

LOCAL TRANSPORT PLAN 2011-26

PLYMOUTH
CITY COUNCIL







Transport and Highways
April 2011

EXECUTIVE SUMMARY

Plymouth's Third Local Transport Plan (LTP3) sets out the transport strategy for the city and provides a framework for the Plymouth Transport and Highways Service within the Council to deliver a high quality transport network enabling the transformation of the city over the next 15 years and beyond. Having a strategy ensures that the significant changes arising from substantial development opportunities across the city can be delivered in a sustainable way, that it is deliverable, affordable, viable and less damaging to the environment.

The Council shares a vision with its 2020 partners for Plymouth:

"To be one of Europe's finest, most vibrant waterfront cities, where an outstanding quality of life is enjoyed by everyone."

The transport strategy supports the four shared priorities of the Council for delivering the vision with its 2020 partners:

- Deliver growth
- Raise aspirations
- Reduce inequality
- Provide value for communities.

LTP3 has been developed in consultation with key stakeholders, the business community, transport operators, neighbouring local authorities and has been subject to a full public consultation. In addition to forming our transport strategy, LTP3 establishes our delivery plans and funding programmes, which are set out in an accompanying Transport Implementation Plan, including targets for delivery.

The Local Development Framework and the Local Economic Strategy also provide a key context for the LTP3. Plymouth's population is forecast to grow by almost 50,000 between 2011 and 2026. As Plymouth's population grows so to will the demand for travel. Put simply, by 2026, without taking action now to increase the use of public transport, walking and cycling, demand for travel by car will far exceed the capacity of the road network and moreover the impact that increasing traffic volume would have on climate change also has to be tackled.

However, the private car will continue to be an important mode of transport for a range of journeys. Through this LTP3, investment will be targeted to manage traffic, improve traffic flow, improve journey time reliability and improve the quality of our car parks. However, the private car is included within the drive for greater efficiency of our transport network. Individuals changing one or two journeys per week from private car to another mode will make a substantial difference to reducing congestion and improving air quality for Plymouth.

LTP3, therefore also has to have an emphasis on bringing about changes in travel behaviour. Giving people a wider choice of travel options and encouraging mode switch for some journeys, will free up capacity on our existing networks to help deliver growth as well as facilitate access to local employment and build strong local economies.

Growth and connectivity

To deliver growth, the strategy sets out the need to provide more reliable journey times by all modes of transport by investing in improvements to the main transport corridors. The key strategic infrastructure projects on the Eastern, Northern and Western corridors focus on delivering high quality public transport routes and services as well as improved journey reliability for all users making the key strategic east-west and north-south movements across the city. However, recognition of the limitations arising from lower levels of funding and limited availability of land will require careful decisions on how to use existing road space. Infrastructure alone will not provide all the solutions to the changing travel demands of a growing city, so the strategy includes measures to improve travel choices, such as providing better real-time information to the travelling public, thereby improving network efficiency as information on journey alternatives is relayed at the time and place decisions are made.

A vital aspect of supporting growth will be improvements to the connectivity of the city regionally and nationally in terms of both personal travel and recognising the role of digital connections such as high-speed broadband, creating better connectivity without the need to actually travel. The perception of the city and the quality of transport networks will be enhanced by targeting the modernisation of the major gateways to the city such as ferry terminals, rail stations, the bus station and our major road corridors.

Equalities

The Corporate Plan 2011-2014 identifies the need to reduce inequality. Reducing inequality is a cornerstone of LTP3 through improving access to goods and services as well as encouraging people to participate in 'active travel' through more walking and cycling between and within communities as part of a

healthier lifestyle. Gaining access to education, healthcare, retail, cultural and leisure opportunities for those without access to a car is fundamental to achieving greater equality across the city. Working with partners across the city and beyond, the strategy sets out to provide more opportunities for walking, cycling and using public transport to access local services and facilities as well as the key employment and retail destinations across the city. Fundamental to this approach is recognising the distinctive needs of each community and working closely with them to develop tailored solutions.

Safety

Every road accident has a physical, emotional, social cost as well as a significant financial cost to the local economy. Safety is often cited as a key factor in the decision to drive rather than walk or cycle. It is therefore important that the strategy sets out mechanisms for reducing accidents and improving the perception of safety and security on the local transport network, particularly in residential areas.

The Environment

Climate change is a key consideration in developing transport strategies as transport is responsible for a quarter of the city's annual CO_2 emissions. The effects of climate change will also have serious impacts on our transport infrastructure. Achieving a small change to travel habits, such as leaving the car at home for one journey per week by increasing awareness and use of alternatives such as walking, cycling and taking the bus or altering driver behaviour which reduces fuel consumption, can have a significant impact on CO_2 emissions. LTP3 will introduce measures which encourage and enable the uptake of electric or other alternative fuelled cars which have lower carbon footprints.

Gradual improvement of our transport assets will be required over the life of LTP3 to meet standards that will better enable management of extreme weather events. In this way, the funding available provides better value for communities by providing a better quality service.

To achieve the necessary level of progress on the priorities does not happen overnight. The strategy set out in this plan therefore supports an incremental approach to delivering improvements to infrastructure and the provision of travel information through innovative information technology, this is underpinned by the need to make more efficient use of our existing transport assets.

Plymouth is the transport focus for the sub-region. The strategy cannot therefore be delivered by the Council alone so, as with the development of the vision itself, partnership working with our 2020 partners, stakeholders and transport operators will be fundamental to achieving the required outcomes and realising greater benefits over the life of the plan and beyond.



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CHAPTER ONE
INTRODUCTION

INTRODUCTION

Welcome to Plymouth's Third Local Transport Plan

1.1 Plymouth is a focal point for the South West peninsular, being the second largest city in the region. The attraction of the city covers a wide sub-region with people travelling to work, shop, attend colleges or university or for leisure opportunities.

1.2 Plymouth has set itself an ambitious growth agenda to increase the wealth of the city by growing the population to such a scale that it is an attractive prospect for investors, major employers and entrepreneurs. This will enable the city to reach its full potential and offer an excellent quality of life to residents and visitors. However, success on this scale must be supported by investment in transport measures, such as communications technology, roads, public transport and travel planning. The benefits of the growth of the city will be enjoyed far beyond the city boundaries.

1.3 We need to think seriously about the future and the type of city we want to pass on to our children. The legacy of our generation could be the difference we have made to reducing the impacts of climate change. Now is the time when we can make the biggest difference and this strategy will put in place real alternatives, which will enable residents and visitors to make an informed choice about how they travel for different journeys. It is only necessary to make small changes to have a significant impact. For example, if all those who travel by car changed their mode one day per week the traffic levels would be reduced by 20% to about the same as it is in the school holidays.

1.4 The growth over the coming years is only part of the story. We need to address the existing problems, such as health inequalities. Transport alone cannot 'fix' problems, but it can help to manage them so they have a reduced impact. Enabling people to get to hospitals and doctors quickly and easily, or providing high quality walking and cycling routes are things we can do which will help reduce those inequalities.

1.5 This plan sets out the strategic direction that it is necessary to follow for the next 15 years. The aim is to provide the right conditions to enable the growth set out for the city, contribute to tackling climate change, improve safety and security, promote equality and improve the health of our communities.

1.6 The Local Transport Plan is a strategy and so only provides details of projects at a strategic level. The strategy relies on evidence from a number of sources. Much of this is work that has been carried out within Plymouth to get an intimate understanding of the local issues and develop local solutions.

1.7 From this strategy a Transport Implementation Plan has been developed which sets out in more detail the activities which will be undertaken and the time frames within which these are likely to occur given what is currently known about funding and development.

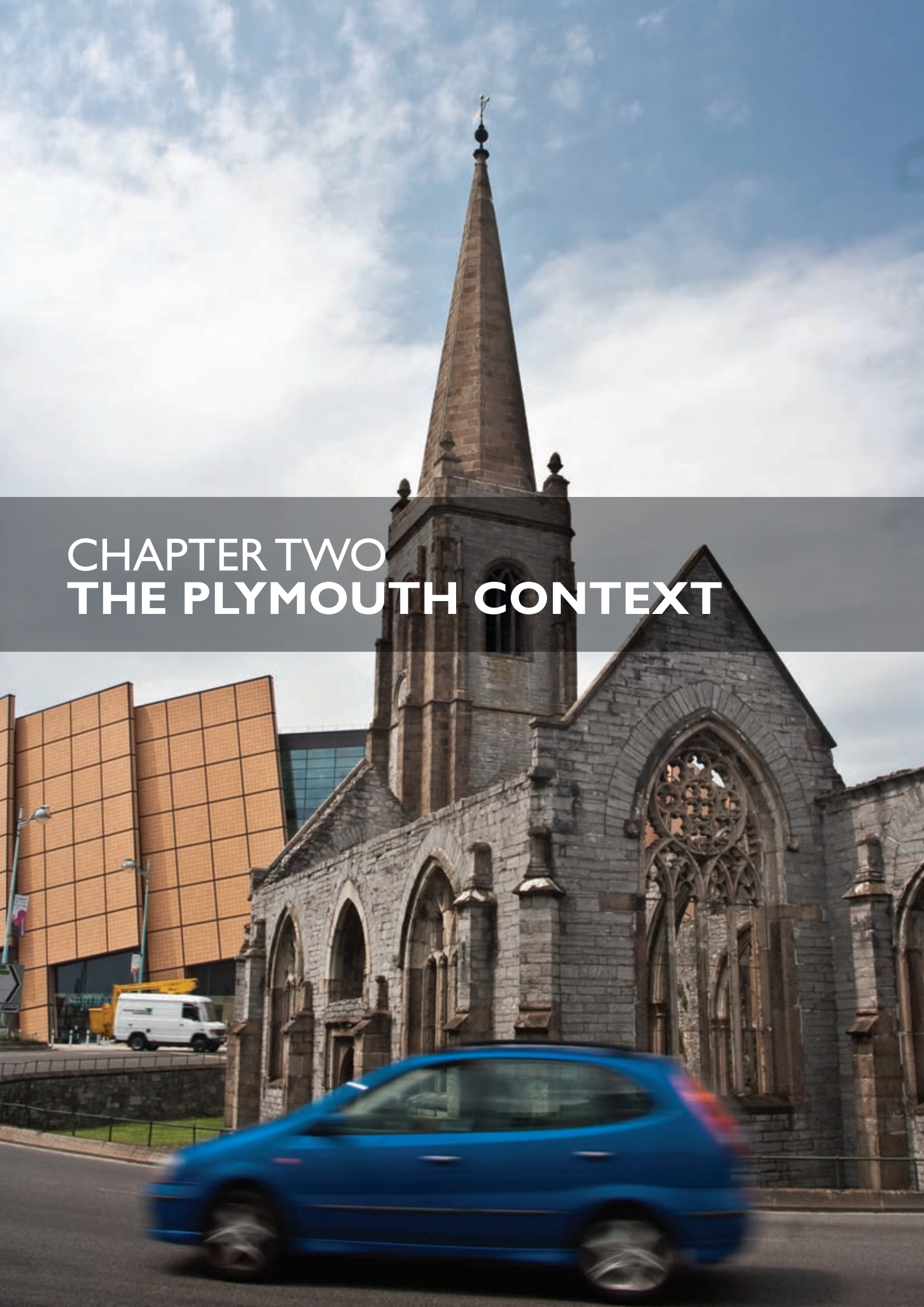
1.8 The Local Transport Plan does not set out the changes required to manage the business as usual activities, such as highway and structural maintenance or management of our transport networks. These activities fall within the Network and Asset Management Plans, both of which are fundamentally linked to the LTP as many of the improvements required by this plan will be driven by them.

1.9 It is anticipated that this LTP will be revised to take account of the changing financial, policy and development climates before April 2016. The Transport Implementation Plan will be revised on an annual basis so that up-to-date information is provided about schemes and projects that are to be implemented and whether changes are required to delivery time frames and the justification for this.

