

CHAPTER 1 : THE TEES VALLEY CONTEXT

Overview

- 1 This chapter places the Local Transport Plans of the five Tees Valley Unitary Authorities in the wider context of the sub-region, the region and indeed the national picture. It draws upon demographic and socio-economic trends, key policy influences, drivers of change and wider Government agendas (such as health, education, housing and employment) to indicate how we want the Tees Valley to change, concentrating on those issues of a more regional and sub-regional nature. The chapter identifies the critical issues facing the Tees Valley as a result of these influences and describes what outcomes we will seek to achieve to address these issues. In particular, our future transport investment will need to address improved accessibility to services such as employment, health and education if we are to best serve the existing population and those that will live in, work in, and visit the Tees Valley in the coming years.
- 2 These national policy drivers must be considered alongside the imperative for the Tees Valley of **regeneration**. Recent Government guidance has stressed the strong connection between transport investment and productivity benefits. This has been highlighted in high profile speeches and presentations made recently by a variety of Government Ministers. This is driven by a need to enhance the links between businesses and, equally importantly, between businesses and their markets and their workforces. Reducing the barriers to travel in these respects will significantly contribute to the competitiveness of the sub-region.
- 3 The sub-region is lagging behind the national average in terms of the key “Quality of Life” indicators that underpin the Shared Priorities for Public Services and, therefore, regeneration of the Tees Valley is of paramount importance. In recent years, most of the country has experienced a cycle of: **economic growth** leading to **more private vehicle trips** which produce **congestion** and thus the need for a twin track approach of **demand management** and **improved public transport**.
- 4 The challenge for the Tees Valley as it commences its regeneration cycle is to avoid or minimise the increase in private vehicle trips. We do not wish to see economic growth slowed or strangled by congestion. We wish to

improve public transport at the start of the recovery to engender a virtuous cycle in which it is able to accommodate the anticipated increased demand to travel.

Demographic and Socio-Economic Influences

Population

- 5 The population of the Tees Valley, comprising the Unitary Authorities of Darlington, Hartlepool, Middlesbrough, Redcar & Cleveland and Stockton-on-Tees, is currently just over 650,000. This figure increases to 875,000 when the full City Region hinterland is included, covering the parts of County Durham and North Yorkshire that look to the Tees Valley for employment and provision of other key services. Table 1.1 shows the recent population trends across the sub-region.

Table 1.1: Summary of Population Changes across the Tees Valley

Population	Darlington	Hartlepool	Middlesbro'	Redcar	Stockton	Tees Valley - Total
1991	99,400	91,100	144,700	145,900	175,200	656,300
2001	97,900	90,200	141,200	139,200	183,800	652,300
% change 1991–2001	- 1.5	- 1.0	- 2.4	-4.6	+ 4.9	- 0.6
2005 Estimate	99,200	89,800	137,900	137,800	186,700	651,400
% change 2001–2005	+ 1.3	- 0.4	- 2.3	- 1.0	+ 1.6	- 0.1

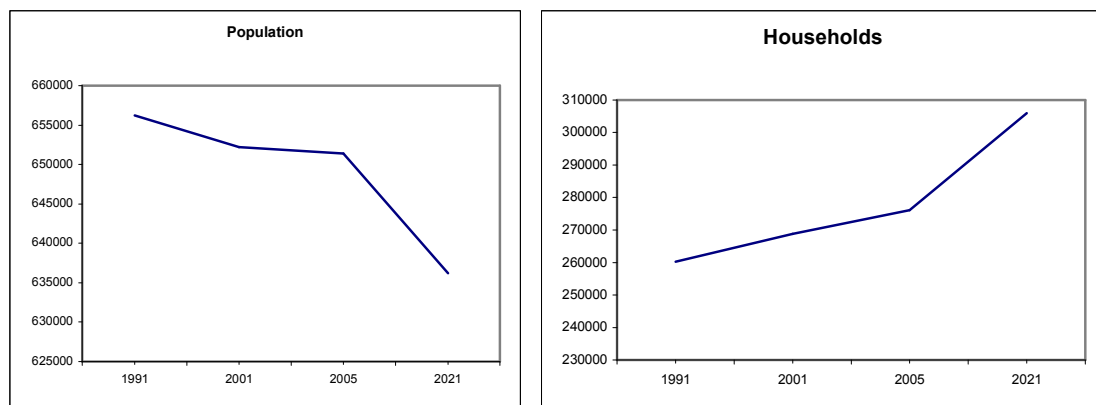
(Source :TVJSU/ONS)

- 6 Table 2.1 indicates that four of the five authorities saw a drop in population between 1991 and 2001, with only Stockton witnessing an increase. The overall Tees Valley impact was a small reduction. By 2005 the Tees Valley figure had stabilised somewhat although there was a further 0.1% reduction compared to 2001. Stockton again saw an increase in population, as did Darlington whilst the other three authorities witnessed further population decline.
- 7 Using current Tees Valley Joint Strategy Unit (TVJSU)/Office of National Statistics (ONS) projections, the population of the Tees Valley is forecast

to fall to 636,200 by 2021. This represents a 2.3% reduction over the period from 2005. The population figures for Stockton and Darlington are likely to remain static up to 2021, whilst Hartlepool, Middlesbrough and Redcar & Cleveland are forecast to witness reductions in the range 3% to 5%.

- 8 However at the same time the number of Households in the Tees Valley will increase from 276,100 in 2005 to 306,000 in 2021. Possible reasons for this include an increasing proportion of younger people setting up home, changes in the fabric of society leading to more single occupancy and an ageing population profile coupled with improved mortality rates.
- 9 Figure 1.1 shows the forecast trends in population and household numbers in the Tees Valley over the next 15 years.

Figure 1.1: Population and Household trends in the Tees Valley 2005 to 2021



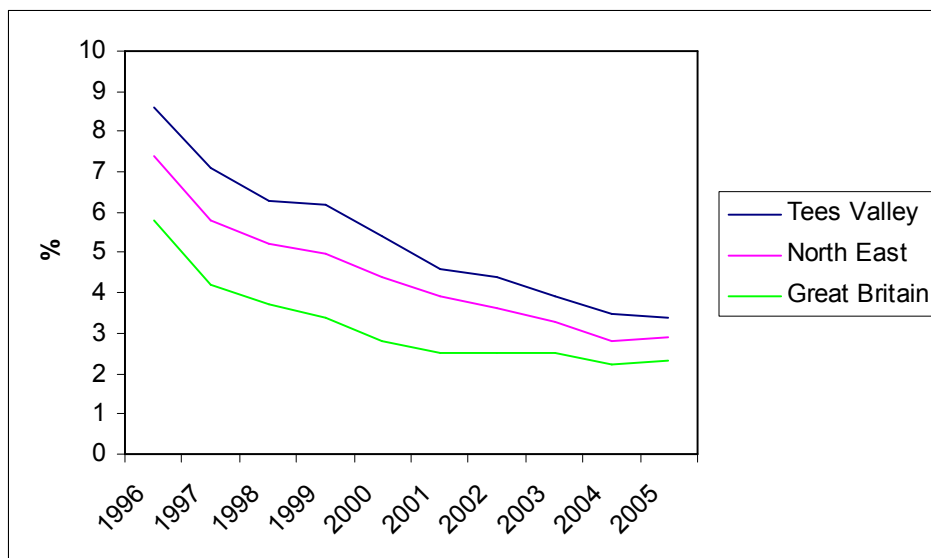
Gross Domestic Product

- 10 GDP per capita in the Tees Valley is only 85% of the national average (and there was a £29.3 billion gap in GDP between the South and North of England in 2002).
- 11 UK economic growth will continue to accentuate the GDP and employment growth gap between the best and worst performing regions in the country.

Employment

- 12 Unemployment in the Tees Valley is 50% higher than the national average. According to the most recent national Annual Population Survey figures, the employment rate (the proportion of resident population in employment) is 70.2%, compared to the national average of 74.4%. Although the overall unemployment rate for the sub-region has been on a steady downwards trend over the past decade, it is still 3.4%, relative to 2.9% across the North East of England and 2.3% nationally.
- 13 Figure 1.2 shows recent trends in unemployment and compares the Tees Valley with the rest of the North East and with the national picture.

Figure 1.2: Trends in Unemployment 1996 to 2005



- 14 There are also pockets of very high deprivation across the sub-region, with some of the highest ward-level unemployment rates within the Tees Valley including Stockton Town Centre (9.2%), Brambles Farm and North Ormesby, Middlesbrough (9.1%), Stranton, Hartlepool (8.2%), Grangetown, Redcar & Cleveland (7.9%) and Darlington Central (7.6%). Source: ONS/TVJSU, October 2005.
- 15 Without intervention, it is predicted that there will be a 0.2% per annum decline in employment, with total employment falling in all five of the Tees Valley Authorities by some 15,000. This figure was calculated by

- consultant, Experian, during the recent Tees Valley Metro-Phase 1 Study.
- 16 The number of people employed in 'hi-tech' industries is half the national average. The proportion of the workforce engaged in 'hi-tech' industries is forecast to decline by 2.1% over the next 10 years.
- 17 Historically, the Tees Valley, in particular its urban core, has been reliant on heavy manufacturing and engineering for a large proportion of its employment opportunities, economic wealth and prosperity. Chemicals, steel and shipbuilding are three of the key industries that contributed most, and helped give rise to a very dispersed pattern of development across the sub-region. There is no one dominant centre of commercial activity, as would be the case for a single large city of similar population. As a result the urban part of the Tees Valley is more polycentric in nature, supplemented also by numerous Rural Service Centres.
- 18 In terms of jobs provided, the heavy industries have declined massively since their heyday and this has necessitated the provision of alternative means of employment to bridge the gap. Given the specialist and site-specific nature of the industries described, many of the new opportunities have been provided in different locations, either within or closer to the present day centres of commercial activity and some distance away from the historic centres of employment. Regeneration of older industrial sites will seek to re-use previously developed land.

