous requirements for the traveller to be in full-time education are no longer in effect.

- 2.48 Across the remainder of the network, discounts of up to 33% are available via rail cards for a variety of qualifying groups (e.g. disabled persons, young persons) Rail cards must be purchased up-front for a modest annual fee, with discounts applied when purchasing tickets. A minimum fare applies in some cases. The discounts serve to support demand for rail travel amongst groups who may be more affected by affordability challenges. Child fares, usually priced at 50% of the cost of the adult equivalent, are available to those aged 16 and under.
- 2.49 In addition, Trans Pennine Express has a Jobcentre Plus Railcard that offers a 50% discount on TPE Advance Purchase, Anytime Day, Off Peak and Season Tickets. Those claiming Jobseekers Allowance or Universal Credit for 3 to 9 months (18-24 years old) or 3 to 12 months (over 25s), are eligible.
- 2.50 The Esk Valley and Dales Railcards are available to residents in certain postcodes and, similarly to national railcards, offer a 33% discount to passengers on certain services on community rail services.
- 2.51 The extension of the base concessionary offer in the PTE areas has created an inconsistency across the region as a whole. Residents outside of the PTE boundaries are not entitled to the same concessionary offer as those within the boundary, potentially posing a barrier to travel for groups qualifying for concessionary discounts. It may also pose a barrier to those residents seeking to travel beyond or between the PTE areas.

Retailing, and Integrated and Smart Travel

Issue 13: The current method of retailing places a requirement on the industry to balance complexity in the product suite against ease-of-use.

- 2.52 Traditionally, rail products were retailed exclusively via paper tickets from offices and vending machines located at the station or on board the train. In recent years, the range of retailing methods has diversified, making use of technology to improve convenience for passengers. However, the fundamentals of the transaction remain the same as previously – the passenger selects and purchases a product, which is then held on some form of media which can be presented for validation/inspection when required.
- 2.53 As long as this type of transaction persists, the rail industry must always balance the complexity of the product and price range against the ease of use for the passenger, as they must be presented with the full range of products in advance, in order to make an informed choice.
- 2.54 In some areas, notably on the Transport for London (TfL) network, the way in which passengers pay for travel has changed. Through the introduction of an account-based system, passengers can now travel across the network without first purchasing a product. The relevant value of travel is calculated in retrospect and debited directly from the passenger's bank account – with passengers having the confidence that they will be charged the best value for their travel consumption.

2.55 This has a number of advantages:

- It is easy to use for passengers, who no longer need to navigate the range of products in advance, take the risk that their product will be the best match for their future travel requirements, and carry a product (in whatever form) during their journey;
- This in turn reduces operator costs, through less requirement for traditional retailing methods and associated revenue-handling and reconciliation;
- It can reduce overcrowding, and therefore risk, on stations;
- It enables the operator to design additional complexity into the structure and product suite without negatively impacting perceived ease-of-use;
- It has the potential to be used to personalise and target travel information, discounts, offers, and advertising to the individual traveller, rather than less efficient broad-brush approaches;
- Given appropriate commercial agreements and management, it can be used across travel modes, and potentially across other sectors (e.g. to pay for car parking); and
- It significantly increases the amount of data available to understand travel patterns.

2.56 It, however, also has the disadvantage of removing the option for cash payment, which can be the preferred option for some (e.g. children without a bank card or those who prefer to use cash as a way of managing a limited budget). A similar disadvantage can occur in the North with the introduction of card-only ticketing machines. The way this problem has been addressed in London is through the wide-spread availability of Oyster cards.

2.57 TfN's Integrated Smart Ticketing (IST) programme aims to deliver such a scheme for urban users of public transport, including rail passengers, in the North of England.

2.58 The IST programme will provide passengers with seamless, multi-modal travel using their preferred payment method. Working in partnership with rail, bus and light rail operators, the programme intends to utilise technology to enhance passenger's experience of their end-to-end journey.

2.59 The programme is being delivered in three phases:

Phase 1: Smartcard on rail

2.60 Part of a national programme to roll out smart-ticketing across the UK rail network, Phase 1 is seeing traditional paper season products converted to the ITSO system, by issuing season tickets on plastic, personalised smartcards – which is already used widely across the transport network in the North of England and beyond¹⁵ – and the introduction of station validators and updated ticket machines to support the introduction. It will also see the limited introduction of 'flexi-seasons' on part of Northern's network, tailored to those passengers who don't work a traditional 5-day week.

2.61 Phase 1 will set the scene for a move to 'digital by default' - encouraging passengers to move towards digital ticketing methods rather than using the traditional paper tickets. Phase 1 commenced rollout in late 2018 through a trial and went live to all areas across the north of England in early 2019. Take up has been uniformly high across the region.

¹⁵ Including the Get Me There, M-Card, Pop, TravelMaster and Walrus transport authority cards.

Phase 2: Customer information, collaboration and innovation

- 2.62 Primarily focussed on the bus and light rail networks, Phase 2 will deliver a series of features supporting better customer information:
- Improving the availability of bus fares information;
 - Sharing of planned disruption information across multiple channels;
 - Providing an open data hub, centralising data and making it available to parties to use for the development of new information channels;
 - A “knowledge network” of resources for operators and transport authorities;
 - Supporting the trialling and introduction of innovation.
- 2.63 Phase 2 commenced in 2018 and is expected to be completed in 2021.

Phase 3: Account-based travel

- 2.64 This phase of the programme will deliver the ability for passengers to make multi-modal, multi-operator journeys using contactless pay-as-you-go options. The system will apply across bus, light rail and “urban rail” (broadly within the existing zonal systems described earlier in this report).
- 2.65 A key feature of Phase 3 will be the application of “Fair price promise”, daily and weekly price caps ensuring that passengers will never pay more for their journey than had they purchased the equivalent daily or weekly season product. TfN is currently exploring alternative delivery models for Phase 3.

Summary

- 2.66 The evidence presented in this Chapter demonstrates a multi-faceted case for change and supports RDG proposals for rail fares reform. The rail fares and ticketing system within the North of England presents potential passengers with a complex range of products, each with different validities, prices and available retailing methods. This falls short of the TfN vision for a seamless, convenient system which breeds passenger confidence.
- 2.67 The five existing zonal systems provide additional flexibility for passengers within certain urban areas – but each contain different products, multi-modal entitlements, concessions and terminology. There are no consistent urban fare products in the North of England. The geographic extent of these systems is increasingly misaligned with travel catchments, which can create a disparity of choice for certain travellers – and causes step-changes in price for stations beyond the boundary.
- 2.68 The existing range of products do not fully cater for the potential passenger market, with a lack of products available for the increasing numbers of part-time, shift and flexible workers. The product suite is made more complex to navigate through a range of differing time and routeing restrictions and terminologies.
- 2.69 The way in which certain products are priced, and the ratios between them, has the potential to create a sense of “unfairness”, and is often cited by passengers citing inconsistencies with fares and ticketing.
- 2.70 The TfN Integrated Smart Ticketing programme will deliver a transformation to the way in which passengers pay for public transport in the North. Passengers in urban areas will be able to seamlessly travel across the rail network, confident that they will be retrospectively charged the best value price for their travel.

- 2.71 Whilst the IST programme will provide a framework for transformation – to maximise its value and potential it must be supported by an attractive and coherent pricing structure. Combined, this will help foster the confidence needed for passengers to migrate toward the seamless, convenient travel set out in the Vision.
- 2.72 In parallel, TfN will ensure that the fares structure – including its retailing channels – continues to be accessible and inclusive for the whole of society.