1.10 This plan is an evolution of the LTP that was published as a draft for consultation in October 2010. Following 12 weeks of consultation the final strategy has been developed on the basis of the comments that were submitted and new data that has been collated. Details of the changes that were made as a result of the comments received are contained within the consultation report, which forms part of the evidence base for this strategy.



Councillor Kevin Wigens
Cabinet Member for Transport



CHAPTER TWO
THE PLYMOUTH CONTEXT

THE PLYMOUTH CONTEXT

Location and Historical Context

2.1 The city of Plymouth is located on the south coast of Devon, bordering Cornwall, 120 miles south-west of Bristol and 220 miles from London. With a population of around 256,000 people, it is the largest city in the far south-west of England and the second largest in the south west after Bristol.

2.2 Residents benefit from Plymouth's outstanding natural setting between two rivers and at the head of one of the world's largest and most spectacular natural harbours, Plymouth Sound; a setting that has always played a pivotal role in the city's development. Those that live in Plymouth and its surrounding area benefit from the proximity to other nationally recognised areas of natural beauty, including Dartmoor National Park and Cornwall, South Devon and the Tamar Valley Areas of Outstanding Natural Beauty.

2.3 Plymouth has a largely rural hinterland, with the largest settlements within its sub-region being Torpoint and Saltash in the west, Tavistock in the north, and Ivybridge in the east.

2.4 The city was built on a sea faring history, culminating in the establishment of the naval dockyard, which still exists today. Much of the city centre was destroyed in World War Two and subsequently completely rebuilt to the Abercrombie vision on a highway grid system, now mainly pedestrianised with a ring road.

Plymouth Today

Economy and Connectivity

2.5 Today, although Plymouth's economy is still influenced by maritime engineering, recent changes in the defence sector have forced a change. The city has made progress in recent years with significant structural and economic changes designed to match the city's performance with its size and standing. However, a much larger reliance currently on the public sector than much of the UK does make Plymouth highly vulnerable to economic shocks such as public sector finance cuts.

2.6 Plymouth's peripherality has, in the past, been recognised as a primary inhibitor of economic activity. The city relies on a few key strategic links to other parts of the UK. Some critical connectivity issues need to be resolved, but Plymouth has inner strength as a result that improved connections can only help to strengthen further. The city is currently lobbying for improvements to rail journey times and seeking to actively protect the A38 journey times to Bristol.

Inequality, Social Deprivation and Health

2.7 The unemployment rate for Plymouth is currently 7.9% which is higher than the South West average of 6.2% and slightly higher than the average for Great Britain of 7.7%.[1] Public sector employment accounts for 36.9% of the jobs in Plymouth - this is a higher proportion than for the South West as a whole (28.7%).[2]

1 Office for National Statistics annual population survey (July 2009 - June 2010)

2 Office for National Statistics annual business inquiry employee analysis (2008)

2.8 There are many factors that contribute towards social deprivation in Plymouth. We have inequalities of wealth, employment, health, education, mobility, crime and the environment, which is the same as most cities. In the 2007 Index of Multiple Deprivation (IMD) Plymouth was ranked as 76th most deprived out of 354 Local Authorities in England.[3]

2.9 The most acutely deprived areas within Plymouth neighbourhoods are Devonport, Keyham, Barne Barton, North Prospect and Whitleigh.

2.10 The health and well-being of people in the South West is considered to be good compared to the rest of the UK. However, in Plymouth itself the health and well-being of residents is generally worse than in the rest of the UK. The health of the city's residents also varies across the different neighbourhoods. For example, the difference in average life expectancy between the richest and poorest neighbourhoods is 14.7 years.[4] According to the Office for National Statistics, Plymouth's male life expectancy is 77.2 years. This is the second lowest in the South West. Female life expectancy is 82.[5]

Environmental Issues

2.11 Arguably one of Plymouth's greatest assets stems from both its fantastic natural setting and the natural environment found within and around the city.

3 Department for Communities and Local Government, December 2007 http://www.communities.gov.uk/documents/communities/pdf/576659.pdf

4 Director of Public Health for Plymouth, Annual Report 2010/11http://www.plymouthpct.nhs.uk/CorporateInformation/boardpapers/Documents/Board%20Papers%20-%202011/Board%20Papers%20-%20February%202011/Public%20Health%20Report.pdf

5 Office for National Statistics (Based on a 3 year average 2006-2009) http://www.statistics.gov.uk/life-expectancy/default.asp

2.12 As such, we have a responsibility to preserve and protect this valuable resource from human activity, including land-take and the negative impacts of transport. Whilst protecting the environment is clearly a positive goal, when combined with the lack of available space for new infrastructure, it does represent another constraint that prevents merely building extra highway capacity as the city grows.

2.13 Vehicle emissions are one of the contributors to poor air quality, which can lead to a significant impact on the natural environment and on human health. Plymouth currently has two Air Quality Management Areas; Mutley Plain and Exeter Street / Embankment Road. These have been declared due to high levels of nitrogen dioxide, whilst monitoring has indicated that three other areas may soon fall into this category.

2.14 In terms of our carbon footprint, Plymouth's carbon emissions, currently at 5.5 tCO_2 per capita, are actually one of the ten lowest for cities across the UK. Transport is responsible for 25% of Plymouth's emissions.[6]

Safety and Security

2.15 The Council's road safety record has significantly improved over recent years due to the strategies contained within the previous LTPs. We have been very successful in cutting deaths and serious injuries on the roads by 68% to the end of 2009.[7] We have achieved this by intensive training programme of road safety engineering projects, speed management initiatives and education and training.

2.16 How safe people feel can significantly influence their travel choice and behaviour. Crime statistics show recorded crime in the city fell by 8% and the risk of being a victim is lower than at any time since British Crime Survey began in 1981.[8] Public safety at night was perceived as a problem as two thirds of residents expressed this in the Quality of Life Survey in 2006.[9]

2.17 The Council and its partners have recently been recognised by the Audit Commission for exceptional performance in planning to respond to large-scale emergencies and keeping the city safe. Ensuring the city's transport systems are resilient and able to cope with incidents and events is a priority.

Health of the Transport Network

2.18 Plymouth is well served by a road and bus network, although the severance effects caused by main roads restrict walking and cycling opportunities. In addition, its topography restricts the routes and transport choices from certain areas.

2.19 In common with much of the UK, vehicular traffic has increased by around 15% over the last 15 years.[10]

2.20 Comparing Plymouth with other authorities nationally in a survey, our city was ranked 62nd out of 95 with regard to satisfaction with transport services overall.[11]

2.21 The majority of the regular commuting trips are made by car within the city boundary, many of these being for only short distances and 38% of trips less than 2km being made by car. However, many residents are using other forms of transport: either public transport, cycling or walking.[12]

2.22 Of the 20% of the workforce that live outside the city there is a higher level of car dependency.[13]

2.23 The use of public transport for travel to work in Plymouth is higher than the national average and there are good levels of customer satisfaction with local bus services.[14] However, much of this use is focused on trips to the city centre.

2.24 Patronage of both bus and rail has been increasing recently. Bus patronage was following the national downward trend but, in the last four years, levels have increased by around 5%. The national trend of sharp increases in rail travel has been particularly apparent in Plymouth, with rail station footfall figures indicating that rail patronage has been rising rapidly for main line services, whilst patronage on the Tamar Valley line has achieved even greater growth.[15] Rail capacity is currently a constraint for the south west and there is a need to increase both the number of trains and seats to cope with demand.

2.25 Levels of walking trips are estimated to be higher than the national average and cycling trips broadly in line.

6 Department of Energy and Climate Change, 2008 Local Authority Carbon Dioxide figures http://www.decc.gov.uk/en/content/cms/statistics/climate_change/gg_emissions/uk_emissions/2008_local/2008_local.aspx

7 Calculated from Devon and Cornwall Police data using baseline average 1994-1998 to 2009

8 British Crime Survey Survey 2004/05-2007/08

9 Plymouth City Council, Quality of Life Survey, 2006

10 DfT National Road Traffic Survey, 2010

11 National Highways and Transport Network Public Satisfaction Survey, 2010 http://nhtsurvey.econtrack.co.uk/Content.aspx?589.

12 Office for National Statistics, 2001 Census http://www.ons.gov.uk

13 Office for National Statistics, 2001 Census http://www.ons.gov.uk

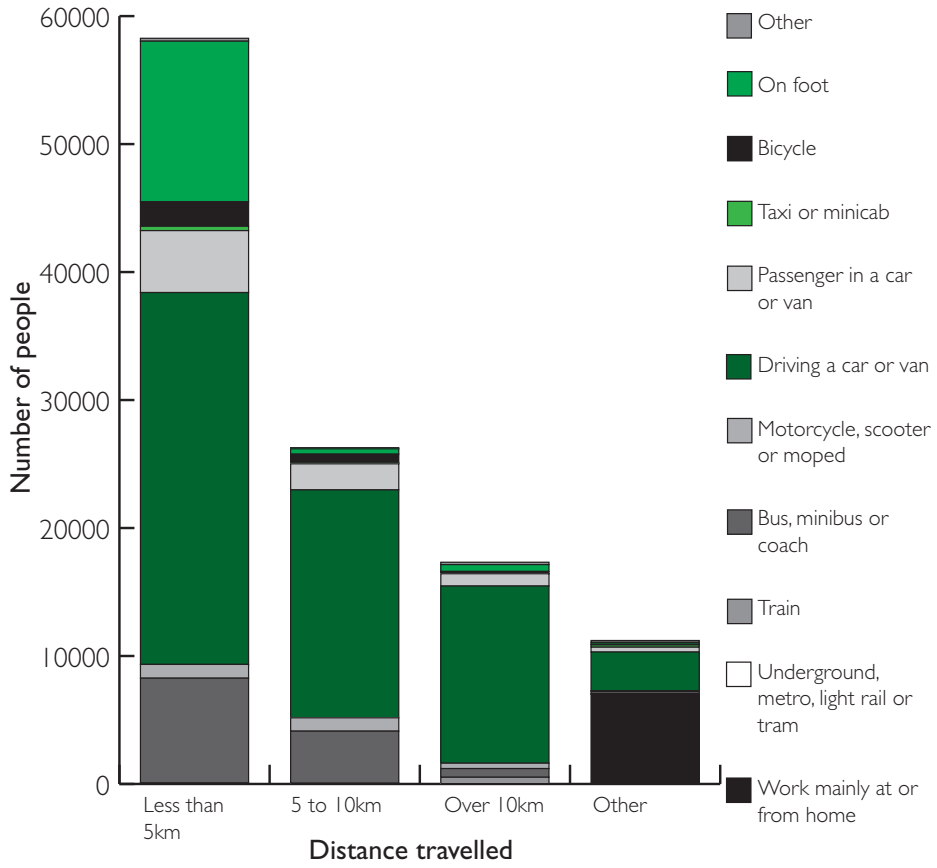
14 Passenger Focus, Bus Passenger Survey, 2010 http://www.passengerfocus.org.uk/research/bus-and-coach/content.asp?dsid=4548

15 Office of Rail Regulation, Rail Statistics http://www.rail-reg.gov.uk/

2.26 Plymouth benefits from a continental ferry port, regular local ferry services and a new landing stage at the Barbican to enable easier access to water transport and encourage tourism.

2.27 Plymouth's ports also provide opportunity for future freight transfer between road, rail and sea.

Figure 2.1 Distance travelled to work by Plymouth employees (Census 2001)



Policy Context

The National Policy Context

2.28 The need for people to make more sustainable transport choices, reducing the need to travel and the role of transport in accessing key services have been on the UK government's agenda for many years. This approach has been supported by a drive to integrate transport and planning policy and processes, with new international and national policies having been introduced in recent years.

2.29 The Government's recent White Paper, Creating Growth, Cutting Carbon – Making Sustainable Local Transport Happen (DfT, January 2011) sets out its clear intentions for a locally-led approach to meeting two key government objectives: helping create growth in the economy and tackling climate change by reducing carbon emissions.