Travel to Work Patterns

- 19 Analysis of Census data has shown that across the Tees Valley as a whole, the daily inflow of trips between 1991 and 2001 increased by 27% from 24,550 to 31,074, and daily trip outflow increased by 46% from 19,390 to 28,336.
- 20 These figures show that there has been a large increase in 'external' daily work travel patterns to and, in particular from, the Tees Valley. These are trips to the Tees Valley from other non-Tees Valley areas or conversely trips from the Tees Valley to non-Tees Valley areas, likely to be a result of people being more willing/able to travel greater distances to access employment opportunities. The Tees Valley continues to offer employment opportunities to a growing number of people who live outside the Tees

Valley administrative area. Increasingly, more Tees Valley residents are now travelling daily to take up jobs in other parts of the North East, North Yorkshire and also noticeably other areas such as West Yorkshire. These patterns have been clearly identified in recent high profile research into commuting in the North East by the North East Regional Information Partnership (NERIP).

- 21 Table 1.2 shows the total numbers of travel to work trips made within the Tees Valley, as derived from the 2001 Census. The total number of travel to work trips made was 260,560. The table shows a high level of intra-Borough trip making, and a low level of inter-Borough trip making, which reflects the historical development of the local industry.

Table 1.2: Travel to Work Census Data - Total Trips

	Darlington	Hartlepool	Middlesbrough	Redcar & Cleveland	Stockton-on-Tees
Darlington	29,963	293	1,161	431	2,513
Hartlepool	346	24,170	1,316	528	3,107
Middlesbrough	801	808	29,115	5,615	8,514
Redcar & Cleveland	553	528	10,527	32,550	5,091
Stockton-on-Tees	2,482	2,777	9,861	3,504	49,342

- 22 The following trends are also clear from Table 1.2:

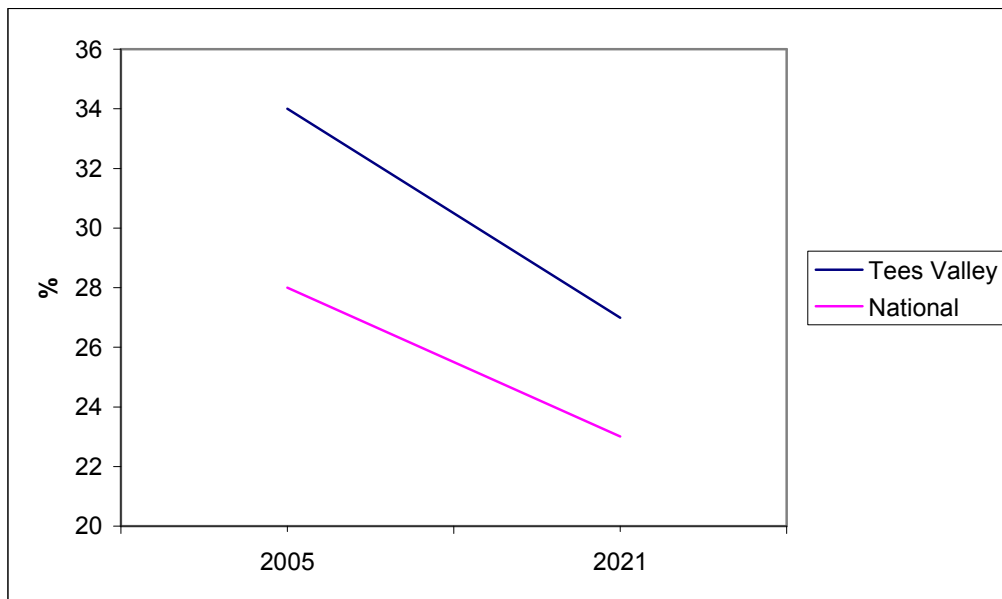
- Having the highest population, Stockton clearly attracts and generates significantly more work trips than any of the other Tees Valley Authorities. Whilst 72% of work trips to Stockton are made by Stockton residents, there are significant inflows from Middlesbrough and Redcar & Cleveland and to a lesser extent from Hartlepool and Darlington. The pattern of work trips from Stockton is similar with the majority retained within the borough but with a relatively large figure to Middlesbrough.
- Middlesbrough has the lowest percentage of self-contained Tees Valley trips and is clearly the most significant net 'importer'. There are very strong links with Stockton in both directions and with Redcar & Cleveland, particularly into Middlesbrough. Flows between Middlesbrough and North Yorkshire are greater than between Middlesbrough and Hartlepool or Darlington.

- Over three-quarters of Tees Valley work trips in Redcar & Cleveland are self-contained but the borough is highest net 'exporter'. There are very strong two-way links with Middlesbrough (particularly outbound) and Stockton, but a fairly low level of movements to/from Hartlepool and Darlington.
 - Darlington has the highest proportion of self-contained Tees Valley trips. There are relatively strong links to Stockton, but daily links to County Durham particularly and also North Yorkshire are of more significance for Darlington than links to any of the Tees Valley Authorities. There are reasonable flows to and from Middlesbrough but very low flows to or from Hartlepool and Redcar and Cleveland.
 - Hartlepool has a very high percentage of self-contained Tees Valley trips. There are strong links to Stockton, with County Durham next in terms of significance. There are also reasonable flows to and from Middlesbrough but relatively low flows to or from Darlington and Redcar & Cleveland.
- 23 Overall, there is a strong east – west axis of movement, principally between Stockton, Middlesbrough and Redcar & Cleveland. Darlington and Hartlepool have some links to Stockton, but more pronounced links to the neighbouring authorities of North Yorkshire and County Durham than to other Tees Valley Authorities.

Car Ownership

- 24 Car ownership in the Tees Valley is significantly lower than the national average at the present time. For example the DfT's TEMPRO database indicates that in 2005, 34% of households had no access to a car compared to 28% nationally. This gap is forecast to close significantly by 2021 when only 27% of Tees Valley households are likely to have no access to a car. This compares to a figure of 23 % nationally. Figure 1.3 provides a graphical representation of these trends. During this time, growth in the number of 2 and 3 car households in particular in the Tees Valley will be significantly higher than the national average as the sub-region recovers from a low base.

Figure 1.3: Households Without Access to a Car



Policy Influences

Transport White Paper

- 25 The Transport White Paper '**The Future of Transport – A Network for 2030**', was published in July 2004. The White Paper identifies the fact that good transport is essential for a successful economy and society because it allows access to jobs, services and schools and allows people to make the most of their free time. The links to wider objectives have become more recognised at a local, regional and national level, and there is encouragement for transport decisions to be made alongside those for housing and economic growth. This approach has been adopted by the Tees Valley Authorities in preparing their LTPs, where the key aim is to use transport to support overall regeneration initiatives and hence improve the Quality of Life within the sub-region.
- 26 The White Paper contains a number of key government commitments and recommendations:
- **Sustained investment** – an increase in transport spending from £10.4 billion in 2004/05 to £12.8 billion by 2007/08.

- **The need to improve transport management –**
 - a reorganisation of the rail industry to improve performance and reduce costs;
 - improved traffic management on the road network, with new capacity, tolling and High Occupancy Vehicle lanes where possible; and
 - encouragement to procure bus services through Quality Contracts.
 - **Planning ahead** – it is unfeasible to simply build our way out of transport problems.
- 27 Future transport investment in the Tees Valley will need to reflect these key commitments and recommendations, although the latter is probably the most important given the regeneration aspirations of the sub-region.
- 28 The Transport White Paper itself is supported by a series of documents that include more detail on what national policies mean for the Tees Valley. Key documents include the **Rail White Paper**, the **Aviation White Paper** and the **National Ports Strategy**, due for publication in 2006.
- 29 Local Government Shared Priorities**
- 30 In July 2002, the Government and Local Government Association agreed a set of seven **Shared Priorities** for the delivery of **Public Services**. These priorities are:
- Raising standards across schools;
 - Improving the quality of life of older people and of children, young people and families at risk;
 - Promoting healthier communities and narrowing health inequalities;
 - Creating safer and stronger communities;
 - Transforming the local environment;
 - Promoting the economic vitality of localities; and

- **Meeting local transport needs more effectively.**
- 31 As well as being a Shared Priority itself, transport will also play an important role in delivering the other Shared Priorities. Under the Transport Shared Priority, five elements have been agreed that are central to the development of our future transport strategy:
- delivering accessibility;
 - tackling congestion;
 - safer roads;
 - better air quality; and
 - other 'quality of life' issues.
- 32 Given the importance placed on these Shared Priorities by the Government, the future transport strategy for the Tees Valley has been framed around these to show how transport will help to deliver regeneration through the Shared Priorities.