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Table 2.2: The North of England case for change issues overview

#	Key Issue
1	The existing structure, whilst offering flexibility, constrains product choice for certain passengers, and could be perceived to be complex.
2	There is a choice disparity between passengers within the zonal systems and those elsewhere in the North, and further complexity for those within the zonal systems.
3	The varying zonal structures create an inconsistent experience for travel within the urban areas in the North of England.
4	There is a disparity of choice for passengers travelling into zonal areas from further afield, and between the zonal systems themselves
5	The current product suite does not fully cater for part time and flexible workers, nor those working across multiple sites.
6	The terminology associated with certain products presents further complexity to potential passengers, and further requirements for retailers.
7	There exist some routeing restrictions which appear to serve no practical purpose – but create a more complex proposition to potential passengers.
8	Restrictions for Off-Peak products can be inconsistent and contribute to perceived complexity.
9	The deterrent to fraudulent travel is inconsistent across the North
10	The range of price ratios between products can present a challenge to securing best value.
11	Step-changes in price along lines of route create a sense of “unfairness” and lead to behaviours which place pressure on local communities.
12	Concessions and discounts to address affordability challenges are inconsistent across the North.
13	The current method of retailing places a requirement on the industry to balance complexity in the product suite against ease-of-use.

Strategic Aims

- 2.73 In order to address the issues identified in this Chapter, whilst ensuring that this Long Term Fares & Ticketing Delivery Plan contributes toward the wider objectives of the LTRS and the STP, a series of strategic aims have been defined.
- 2.74 These strategic aims have been developed and refined in conjunction with the TfN Officer Reference Group, and state that this Delivery Plan will:

<p>Support the regional economic agenda by:</p> <ul style="list-style-type: none"> – making rail travel more affordable for commuting; – increasing the catchment area within affordable commuting distance; – offering products that meet a wide range of commuting needs (e.g. part-time workers, workers with more than one place of work, people starting work for the first time, etc) – offering products that meet a wide range of business travel needs; – supporting and stimulating the leisure and tourism economy; – supporting the needs of the education & learning sector.
<p>Support social objectives by:</p> <ul style="list-style-type: none"> – recognising the interests of price sensitive and non-discretionary markets; – ensuring that any necessary step-change increases to fares are phased over time;
<p>Encourage efficient use of the transport infrastructure by:</p> <ul style="list-style-type: none"> – reducing price barriers to multi-modal journeys, including park and ride; – encouraging modal choice which is suitable for the distance travelled and the alternatives available; – promoting the use of surplus rail capacity; – making rail more attractive to current non-users.
<p>Make rail more attractive by reducing perceived complexity and other barriers to use by having a product structure that:</p> <ul style="list-style-type: none"> – better aligns to passengers’ travel needs; – can be more easily understood; – supports simpler retailing; – providing greater confidence that passengers can avail of the best fare; – reducing anomalies.
<p>Ensure the commercial viability of the rail network by:</p> <ul style="list-style-type: none"> – providing a structure that gives clarity for future franchise bidders and maintains interest in future franchises; – supporting the realisation of policy on the balance between fare payer and tax payer; – providing scope to increase fares to invest in service and infrastructure improvements, and scope to subsidise fares to promote use.
<p>Promote consistency with the wider transport network by:</p> <ul style="list-style-type: none"> – maintaining consistency between the national fares and product structure and that within the North of England; – promoting consistency with other modes where relevant (e.g. child age).

2.75 Table 2.3 overleaf demonstrates the alignment between these Strategic Aims, the LTRS and the STP.

Table 2.3: Alignment of Strategic Aims

STP Objectives	LTRS Themes	Fares & Ticketing Plan Strategic Aims
Increasing efficiency, reliability, integration, and resilience in the transport system Transforming economic performance	Connectivity	Encourage efficient use of the transport infrastructure
	Capacity	Support the regional economic agenda
		Promote consistency with the wider transport network
Improving inclusivity, health, and access to opportunities for all	Customer Communities	Support social objectives
		Make rail more attractive by reducing perceived complexity
	Cost-effectiveness	Ensure the commercial viability of the rail network
Promoting and enhancing the built, historic, and natural environment		

3 What - Defining Change

3.1 In this Chapter, we consider how the Delivery Plan's Strategic Aims could be delivered through a series of "Do Something" options. It is important to note that there is no single 'magic bullet' initiative which will address all of the existing issues identified earlier in this report. Rather, this Chapter will focus on establishing a long-term vision for how the fares and ticketing system will enable convenient, seamless and best value travel across the network. It will then set out some targeted initiatives which could be trialed and implemented in the short/medium term in partnership with RDG, to progress toward the longer-term state.

An evolving structure

3.2 In Chapter 2, the pros and cons of the existing zonal structures were examined. Their primary function is to enable the creation of products which offer a more flexible entitlement across an economic area.

3.3 Growth in employment and population, alongside the improved transport connectivity delivered by the Transport for the North (TfN) investment strategy, will see the North of England increasingly becoming a single functional economic area. In the same way as passengers can travel flexibly around larger urban areas today, this suggests a requirement to cater for this type of travel market across a much broader geography.

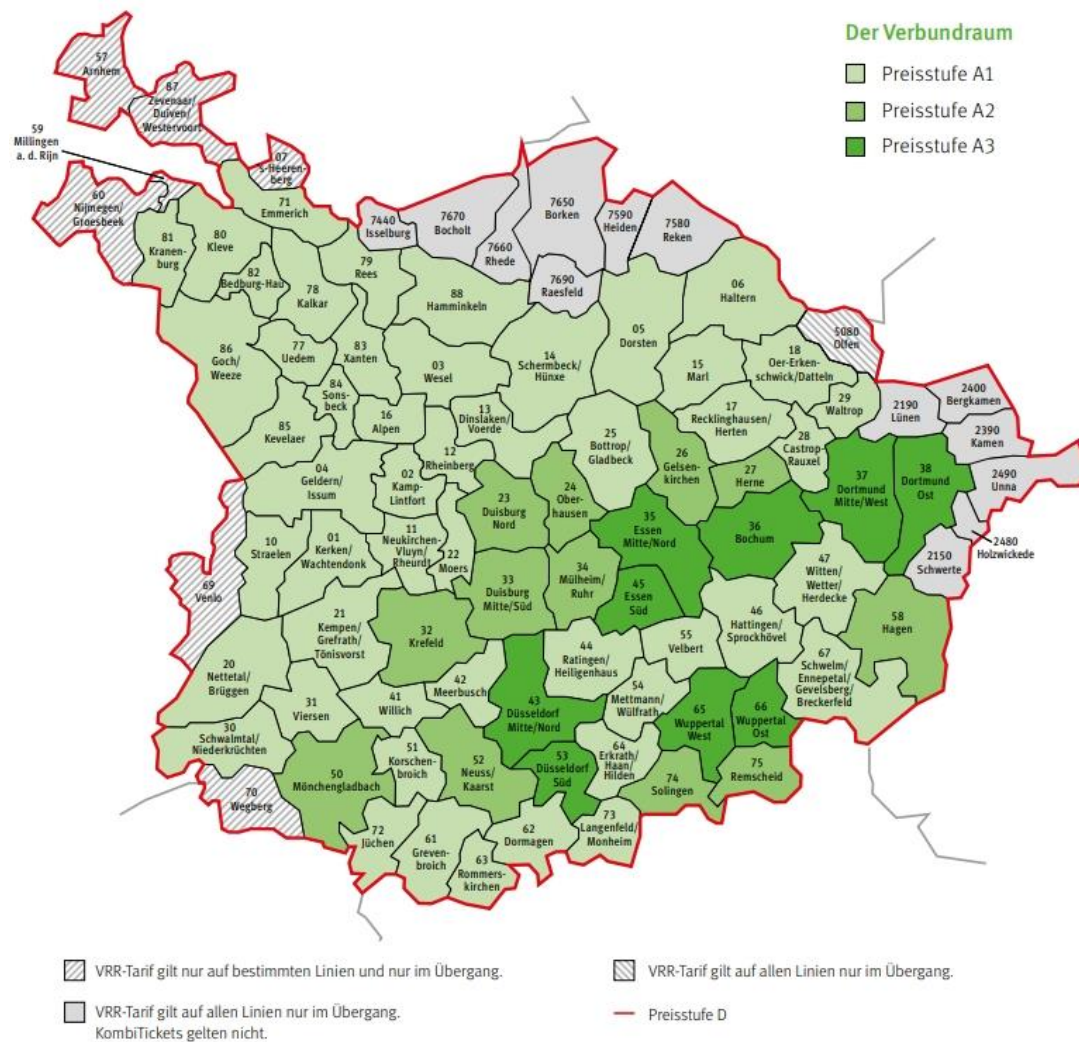
3.4 Delivering this type of functionality will be challenging solely within the current point-to-point structure which exists across the network. As the economy and the transport network of the North of England evolves over time, there may be a case to migrate toward a different structure, better-equipped to cater for more frequent longer-distance travel patterns.