2.30 Through the introduction of the Local Transport Act 2008 the government has given local authorities more powers, specifically to improve local bus services, to review and propose their own arrangements for local transport governance, and powers to implement local road pricing schemes. A new regulatory framework for bus services has also been introduced.



The Local Policy Context

The Corporate Plan

2.31 The council and it's partners in Plymouth 2020, the Local Strategic Partnership (LSP), have committed to a clear shared vision for Plymouth:

"To be one of Europe's finest, most vibrant waterfront cities, where an outstanding quality of life is enjoyed by everyone.

A city that will be:

- A healthy place to live and work
- A wise city that is a place for learning, achievement and leisure
- A wealthy city which shares and creates prosperity
- A safe and strong city

2.32 The current Corporate Plan sets out the council's strategic direction for 2011-2014 and beyond. It focuses on the vision and the four shared priorities that have been developed to deliver the vision:

- **Deliver growth**
  Develop Plymouth as a thriving growth centre by creating the conditions for investment in quality new homes, jobs and infrastructure
- **Raise aspirations**
  Promote Plymouth and encourage people to aim higher and take pride in the city
- **Reduce inequality**
  Reduce the inequality gap, particularly in health, between communities
- **Provide value for communities**
  Work together to maximise resources to benefit customers and make internal efficiencies

2.33 The Corporate Plan describes how, at the core of the vision, is the transformation of Plymouth into a series of sustainable communities where the most is made of the city's very considerable natural assets, and the view that the city should grow in width to the east and in height to exploit it's waterfront setting.

2.34 Plymouth's vision involves growing the city's population from 250,000 to 300,000, with an increase in homes and employment, to become the regional economic hub of the South West. This means responding to what will be a growing and changing population, as new workers and visitors arrive, in an inclusive and welcoming way. It also means building on the city's strengths and, crucially in terms of transport, developing a series of interlocking and sustainable communities.

2.35 Ensuring that there are high quality access networks across the city to leisure, work, health and other amenities is a feature of the vision, together with improving the major gateways to the city like the ferry terminal, rail and bus stations and our major road corridors.

2.36 There is focus on developing jobs in six high value growth areas; having a vibrant city centre of regional significance and a second centre for the growing high tech and medical sciences quarter to the north of the city at Derriford. Access to the waterfront will be improved, local communities will be regenerated, and new schools and leisure amenities will be provided, all with the aim of attracting new firms and jobs to the city and making the city a more vibrant and attractive place.





The Local Development Framework

2.37 The Local Development Framework (LDF) provides the spatial planning framework for the development and growth of the city up to 2021. Together with the LTP it provides the strategic framework for the spatial development of the city. The LDF consists of a set of strategies of which the Core Strategy, which was formally adopted in 2007, sets out the overall planning vision for the city and the means by which this will be delivered.

2.38 The importance of reducing the need to travel through creating sustainable linked communities, and ensuring that sustainable transport provision is an inherent part of development, with a transformed high quality public transport network linking key growth areas, is central to the delivery of the Core Strategy's vision.

2.39 Ten priority areas have been identified because of their importance city-wide, their opportunities for development or their urgent need for regeneration. These areas are detailed in Area Action Plans (AAPs), which provide the detail for delivering local priorities, each one containing location specific proposals.

2.40 Several AAPs have already been adopted:

- City Centre and University
- Millbay and Stonehouse
- Sutton Harbour
- North Plymstock
- Devonport
- Central Park.

2.41 The Sherford New Community AAP, although not part of Plymouth's LDF (it is part of South Ham's LDF), is of particular relevance to Plymouth as it deals with the creation of a sustainable new community on the Eastern fringe of Plymouth, with high quality public transport services linking it with Plymouth and Langage.

2.42 Three remaining AAPs for Plymouth are yet to be fully developed. Of particular significance is the Derriford and Seaton AAP, which proposes significant growth of employment, as well as new retail (including a completely new district centre), housing, improvements to the airport and enhancements to the area as a gateway to the city.

2.43 In addition South Hams District Council has set out preferred site options for development of the 'Plymouth Urban Fringe', the land within the South Hams boundary on the northern and eastern edges of Plymouth (excluding Sherford). Of significance to Plymouth is the proposal for the expansion of employment provision at Langage, as well as further housing growth. The Plymouth Urban Fringe DPD is being jointly prepared by Plymouth and Devon County Council with South Hams District Council.

2.44 Transport considerations and proposals including new infrastructure, improved connectivity, enhancement of public transport provision, provision for walking and cycling, and encouraging the use of sustainable modes have been very important in developing AAP proposals and securing the adoption of AAPs and the LDF Core Strategy as deliverable.

2.45 Also part of the LDF, the Sustainable Neighbourhoods Development Plan Document will provide further detail for areas of the city not included within AAPs. This will play an important role in tackling social deprivation and achieving the desired outcomes of improving health, safety and equity, by guiding development in a way that will address local community needs such as through improving connections to community facilities and other parts of the city, as well as identifying sites that might be required to meet the wider needs for employment, homes and services.

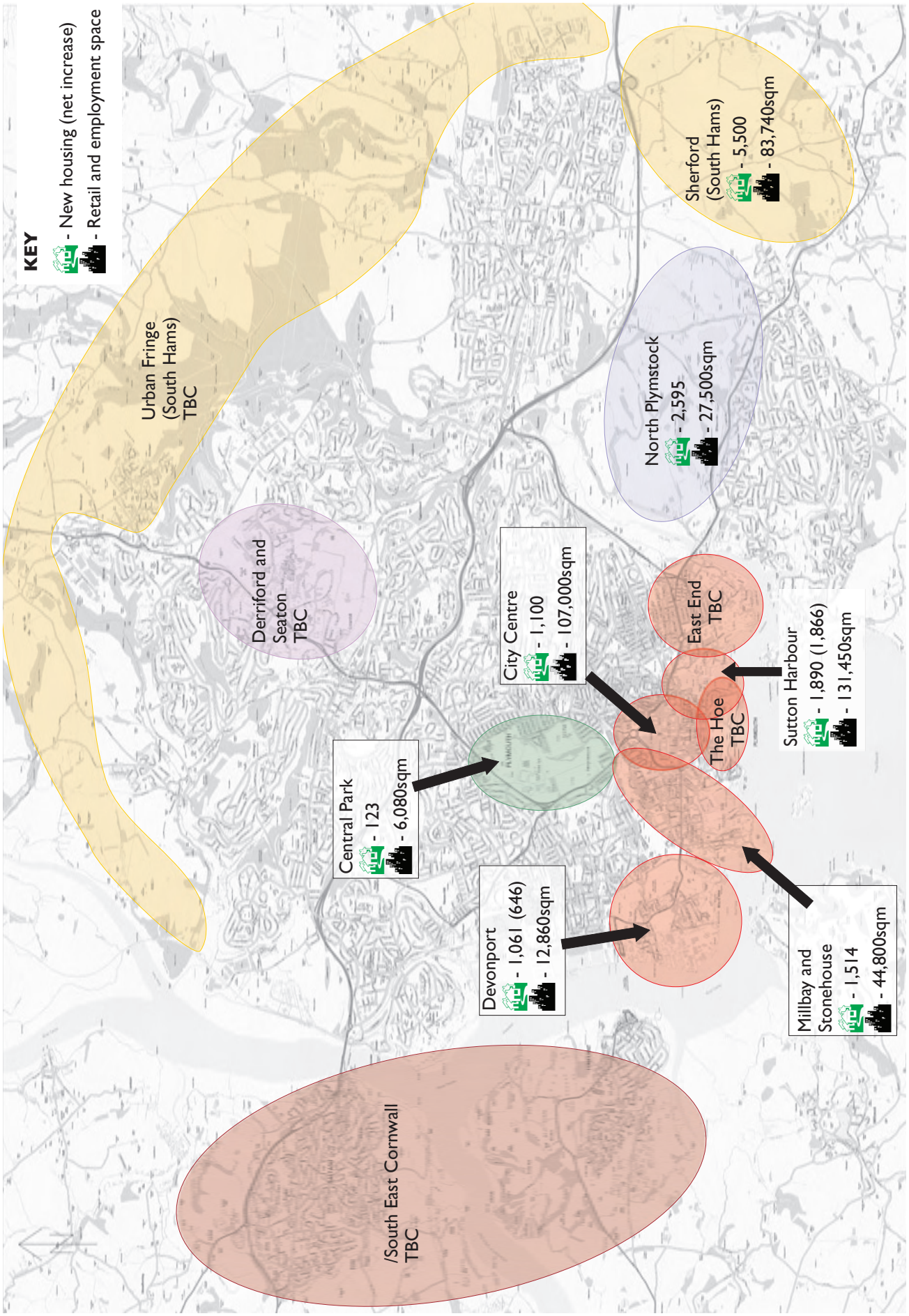
2.46 The LDF includes several Supplementary Planning Documents that have been adopted by the Council, providing further policy guidelines for developers and to help the Council assess planning applications; these are of particular relevance in relation to developing sustainable communities.

- Planning Obligations and Affordable Housing SPD: seeks to address the impacts of development on the infrastructure needs of the city, both at neighbourhood level and in relation to enabling the city to grow sustainably. The current mechanism for achieving this is through the Plymouth Development Tariff, a standard charge used to secure contributions in a clear, efficient and transparent way. The tariff secures developer contributions for, amongst other things, strategic transport measures. During 2010 and 2011 the Council will consider whether to adopt a Community Infrastructure Levy as its mechanism for securing infrastructure contributions. The Community Infrastructure Levy Regulations 2010 provide that tariff approaches to planning obligations, such as that currently operated by the Council, will only be effective until 2014

- Development Guidelines SPD: sets out maximum car-parking standards and includes a methodology whereby maximum car parking standards can be reduced for non-residential development, depending on the accessibility of the site. Guidance is also provided on the requirements for travel plans. In relation to the interpretation of car parking standards the council will continue to operate the parking policies set out in this SPD but will be guided by the Government Announcement of 3 January 2011 in relation to the application of parking standards for residential development
- Design SPD (Sustainable Design in Plymouth): provides guidance on a range of design issues including designing distinctive neighbourhoods, designing safe and attractive streets and preserving and enhancing both the natural and the built environment.



Figure 2.2 Growth areas in the Plymouth sub-region



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Scale 1:15000

The Local Economic Strategy

2.47 Planned changes to Plymouth's economy are set out in the Local Economic Strategy (LES), another document with a strong link to the LTP. The focus of the LES is on delivering the LSP's strategic objective of developing a prosperous economy.

2.48 The LES identifies the economic development priorities necessary to deliver a step change in economic growth to 2026. Its aspirations are to increase competitiveness, diversify knowledge, improve the skills base of the workforce, build sustainable, well connected and inclusive communities and intensify the overall business base of the city. This will in turn attract private investment, raise incomes and help tackle economic and social exclusion.

2.49 As is the case with the LDF, transport decisions will play an important part in providing the right conditions for the city's economy to prosper to its full potential.

Acting on Climate Change

2.50 A major challenge for the city within the context of its significant planned growth will be how to achieve this whilst still working towards its policy aims on climate change.

2.51 Part of the challenge we face is how to adapt our infrastructure to cope with current and future impacts of climate change such as extreme weather. Perhaps a greater pressure is how to be part of the national and global drive to slow the rate of climate change by reducing greenhouse gas emissions across the city and moving towards a lower carbon economy.

2.52 The city has already, in line with national policy, set itself ambitious targets as set out in Acting on Climate Change: Plymouth's Climate Change Action Plan:

- to reduce CO_2 emissions by 60% by 2020 and by 80% by 2050
- to reduce the per capita carbon footprint in the local authority area from 5.8 tCO_2 per person (in 2006) to 5.0 tCO_2 per person by 2011.





CHAPTER THREE
THE TRANSPORT VISION FOR PLYMOUTH

THE TRANSPORT VISION FOR PLYMOUTH

3.1 Plymouth is a city with a clear vision to grow in terms of population and prosperity over the next 15 to 20 years; this will present a number of opportunities for the transport networks.