Northern Way Growth Strategy

- 33 The Office of the Deputy Prime Minister published '**The Northern Way Growth Strategy**' in September 2004 as part of the wider Sustainable Communities initiative first set out in the Sustainable Communities Plan.
- 34 The strategy aims to transform under-performing city economies, boost connectivity and transport links, lever significant business growth and investment, create new jobs and skills for thousands of people and improve economic inclusion and housing for deprived communities. The drive for regeneration of the Tees Valley is fully supported by The Northern Way. The Tees Valley has been highlighted as one of eight 'City Regions' - areas that are considered to be driving economic growth in the North. The strategy is based upon concentrating growth within these city regions and a delivery plan has been developed for each area.
- 35 More specifically, the document makes reference to the need to improve internal connectivity within the Tees Valley City Region, to provide high quality public transport links to the national transport network and to

provide good accessibility to all new employment sites. All three are key objectives for the long-term transport strategy for the Tees Valley.

- 36 Specific aims that future transport improvements across the Tees Valley will need to address are:
- improve access to the north's sea ports (principally Teesport);
 - improve surface access to key northern airports (in particular Durham Tees Valley);
 - create premier transit systems in each city region (in the first instance by stemming the decline in bus use, and then supporting wider regeneration with a sub-regional transit system);
 - create stronger links between regions (notably the neighbouring Tyne and Wear and Leeds City Regions); and
 - create truly sustainable communities.
- 37 The first three of the above list are probably the most influential for forward transport planning at the sub-regional level, as they require cross-boundary working both within and outside the Tees Valley.
- 38 To this end, the Tees Valley Authorities are now involved in key partnerships to help ensure that these key strategic objectives can be delivered. For example, in its City Region Development programme the Tees Valley has made a strong case, on both economic and environmental grounds, for improvements in rail access to Teesport and the scheme has now gained priority status within the Northern Way programme. Work is on-going to identify a funding source for this key scheme, potentially utilising the Government's emerging Transport Innovation Fund. In order to tackle the surface access issues, the Durham Tees Valley Air Transport Forum is now investigating ways of delivering challenging modal split targets associated with the expansion of the Airport over the next few years. All five authorities and the TVJSU are partners in the Forum along with other key stakeholders such as the main public transport operators.
- 39 Finally the authorities are developing a major scheme bid that will deliver widespread improvements in the provision of bus services across the Tees Valley. These improvements were identified in the Tees Valley Bus

Network Review and, if delivered as a coherent package, will help to reverse the continuing decline in patronage, as well as improving access to opportunities for those without a car. This is particularly true in the core urban areas. This bid is programmed for submission in the summer of 2006, shortly after completion of the full LTP2 document. The longer-term element of the new premier integrated transit system for the Tees Valley is a Metro style system operating on the local rail network. Over the past 15 months, the Tees Valley Authorities have worked in close partnership with Tees Valley Regeneration on the development of this preferred option to ensure maximum integration with the revised bus network. The Metro system will provide improved connectivity between the main centres of the Tees Valley and many of the key development sites to again provide non-car accessibility benefits for a large proportion of the population. Further details on all these issues are provided below.

- 40 The fourth strategic aim requires more regional and/or national interventions, but will still be influential in the forward planning process across the sub-region. It is also consistent with the key connectivity objective in the Regional Spatial Strategy, discussed further below.
- 41 The fifth drives the need to provide an appropriate range of facilities within each area of the sub-region, supported by a transport network that provides good access without discriminating by social characteristics or mode. This will be taken forward by each of the Tees Valley Authorities on a local area basis.

Regional Funding Allocation / Regional Transport Board

- 42 During 2005 the Government announced an indicative **Regional Funding Allocation** of £457 million to be spent on transport schemes in the North East over the next 10 years. The figure, which commences at £42m in 2006 and rises to £49m in 2016, covers highway schemes that are not included in the Highways Agency's national programme and LTP major schemes, in excess of £5m. It does not include any allowance for rail expenditure as, at the time of LTP2 submission, this budget had yet to be finalised by the DfT.
- 43 In an attempt to devolve responsibility and give it more of a say in how this Allocation is invested, the Government invited the North East region to advise as to how best this should be spent. This advice was expected to be in the form of a detailed set of evaluated priorities. Government Office

North East lead the process, which had a tight timescale of about five months, in order to provide the necessary advice to central Government by the end of January 2006.

- 44 GONE appointed consultants to devise an evaluation framework to assess and prioritise transport schemes across the region, against an agreed set of regional policy objectives. A steering group made up of senior officials from representative bodies across the region oversaw the consultant study and also helped to inform the interim **Regional Transport Board**. This Board, facilitated by GONE and again made up of representative members from both the public and private sectors across the region, was the body that ultimately made the recommendations to Government. The output from the evaluation framework was one important tool in helping the Board come to a final decision.
- 45 During the consultant study, all regional stakeholders, including the TVJSU and the Tees Valley Authorities, were given the opportunity to submit detail of any scheme they wished to be evaluated in the prioritisation framework. Schemes ranged from those that were ready for construction to those that still required further detailed analysis.
- 46 By mid January 2006 the Regional Transport Board published its recommendations. Three schemes in the Tees Valley were included in the approved list of short-term deliverables, which totalled £400m. These were:
- Darlington Eastern Transport Corridor (£12m);
 - North Middlesbrough Accessibility Improvements (£16m); and
 - Tees Valley Bus Network (£33m)
- 47 Other potential schemes in the Tees Valley that may still be funded from the balance of the Regional Funding Allocation in the longer term include the East Billingham Relief Road and the A66 Darlington Gateway improvements. Other schemes across the region scored very well in terms of delivering regional policy objectives but due to the amount of funding required were not considered as part of the final Regional Funding Allocation process. One such example was the Tees Valley Metro scheme, which will need to be funded by alternative mechanisms.

- 48 Having delivered its objective of making recommendations on regional transport priorities by January 2006 it is uncertain whether the interim Regional Transport Board will continue in its current guise.

Regional Spatial Strategy

- 49 **'View: Shaping the North East'**, the Consultation Draft of the **Regional Spatial Strategy** (RSS) for the North East, was published by the North East Assembly in November 2004. Following a 6-week consultation period responses were considered and appropriate changes made to the document before a Submission Draft was submitted to the Secretary of State in July 2005. This will be considered at an Examination in Public (EIP) in March 2006. Following this there are likely to be modifications based on the recommendations of the EIP Panel, followed by further consultation. According to current timetables, a final adopted RSS is expected by June 2007.
- 50 The Submission Draft RSS document takes full account of The Northern Way and sets out to assist in its delivery. It is a long-term strategy for the spatial development of the region and identifies the priorities for transport investment in the North East. The RSS incorporates the **Regional Transport Strategy** (RTS) to ensure the integration of land use and transport planning.
- 51 The RSS sets out **four main themes**, under which the locational strategy is developed, each of which has some more detailed objectives that future transport improvements will need to focus on:
- delivering **economic** prosperity and growth;
 - creating **sustainable communities**;
 - conserving, enhancing and capitalising on the region's natural and built **environment**, heritage and culture; and
 - improving **connectivity** within and beyond the region.
- 52 At a strategic level, the RSS specifically mentions the potential of Teesport and Durham Tees Valley Airport as key economic drivers and along with the development of a sub-regional public transport system, recognises these as key regional priorities. This is entirely consistent with

the Northern Way and as discussed above, the local authorities are now taking steps to help deliver these objectives in line with key RSS policies, in particular: RSS Policy 49 – International Gateways, RSS Policy 51 – Regional Public Transport Provision, RSS Policy 55 – Accessibility within City Regions and RSS Policy 57 – Sustainable Freight Distribution.

- 53 The final connectivity objective also follows up some of the key issues that need to be addressed as outlined in the Northern Way. This clearly highlights the fact that future transport investment has a vital role to play in delivering all of the above objectives in some way.
- 54 As such, the Tees Valley is embracing these themes as the cornerstone of its future transport strategy to deliver the anticipated regeneration, and the relationship between the Tees Valley and the RSS in terms of connectivity is shown in Figure 1.4.
- 55 The RSS identifies four multi-modal corridors within the North East where future transport and major land-use investment should be focused:
- North south corridor of the A1/East Coast Main Line;
 - East west corridor of A66/Tees Valley rail links;
 - North south corridor of the A19/Durham Coast Line; and
 - East west corridor of the A69/Tyne Valley Line.
- 56 The first three in the above list affect the Tees Valley directly and provide the main connections both within the sub-region and to the neighbouring areas. These connections will need to be strengthened in support of long term planning to increase the sub-region's competitiveness.
- 57 On behalf of the Tees Valley authorities, the TVJSU is currently part funding a study led by the North East Assembly to provide a better understanding of connectivity requirements between the Tees Valley and Tyne & Wear City Regions. The main focus is on public transport linkages and key to this is a detailed assessment of both existing and likely future demands, as well as the assessment of evidence derived from other similar City Region pairs. The study will recommend appropriate public transport solutions that will support both the economic vitality and accessibility requirements of both city regions, in line with RSS policies

and timescales. In particular it directly addresses RSS Policy 50 – Regional Transport Corridors and RSS Policy 51 – Regional Public Transport Provision. Final recommendations from the study are expected around the same time as the submission of the full second LTPs. The Tees Valley Authorities will then endeavour to work closely with the NEA and other regional partners to ensure the delivery of appropriate solutions that meet the necessary policy and value for money criteria.