3.5 The design of such a structure will need dedicated and careful study to assess the financial and economic impact, as well as gain an understanding of how the transition could be managed, and any impact to important local products defined by the existing zonal structures. The outcomes of these studies will determine if, when and how such a migration could take place. However, there are examples of such structures elsewhere, in geographies which feature many similarities to the North of England from which lessons can be learned. Some examples of these are considered below.

Ruhr polycentric urban area

3.6 Cellular zone systems are more common in areas where there are multiple "centres" within a largely urban conurbation without one dominant location. A good example is the Ruhr in Germany, which covers a number of cities and intervening suburban and more rural areas. The zonal map is shown in Figure 3-1 below.

Figure 3-1: Ruhr fare zones



3.7 The area contains many individual zones, but the fare structure is divided into four tariff levels with one having sub groupings as follows:

- Price level A is for journeys within one zone. This is split into three bands dependent on the population density of the zone.
- Price level B is for journeys between neighbouring zones.
- Price level C is for journeys within one of 19 defined regions within the overall area each of which contains around 10 zones in a semi-local group.
- Price level D covers the whole region.

3.8 This system allows a simple pricing structure to be applied across a multi-centred area with a reasonable association with distance travelled.

The Netherlands

3.9 In 1980, a cellular zonal structure was designed for the Netherlands to permit the introduction of a national ticketing system known as Strippenkaart. Strip tickets were produced, priced by the number of segments provided on each ticket (longer tickets were cheaper per segment) and the pricing principle was that for a trip using n zones you used $n+1$ segments from the strip. Validity was time limited (depending on the number of segments used) with unlimited interchange within that time.

- 3.10 The zones were quite large (typically around 5km across) with consequentially quite large steps in price as increasing numbers of zones were used.
- 3.11 As cities expanded over time, certain suburbs fell outside of their adjacent city zones, meaning public transport was substantially more expensive than travel within the original city zonal limits. This resulted in many complaints and a lot of car movements to public transport stops just within the main city zone. In some respects, this mirrors some behaviours in the North of England noted in Chapter 2.
- 3.12 Around 2000, the card strip tickets were replaced with a smartcard-based system, which migrated to a distance-based tariff as opposed to cellular zones.
- 3.13 In detail, there is an entry fare, set nationally and to which is then added a value calculated at a kilometre rate depending on where the user touches off. If an interchange is made within a set time, a second entry fare is not charged. The kilometre rate varies across the country depending on local policy (i.e. the amount of subsidy the local area wishes to add) and is also generally more expensive on the train.

Migration to a fully smart-capable system

- 3.14 The types of fares structures described above may be effective for catering for the type of travel patterns which may be expected to occur in a transformed Northern economy.
- 3.15 Any pan-Northern structure will inevitably add complexity to the overall system presented to passengers. Using traditional retailing methods, this additional complexity could make the system more challenging to navigate for passengers and place more emphasis on the need for accessible and concise information.
- 3.16 However, the TfN Integrated Smart Ticketing (IST) programme will provide a framework through which these challenges could be overcome. A parallel expansion of the reach of the account-based solution (Phase 3) would enable TfN to create a complex fares structure with a better-tailored product suite, which sits behind a user-friendly and intuitive passenger interface.
- 3.17 Phase 3 of IST will deliver such functionality to rail passengers within some of the North's urban areas, and in principle the solution should be scalable to cover a broader geography, either directly or as a delivery partner for the North in the event of any national programme being brought forward by Government. Doing so may also deliver efficiencies for TfN, driven by the migration to a single pan-Northern structure from the status quo of multiple distinct zonal systems.
- 3.18 If TfN were to achieve this fully-smart future state, it would have the potential to address many more the issues identified in Chapter 2, including:
- Delivering a consistent set of products and price caps across the region;
 - A consistent pricing approach, removing existing anomalies;
 - The ability to personalise discounts to an individual passenger's circumstances; and
 - Providing greater confidence to passengers that they will always be charged the best fare for their travel requirements.
- 3.19 Alongside this smart-capable future state, it is likely that a residual market will exist for traditional, non-smart, retail. Although it is unlikely that all the benefits of a smart system will be able to be offered to this market (such as usage-based capping), an appropriate suite of

products will likely need to be retained to ensure that the system remains inclusive to all sections of society.

Targeted initiatives

- 3.20 Delivering the future state described in this Chapter will require a long-term programme of development and delivery. However, in the shorter term there are a series of targeted initiatives which could be progressed, both to address the existing challenges and provide progress toward the longer-term end state.
- 3.21 TfN officers produced a long-list of initiatives which were compared by the application of an assessment framework. The framework considered, in qualitative terms, the impact of each proposed initiative against a series of criteria structured around the five dimensions of the Treasury Green Book business case. The initiatives listed below performed strongest against these criteria and through subsequent moderation with the TfN Officer Reference Group and Development Group.

Introduce daily and off-peak daily products within zonal systems

What would this deliver for passengers?

- Enables multiple journeys within a zonal area for a fixed price;
- Supports the introduction of IST Phase 3

- 3.22 The creation of rail-only daily zonal products would deliver a flexible travel entitlement for those making multiple journeys within a zonal region – most likely to be business or leisure travellers. Some such products already exist (such as the Merseyrail Daysaver), so this initiative would deliver a more consistent urban travel product across the North, with the potential (if deemed desirable) to align terminology and marketing.
- 3.23 As the zonal products would essentially cap the price of travel within a day, it aligns well with the aspirations of Phase 3 of the IST programme.

Consistent approach to combining long-distance and zonal products

What would this look like?

- Products which offer a longer-distance journey (i.e. Middlesbrough to Leeds) combined with a zonal product (West Yorkshire zones 1-6)

What would this deliver for passengers?

- Supports mobility across zonal fare regions for passengers travelling from further afield;
- Reduces complexity by combining products

- 3.24 This could be introduced on all flows in the North but would require additional products to be created - which would create greater complexity. As such, the timing of any implementation would need to be carefully considered.
- 3.25 In particular, those long-distance flows which have an Open Return (validity greater than one day, typically one month) but no Day Return. To combine this with a daily ranger ticket within the specified zone would require the introduction of an equivalent Day Return product for the point-to-point flow, thus increasing the number of tickets available.

3.26 On those which have a Day Return, a combined product could be created as the combination of the origin station to the zonal boundary, plus the zonal product. In the case of Preston-TfGM Zones, this would give the following price points (Off-Peak):

Table 3.1: Example Pricing for Preston-Manchester Zones

	Boundary Station	Preston-Boundary Fare	TfGM Off Peak Ranger Fare	Combined	Preston-Manchester Fare	Incremental cost of TfGM travel
Preston-Manchester	Blackrod	£7.90	£6.80	£14.70	£12.70	£2.00

3.27 This could be introduced as a “Smart only” product in the form a price cap on the daily cost of travel.

More consistent peak restrictions

What would this look like?