3.2 The vision for transport is one of a more efficient network which capitalises on the aspiration for growth and provides users with a better journey experience.

3.3 To maximise the benefits of growth, it will be essential to increase the efficiency of the transport network such that it is environmentally and economically sustainable. A more densely populated city with the promotion of sustainable communities and mixed use development on our main transport corridors provides the opportunity to improve transport infrastructure. It also creates the right environment for increasing the market for public transport and enabling people to choose walking and cycling more often.

3.4 To achieve this vision it will be necessary to change perceptions and thus attitudes towards the low carbon modes of transport. The highest priority is to provide a choice of high quality, reliable, well-connected journeys by bus, cycle and on foot.

3.5 Cars will continue to provide an irreplaceable tool for a range of journeys, but they are included within the drive for greater efficiency as it will not be possible to build enough roads for everyone to drive where they like, when they like, as fast as they like and park for free. Changing one or two journeys each per week to another mode will make a substantial difference to levels of congestion and pollution.

3.6 Many changes will take place in the future which will provide a greater choice for those who travel around the city. However, a variety of options will not in itself encourage increased uptake of low carbon modes. For there to be a fundamental change in travel behaviour there needs to be a stimulus which raises awareness of the new opportunities.

3.7 Delivering the type of facilities and raising awareness that will enable this vision to become a reality is incredibly complex and will require working with many partners; public, private and voluntary. It is a long-term commitment to a fundamental change in how transport is delivered in Plymouth.

3.8 This LTP sets out the objectives that represent our transport priorities to deliver the vision. These are not fixed for the entire 15 year period of the LTP - they will be reviewed as the local priorities change. The objectives are not in any particular order, but have been developed through an understanding of what is needed to deliver and then refined by working with the key stakeholders in the city. The text that supports each objective provides examples of the areas of likely activity but are not exhaustive.





One of Europe's finest, most vibrant waterfront cities, where an outstanding quality of life is enjoyed by everyone.

Vision for Plymouth

Plymouth's Local Transport Objectives

1. Link communities together

- Improve access to community amenities, leisure opportunities and our high quality natural environment by increasing the availability of attractive walking, cycling and bus routes and enabling the right mix of land use
- Enable easy access to growth and regeneration areas by walking, cycling and public transport
- Improve the design of residential streets to reduce the fear of crime and antisocial behaviour as well as the dominance of the car
- Reduce severance of communities by transport networks and the impact of poor air quality and noise on communities.

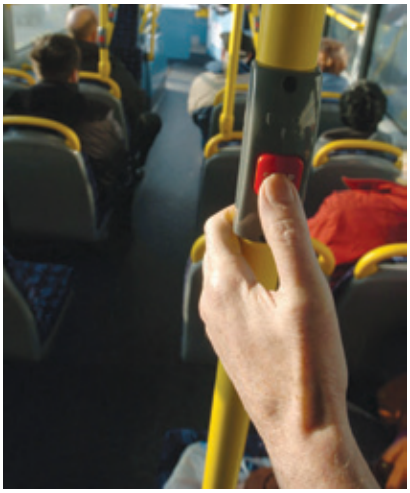
2. High quality transport standards for a vibrant city

- Make best use of our existing transport networks; manage congestion and improve journey reliability
- Maintain, and where necessary improve the condition and increase the flexibility of our transport network such that it is more adaptable to climate change, severe weather events and incidents
- Work in partnership with public transport operators to improve service levels, quality provision and reliability
- Improve the quality of public car parks such that they meet the higher standards set by private parking companies
- Set clear priorities for routes to and from main areas / facilities to balance competing demands for highway space across the network.

3. Make walking, cycling and public transport the desirable choice

- Provide more opportunities and encourage increased uptake of travel by active modes, walking and cycling, to promote healthy lifestyles
- Improve the quality, extent, availability of information and physical access of our bus, rail, walking and cycling networks so that they are easy to use
- Increase integration of transport modes to improve the end to end journey experience so providing an attractive range of travel choices for more people







4. Maximise the transport contribution to Plymouth's carbon reduction target (60% reduction by 2020)

- Increase awareness of ways to reduce personal carbon footprint by walking, cycling and taking the bus
- Reduce energy consumption from non-renewable sources used by our infrastructure and operations
- When building or renewing infrastructure or equipment consider the lifecycle carbon footprint; reuse and recycle where possible
- Encourage use of more efficient and alternative fuelled vehicles by providing infrastructure and information.

5. Use transport to drive the local economy

- Support the delivery of the Local Development Framework and Local Economic Strategy by connecting growth and regeneration areas by all modes with communities and transport networks
- Work within the development management process to deliver small and large scale improvements in transport networks to enable connectivity
- Develop improved transport networks to open up long term opportunities for growth
- Encourage sustainable tourism
- Improve connections with transport networks which connect Plymouth to the rest of the country
- Improve access to wider road, rail, air and sea networks
- Improve gateways to these networks, prioritising Plymouth railway station and Plymouth's bus and coach station.





The Strategy

3.9 The strategy for the LTP is summarised as follows:

Support growth in terms of population and prosperity by -

- accentuating Plymouth's role as the sub-regional capital by improving connectivity
- Improving the efficiency of the transport networks to keep the city moving by making better use of our assets, improving connections between key areas of the city and improving the movement of goods.

Tackling climate change by -

- addressing the causes of climate change by reducing the carbon footprint of the transport network
- managing the impacts of climate change by improving the resilience of the transport network through better management and maintenance.

Improving the health of the community by -

- enabling active travel through the provision of walking and cycling infrastructure and providing a nudge to encourage use
- managing transport related noise and air pollution.

Contributing to better safety and security by -

- improving road safety through a new, minimal infrastructure approach which includes 20mph limits in residential areas
- managing the perceptions of safety and crime
- ensuring the security of the transport networks through emergency planning in partnership with relevant agencies.

Promoting equality of opportunity by -

- improving access for those without a car through working in partnership to develop and deliver accessibility action plans
- enabling bus use by providing bus priority infrastructure, improving physical access to bus stops and providing better information about services
- supporting the provision of community transport and the use of taxis
- influencing the changing shape of our communities to enable improvements to local access.

3.10 The full details of each element of the strategy are provided in the appropriate chapter of this document.

3.11 The links between the strategy and the objectives are summarised in Table 3.1.

Table 3.1 The strategy and the objectives

Strategy chapter	Strategy section	Local Transport Objectives				
		1	2	3	4	5
Support growth	Plymouth as a sub-regional capital		■			■
	Keeping the city moving	■	■	■		■
Tackling climate change	Addressing the causes of climate change				■	
	Managing the impacts of climate change	■	■	■	■	
A healthy community	Enabling active travel	■		■		
	Managing transport related noise and air pollution	■	■	■		
Contributing to better safety and security	Improving road safety	■		■		
	Managing the perceptions of safety and crime	■		■		
	Ensuring the security of the transport networks		■		■	■
Promoting equality of opportunity	Improving access for those without a car	■	■	■		
	Enabling bus use	■				■
	Supporting Access Plymouth in the provision of community transport	■		■		
	Influencing the changing shape of our communities	■		■		■

3.12 The strategy diagram (Figure 3.1) demonstrates the relationships between strategy sections and their contribution to each of the theme areas. It is clear that some strategy elements contribute to more than one theme area, where this is the case they are included only once in the strategy to avoid duplication.

Figure 3.1 The LTP Strategy



3.13 More details of the strategy and the activities can by found in the relevant chapter of this LTP. We have also summarised this strategy by mode of transport in Chapter 9.

Development of the strategy

3.14 A number of options were considered in the development of this strategy. This strategy does not provide the detail of the business as usual activities or the mechanisms by which these activities will be improved, the maintenance and management of the highway network for example. It is acknowledged that these are vital elements in delivering the strategy and that's why they are referenced herein. Actions to improve the business as usual activities are the development and delivery of the Network Management Plan (NMP), Transport Asset Management Plan (TAMP) and Surface Water Management Action Plan (SWAMP).

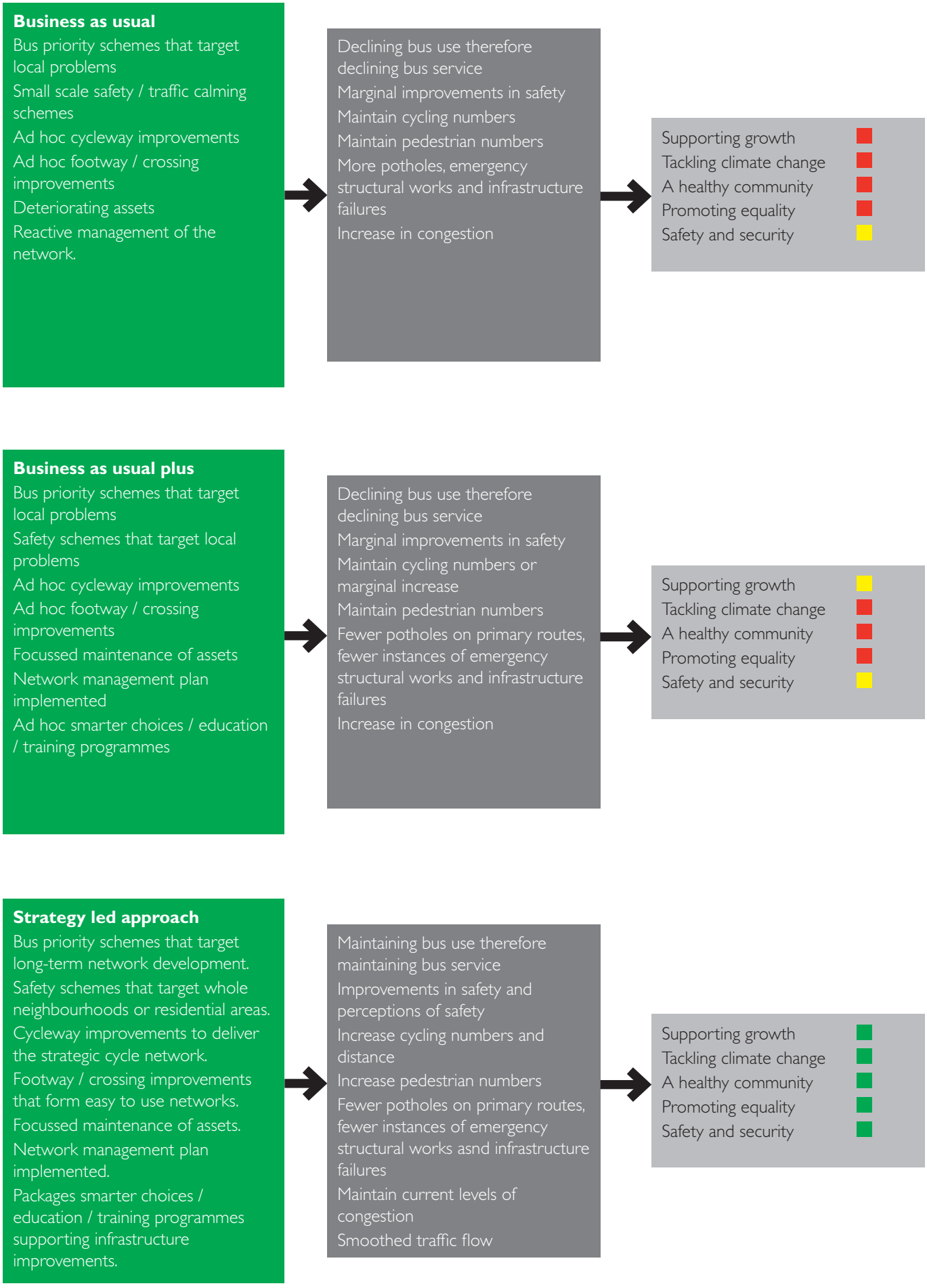
Option 1 - Business as usual - continue to deliver transport along the same lines as the previous 5 to 10 years, dealing with problems in a reactive way, focusing on small scale or very local improvements and being opportunistic. Larger projects have been brought forward, such as the George junction improvements and park and ride or the Eastern Corridor improvements, and have delivered elements of the previous strategy. It is less likely, at least in the early part of this strategy, that these opportunities will exist. This option would deliver on some parts of the strategy but would not support the priority areas. As a mechanism to move forward, supporting the growth of the city, tackling inequalities and managing carbon emissions this option does not provide the leadership and direction to achieve the required outcomes and is therefore discounted.