- 58 On the land-use side, the Tees Valley Authorities are making extensive efforts to ensure that key investment is concentrated in these corridors and close to existing transport hubs. Good examples of sustainable development locations currently being taken forward across the Tees Valley, that are fully consistent with RSS Policy 50 – Regional Transport Corridors, include:
- **Central Park** in Darlington – A1/ECML corridor and A66/Tees Valley rail corridor. Close to Darlington Station and Darlington Town Centre;
 - **Victoria Harbour** in Hartlepool – A19/Durham Coast rail corridor. Close to Hartlepool Station and Hartlepool Town Centre;
 - **Middlehaven** in Middlesbrough - A66/Tees Valley rail corridor and A19/Durham Coast rail corridor. Close to Middlesbrough Station and Middlesbrough Town Centre;
 - **North Shore** in Stockton - A66/Tees Valley rail corridor and A19/Durham Coast rail corridor. Close to Thornaby Station (key rail hub for Stockton) and Stockton Town Centre;
 - The Middlehaven and North Shore developments will be followed by the **Stockton-Middlesbrough Initiative**, which will transform the existing brownfield gap in the heart of the Tees Valley and its transport network. The initiative is being developed jointly by the two authorities;
 - **South Tees Regeneration Area** in Redcar & Cleveland - A66/Tees Valley rail corridor. Supporting development of and access to Teesport;
- 59 The rationale behind the role and location of many of these sites along with their transport impacts are picked up in following sections.

Tees Valley Vision

60 The **Tees Valley Vision** is the sub-regional development strategy, which aims to transform the Tees Valley economy by 2020. It has been in place since late 2001 and essentially consists of three key elements:

- creating sustainable jobs;
- creating attractive places; and
- creating confident communities.

61 The Tees Valley Vision, which will reverse historic trends, was developed and adopted by the Tees Valley Partnership. The Partnership comprises influential organisations from the public, private and voluntary sectors across the sub-region.

62 As a direct result of the formulation of the Vision, existing centres of economic activity are now being revitalised and ambitious plans to develop additional high quality investment sites across the Tees Valley are being taken forward. These major new development proposals, which are being actively driven forward by the Tees Valley Partnership, are at various stages of advancement but will all help deliver the key aims of the Tees Valley Vision.

63 The Tees Valley City Region Development Programme, produced in summer 2005, neatly summarises this as a coherent package and sets out a clear way forward for the sub-region. This Programme is now the delivery mechanism for the Tees Valley Vision and is the means by which we will aim to deliver The Northern Way and the RSS.

Growth Influences

64 The existing sub-regional characteristics show the poor economic and social performance of the Tees Valley in recent years, and the drop in population that accompanied it. However, there has been a relative stabilisation in population over recent years as small scale regeneration has taken place, focused on local sites within each Borough. This has led to a continuation in the relatively high level of intra-Borough trip making that has existed for a number of years and was evidenced above. Over the next 15 years population figures are forecast to follow the long-term downward trend.

- 65 Precisely because the Tees Valley has been failing for so long in respect of the socio-economic indicators described previously, it is recognised at all levels that there is a need for a strong and lasting intervention to achieve the key objective for the area of regeneration. Regeneration of the Tees Valley is needed in order to improve the quality of life of our residents, employees and visitors, and this regeneration needs to be accompanied by improved access to the range of services that a sub-region on an economic growth cycle requires.
- 66 However, the delivery of regeneration within the area will involve much wider spatial planning issues than simply transport, and regeneration is a fundamental part of the wider corporate policies across the sub-region.
- 67 Fifteen of the key sites that have emerged in line with Tees Valley Vision objectives are shown in Figure 1.5. As the diagram indicates, the vast majority of existing and new opportunities lie on or very close to key transport hubs and corridors as defined by RSS. As already discussed the locations of many of these sites have been carefully selected to optimise economic potential but their detailed development should also seek to minimise transport impact - this is an important trend that must continue through the local planning process. There are a small number of exceptions to this that will be highlighted in the more detailed accessibility analysis below. Whilst being regeneration led, it is widely recognised that transport has a key role to play in the delivery of the Vision.
- 68 An indication of the likely impact on trip making that will result from the delivery of the Tees Valley Vision is illustrated in Figure 1.6 for some of the key sites. The achievement of the Vision will lead to an increase in trip making over that experienced at present. These are the most significant of the development opportunities within the Tees Valley and are also likely to have an impact outside the immediate sub-region. The challenge for the Tees Valley Authorities will be to ensure that a greater proportion of these extra trips are made by modes other than the private car to ensure a shift in mode share away from the private car over time.
- 69 The inevitable dispersion of these sites across the sub-region, and the mix of land uses envisaged mean that future transport investment should be focused around supporting access to and from these sites for residents of, workers in, and visitors to, the Tees Valley. The provision of high quality access to each of these sites by the complete range of transport modes will be a fundamental requirement of the long-term transport strategies of all of the Tees Valley Authorities. Better accessibility needs to be delivered on a site specific basis, but with a view to minimising the impacts of

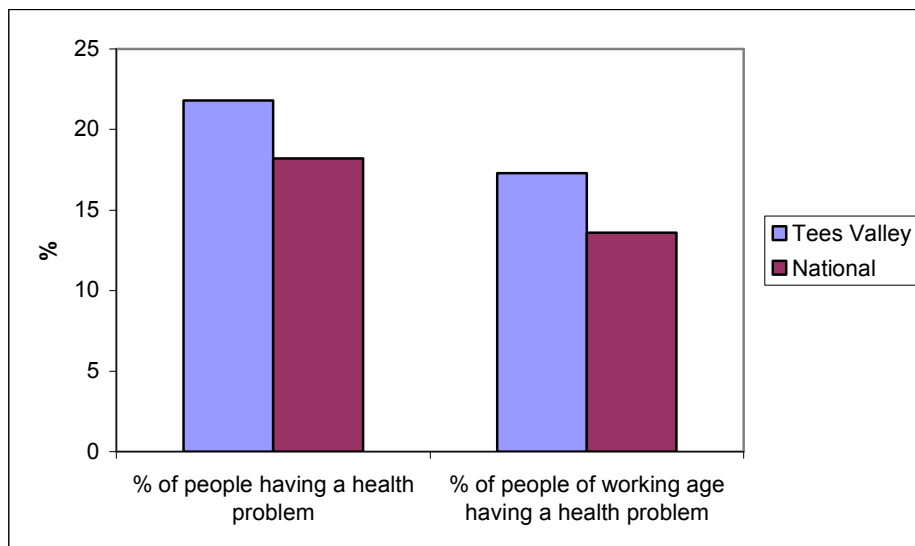
regeneration on congestion, safety and the environment. The accessibility strategy that is developed in more detail later in the Plan provides further analysis of the implications and impact of travel demand to these sites.

Service Influences

Health

- 70 According to the ONS, health levels in the Tees Valley are below the national average. For example, using the latest data derived from the 2001 Census, 21.8% of people have a health problem compared to 18.2% nationally). For those of working age the corresponding figures are 17.3% in the Tees Valley compared to 13.6% nationally. This data is shown in Figure 1.7.

Figure 1.7: Headline Health Statistics



- 71 The latest ONS figures covering the period 1999 to 2003 also indicate that mortality rates in the Tees Valley are 12% above the national average. The main causes of death in the sub-region over this period were Circulatory Diseases (which accounted for 37.7%), Cancers (27.7%) and Respiratory Diseases (13%). The Cancer figure is higher than the national average in the Tees Valley but the figures for the other two main causes of death are very similar.
- 72 In an attempt to ensure that the sub-region benefits from best possible healthcare facilities, and therefore to help close the gaps described, two

major reviews have taken place in recent years into the provision of acute health service across the Tees Valley. The first of these took place in 2001 and covered the County Durham and Darlington Acute Hospitals NHS Trust area. This was followed in 2003 and 2004 by a similar two-stage review of Acute Services in Hartlepool and Teesside, covering the North Tees and Hartlepool NHS Trust and the South Tees Acute Hospitals NHS Trust areas. In essence both reviews have recommended a rationalisation in the delivery of these key services across the Tees Valley and as such access to them has been highlighted as a key issue within each review. This clearly impacts directly on all the five Tees Valley Authority areas and as a result all are now involved in Health and Transport partnerships that have been developed to tackle and develop solutions to any emerging transport/accessibility issues. They are discussed in more detail in later sections.

Education

- 73 Educational attainment is low in the Tees Valley compared to national averages. Again using 2001 Census data, sourced through the ONS, 34.7% of the working population has no qualification, compared with 29.1% nationally.
- 74 In order to address this and close the gap, improving the provision of learning and skills facilities is a core strand of the corporate strategies of each of the Tees Valley authorities. As a result, without exception, each strategy shows a commitment to investing in improved early years, primary and comprehensive education facilities as well as other training opportunities. Similarly, as outlined in the Tees Valley City Region Development Programme, the Learning and Skills Council Tees Valley has also set targets to improve educational attainment across the sub-region over the next few years. The LTPs will take account of any changing patterns of travel demand that result from this targeted investment.
- 75 The two main Universities in the Tees Valley also continue to grow and provide a wealth of opportunities in further education. The University of Teesside in central Middlesbrough now has 22,000 students and employs 1,800 staff whilst the University of Durham's Queen's Campus Stockton, based on Teesdale, has 1,800 students and over 400 staff. As such both generate very significant demands for travel from both within and outside the Tees Valley and form an important part of long-term transport planning for the authorities in the sub-region.

Aims and Objectives

76 The overview indicated the key aim of the Tees Valley Authorities as one of regeneration. We feel that this overall aim will be crucial deliver the desired outcomes listed above, by making the Tees Valley an attractive location in which to work and live, and also to visit.