- Peak services defined in terms of their departure time. Peak restrictions will apply to any departure from a zonal station between set times (say 07:00 to 09:30 and 16:30 to 19:00), and any arrivals into city centre/principal stations from outside the zonal areas prior to (say) 09:30.

What would this deliver for passengers?

- Clarity over the validity of off-peak products, via:
 - Addressing inconsistencies between product restrictions
 - Addressing some ‘unrestricted’ off-peak products
 - Removing remaining restrictions defined to passengers in terms of their arrival time;
 - Harmonising restrictions on all flows wholly within a zonal area
 - Addressing some ‘mis-matched’ outward and return restrictions

3.28 The Franchise Agreements for Northern and TPE define each “peak” as 3-hour periods during the AM and PM, which are defined but are within the powers of the Secretary of State to change. As such, this could be implemented outside of a formal Change process, assuming it could be kept within the Qualifying Change materiality threshold.

3.29 The design of this initiative will require detailed discussion with other TOCs and transport operators utilising peak and off-peak pricing – to avoid cross-modal and cross-operator differences in product validity.

Targeted simplification of routeing restrictions

What would this look like?

- Restrictions which seem to serve no practical purpose are removed. Those with a clear value (i.e. offering a markedly slower journey for a lower cost) are retained.

What would this deliver for passengers?

- Simplifies ticket choices and reduces loop-holes

- 3.30 As demonstrated in previous Chapters and in the ARUP Fares Simplification report, many flows have various route codes with little difference between them, which offer the customer no real differentiation in offer but add confusion as to which ticket to purchase for their journey. Leeds-Sheffield provides a good example for this – LNER price the Any Permitted route for this flow, with Northern pricing the “not via Doncaster” route. The route via Doncaster does not typically appear in journey planners for this route, and therefore most passengers will use the latter. This is priced at £13.80, compared to £18.10 for Any Permitted (both Anytime Day Return). The Any Permitted route could be removed with little impact on the passenger.
- 3.31 To scale this across the North, routes could be removed through analysis of annual revenue on each, with those in the lowest band of revenue impact removed first. This would allow the process to be tested with minimal impact on passengers, and gradually rolled out across the network.

Make ‘flexi-season’ products available in a consistent manner

What would this deliver for passengers?

- Supports those who work flexibly or part time.

- 3.32 Delivering this initiative requires greater consistency in relationship between anytime, off peak and 7-day pricing. It should therefore follow the introduction of other initiatives above. It could then be used to capacity-manage if done using Account-Based Ticketing by either:
- Charging incrementally per journey up to a weekly cap, or
 - Charging the default weekly price, then incentivise off peak or specific-train travel by offering discounts, which would then be provided back to the account for future purchases.

Single-leg pricing

What would this look like?

- Appropriate single fare determined for each Northern & TPE specified fare. Anytime and Off-Peak differential retained, as are Advance fares.

What would this deliver for passengers?

- Simplifies the overall ticket offer;
- Removes inconsistencies between Single and Return ratios;
- Enables passengers to pay the right/best fare for each trip

- 3.33 Single Leg Pricing (SLP) sees single fares priced such that the combination of two single fares is equal to or less than the existing equivalent return fare. There are three options for achieving this, with varying timescales and impacts on the public purse, and are dependent on the existing relationship between singles and returns and the ability of TfN/DfT to flex these fares.
- 3.34 Examples of existing price points¹⁶ for Anytime fares are shown in Table 3.2 below:

¹⁶ As shown in Rail Fares Simplification, February 2017, Arup

Table 3.2: Anytime ratios for example flows

	ADS	ADR	Ratio ADR:ADS
Adlington-Manchester	6.10	11.00	1.8
Steeton-Leeds	5.60	9.20	1.6
Cononley-Leeds	8.10	9.70	1.2
Leyland-Preston	4.40	4.50	1.0

3.35 The three options available for instituting this change are described below.

Option One: Hold single fares, increase Anytime (Day) Return

3.36 This would see Anytime (Day) Returns increased in line with the regulatory limit, with single fares held in nominal terms, until such time as the required ratio is achieved. Below demonstrates the timescales for achieving this for the four flows shown in Table 3.2¹⁷.

Table 3.3: Timescales for delivering SLP on example flows

	Ratio ADR:ADS	Years Required
Adlington-Manchester	1.8	3
Steeton-Leeds	1.6	6
Cononley-Leeds	1.2	14
Leyland-Preston	1.0	18

3.37 Excluding any impacts from changing travel patterns and crowding, this option is likely to have the lowest impact on VfM; however, the timescales involved are unlikely to be satisfactory. Exercising an option to reintroduce regulatory fares flex, in particular if aligned with other passenger-facing improvements, would expedite the introduction of SLP on these flows.

Option Two: Reduce single fares

3.38 This would have the same end result as the option above, but over a quicker timescale. This would put greater revenue at risk in the period that the ADS would be priced lower than in the option above. However, this risk is expected to be small given the majority of travel is for return trips for which the net revenue impact would be zero.

Option Three: Introduce Evening Peak single

3.39 This would require the inclusion of an additional price point, which would act as the net of the Anytime Single and the Anytime (Day) Return. To ensure that peak travel is not perversely incentivised, this price point would need to be greater than the Off-Peak Single. The two examples at the extremes in Table 3.2 are shown below:

¹⁷ Assumes RPI = 3% for each year, 1% flex from January 2021

Table 3.4: Example Evening Peak Single Fares

		Anytime Day Single	Anytime Day Return	Cheap Day Return	Evening Peak Single	Off Peak Single
Adlington - Manchester	Current Fares	7.90	11.90	8.90		
	Proposed	6.90	11.90	8.90	5.00	4.45
Leyland - Preston	Current Fares	4.60	4.90	4.10		4.00
	Proposed	2.80	4.90	4.10	2.10	2.05

3.40 Any perceived complexity in the addition of a new price point would be alleviated by the nature of the new offer; that the passenger can turn up at the station and pay the fare for the next departure, rather than purchasing a fare in advance of travel.

3.41 Currently there is no Off-Peak Single fare for Adlington-Manchester, which would be required to achieve single leg pricing. The introduction of an Evening Peak Single, in combination with the Anytime Day Single, would provide travel during both Peak periods for the same price as an Anytime Day Return, and would then allow a single in each peak to be combined with an Off-Peak Single to offer new return price points. This is set out in Figure 3-2 below:

Figure 3-2: Price of Return travel under proposed SLP for Adlington-Manchester



3.42 The development of a single-leg pricing initiative would require careful consideration of the financial, commercial and deliverability impacts. In particular, this should consider the management of transition from the current state to the desired end state (which as described above could take a number of years) and associated costs. It may be beneficial to implement a small-scale trial period of such an initiative, in order to have greater certainty of the impact on demand and revenue, upon which further development could be based.

Resolve step-changes along lines of route

What would this deliver for passengers?

- Improved perception of ‘fairness’ for passengers travelling into the PTE/former PTE areas from outside of their respective boundaries.

3.43 The Northern Franchise agreement includes the introduction of a ‘Harmonisation Initiative’ for which Northern will use its ability to flex fares to insofar as possible see fares:

“...priced on a consistent basis by the application of a pence per mile pricing policy”

3.44 This also includes the introduction of Off-Peak Day Returns on all flows priced at a maximum of 85% of the equivalent Anytime Return.

3.45 This should support the resolution of step-changes, as most of the short-distance flows crossing the PTE/former PTE boundaries are likely to be priced by Northern as the lead operator on these flows. Anytime Day Returns on the boundaries are likely to be regulated, and therefore to introduce these changes in appropriate timescales would require the reintroduction of fares flex. This could be combined with the introduction/reduction of the Off-Peak Single on the same flows as a means of negating any perceived loss of value to the passenger.