Option 2 - Business as usual plus - using Option 1 as a basis but applying a stronger focus on planned, targeted network and asset management would provide a better delivery mechanism for growth but would still fall short on a number of outcomes. It is clear that improved asset management is required to halt the deterioration of the quality of the transport networks, however this must be a more focused approach making better use of the available funding as there are unlikely to be additional funding streams. The improved management of street works and incidents, alongside improved information availability and active management of congestion has the ability to radically improve the network performance and journey experience for all users and therefore enables the use of the network to be optimised. These activities clearly support the management of the city of 2011, but a growing city with aspirations to improve equality and reduce carbon emissions will need to focus on other aspects of transport delivery as well, so for that reason Option 2 was discounted.

Option 3 - Strategy led approach - using the knowledge assembled during the last 5 to 10 years about the scale and type of growth that is anticipated within the city, the inequalities faced by some residents and the commitment the city has made to tackling climate change to plan changes to the city's transport network. These changes will enable the whole city to grow and prosper. This approach also requires the stronger focus on planned, targeted network and asset management to underpin the other improvements. This option is being taken forward.

The option diagram (Figure 3.2) shows three options which were considered.

Figure 3.2 Strategy Options





CHAPTER FOUR
SUPPORTING GROWTH

SUPPORTING GROWTH

Strategy at a glance

Support growth in terms of population and prosperity by

- accentuating Plymouth's role as the sub-regional capital by improving connectivity
- Improving the efficiency of the transport networks to keep the city moving by making better use of our assets, improving connections between key areas of the city and improving the movement of goods.

Introduction

4.1 The movement of goods, people and information has driven the world economy since the earliest recorded history. Transport investment drives improved economic performance in a number of ways, including by:

- Increasing business efficiency through time savings and improved reliability for business travellers, freight, and logistic operations
- Increasing business investment and innovation by supporting economies of scale or new ways of working
- Attracting globally mobile activity by providing an attractive business environment and good quality of life
- Providing a healthy, more mobile workforce.

4.2 The city has set out an ambitious growth agenda in its Local Development Framework (LDF) to endorse Plymouth as the economic hub of the far south west. The large-scale expansion planned for in the LDF presents opportunities and challenges in terms of transport infrastructure and services, such as ensuring adequate connectivity by all modes of travel between employment and population centres and achieving growth without generating excessive levels of traffic and congestion.

4.3 Transport investment will also play a key part in achieving many of the actions identified in the city's Local Economic Strategy (LES) as critical to increasing the city's economy strength, competitiveness, diversity and productivity, raising incomes, tackling economic and social exclusion and reducing its reliance on service industries and public sector employment.

4.4 These actions include the need to focus on key sectors for which Plymouth has a competitive advantage, to enhance the tourism offer, to transform Plymouth into a true 'learning city', to achieve well connected and complementary growth, and to achieve effective and unconstrained participation in the labour market.

4.5 The city recognises that Plymouth's planned growth needs to take place with a commitment to sustainable development again putting Plymouth at the forefront for future investment, and that if not managed appropriately, growth in the city's prosperity could easily lead to significantly increased congestion, pollution and greenhouse gas emissions; all of which have economic and social costs. In addition, the knowledge intensive industries, which the city aspires to develop, are generally more vulnerable to the economic impacts of congestion than low skills industries where labour can be substituted more easily. It is therefore vital that we plan appropriately for growth.

4.6 Our determination to support and enable the successful delivery of the city's growth agenda and to boost the competitive position of the city is reflected in the adoption of the local transport objective:

Use transport to drive the local economy

4.7 In our approach to supporting Plymouth's economic growth, we will also be mindful of the following:

- Congestion places a variety of cost burdens on the city's economy. Unless effective measures are taken, the city's growth aspirations will lead to significant worsening of traffic conditions
- Health benefits from increased levels of walking and cycling deliver significant and long term economic benefits
- Reducing air pollution and noise pollution from high traffic levels and congestion delivers economic benefits
- The economic costs of failing to tackle climate change will be far higher than the economic costs of measures needed to tackle climate change
- High quality transport infrastructure, gateways and services will enhance the image and reputation of the city, and make it easier for the city to attract investors and new employees
- Small and medium scale transport investments focused on improving the performance of existing networks, and measures to encourage and enable sustainable travel, are increasingly seen as more appropriate and cost effective than large-scale schemes designed to increase transport capacity
- Using existing highway assets most effectively reduces the cost of investment in new infrastructure.

Plymouth as a sub-regional capital

4.8 Plymouth has regional importance in the south west. It has rail, air and international sea links, and is the second largest city in the region after Bristol. As a sub-regional centre, Plymouth provides healthcare, education, leisure, retail and many other services to residents of its surrounding towns and rural communities.

4.9 Plymouth is well served by the trunk road network and by direct mainline rail services to London, the Midlands and the North. They nevertheless suffer from a perception of being of average quality and vulnerable to disruption. Enhanced connectivity to the South West region from the rest of the UK is essential to attract investment, boost employment opportunities, and enable the city to fulfil its economic potential.



Improving access to the city by rail, road, sea and air networks

4.10 The Council does not control any of the transport networks that connect the city to the rest of the country. The A38 Devon Expressway, the rail network, the airports and airlines, the coach networks and the ports are all owned and managed by other organisations and private companies. This means that the Council has limited influence over changes made to these networks, and the biggest role we can play is to act as an advocate for residents and businesses as users of their services. In this context we will be lobbying the relevant bodies for improvements to the services they provide.

4.11 In particular, through the potential Local Enterprise Partnership, the council will promote vigorously the importance of maintaining the A38 Devon Expressway as part of the trunk road network in order to maintain journey times and journey time reliability between Plymouth and Exeter and onwards via the M5 to London.

4.12 Plymouth's travel to work area, retail and service catchments extend far into Devon and Cornwall. It is therefore important that we work with our neighbours on shared transport issues, and in particular to maintaining and improving access to and from the city by all modes via the limited number of routes and river crossing points.

4.13 The vision for Plymouth recognises the importance of the accesses to the city with the intention of improving the major gateways, such as the ferry terminal, rail and bus and coach stations and our major road corridors.

4.14 Conventional wisdom is that a total journey time of three hours is widely considered the point at which a decision is made about which mode of travel to take. Plymouth sits on the cusp of this decision point for rail and air connectivity to London, and road and rail connectivity to Birmingham and Cardiff. The convenience of rail travel over and above journey time alone often means that it is selected over other modes.

Rail

4.15 Improvements in the rail network will benefit over 1.5 million journeys made by train to or from Plymouth stations each year. The rail network in the far south west has suffered historically from under investment, resulting in much of the rail infrastructure being in need of urgent renewal in order to maintain existing services and deliver better rail services for the city and beyond. The Council will continue to promote and support increased rail use and lobby the rail authorities for improvements to the rail network and the services that serve the city. Among the local priority rail improvements that we will lobby for are:

- An increased number of services with reduced journey times to other major cities and particularly between Plymouth and London timetabled to take no more than 3 hours
- Earlier morning arrivals of direct services from London and Birmingham
- Local rail freight infrastructure improvements to support increased rail freight volumes to and from Plymouth
- Increased capacity and new rolling stock on the network
- Reclassification of Plymouth Station to Regional Hub status

- The development of a local 'metro' system with improved frequency of service on the local rail network from Liskeard to Newton Abbot, including re-opening the Tamar Valley line between Bere Alston and Tavistock (the Drake Line)
- Improved weather and flood protection to maintain operating capability across the Somerset Levels, through the Exe Valley and at Dawlish
- Investigation of the long term solution to the disruption to services at Dawlish
- Inclusion of the Great Western Main Line to Plymouth in the electrification programme as a long term aspiration.

Trunk Roads (A38 / M5 / A303)

4.16 We will continue to work with the Highways Agency and Department for Transport to:

- Improve real time journey information provision to motorists between Plymouth and Exeter / Bodmin
- Improve the single carriageway second strategic route to the south west (A303 and A30) to tackle summer season congestion and enhance connectivity and journey time reliability between Plymouth and the south east
- Improve and maintain the resilience and reliability of the routes.

Air Travel

4.17 Good connectivity between the city and air services is vital for business and tourism. Enabling efficient onward international links to be made via major European hubs particularly supports potential expansion into new markets.

4.18 Plymouth City Airport is important to the business community of the sub-region, providing rapid access to the major mainland destinations, plus the Channel Islands and the Republic of Ireland. To support the provision of air services to the city we will:

- Safeguard land to enable future airport expansion, through the planning process
- Work with the airport operator and public transport providers to improve surface access to the airport by sustainable modes to enable connections to main business districts including Derriford, Langage and the city centre.

Ports

4.19 Plymouth's ports are valuable economic assets, which handled over half a million ferry passengers and over 2.3 million tonnes of cargo in 2008. Taking into account the work of the Port of Plymouth Evidence Base Study (2010) we will work in partnership with port operators in support of their continued success and potential expansion by:

- Improving access to the ports
- Encouraging increased use by cruise ships
- Encouraging increased freight handled through the ports
- Supporting the development of a Port of Plymouth Master Plan
- Supporting increased port-related freight movement by rail.

Digital Connectivity

4.20 The growth of high speed and mobile broadband networks and an increasingly knowledge-based economy is reducing the economic costs of remoteness. A key indicator of economic performance will be the percentage of homes/businesses connected to high-speed broadband. To reduce the effects of remoteness and the need to travel for work, we will support improvements in communications technology by:

- Working with potential private sector providers to support the installation of new fibre networks for high speed (100 megabits per second) internet access
- Promoting the economic and carbon reduction benefits to businesses of increased home working and video conferencing through workplace travel planning process.

Sub regional connectivity

4.21 The Tamar Bridge and Torpoint Ferries have undergone considerable investment in the last decade, which has increased their operating capacity and secured their effective functioning into the future. We will continue to work with Cornwall Council to make the most of this investment and manage future increased demand to maintain good links and connections between south east Cornwall and all parts of the city. Both authorities' LTPs are committed to jointly undertaking a Tamar Crossing Strategic Review. Possible measures include:

- Greater use of buses including a park and ride in Cornwall to serve the city centre and Derriford
- Connecting cycling and walking routes where necessary
- More efficient use of the local rail network
- Different toll levels at different times of the day
- More efficient use of the existing local bus network
- A 'smarter choices' programme
- Improved integration of ferries with other transport services, including smart ticketing
- Improved availability and quality of information to increase use of ferry services, such as the Cremyll foot ferry.

4.22 We will work with Devon County Council, South Hams District Council and West Devon Council and other partners to improve connections between key areas of the city (including the growth areas along the Eastern Corridor) and the sub-region, and improve access to networks to beyond Plymouth. This could include:

- Connect cycling and walking routes between Devon and our Northern and Eastern Corridors, including National Cycle Network routes and routes on Plymouth's Strategic Cycle Network
- Seek to improve the sustainable travel options from sub-regional towns and villages – especially Ivybridge and Tavistock, which are significant commuter towns for Plymouth
- Develop transport options for major new developments in the sub-region, in particular through the implementation of High Quality Public Transport (HQPT) from the east of Plymouth including a new park and ride on the A38 at Deep Lane junction to reduce traffic into Plymouth
- Co-ordinate network management activities at or near our boundaries to avoid network disruption
- Joint negotiations with potential private sector providers of new fibre networks for high speed (100 megabits per second) internet access to the Sherford New Community
- Co-ordinate the provision of HQPT and improved cycling infrastructure to the Sherford new community.