77 We also recognise that we need to place our overall aim in the context of the Government's Shared Priorities for Transport. These relationships have been developed and are presented below:

REGENERATION	to be delivered through enhancements in	ACCESSIBILITY
	whilst offsetting the impacts of	CONGESTION
	and not having an adverse impact on	ROAD SAFETY or
		AIR QUALITY
	all leading to a better	QUALITY OF LIFE
	for our residents, employees and visitors	

78 At this strategic level, concentration will be placed on the first two core priorities of Accessibility and Congestion. It is felt that these priorities will be most affected by the significant and increasing levels of cross-boundary travel already described. As a result, the Tees Valley Authorities are working effectively on a number of joint initiatives to manage such implications. These are described in this Chapter while the rest of the LTP document then demonstrates how appropriate solutions are being developed at the local level along with measures being taken to provide improved road safety, better local air quality and a better overall quality of life for local residents.

79 The Tees Valley Authorities have also agreed a series of key Objectives for the Second LTP within the context of the Tees Valley imperative of regeneration. The first of our key objectives is:

Tees Valley Objective 1

To facilitate the delivery of the Tees Valley Vision within the framework of the Transport Shared Priorities.

- 80 The development of the remaining Objectives is discussed in relation to the two main Shared Priorities.

Accessibility: The Issues and Objectives

- 81 Enhanced quality of life is dependent upon access to employment, education, health care, shopping and leisure activities. The Social Exclusion Unit Report, '**Making the Connections: Final Report on Transport and Social Exclusion**', published in February 2003, details a number of issues that need to be addressed in the Tees Valley. The report highlights the connection between social inclusion and accessibility and provides a base upon which local authorities can build, in order to:
- Provide effective access to markets and the competitiveness of North East businesses;
 - Provide effective access to the North East for inbound tourism;
 - Ensure access to employment, learning, health facilities and services for all sections of society; and
 - Support the development of a dynamic labour market for North East businesses.
- 82 The changes anticipated within the Tees Valley will give rise to the following problems.
- 83 The additional pressures of increased choice in health and education facilities, coupled with the polycentric nature of the Tees Valley means that there will be a need to take account of a wider range, and greater level, of likely trip making.
- 84 The complex pattern of development that will result from the regeneration proposals also brings with it complex travel demands and makes it more

difficult to provide a transport network that caters for all the existing and future demands.

- 85 Accessibility cannot be discriminatory – it has to be provided for all users in an equitable way. However, given the priorities afforded in recent times to the private car as a means of transport, there is a need within the short to medium term, to invest in more sustainable forms of transport in order to make the network as a whole more equitable.
- 86 It may also be necessary to target investment in specific areas of the Tees Valley, where deprivation and disadvantage is at its greatest, in order to deliver equality in accessibility to health, education, employment, housing and leisure opportunities.
- 87 Hence, our second key objective is as follows:

Tees Valley Objective 2

To maximise accessibility opportunities to the revitalising Tees Valley economy and associated services (health, education, leisure, etc) for all sections of society, particularly those without private transport.

- 88 The opportunities to achieve this objective will be varied according to need and location, and will be developed through the Tees Valley Authorities' Accessibility Strategies, as described later in this Plan.
- 89 The following sections include some further problems and opportunities related to accessibility on a modal basis.
- 90 The main **road** network in the Tees Valley is highlighted in Figure 1.5. The road network serving the Tees Valley is generally of high quality with three major trunk roads providing good links within and outside the sub-region. The A1(T) provides north - south links for the west of the Tees Valley, primarily Darlington, while the A19(T) performs a similar function for much of the rest of the sub-region. The A66 is the primary northern trans-Pennine road link that also runs through the heart of the Tees Valley from east to west.

- 91 These routes provide the main source of inter-region trip making, and were identified in the RSS as essential components of the required connectivity. The strategic function of these routes will need to be maintained and enhanced, working in partnership with the Highways Agency and their recently published Route Management Strategies. The Tees Valley Authorities have recently set up such a partnership for the sub-region to effectively plan for the future and is described in more detail below.
- 92 The **bus** network across the Tees Valley is not particularly well co-ordinated between the five Authorities, resulting from a history of piecemeal development over time. However, bus continues to be the dominant mode of public transport in the Tees Valley with more than 42 million passenger journeys undertaken on services provided by the two main operators in 2004/05, and it has a mode share that compares well with the national average.
- 93 Despite this, there has been a 3% year on year decline on average of bus passenger numbers over the First LTP period. The decline is likely to be occurring for a number of reasons including:
- Increasing car ownership/availability – particularly among the traditional public transport markets (under 21s/over 60s);
 - Complex historic networks, not necessarily best serving the current market;
 - Lack of understanding of the network by non/potential users, partly due to a lack of information/marketing;
 - Complex ticketing/lack of integrated ticketing and widening gap between cost of motoring and cost of bus usage;
 - Low perception of quality, particularly by non-users; and
 - Lack of priority afforded to buses on the highway network and the consequent variable reliability.
- 94 This is not an exhaustive list but it does contain a raft of issues that are common to all the Tees Valley Authorities. The problem for the Tees Valley Authorities is one of stemming the existing decline in bus use whilst developing a network to better suit the changing travel patterns envisaged as a result of development proposals.

95 A number of initiatives are being developed by the Tees Valley Authorities to promote bus use, and these themes will be developed in subsequent chapters to reflect the varying emphases and priorities of them. However, a re-alignment and re-focusing of the bus network with the new travel patterns emerging from the sub-region's regeneration is necessary. This is particularly important when considering the more dispersed and longer distance trip making that is predicted.

96 This leads to the third key objective:

Tees Valley Objective 3

To address the decline in bus use and provide a stable and sustainable network that meets passenger demands.

97 Compared to bus, **rail** has a much smaller share of the passenger market in the Tees Valley with approximately 2.4m journeys a year commencing at Tees Valley stations. This is actually a 27% increase from a baseline figure in 1999/2000 and rail patronage has risen consistently year-on-year, but still represents relatively low use when compared to other parts of the country. Again there are potential reasons for this:

- increasing car ownership, as for bus;
- low quality of services and facilities;
- low frequencies of services on many lines;
- remote location of some stations, for historical reasons; and
- lack of integration with other modes.

98 As with bus, it is important that these issues are addressed if rail's market share is to grow significantly.

99 Due to its location on the East Coast Main Line, Darlington remains the dominant station in the Tees Valley in terms of passenger footfall (that is, the start or end of a rail journey) with a figure of 1.80 million in 2004/05. Middlesbrough is next at 1.12 million then Redcar Central (357,000), Thornaby (323,000) and Hartlepool (316,000).

- 100 However, better sub-regional and inter-regional accessibility will be required if the Tees Valley is to compete economically and close the productivity gaps already described. This emphasises the need set out in the RSS to provide better connectivity to the Tyne & Wear and Leeds City Regions, and also to other parts of the country, particularly London. Providing additional rail freight capacity is also a must to support the growth of the sub-regional economy and reduce the level of heavy goods vehicles on the road network.
- 101 The recently published **Regional Rail Strategy**, which informs the RSS, now sets the policy framework for rail in the North East, as summarised below:
- 102 “In future the North East will have high quality, integrated, safe and robust rail links both within and beyond the region that will support regeneration and economic growth. The rail network will provide access to jobs and facilities for all sections of society, and promote sustainable patterns of activity, development and movement. The development of rail will represent value for money for users, operators and the taxpayer.”
- 103 This gives rise to the fourth key objective:

Tees Valley Objective 4

To attract the necessary investment to deliver the required improvements in the local rail network the sub-region will look towards more innovative solutions. This applies equally to passenger services/facilities and improved freight capacity, which is of particular importance to Teesport and other local industry.

- 104 Durham Tees Valley Airport is another key economic driver for the sub-region with major plans in place to expand both passenger air services and wider employment opportunities at the site. Subject to a current planning application, a terminal extension will be built in the next two years as part of the continued expansion of passenger movements at the airport. Between 1996 and 2004, annual passenger numbers grew by 77% to reach nearly 800,000. As new operations continue to arise, the figure is predicted to top the 1 million mark in 2006 and is forecast to grow to at least 1.5 million by 2015. This will lead to a large increase in travel demand to the site from all five of the Tees Valley Authorities as well as from a wider area. Future opportunities will need to focus on an increasing

use of sustainable modes to access the airport.

- 105 Investment in **walking** and **cycling** measures across the Tees Valley has been made throughout the First LTP period, and encouragement of these modes has much wider benefits in terms of health, education and safer communities. As regeneration takes place, and trips become longer and more dispersed, there may be a decline in journeys made on foot or by cycle as the dominant mode of travel. However, investment should be focused on measures encouraging the use of such modes for short journeys within local communities and as part of a multi-modal journey that does not necessarily involve the private car at any stage.
- 106 Key objectives for cycling over the next few years are: the completion of the National Cycle Network within the sub-region along with improvements of the links to it, from schools, town centres and residential areas; continued improvements to cycle parking facilities; and an improvement in the level of information available to cyclists, including the development of an on-line journey planner.
- 107 Each of the Tees Valley Authorities will be pursuing individual quality walking networks as part of the Second LTP, recognising that walking as a mode of transport is suitable for short distance trips and can make a significant contribution to health initiatives.
- 108 In the case of both cycling and walking, there are clear links to improved health across the sub-region resulting from an increase in trips made, either in full or in part, using these modes.