4 How - Change Mechanisms and Next Steps

4.1 In this Chapter, we set out the mechanisms for delivering the targeted initiatives set out in Chapter 3, and provide an understanding of potential timescale for delivery. Finally, we set out the next steps for TfN to consider when developing this Delivery Plan.

Change Mechanisms

4.2 TfN is the first Sub-national Transport Body and it has the following functions:

- a. The preparation of a Northern Transport Strategy;
- b. The provision of advice on the North's priorities, as a Statutory Partner in the Department's investment processes;
- c. The coordination of regional transport activities, (such as smart ticketing),
- d. With the DfT, the co-management of the TransPennine Express and Northern rail franchises. This is done through the Rail North Partnership.

4.3 The Northern and TransPennine Express franchises set the fares for the majority of flows in the North, and would therefore be most significantly affected by the initiatives described in Chapter 3. Under its Partnership Agreement with the Secretary of State, TfN holds certain rights which may enable it to implement changes to the fares system within these franchises.

4.4 The principal change mechanism available to TfN is the future franchising process¹⁸. Under the current franchise model, where the franchisee bears revenue risk, any change to fares and the regulation underpinning them has the potential to alter the risk profile borne by both the franchising authority and the operating company (TOC). It is vital that the impact of any change is understood in detail in order for both parties to manage and mitigate the impact, and for any change to the subsidy/premium profile to be accurately forecast.

4.5 As an outcome of its Easier Fares initiative, Rail Delivery Group (RDG) is proposing a two-stage approach to reform fares:

- Stage 1; Industry and government work together to reform the way that fares are worked out. RDG proposes that the Ticketing and Settlement Agreement (TSA) is replaced with a new set of system regulations.
- Stage 2: With these new system regulations in place commercial changes will then need to be agreed with operators, reflected in new pricing regulations written in to their government contracts.

¹⁸The arrangements for future franchises are yet to be determined. Moreover, an on-going industry review (the Williams Review) is looking at the future of franchises and should the Government act on its recommendations, this may lead to new arrangements in the future.

- 4.6 Should the RDG approach be taken forward, this Delivery Plan will support TfN to engage and secure either facilitatory or actual changes to the approach to fares and ticketing in the North of England.

The Devolution Opportunity

- 4.7 Initiatives with a greater potential impact on risk may be more suitable to be delivered as part of future franchises, with the specific requirements on the TOC included as part of the procurement specification. This multi-party environment would provide greater negotiation leverage than single-party negotiation undertaken mid-franchise.
- 4.8 It is important to note that some of the initiatives described in Chapter 3 would likely affect other franchises providing services within the TfN area. When developing the initiatives further, these impacts should be clearly identified and examined. Depending on the scale of the impact, negotiation with the relevant franchising authority – the DfT, Transport for Wales (TfW), Transport Scotland, Merseytravel, and/or the DfT/West Midlands Rail Executive partnership – may be required in order to enact change.
- 4.9 Some initiatives, which are a departure from established practice, may benefit from trial periods to provide greater certainty on their impacts before seeking to specify and implement a formal change or inclusion in a franchise specification. Due to the uncertainty of the impact of any such trial alternatively, bidders could be required to conduct such a trial, with an agreed process for examination of results and wider implementation.
- 4.10 Similarly, any change which is likely to impact upon the design or price of a multi-modal product would require agreement through negotiation with transport authority, light rail and/or commercial bus operators party to the underpinning commercial agreement.

Timescales

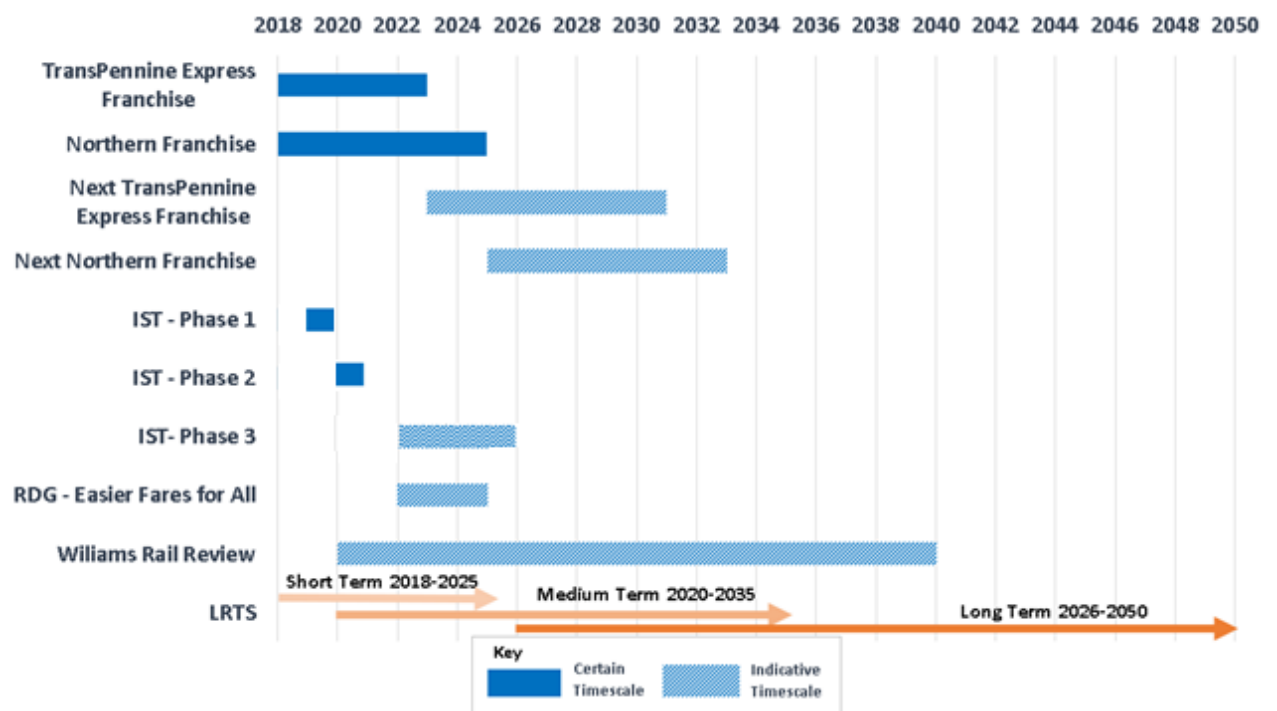
- 4.11 To deliver the initiatives described in this Delivery Plan, TfN will work alongside RDG, its Partners and the wider industry. All the initiatives will require some degree of “change” – whether it be to the commercial arrangements underpinning individual franchises, or wider regulatory frameworks. Whilst it is feasible that changes could be negotiated by TfN at any time, there are pre-existing mechanisms which could provide TfN with the opportunity to secure changes alongside its broader requirements.
- 4.12 Figure 4-1 illustrates the indicative timing of these opportunities, which include franchise procurement periods, the TfN IST delivery timescale, the Williams Review, and any timescales set out in the RDG Easier Fares for All publication. The short, medium- and long-term delivery horizons described in the draft TfN Long Term Rail Strategy are illustrated for comparison.
- 4.13 Of greatest certainty are the procurement periods for the TransPennine Express and Northern franchises, over which TfN has direct influence. The TransPennine Express franchise is programmed to expire at the end of March 2023, whereas the Northern franchise expires at the end of March 2025.
- 4.14 In parallel, the Rail Delivery Group (RDG) has put forward a number of rail fare reforms and recommendations to:
- a. Engage Industry and Government to work closely together on replacing the outdated Ticketing & Settlement Agreement (TSA) with a new set of system regulations and

- b. Bring about commercial changes, as a result of the new system of regulations, that would need to be agreed with operators aiming to change pricing regulations written in to Government contracts.