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PLYMOUTH

Keeping the city moving

4.23 Traffic congestion levels are low compared to many similar cities. Congestion only occurs at a few "hotspots", and then just for short periods of the day; this makes the transport network relatively efficient and reliable and enhances the attractiveness of the city to new employers. However, the "hotspots" that do exist can have an impact on bus punctuality, which erodes the perception of bus travel.

4.24 Increasing the size of a city's labour market generates agglomeration benefits that have been shown to lead to valuable increases in business productivity. However, these productivity benefits can be reduced by growth in traffic congestion, and it is therefore critical for the economy that Plymouth minimises congestion growth as the city grows.

Making best use of our assets

4.25 If we are to effectively support economic growth in the city then we need to achieve the maximum benefit out of the transport assets we manage. Our two main tools for doing this are the Network Management Plan (NMP) and Transport Asset Management Plan (TAMP).

Network Management Plan

The Traffic Management Act (2004) places a Network Management Duty on all local highway authorities to secure the efficient movement of traffic on their road networks, and to facilitate traffic movement on other authorities' networks. The council's Network Management Plan (NMP) demonstrates how our policies, procedures and structures support the delivery of the Duty. A 'whole authority approach' will be taken to ensure that all council departments are aware of the duty, and the actions and required outcomes in the NMP are embedded in the Local Transport Plan. The NMP draws together all of the tools that we currently use to demonstrate how we will manage the highway network.

Transport Asset Management Plan

Transport infrastructure - roads, pavements, traffic lights, street lights, and drains - make a vital contribution to the city's economy, and it is essential that they are well managed and maintained in a good state of repair. For example, efficient transport asset management:

- reduces the frequency of traffic light failure and the congestion that these incidents cause
- reduces wear and tear on vehicles arising from potholes
- results in better maintained and more attractive streetscapes, which makes the city a more attractive place for tourists, investors and existing residents
- enables a well prioritised Network Management Plan
- saves money, which frees council resources to invest in other transport infrastructure.

Our recently updated Transport Asset Management Plan (TAMP) provides a comprehensive audit of the city's transport assets. It enables the amount and cost of work required to maintain and periodically replace these assets to be quantified, planned for, and prioritised efficiently in the long term.

The development of infrastructure schemes will also include consideration of de-cluttering to ensure only essential infrastructure is maintained.

4.26 In urban areas small and medium scale transport investments, focused on improving the performance of existing networks, and measures to encourage and enable travel by public transport, cycle or on foot, are increasingly recognised as more cost effective than large scale schemes designed to increase transport capacity.

4.27 For public transport, such measures include:

- Implementation of smart-ticketing system for use with all city road/rail/water public transport modes
- Improved journey planning support and information with linked timetables
- Better integration of different modes.

4.28 Managing congestion is a fundamental part of the role of the Council that can be achieved in many ways. Options which include the use of technology to actively manage traffic such that greater capacity for trips is achieved will be delivered. This could include defining routes as primary routes for certain vehicle types, such as cars, implementing high occupancy vehicle lanes or using more sophisticated systems for managing traffic lights. This is complementary to providing choice of mode of transport and better information about ways to travel.

4.29 Congestion charging is not an attractive option for Plymouth presently. The level of congestion the city suffers from would not warrant it and the use of a congestion charge could potentially be detrimental to the growth in the city's economy. Equally, the city does not have sufficient physical space or money to build wider roads or new roads in all but a few targeted locations, moreover the environmental impacts of this approach would also be unacceptable.



Improving connections between key areas of the city

4.30 The main focus for improvements will be on corridors linking key employment and service areas of the city identified by the LDF and LES. Infrastructure improvements will be prioritised towards travel by sustainable modes. However, it is vital that we don't focus all our efforts on new developments.

4.31 Amongst the challenges will be ensuring adequate connectivity by all modes of travel between existing and growing employment and population centres and achieving this growth without generating excessive levels of traffic and congestion.

4.32 Improving access to work, health, shopping and leisure opportunities and services in order to tackle social exclusion is also a vital factor in enabling growth in urban areas. This area of work was a priority during Plymouth's Second Local Transport Plan, and the importance of barriers to participation is well reflected in Plymouth's new Local Transport Objectives to 'link communities together', 'reduce the negative impacts of transport' and 'make walking, cycling and public transport the desirable choice', and is a key theme in Chapter 8 'Promoting Equality of Opportunity'.

4.33 Improving connectivity by all modes to key economic development areas underpins the approach to delivering economic growth, and walking, cycling and public transport will be the primary focus.

4.34 High Quality Public Transport (HQPT) routes will be developed on corridors, building towards a network of a fast, limited stop services linking key destinations and transport interchanges.

Eastern Corridor

One of the city's largest areas of planned growth is to the east of the city, along what is termed the 'Eastern Corridor'. By 2026 this corridor will accommodate in excess of 7,000 new homes and 108,000 sq. m of new commercial development.

A park and ride site and service will be delivered at Deep Lane junction on the A38. Following a Strategic Park and Ride Study undertaken for the city we will investigate in more detail the viability of a park and ride site for the A379 corridor into the city.

An Eastern Corridor High Quality Public Transport (HQPT) scheme is under development. It will be a package of public transport infrastructure and improved cycling links, supported by small scale highway improvements and will require financial contributions from developers and bids for funding to the Department for Transport. Delivery will be phased with demand and funding opportunities.

The early phases of this project are already under way with the East End Transport Improvement Scheme which is due to be completed in November 2011. This will be followed by improvements to Cattedown roundabout and then the phased delivery of the scheme working eastwards from the East End.

Northern Corridor

The Northern Corridor, the A386 and B3250, is one of main routes in Plymouth for public and private transport and is used by 30,000 vehicles per day. Travel demands on the corridor are set to grow significantly in the future as a result of extensive planned development (retail, business, residential and leisure), and investment in the transport provision will be required to avoid the impacts of unchecked traffic growth and congestion.

The city aspires to develop a Northern Corridor Major Transport Scheme to deliver major transport infrastructure improvements necessary to cater for the large scale growth planned in the city centre and along the Northern Corridor. These improvements will focus on improving connectivity in the Derriford area, and between the Derriford Area and the Eastern Corridor developments, especially for HQPT and for active modes of travel. This may include the building of a link road through the Forder Valley.

The re-opening of the Drakeline from Bere Alston to Tavistock will provide additional choice for journeys to and from the North of the city.

Western Corridor

The Strategic Park and Ride Study for the city investigated the potential for the delivery of a park and ride facility to serve the city's Western Corridor and assessed a number of potential locations for a park and ride site. The assessment concluded that there is significant potential to operate a commercial park and ride service on this corridor, but that operating from a site to the West of the Tamar Bridge alone would likely require subsidy from the local authority. The study did not specify sites on the corridor to the East of the Tamar Bridge, but did put forward three options and the deliverability of these needs to be further investigated. Delivering park and ride services on the Western Corridor may affect the viability of operating commercial services on the Northern Corridor, in particular the existing site at Milehouse, and this impact needs to be carefully considered before the decision is made to invest in new infrastructure.

In addition to the connections between Plymouth and Cornwall there are a number of improvements required on the Western Corridor to significantly enhance the quality and variety of the transport offer to residents. Due to the nature of the existing infrastructure these measures do not need the major changes that are needed on other corridors and are therefore not shown on the strategic infrastructure map.

City Centre

Dramatic changes are planned that will enable Plymouth's city centre to become a sustainable city centre neighbourhood which is a vibrant and thriving regional destination.

In order to achieve this, the way in which the transport network operates will need to change. Based on evidence for the City Centre and University Area Action Plan the following key principles for changes have been adopted:

- Maintain the role of the Strategic Road Network to efficiently distribute movements by all transport modes around the city centre
- Support and improve access by public transport to the city centre, and particularly the development of the High Quality Public Transport system
- Provide city centre car parking in fewer, larger, strategically located, high quality car parks with easy access from the Strategic Road Network
- Address the need for better facilities for cyclists and pedestrians within and into the city centre
- Ensure safe movement for all users of the road network
- Ensure safe movement between the city centre and surrounding neighbourhoods
- Support development of Plymouth Railway Station and the adjacent area securing improved access from the city centre road system and better connections to the HQPT and local bus networks, the Strategic Cycle Network (SCN) and city centre walking networks.

This will require some major changes to the existing transport networks, including junction improvements, enhancements for walking and cycling infrastructure and increased priority measures for buses. All of this needs to be balanced with the management of a worsening air quality situation in the parts of the city centre for which the Council has a statutory responsibility. Air quality is specifically dealt with in Chapter 6 of this Local Transport Plan.