Accessibility: The Forward Strategy

- 109 In a sub-regional sense, accessibility will play a much greater role in terms of supporting employment growth at the key sites and in the existing local centres. Therefore, the sub-regional accessibility work has concentrated in these areas as well as to strategic health facilities, with other issues, such as local health services, education facilities, retail and leisure services picked up at a more local level.
- 110 In order to better understand the issues around accessibility, the Tees Valley Authorities have made use of the Accession software supplied by

the DfT. The TVJSU has developed the Tees Valley Accession Model which has been used by the local authorities to inform the setting of their local targets and indicators. In the light of the evidence provided by Figures 1.2 and 1.3, the Tees Valley Accessibility Group, comprising the five authorities and the TVJSU, agreed that a number of key locations in the Tees Valley were of sufficient importance, in terms of their trip generation potential, to warrant consideration at the sub-regional level. These sites were as follows:

- **Darlington – Town Centre** (to also include Central Park development site);
- **Hartlepool - Town Centre** (to also include Victoria Harbour development site);
- **Middlesbrough – Town Centre** (to also include Middlehaven development site);
- **Redcar and Guisborough Town Centres**, combined;
- **Stockton – Town Centre** (to also include Teesdale and North Shore development site);
- **James Cook University Hospital**, Middlesbrough;
- **University Hospital of North Tees**, Stockton;
- **Durham Tees Valley Airport**; and
- **Wynyard**, prestige employment site.

111 These are some of the key locations in the Tees Valley that do, or are likely to, generate trips from across all five of the Tees Valley authority areas and indeed beyond. As well as being key transport hubs, they contain many of the existing and future employment opportunities in the Tees Valley along with two of the main hospitals serving the sub-region. In addition to providing the obvious healthcare facilities, the major hospitals in the Tees Valley are also important employers in their own right. As a result good access to all these locations from across the Tees Valley is vital if the economy is to perform to its full potential and quality of life for all residents is to improve. This will clearly be an important consideration for the authorities in their individual local strategies. However it is recognised that these strategies will also give full consideration to other non-work related accessibility issues and there may well be differing local priorities as a result of local consultation.

- 112 The 5 plots for the key strategic centres in each borough, which include some of the key development sites, generally indicate accessibility patterns that would largely be expected. They use journey time by public transport as the key indicator, however areas shown in white have not had a public transport journey time calculated because there is neither a bus stop nor rail station within an acceptable minimum walking distance (set at 800m which is a standard distance used in accessibility analysis). It should also be noted that these plots indicate a best-case scenario in terms of optimum achievable journey time throughout the main part of the day. There will therefore be occasions both within and outside the 0800 to 1800 period when such journey times are unachievable.
- 113 All five of the key centres identified are, in general terms, fairly accessible to the local population within each individual borough. As a rule it would appear that a significant number of people are able to access their own local centres (eg Middlesbrough residents to Middlesbrough Centre) within a journey time of 30 minutes or less. At the very edge of local authority areas this figure can rise as high as 60 minutes but does not often exceed this. However there are pockets of poor accessibility within each area, often in rural or outlying areas, which each local strategy will need to take steps to address.
- 114 Accessibility from each borough to other centres (eg Hartlepool residents to Stockton Centre) is generally not as good with much longer journey times than to the equivalent local Centre. Located at the geographical heart of the Tees Valley, Middlesbrough and Stockton Centres are unsurprisingly more accessible to a greater number of non-residents than the other Centres, with a fair proportion of areas able to gain access to them within 60 minutes. However there are still outlying parts of neighbouring authorities for whom public transport journey times to the two centres can exceed 90 minutes. For the converse reasons of geography, the Centres of Darlington, Hartlepool and Redcar & Cleveland are not as accessible to the same numbers of people, with journey times generally in the range of 60 to 100 minutes from all but the closest parts of the neighbouring authority.
- 115 Whilst not possibly surprising, given the likely pattern of development, without intervention this is going to become a key long-term issue because for many people new employment and other opportunities will increasingly arise in different boroughs to which they are resident. In order to gain a better understanding of these key issues the Tees Valley Authorities have recently set up a Partnership to look closely at Access and Transport to

Employment, Training and Further Education in the sub-region. The first workshop to effectively initiate the process was held in early January 2006 and was attended by representatives from all 5 of the local authorities as well as from the employment, training and further education sectors. It is clear that there are strategic accessibility issues common to all these sectors and over the next year the Partnership will seek to develop appropriate solutions to these.

- 116 The accessibility plots for the two main hospitals identified show many of the patterns/traits contained in the plots for the adjacent key Centre. However in both cases, due to their location away from the key transport hub, the accessibility of the hospitals is not quite as good. For its immediate catchment in the Middlesbrough area, journey times to James Cook University Hospital are generally under 40 minutes. Parts of Redcar & Cleveland can access the hospital within 40 minutes but there are areas of this borough where journey times to this key facility are anything from 50 minutes to 90 minutes and beyond. Increasingly the specialist nature of facilities at the new single site hospital means that its catchment area is wider than it was traditionally (at one time largely Middlesbrough and Redcar & Cleveland only). Today people are increasingly required to travel from other Tees Valley boroughs, as well as from much further afield, hence provision will need to be made to improve links to James Cook University Hospital from these areas also. Similarly, access to the University Hospital of North Tees is fairly good from within Stockton borough but not so good from elsewhere including parts of its core catchment area in Hartlepool. Again the plot helps to identify areas which would potentially benefit from improved transport links to the hospital.
- 117 As referred to earlier in the Chapter, two key transport and health partnerships are now in place in the Tees Valley as a result of major reviews in the provision of healthcare facilities.
- 118 **The Durham and Darlington Transport for Health Partnership** was formed in 2003, largely as a result of the 2001 review of acute services in County Durham and Darlington entitled "Access, Choice and Sustainability". Transport and access to services were areas of major concern to local people as identified by the review. The Partnership has a number of key objectives:
- to develop a strategy to improve transport to health care and contribute to the Local Transport Plan to be published in 2006;

- to develop sustainable transport services enabling access to primary care, community and elective health care; and
 - to identify key access problems in relation to health care provision.
- 119 Darlington Borough Council plays an active role in this Partnership and the Partnership has helped to shape Darlington's Local Transport Plan, including the development of a specific, health related objective.
- 120 The **Tees Health and Transport Partnership** was formed in 2004 following a similar review of Acute Services across Hartlepool and the rest of Teesside. The Partnership has the following key Aims:
- To promote social inclusion and opportunities for health and well-being in the Tees Valley through the development of accessible, efficient, cost-effective and integrated transport services;
 - To develop in partnership effective means of needs assessment and a sound base for change in transport systems; and
 - To promote real travel choice through attractive public and community transport, and first class opportunities for walking and cycling, recognising the health benefits of such modes.
- 121 All of the other four Tees Valley Authorities are key members of this Partnership with each LTP describing how local solutions are now being delivered.
- 122 Strategic transport schemes are also now in development to help deliver solutions to these accessibility issues. For example, the Bus Network Review will initially concentrate on the 'Core' and 'Super Core' Networks across the Tees Valley. These routes will provide improved links both into the majority of the hubs and also importantly between them. This will give a greater number of people improved access to a range of opportunities both within their own borough, but vitally in neighbouring boroughs in the Tees Valley where accessibility has been shown to be more problematic. Importantly the majority of wards suffering the highest levels of deprivation in the Tees Valley, including all 5 specifically referred to under Socio-Economic indicators, will directly benefit from the investment on the Core and Super Core networks. The bus network will be better integrated with the existing rail system in the short term to provide improved inter-urban travel opportunities. In the longer term a Tees Valley Metro system,

operating on the core rail network with additional potential spurs, will provide a step-change in the quality and frequency of these inter-urban links across the sub-region. The revamped bus network will provide a vital feeder function into the Tees Valley Metro system to further enhance cross-boundary travel opportunities by public transport.

- 123 Many of the sites discussed and/or highlighted in Figures 1.2 and 1.3 are located at or close to key transport hubs or on key regional transport corridors as defined by RSS and in the Tees Valley these corridors are generally reasonably well served by public transport. Accessibility analysis has provided evidence that most of these sites are within reasonable reach for much of the Tees Valley's resident population. Having said that, major enhancements to the public transport systems in the Tees Valley are being planned to ensure that the accessibility to these key hubs is further improved.
- 124 However the same analysis has shown that some of the key generators identified are not so accessible by public transport. **Wynyard** is the sub-region's prestige employment site as identified by RSS. Highway access to this site is excellent due to its proximity to A19 and A1 (via A689) and is the main explanation as to why the site was developed historically and has since been retained and promoted as a prime development site. The market dictates that this will continue to be the case, but as has been clearly shown, public transport accessibility is not sufficient at the present time as the site is only served by one, infrequent, bus service. The analysis now provides robust evidence for the planning authorities to ensure that improved public transport links, preferably into one or more of the strategic hubs, becomes a pre-requisite of any future planning applications related to this site.
- 125 Existing public transport accessibility to **Durham Tees Valley Airport** is also not as good as to other key hubs. However as discussed, a partnership is now in place to help deliver improved surface access into the site by public transport. The new Sky Express service from Darlington station and town centre is now in place to provide improved accessibility from the west and options are now being considered for a similar scheme from the east. The local authorities must now use this evidence to ensure that appropriate public transport provision is an integral element of the future master planning process for these (and indeed other) key development sites and not simply an after thought.