These reforms are expected to be implemented in the next 3 to 5 years (2022 to 2025).

- 4.15 The Williams Rail Review, currently being undertaken, aims to restructure the whole rail industry and the way passenger rail services are delivered. The review will be published in Autumn 2019 and will make recommendations for reform that prioritise passengers’ and taxpayers’ interests. Although the implementation period of any proposed reforms is not yet known, an indicative timescale beginning in 2020 has been shown here.
- 4.16 As described in Chapter 2, Phase 3 of the TfN Integrated Smart Ticketing (IST) programme, including the provision of the account-based functionality, is expected to commence in 2020.
- 4.17 To enable TfN to realise the opportunities afforded by periods of industry change, a programme of development, to further define and analyse each initiative and develop the necessary business cases and implementation strategies, should commence immediately. The targeted initiatives set out in this Delivery Plan could be developed with a view to implementation alongside the Easier Fares for All reforms and/or the next round of Northern and TransPennine Express franchise procurement – within the Short-Term time-period defined by the draft LTRS. The potential migration toward a single North of England fares structure will necessarily require longer-term development but could be achievable within the draft LTRS Medium Term time-period.

Figure 4-1: Indicative delivery timescales



Developing the initiatives

- 4.18 Translating this Long Term Fares & Ticketing Delivery Plan into a series of fully designed and evidenced initiatives will require a programme of further development prior to and following the next round of franchising and should be cognisant of the RDG work into fares reform.

- 4.19 It is intended that this programme will be set out in detail in a Delivery Plan – which will set out the tasks, timescales and resources required to develop these initiatives. The Delivery Plan will feed into the TfN annual business plan, where close alignment with both TfN’s franchise management and IST activities will be key.
- 4.20 The Delivery Plan will be produced and owned by TfN Strategic Rail, with review and approval from the Officer Reference Group and endorsement by the TfN Board.
- 4.21 In some cases, progressing the initiatives will require the development of individual Strategic Outline Business Cases (SOBCs).
- 4.22 The SOBC should set out to:
- Refine and strengthen the case for change (the “Strategic Dimension”), building on the evidence presented in Chapter 2 of this Delivery Plan and reflecting the views of key stakeholders, which could include other franchising authorities;
 - Define the initiatives in more detail, including the specifications of products and price-points, and the anticipated impact of smart-technology. This should include a number of alternative options for realising the intended benefits;
 - Proportionally analyse the economic and financial impact of each option, through the development of a suitable modelling suite;
 - Consider the commercial impact upon the franchising authorities – including any impact on authorities such as Merseytravel, Transport for Wales, Transport Scotland and the West Midlands Rail Executive, TOCs and other transport operators; and
 - Consider how the transition from the status quo would be managed, including processes, regulation, requirements for consultation, timescales, stakeholder management and resource requirements.
- 4.23 Whilst the SOBC does not necessarily have to identify a single preferred option (although it may do), it will need to demonstrate that there will be a clear benefit for rail users, that the cost and demand impacts have been considered – including those likely to arise from any measures undertaken during the transition phase. It will also need to set out intended progress toward producing an Outline Business Case (OBC) and associated costs.

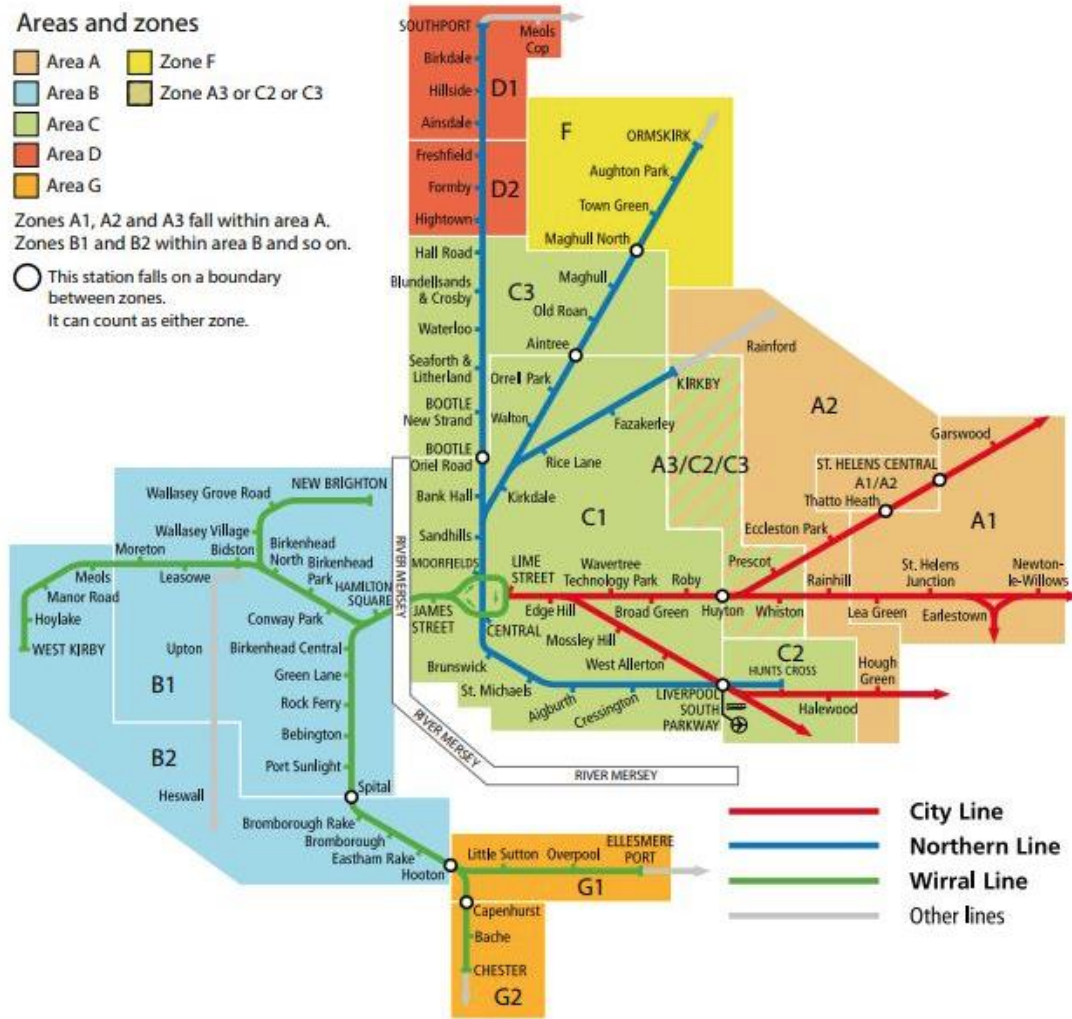
Reviewing the Delivery Plan

- 4.24 The rail network in the North of England is undergoing significant change. This change will not occur in isolation. In parallel, changes to other transport networks, further devolution at local and regional level, and emerging technological and societal change will influence the issues described in this Delivery Plan – and has the potential to create new ones.
- 4.25 It is important that the TfN Long Term Fares & Ticketing Delivery Plan is periodically reviewed and updated to reflect the impact of these changes. This will ensure that policy, and the practical initiatives that stem from it, continue to fit for purpose in the long term.
- 4.26 In particular, it is possible that significant change to rail fares policy will emerge from the on-going review being undertaken by the RDG. TfN will look to work alongside the RDG in the planning and delivery of change, to ensure that whatever measures the industry takes at national level are aligned and contribute to the Vision described in this Delivery Plan.