Figure 4.1 Northern Corridor Whole Route Implemenation Plan

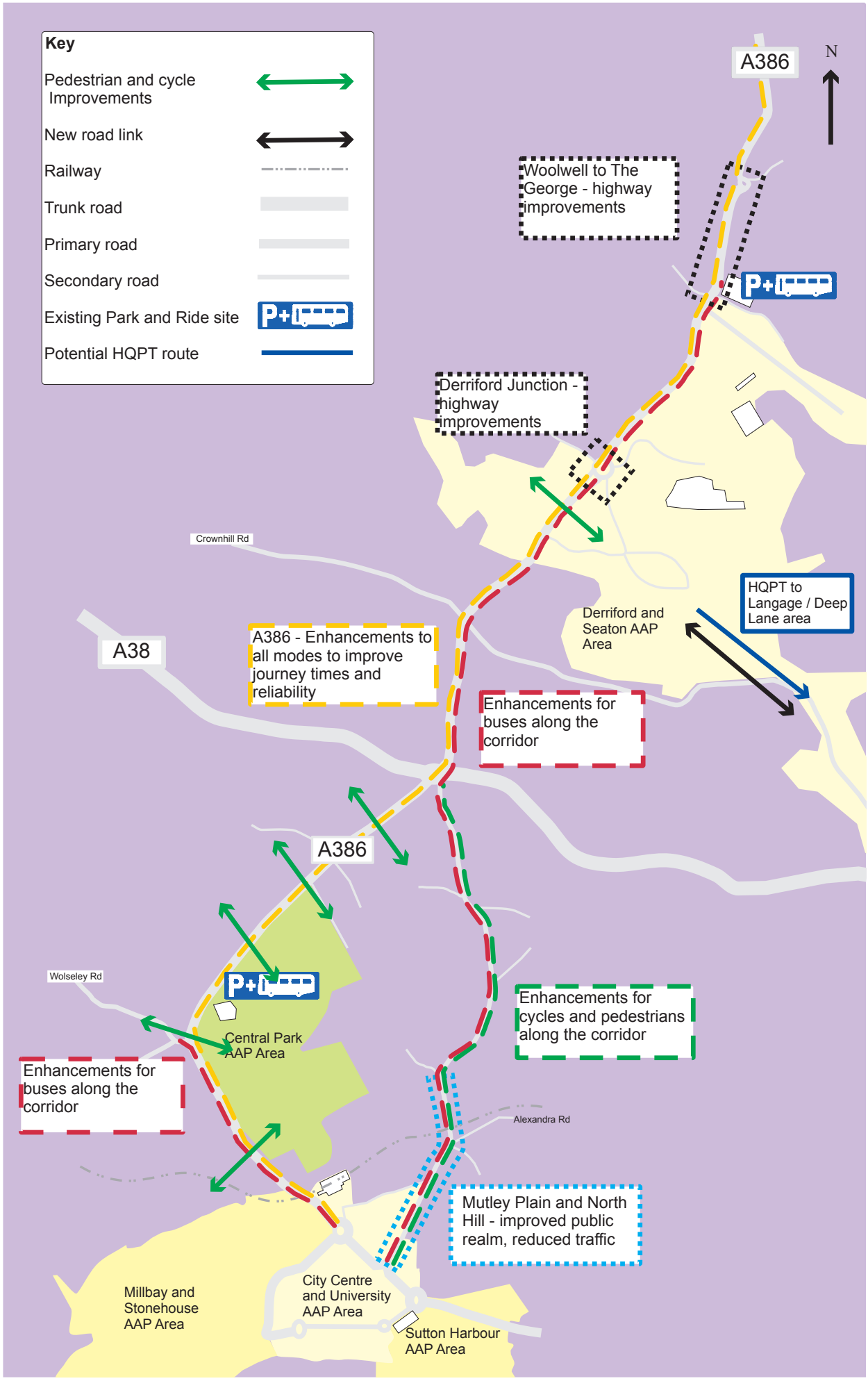


Figure 4.2 Eastern Corridor Whole Route Implementation Plan

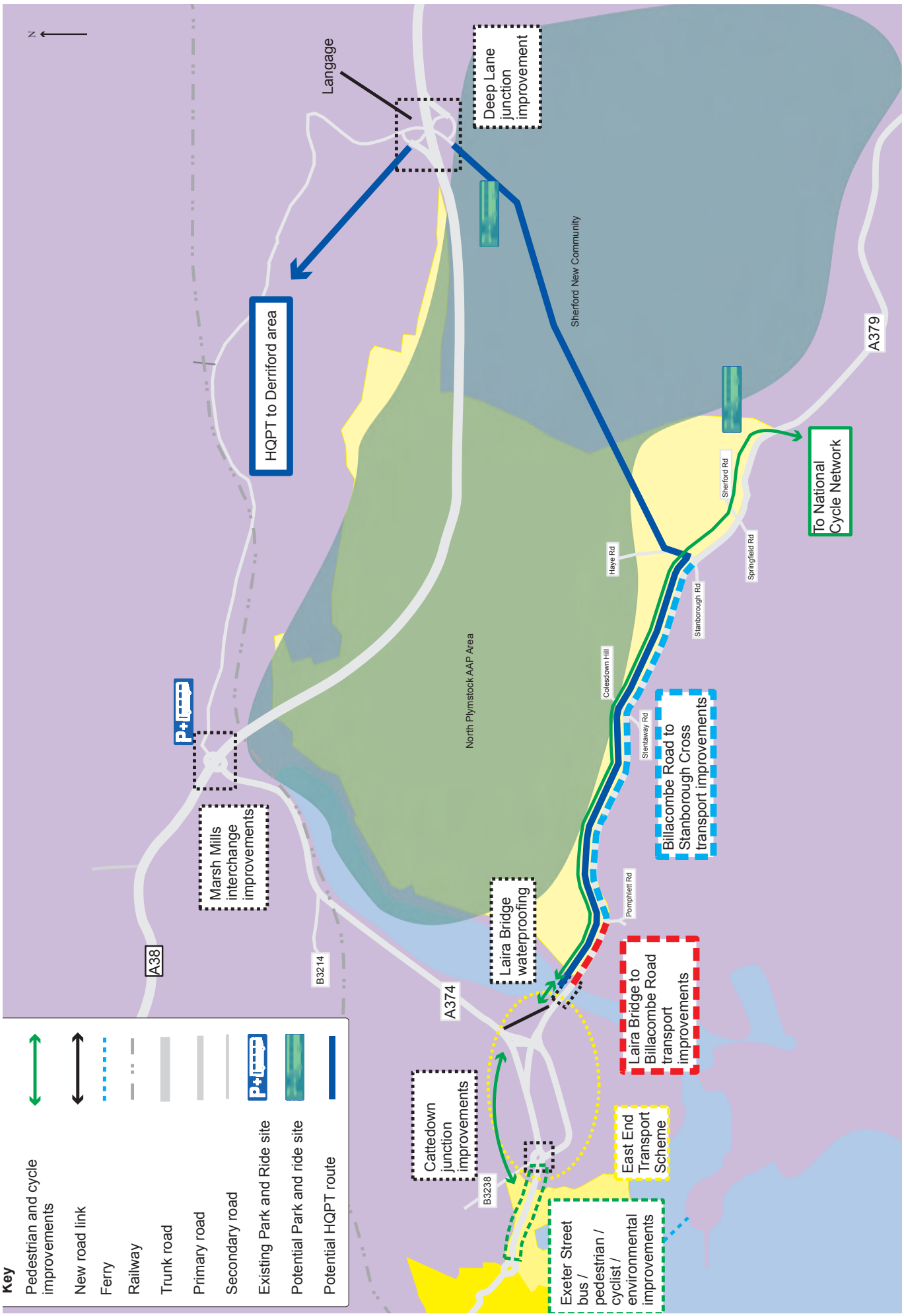


Figure 4.3 Western Corridor Whole Route Implementation Plan

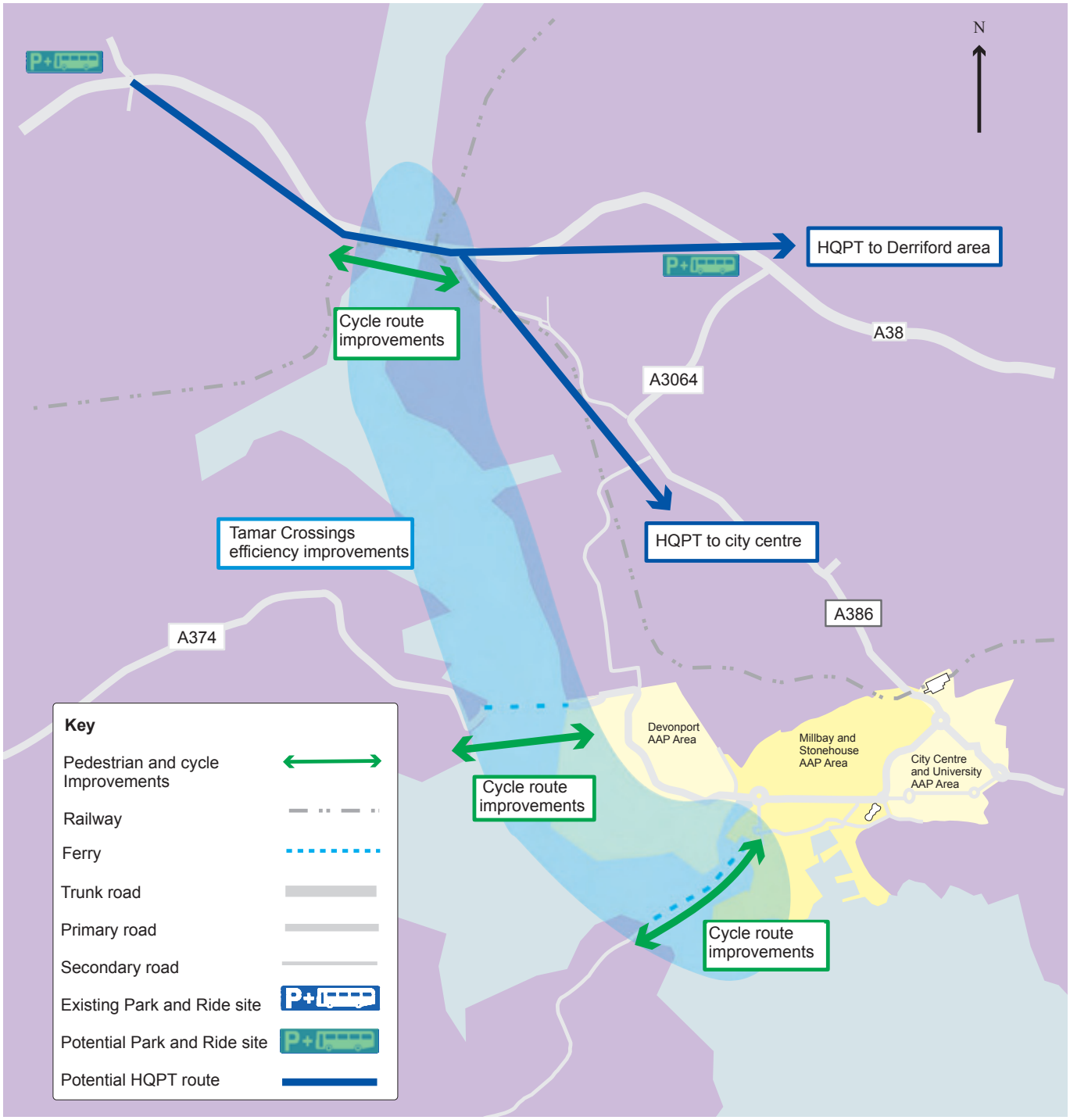
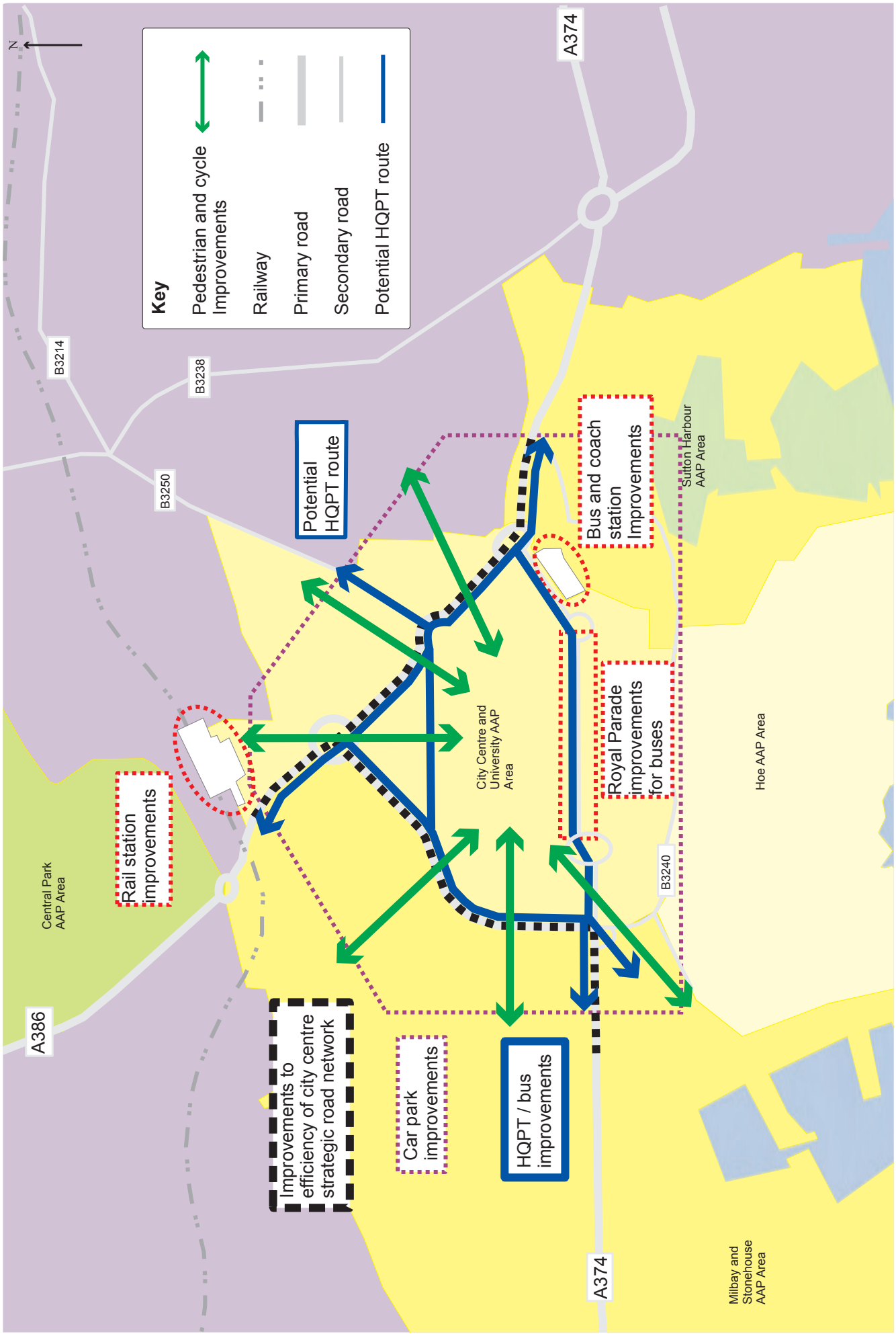


Figure 4.4 City Centre Whole Route Implementation Plan



4.35 In order to improve connections between key areas of the city we have, in this section, set out an approach that looks at investment in infrastructure on the main transport corridors. We will need to be flexible in delivering the different schemes on the corridors in order to respond to the emerging situations regarding funding and development.