- 126 Although not covered by a specific accessibility plot, there is one other key site identified in Figure 1.6 that warrants specific attention here. The very specialist nature of employment at the **Wilton International** chemical complex, combined with the size of the site, its location and the shift patterns worked by many of the employees, make the provision of meaningful public transport provision very difficult. Existing bus services stop throughout the day at the site entrance but for the reasons discussed, both existing and future trips by this mode are likely to be relatively small in number. It is therefore recognised by Redcar and Cleveland Borough Council that the car will continue to be the dominant mode of transport to the site and will therefore take the appropriate measures to facilitate this growth in a sustainable manner.
- 127 It should be noted that while the output from the strategic analysis has concentrated on accessibility to key sites by public transport, the Tees Valley Authorities will aim through their local strategies, to ensure that all modes of transport are given equal attention. It is recognised that accessibility is not solely a function of the journey time/length to key sites so local strategies will also focus on other barriers such as cost of travel, lack of information, public perception of alternatives and safety/security. It is also important to note that other journey purposes such as those to education, leisure or retail facilities, will form a key part of future local accessibility planning.
- 128 From this analysis, it is clear that we will need to pursue a number of wide-ranging improvements to support the overall aim of regeneration for the sub-region.
- 129 Selective investment in the road network will be necessary to enhance accessibility to a number of the key regeneration sites across the Tees Valley as identified previously. Many of the Tees Valley's key regeneration sites are close to the river and the A19/A66 Interchange. In 2002 following a detailed transport modelling exercise, the Tees Valley Transport 2010 Study identified the need for additional cross river capacity even if only historic traffic growth levels continue and all regeneration-led growth is met by public transport. Traffic levels and congestion on the A66 east – west corridor are also high at certain times of the day. Solutions to these issues, in particular how future growth associated with regeneration can be accommodated are now being taken forward in partnership with the Highways Agency.

- 130 The designation and development of core freight routes across the sub-region will also be necessary, as freight transport will be key to the ongoing development of sites such as Teesport. This is being coordinated at the sub-regional level by the Tees Valley Freight Quality Partnership. Principal freight routes are the trunk and principal roads mentioned above, in addition to the A1053(T) and A174(T).
- 131 In response to the lack of a co-ordinated bus network system and the continued fall in bus patronage across the sub-region, the five Authorities jointly commissioned the Tees Valley Bus Network Review (project managed by the TVJSU) to consider all aspects of the existing network and produce options for:
- a network to maximise bus patronage whilst maintaining accessibility and social inclusion, with a cost neutral base option and costed, prioritised incremental improvements;
 - infrastructure and bus priority improvements with an implementation strategy;
 - priority routes for low floor buses;
 - fare and ticketing improvements (and simplification); and
 - other marketing and information initiatives.
- 132 This review has identified a variety of proposals encompassing the whole of the sub-region and is based on a stable hierarchical network approach and the development of high demand and sub-regional, inter-urban links in particular. They are described in subsequent chapters, but the overall report provides a framework to develop a co-ordinated bus network across the Tees Valley for the first time. A strong partnership approach is envisaged between key stakeholders with a new set of relationships and structures. It is essential that this, possibly one-off, opportunity to raise the profile of the bus and take the network forward sustainably is grasped if the objectives are to be realised.
- 133 As a direct result of these findings, a major scheme bid is now being developed for submission during the summer of 2006. More detail on the precise format of this bid can be found in the accompanying Bus Strategy. Whilst full detail is still subject of on-going development through the normal appraisal process, it is pleasing that the scheme has been identified as a priority by the interim North East Regional Transport Board.

If the project proceeds without any major delays and of course subject to the necessary approvals at various stages, it is envisaged that initial scheme implementation could begin as early as mid 2006. The scheme is likely to take up to 3 years to implement in full.

- 134 Of the rail schemes identified as high priority for improving inter-region and intra-region connectivity, the following will play an important role in delivering better connectivity and hence support economic growth:
- East Coast Main Line Power Supply;
 - Loading Gauge Enhancements;
 - Tees - Tyne Express (via Stillington) – to connect the two North East City Regions;
 - Hartlepool to East Coast Main Line – direct link to York, preferably continuing to London or the Midlands; and
 - Esk Valley Line – new station at James Cook University Hospital and additional frequency on the Middlesbrough to Nunthorpe/Whitby line, which will offer commuters to Middlesbrough Centre a rail-based alternative.
- 135 To improve competitiveness of the sub-region, the provision of a modern, integrated, sub-regional public transport system remains central to the long term transport and economic strategy for the Tees Valley. At present, it is clearly evident that the existing rail and inter-urban bus networks do not provide such a system. The Bus Network Review can deliver the required necessary step change in bus network quality in the short-term while over the next year, the local authorities will continue to work closely with Tees Valley Regeneration in the development of an upgraded and more locally focussed Metro rail system. This preferred option would deliver:
- A new sub-regional transit system for the Tees Valley, making more efficient use of the current rail and bus networks to better meet the travel needs over the next 20 years;
 - Conversion of the Darlington to Saltburn heavy rail line to tram-train technology, resulting in increased frequency and higher quality of service;

- Five new stations along the route, serving key employment sites, major regeneration areas, James Cook University Hospital and Durham Tees Valley Airport;
 - Supporting high frequency bus services linking into the new system, providing an enhanced frequency of connection to Hartlepool;
- 136 The future integrated system would create a high quality, fast and reliable public transport solution to assist regeneration and help to avoid the transport problems that would otherwise arise as economic activity gathers pace. It would also play a key role in raising the area's regional and national profile and encourage greater inward investment and sustainable economic growth. Further potential benefits include:
- It allows opportunities for further heavy rail passenger improvements such the Tees-Tyne Express, Grand Central increased services along the Durham Coast by removing congestion at Eaglescliffe Junction;
 - It provides the opportunity for further freight services to run through to Teesport;
 - It will deliver enhanced accessibility many of the key regeneration sites identified in the RSS and the Tees Valley Vision;
 - It will reduce the long term funding requirements for the heavy rail service from Government and Network Rail;
 - It will allow Community Rail Partnership proposals for the Esk Valley Line and the Bishop Auckland – Darlington service to proceed;
 - It will encourage mode shift away from the private car for intra-region trips; and
 - It will offset the increasing impacts of congestion on the trunk and primary route network.
- 137 At the present time, a Business Case is being prepared for submission to DfT in 2006. This is unlikely to form the basis of an LTP Major Scheme bid, with the Transport Innovation Fund viewed as a more appropriate funding mechanism, particularly given the strong impacts of the proposals on increasing national productivity. Additionally options for heavy rail funding are being explored as part of the Business Case development work.

- 138 Freight is clearly extremely important to the Tees Valley economy and facilitating present and future rail freight growth is a key regional priority. Of particular importance is the provision of improved rail freight connections to Teesport which is widely recognised as one of the major economic drivers for the both Tees Valley and the North East region. Teesport has major expansion plans and it is important that the sub-region continues to work together, particularly on access issues, to ensure that these come to fruition. As already discussed, a potential TIF bid is currently under consideration in this respect, with the key constraint on the network in the Tees Valley being Yarm Tunnel.

Congestion: Issues and Objectives

- 139 Despite a number of measures introduced by the Tees Valley Authorities to stem it, growth in road traffic over the First LTP period has risen consistently. At a well defined cordon, covering most strategic points on the Tees Valley boundary, traffic levels grew by 11% between 2000 and 2005. Over the same period at a number of strategic screenlines, growth was approaching 10%. This data was sourced from the Tees Valley Transport Monitoring Report, 2005.
- 140 Although not as prevalent as in other major conurbations, road congestion is likely to increase in the Tees Valley over coming years as car ownership rises. It is rising more quickly in this region than anywhere else in the country from a much lower base. For example in 2005, 37% of households in the Tees Valley had no access to a car compared to the national average of 25.8%.
- 141 Existing locations already witnessing congestion include the A19(T) Tees Flyover and adjacent interchange with A66, the junction of the A19(T) and A174(T), and sections of the A66 around Darlington and through Middlesbrough and Stockton. There are also a number of local roads where capacity is being reached at peak times, in particular key radial routes into Middlesbrough, Stockton and Darlington.
- 142 Based on current growth trends, and on-going modelling work undertaken by the TVJSU, parts of the network are likely to reach or exceed capacity, at certain times of the day, by the end of this Plan in 2011. Figure 1.8 shows where these may occur on the principal road network. These locations have been identified by the Tees Valley Transport Model by comparing links flows against their operational capacities.

- 143 The main issue to address will be a need to balance the access requirements for key regeneration sites, and the need to address specific congestion issues to maintain the area's attractiveness, but without unrestrained growth in car traffic.
- 144 A further key objective is therefore as follows:

Tees Valley Objective 5

To manage the projected growth in demand in a sustainable way that still allows widespread regeneration to continue without creating congestion, or being constrained by it.