Appendices

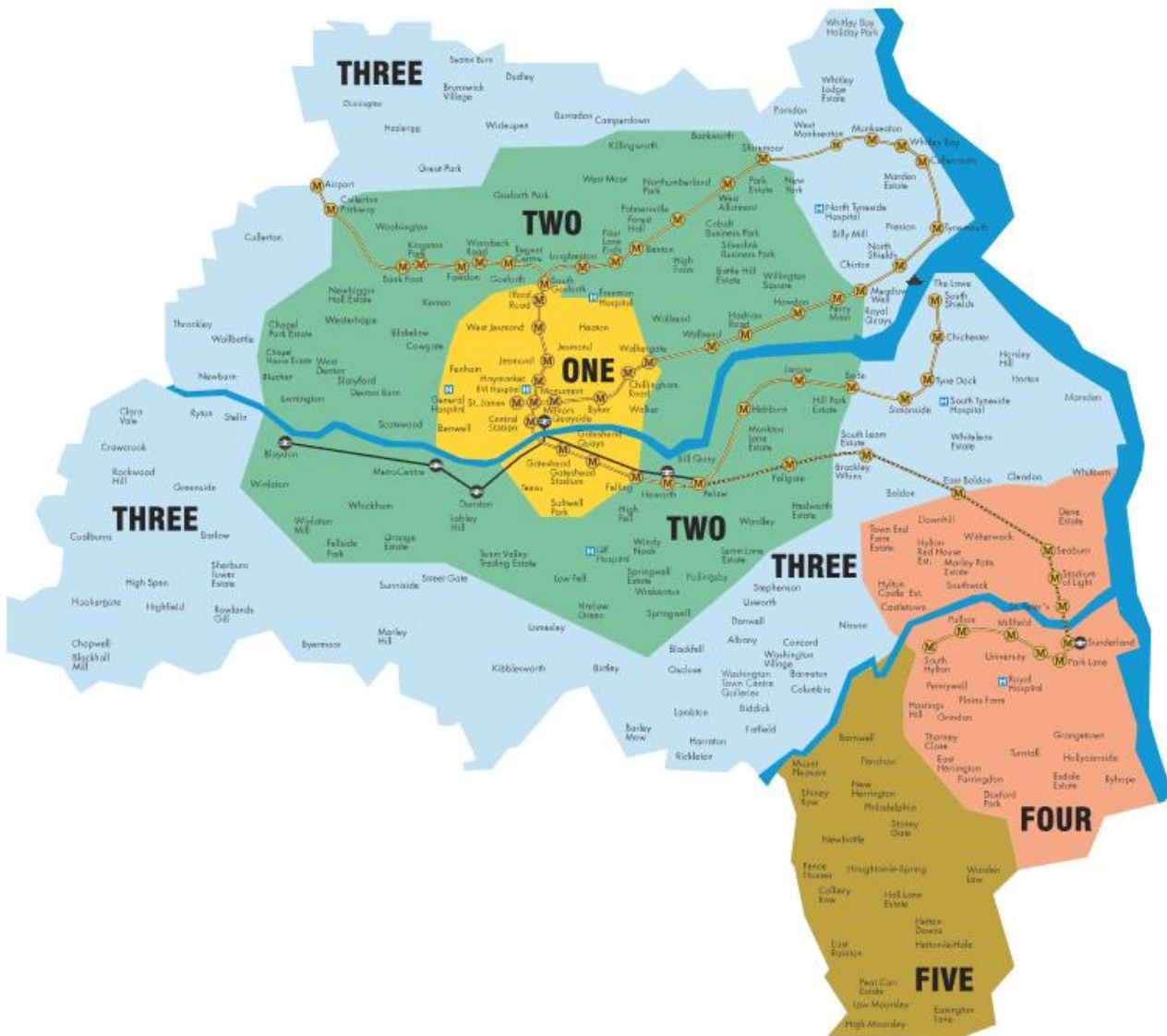
A Fare Zone Maps

Figure A.1: Merseytravel Railpass Fare Zone Map



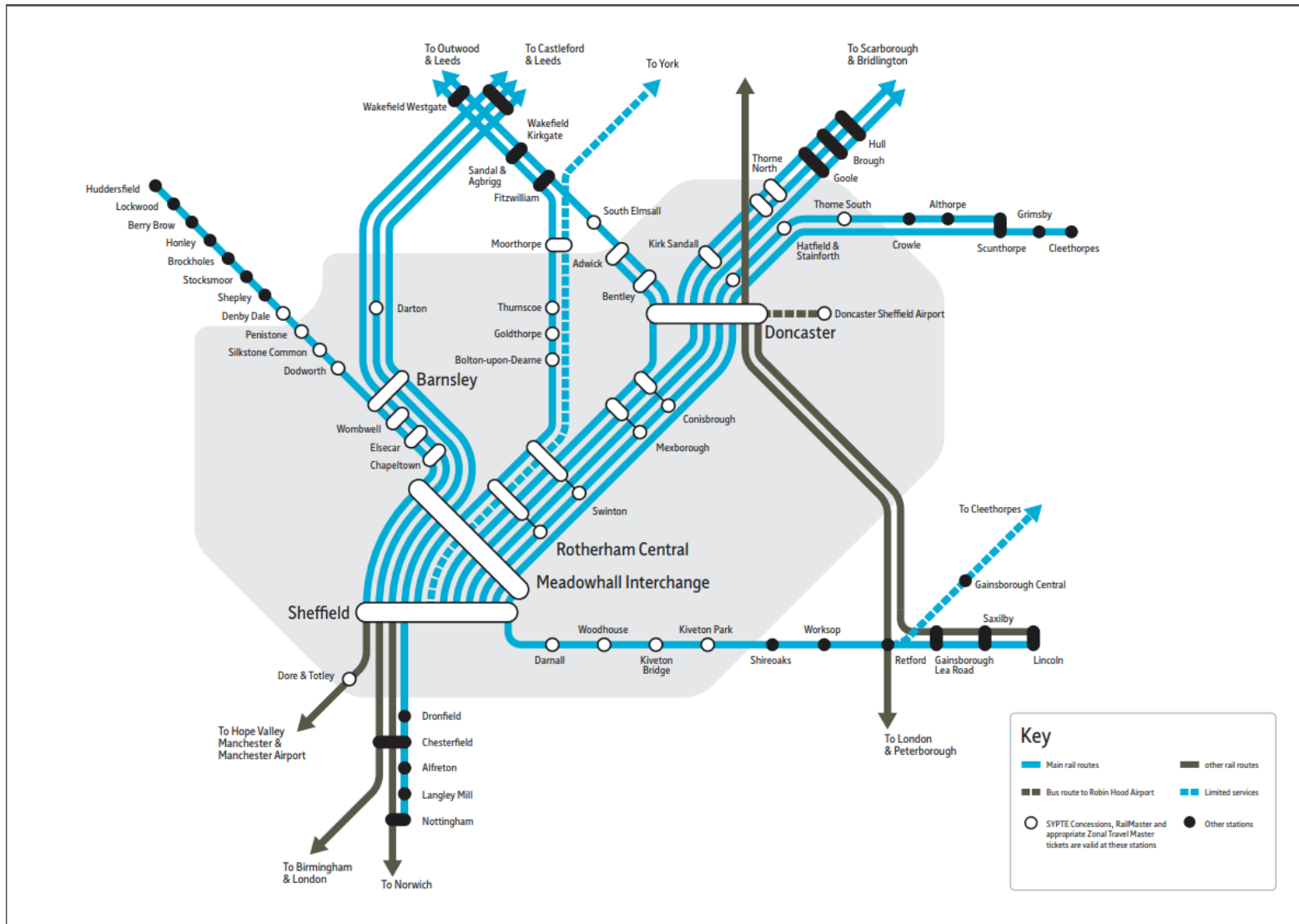
Source: Merseytravel's Tickets for Adults (aged 19+), February 2019

Figure A.2: Tyne & Wear Network One Zone Map



Source: networkonetickets.co.uk

Figure A.3: South Yorkshire RailMaster Map



Source: Travel South Yorkshire website

Figure A.4: West Yorkshire Fare Zone Map for Rail

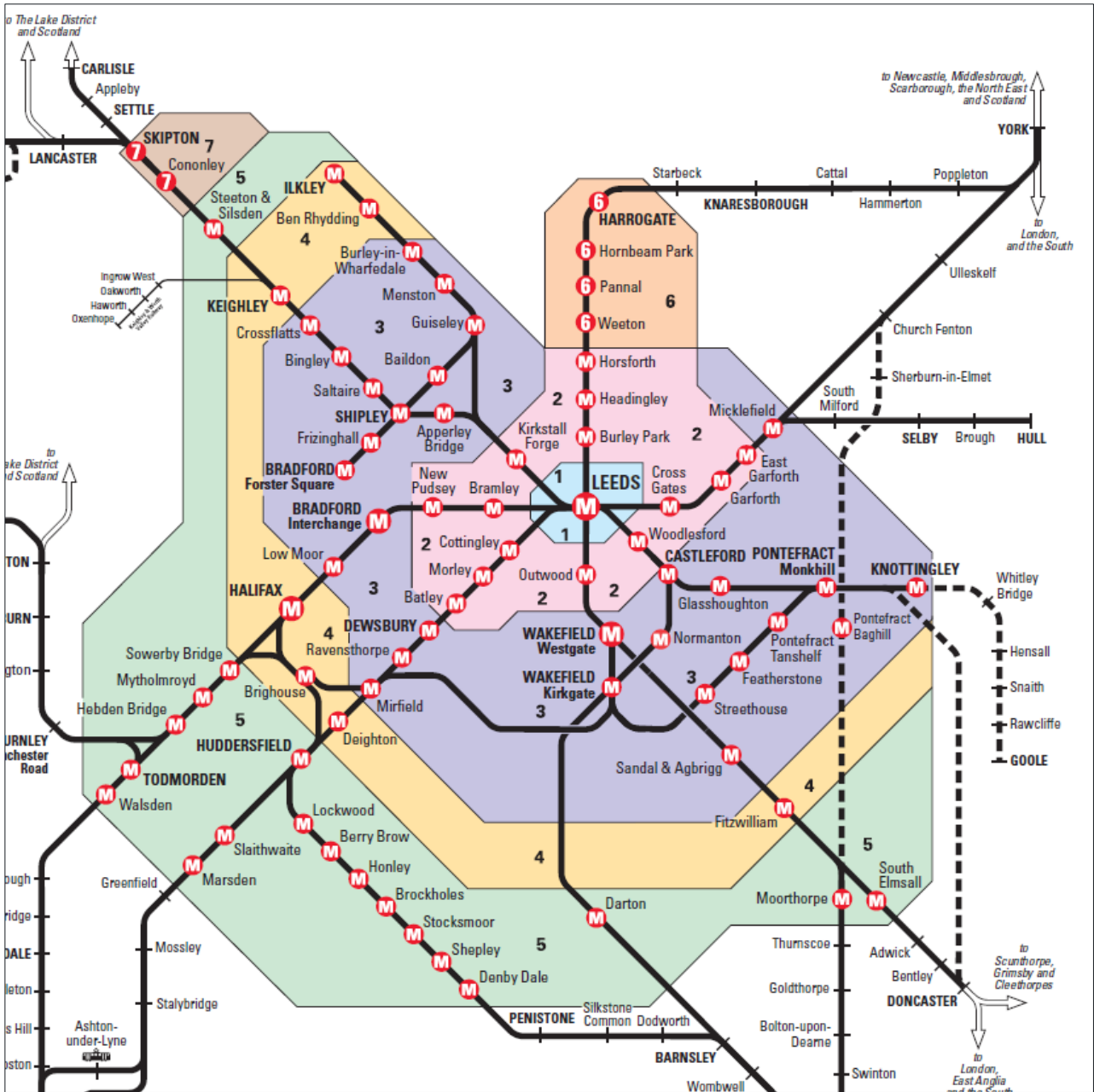
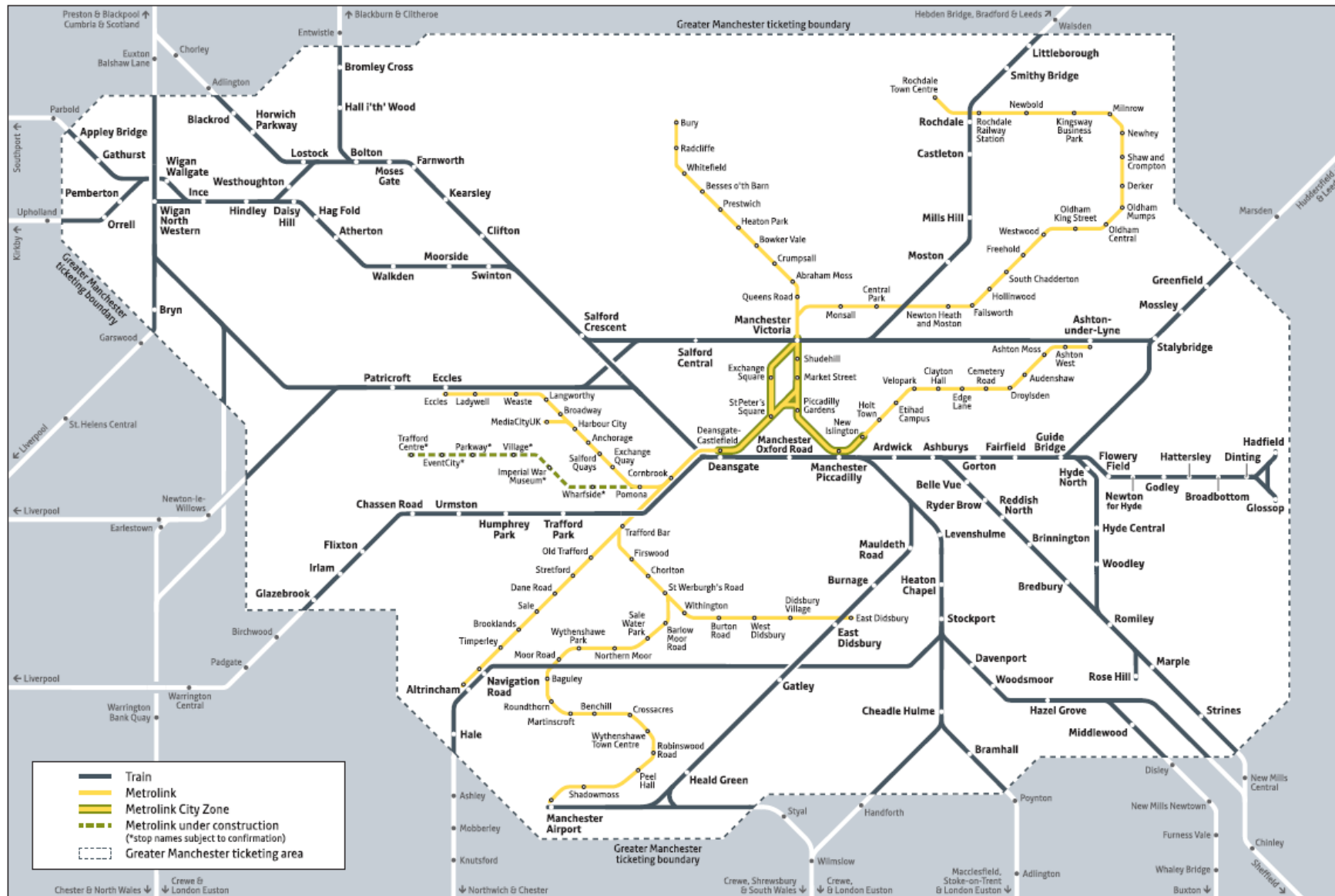


Figure A.5: Greater Manchester Single Zone Map: Rail & Metrolink



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