Congestion Shared Priority: The Forward Strategy

- 145 Managing the growth in a sustainable way will mean making best use of the existing infrastructure and maximising its use through better maintenance. Measures to be explored include the use of intelligent transport systems and better driver information, although selective investment in new infrastructure may be needed in certain circumstances.
- 146 In light of all the regeneration initiatives discussed in this Chapter, an extremely important issue for the Tees Valley at the present time is to fully understand their impact on the transport network, notably the trunk road network. In an attempt to facilitate a way forward for the Tees Valley in this respect, a partnership has now been formed between the Tees Valley Authorities and the Highways Agency. Early discussions have been held with the initial focus being very much on the Stockton-Middlesbrough Initiative along with some of the other flagship development sites, due to their proximity to the recognised hotspot at the A19/A66 interchange and Tees Flyover. However there is a clear recognition by all parties that the transport impacts of all the strategic development sites in the Tees Valley need to be considered as a coherent whole in this process. The partnership has now agreed the extent of the development likely in the Tees Valley over the next 15 years, realistic timescales for this and importantly the implications of these developments on each other and on existing centres. This has provided vital input and ensured full consistency between transport models run by both the TVJSU and the Highways Agency, which will be used to analyse the impacts on the transport networks and test the likely impact of various interventions. The

network-wide and multi-modal Tees Valley Transport Model has been updated to inform this process and to feed directly in to the more corridor based and visual highway models run by the Highways Agency to specifically assess their trunk road network. For maximum synergy the two models will use the same assumptions and input data. The Tees Valley model is able to assess the implications of the sub-regional Development Programme on the local transport network and test the transport impact of a range of future highway and public transport interventions. Importantly it is now recognised by all local authorities that transport issues must now be at the heart of their future master planning processes.

- 147 Much of the delivery of Objective 5 will therefore be achieved through the LDF process and its alignment with the objectives of the Second LTP within each of the Borough's planning duties.
- 148 If this is to be achieved then a quality public transport system is vital to support the highway network at all levels. The decline in bus use and its perceived unattractiveness must be addressed to avoid the rapid growth in private car usage currently being experienced in areas with more vibrant economies.
- 149 The outcomes of the Tees Valley Bus Network Review described previously will be used to address the decline in bus use and attempt to stem the growth in traffic levels that is likely to increase further with regeneration of the sub-region. The Tees Valley Review also provides the framework for taking forward other ongoing initiatives that will encourage more bus use and reduce congestion, such as:
- Tees Valley Public Transport Information Strategy;
 - Real Time Bus Passenger Information and Priority System; and
 - Strategic Public Transport Hubs – improving interchange and supporting high density land uses.
- 150 These are short-term measures being pursued by the Tees Valley Authorities at a sub-regional level that can realistically be delivered over the lifetime of LTP2. They form the key first stage of a package of integrated public transport improvements that will attract greater numbers of people away from private car use than is achievable at present.

- 151 The local rail network in the Tees Valley already offers segregated alignments and relatively fast journey times for most inter-urban corridors. However frequencies and rolling stock quality are generally unattractive and as such rail's full potential to meet existing demand is not realised. Emerging findings from the ongoing integrated rapid transit study for the Tees Valley offer an opportunity for the local rail network to also play a much greater role than presently in contributing to Objective 5. An improved and more sub-regionally focused rail system, such as the proposed Tees Valley Metro, can help avoid future congestion problems and complement the enhanced bus network, to provide the second stage of a fully integrated solution. As already discussed over the next year the Tees Valley Authorities will continue to work closely with Tees Valley Regeneration to develop a robust business case and funding strategy for the Tees Valley Metro scheme.
- 152 The imperative of expanding and regenerating the Tees Valley economy and the relative lack of congestion at present means that overt demand management in the form of congestion charging/road pricing or workplace parking levies is not yet viewed as the high priority it perhaps is in other parts of the country. However, there is a desire to increase modal shift to public transport within a growing travel market and there is a recognition this can only realistically happen with stricter coordinated demand management measures across the Tees Valley.
- 153 In reality the overt measures above may be considered after the end of the Second LTP when they have gained acceptance in other parts of the country. However in the short-term the Tees Valley can still be more innovative in its thinking to introduce more subtle measures or packages of measures such as:
- Ensuring regeneration can be achieved without an unrestrained growth in long stay commuter parking;
 - Introducing more innovative car park charging regimes that are consistent with other local policies;
 - Reallocating road space to and creating new dedicated links for public transport; and
 - Introducing bus priority at busy intersections.

- 154 If targeted and coordinated effectively this could be the most realistic way to achieve optimum modal shift, given the wider economic growth context for the sub-region.
- 155 Demand management has the potential to conflict with regeneration. On the one hand it is necessary to ensure that new developments do not rely on private transport for their success; on the other, it is vital to ensure that overly-severe demand management does not choke off regeneration. Consequently the Tees Valley Authorities will continue to review their demand management policies as regeneration proceeds and adjust them according to the pace of that regeneration and the strength of the local economy. The Tees Valley Demand Management Framework, which has been updated for LTP2, clearly sets out these policies in the context of the wider regeneration imperative. It will set a framework for actions to be undertaken in the short-term but importantly will also identify a mechanism by which the authorities can set and identify trigger points linked to congestion levels on the network. When these points are reached, appropriate restraint measures will be introduced to ensure that traffic flow levels and journey times are retained at levels that are considered acceptable.

Key Issues

- 156 Based on the review of the evidence and trends across a wide range of influences on transport, the following have been identified as our key issues to address at a sub-regional level:
- declining, but ageing population with increasing numbers of households;
 - economic gap between the Tees Valley and the North East, and between the North of England and the rest of the country;
 - unemployment is higher than the national average, and employment rates will fall without inward investment;
 - disparity in job densities across the sub-region;
 - travel to work patterns differ between the five Tees Valley Authorities and will change over the next 20 years;
 - car ownership is low at present, but is forecast to rise at a higher rate

than the national average;

- poor connectivity with adjacent city regions by public transport;
 - ill-defined connectivity within the Tees Valley City Region by public transport;
 - constraints on future growth of Teesport and Durham Tees Valley Airport as a result of constraints posed by the existing transport network;
 - potential for additional congestion with new employment sites;
 - some of the key employment sites are not currently adequately served by public transport; and
 - health and education trends are below the national average.
- 157 These issues provide the forward momentum for our future transport strategy.

Desired Outcomes

- 158 From the list of key issues, we have identified a series of desired outcomes at a sub-regional level, including:
- reverse the trend in population decline;
 - increase the economic vitality of the sub-region and close the gap in the national trends;
 - more, high quality employment in sustainable locations;
 - enhanced connectivity within the City Region and to neighbouring City Regions;
 - healthier communities; and
 - higher educational attainment.
- 159 These outcomes will provide the means by which the Tees Valley Authorities will monitor the success of their forward strategies.

Summary

- 160 This chapter has set out how the sub-region is lagging far behind the national average in terms of the key indicators that underpin the Shared Priorities for Public Services and how transport can help achieve national initiatives in relation to health and education, and the sub-regional imperative of regeneration.
- 161 Effective access to the range of services required by a growing population, but particularly health and education, is vital to retain the existing population and attract new residents, employees and visitors. The Tees Valley Authorities will seek opportunities to improve accessibility to the range of services to drive regeneration and ultimately improve Quality of Life.
- 162 An analysis of the current situation, the implications of the various policies and drivers for changes, and the consequences or threats of non-intervention, has led to the development of a series of key Objectives for the Tees Valley. These objectives have been set against the Government's Shared Priorities for Transport.
- 163 These sub-regional Objectives will be taken forward within the following chapters to analyse the future trends, problems and value for money solutions at an individual Borough level. However, based on the Shared Priorities for Transport, the most important implications for the Tees Valley Authorities to address are as follows:
- In Darlington, accessibility both locally and sub-regionally to the regenerated town centre "pedestrian 'heart'" and the Central Park development will be important; equally access to and from employment sites outside the Borough will be an issue. The sub-regional transport gateways of the rail station and Durham Tees Valley International Airport will be continue to be vital to all the sub-region. Action is also needed to address the issue of traffic congestion, before it affects economic regeneration and quality of life, along the A66(T) corridor, such as through the Tees Valley Bus Network Review and the Darlington Eastern Transport Corridor. Such action also needs to minimise the barrier to movement caused by the A66(T) around Darlington through measures such as implementing National Cycle Route 14 to Teesside.

- In Hartlepool, the enhanced connectivity to the national road and rail network (the A19(T) and York and Darlington stations in particular) will be vital to support the Victoria Harbour development and provide access to new leisure opportunities. More localised congestion is likely in the vicinity of the Victoria Harbour development and a town centre movement strategy will be required to address this impact.
- In Middlesbrough, access to the Middlehaven and North Middlesbrough regeneration zones will be a priority, with investment in measures to enhance the links between these sites and the existing town centres. However, access to Middlehaven and North Middlesbrough may create added pressure along the A66 corridor, further segregating the regeneration zones from the town centre, and this effect may be exacerbated with any increases in traffic to and from Teesport. Access into the town centre on key corridors will need to be managed as travel demands increase.
- In Redcar and Cleveland, Teesport and other identified regeneration sites will underpin a turn round in economic performance, so good road and rail connections to the national network will be essential. Additional regeneration traffic will need to be managed efficiently and with minimal impact on local roads in this and the neighbouring Authorities. The aim to retain and increase population will need to be supported by enhanced access to health and education facilities as well as new employment opportunities.
- In Stockton, the North Shore proposals and Stockton Middlesbrough Initiative proposals will reinvigorate the riverside, which is served by the A66 and the railway line at present, both of which suffer from capacity restraints. The A19(T)/A66(T) axis will be one of the first areas of congestion on the network, but this forms a vital 'pivot' to the operation of the Tees Valley network, hence there will be a need to provide capacity through this point on the basis of need, and to ensure that local roads within the Borough do not suffer from the effects of diversionary traffic. Future travel demands on key commuting routes from Yarm and Ingleby Barwick will also need to be managed.