4.36 In taking a flexible approach we will be cautious about bringing forward schemes that don't deliver on LTP objectives and don't offer good value for money.



Figure 4.5 Strategic public transport network



The movement of goods

4.37 Direct and easy access for the timely delivery of goods and services is essential to maintain a stable and growing economy.

4.38 However, the movement of freight also has negative environmental impacts such as poor air quality, transport noise and climate change implications and road freight contributes to traffic congestion.

4.39 The Council will work with freight bodies and organisations, like the Freight Transport Association and the Road Haulage Association, the airport, port and rail authorities, the Highways Agency and the city's significant freight traffic generators to identify where improvements to the city's transport networks could be made, in relation to:

- maintaining goods delivery timescales
- providing for increased freight volumes
- reducing the negative impacts of freight transportation, and
- identifying potential opportunities to transfer freight and goods movement from road to rail.

4.40 Amongst the measures to be considered will be:

- establishing a Freight Quality Partnership (FQP) to facilitate improved co-ordination between the appropriate parties
- continued working at a regional level on freight issues and routes
- the identification of potential freight consolidation and distribution centres for the city
- safeguarding and developing the existing rail freight infrastructure along the Cattewater branch line, Friary Yard and Tavistock Junction to support increased transfer from road to rail freight.



CHAPTER FIVE
TACKLING CLIMATE CHANGE

TACKLING CLIMATE CHANGE

Strategy at a glance

Tackling climate change by

- addressing the causes of climate change by reducing the carbon footprint of the transport network
- managing the impacts of climate change by improving the resilience of the transport network through better management and maintenance.

Introduction

5.1 Climate change is a global issue, which is happening now. It is unavoidable and is, to a large extent, a direct result of the carbon dioxide (CO_2) produced by the burning of fossil fuels such as coal, gas and oil. Transport is a major source of CO_2 in Plymouth and is currently responsible for 25% of the city's annual CO_2 emissions, most of this coming from road transport.[16]

5.2 Plymouth's contribution to the national commitment to tackling climate change is to reduce the city's CO_2 emissions by 60% by 2020, just nine years into this LTP. Achieving this target is a huge challenge whilst the city has plans to grow in population and prosperity.

5.3 At the same time we need to adapt to the extremes of weather that climate change is bringing. We have to ensure that our transport systems can cope with the coming extremes in temperature, floods and more severe storms.



16 UK's National Atmospheric Emissions Inventory sponsored by DEFRA, http://www.naei.org.uk



Addressing the causes of climate change

5.4 The commitment to reducing CO_2 from this LTP is reflected in Objective Four:

- Maximise the transport contribution to Plymouth's carbon reduction target (60% reduction by 2020)

5.5 The vast majority of transport carbon emissions are from road transport. Nationally, more than 90% of the total domestic transport emissions in the UK are produced by road transport.

5.6 Some reductions in road transport emissions can be gained through improved vehicle technology and/or changing driver behaviour. However, in order to make sufficient change, we need to think differently about how we move people and goods around. The required scale of reductions is likely to involve the need for significant changes in travel behaviour.

5.7 It is clear that to reduce the carbon emissions of transport, we need to reduce the use of fossil fuels. We know oil will not be as readily available in the future, so climate change aside, with fuel being in shorter supply in the future and becoming more expensive, we have to look at the way we travel and ask ourselves if we can afford to remain reliant on oil-intensive modes of transport.

Encouraging lower carbon travel

5.8 Plymouth needs a transport system that enables people to make choices about how they travel or if they travel at all. The city is set to grow - Chapter 4 has already outlined and set out the transport strategy for this. There will simply not be enough road space for everyone to choose to drive a car, however carbon-efficient vehicles become.

5.9 Currently 69% of the domestic road transport emissions in Plymouth are produced by private cars.

5.10 To enable everyone to travel we need a transport system that enables people to choose walking, cycling and public transport as an alternative to the car as often as possible. These are the lower carbon modes that enable the city to grow whilst tackling climate change. These lower carbon modes also improve health and quality of life, as is set out in Chapters 6 and 8.

5.11 The effects of carbon emissions are global and long-term, hence in themselves do not present a tangible incentive to change travel behaviour. Such incentives must therefore be created or demonstrated, either by linking emissions directly to some form of financial advantage for example, saving money on fuel by driving more efficiently, or by encouraging behaviour which changes mode of travel, trip frequency or length of trip.

Table 5.1 Measures to address the causes of climate change	
Reduce the need to travel	Facilitate the development of communications networks to enable home / remote working and teleconferencing particularly linking businesses and homes with high-speed broadband
	Ensure land use planning continues to locate and design new developments with reduced trip length and sustainable travel in mind
Encourage walking and cycling	Encourage walking for the shorter local trips in neighbourhoods
	Implement the ROWIP Statement of Actions
	Make cycling more practical for trips up to 5km
Ensure public transport is a realistic and desirable option	Maximise use of the investment made in public transport
	Develop the Plymouth 'metro' rail network concept (see Chapter 4)
	Improve interchange opportunities between all modes
	Actively seek opportunities to utilise the latest low carbon fuels and technologies
	Improve the free flowing of public transport to avoid wasting fuel
More sustainable driving	Encourage drivers to drive more efficiently to reduce fuel consumption
	Provide up-to-date information to reduce unnecessary vehicle miles
	Make the most of new technologies including alternative fuels and the provision of electric car charging points
	Encourage and support car clubs and car sharing
Goods vehicles	Work very closely with businesses to help them to make changes that achieve savings but don't restrict their ability to grow
	encourage better use of rail and sea freight, making the most of lower carbon options, such as short sea shipping
Information	Enable and encourage the lower carbon alternatives with travel planning and information such as PlymGo and other journey planning and healthy travel resources.

5.12 More details on the measures included within Table 5.1 can be found in Chapters 4, 6 and 8.

5.13 Modelling work has recently been undertaken to assess the potential effectiveness of different carbon reduction measures for transport in Plymouth. This showed eco-driving, Smarter Choices, urban electric vehicles and public transport investment to be amongst the most significant individual measures for reduction.

Reducing the carbon emissions of transport operations and infrastructure

5.14 Whilst encouraging low carbon travel by individuals and goods we also need to reduce the carbon emissions of the transport operations and infrastructure itself.

5.15 We need to:

- Encourage a more fuel-efficient and/or alternatively fuelled fleet of taxis and buses and other operations vehicles
- Make more efficient use of existing fleet vehicles, such as driver training, traffic management and engine-off policy
- Review the need for signalised junctions and other infrastructure
- Improve energy efficiency of street lighting, traffic signals and other infrastructure through the use of lower energy light bulbs
- Use renewable energy sources, such as solar power such as those on parking ticket machines and bus shelters
- Design new transport infrastructure and equipment to maximise renewable energy sources
- Minimise use of new materials in infrastructure
- Reuse and recycle materials wherever possible.

Managing the impacts of climate change

5.16 We can work towards a slowing down of change globally, but climate change is happening now and will continue as the effects of past emissions take their toll. We have to adapt to the extremes of weather that climate change is bringing.

5.17 The risks for Plymouth associated with climate change include:

- flooding through rising sea levels
- hotter drier summers
- milder wetter winters
- increased frequency of extreme weather events such as heat waves
- heavy rain storms.

5.18 These outcomes leave transport networks, whether they are road, rail, sea or air, extremely vulnerable, both within the city and out of the city. We need to ensure that our transport systems, both current and future, can cope with the coming floods, heatwaves and more severe storms.

5.19 We know, for example, that we have areas in Plymouth that will be at an increased risk of flooding as climate change advances. Flooding may be tidal, fluvial or from surface water run-off.

5.20 Work on the Strategic Flood Risk assessment (SFRA) has identified:

- Key threats to strategic road and rail transport assets at Embankment Road
- Capacity constraints of the surface water drainage network to deal with rising sea levels, causing tide locking at key locations such as Sutton Road, Union Street and Gdynia Way.

5.21 The SFRA also identified that the existing highway drainage system will not be able to cope in future years with the forecast increase in rainfall intensity and quantity.

5.22 Of great importance to the city are our connections to the rest of the country. The effect of the weather is well known on the Plymouth to Exeter rail route where it is vulnerable to disruption caused at Dawlish. This is the only rail connection to the rest of the country for communities and businesses west of Exeter, which includes Torbay, Newton Abbot, Plymouth and the whole of Cornwall. As demonstrated in Chapter 4, the rail network is vital to the prosperity of the region and the disruption caused by extreme weather has already had a detrimental impact.

Managing, maintaining and improving transport assets to cope with temperature changes, sea level rises and extreme weather events

5.23 We need to work to LTP3 Objective three:

- High quality transport standards for a vibrant city

5.24 We will assess our transport networks and systems to identify the weak points - those most at risk from flooding, extremes of temperature and high winds, for example. We will then prioritise adaptation work on those areas of severe risk and strategic importance; it is prohibitively expensive and unrealistic to expect the whole of the network to be made totally resilient to all extremes of weather.

5.25 We will need to work with our partners to protect our external links, including rail and shipping.

5.26 We will work with the emergency planning team to put plans in place in the case of disruption by weather, which might include contingency planning such as diversionary routes and dissemination of information and advice in real-time. We will need to be sure that forecasts of severe weather are received and understood where they are needed to enable this.

Network Management Plan (NMP) and Transport Asset Management Plan (TAMP)

5.27 Chapter 4 (Supporting Growth) references the Network Management Plan (NMP) and the Transport Asset Management Plan (TAMP). Both of these will need to address and manage the effects of climate change on the transport system.

5.28 The TAMP will need to consider the revision of specifications for construction and maintenance of transport assets to protect against increasingly severe extremes of weather, which may require the need to

- Flood proof or re-site infrastructure
- Increase monitoring and maintenance of embankments and bridge piers, and increase gully emptying activity
- Re-examine road structural design. Implement remedial work for existing roads.
- Use slower growing plants in landscape schemes. Revise mowing / weed control schedule
- Guard against overheating/ excessive sun exposure of workers and travellers.

5.29 The NMP will require

- The need to identify and plan alternative routes, and procedures for disseminating this information in the case of disruption
- Readiness to restore routes in the case of increasingly frequent severe weather events.

5.30 We need to improve drainage and protection at known vulnerable points.

Surface Water Action Management Plan

With regards to surface water flooding in the city we are producing a Surface Water Action Management Plan (SWAMP) to enable greater understanding and management of the issue.

The SWAMP will outline the preferred surface water management strategy for the city and identify the most cost effective way of managing surface water flood risk for the long term. This will include a long-term action plan identifying the measures that could be used and that will seek to improve surface water drainage systems, reduce surface water flood risk and protect the Plymouth Sound and Estuaries European Marine Site from water pollution including measures to remove pollutants such as hydrocarbons.



CHAPTER SIX
A HEALTHY COMMUNITY

A HEALTHY COMMUNITY

Strategy at a glance

Improving the health of the community by

- enabling active travel through the provision of walking and cycling infrastructure and providing a nudge to encourage use
- managing transport related noise and air pollution.

Introduction

6.1 Transport can have positive impacts of the health of the residents of the city. For many people, an easy way to improve health is to walk or cycle more as part of their everyday travel arrangements. Transport also enables access to healthcare, leisure and education opportunities, benefiting health and well-being.

6.2 Plymouth is a city divided by health, the difference in life expectancy between the richest and poorest neighbourhoods is 14.7 years.

6.3 Just 18.6% of the adult population of Plymouth exercises for 30 minutes three times a week making the city one of the lowest exercising areas in the south west.[17] The Chief Medical Officer identifies walking and cycling as easy ways to increase exercise. Many reasons are given for not walking and cycling, but most of these barriers can be mitigated by relatively small improvements to our transport infrastructure and challenging negative perceptions.

6.4 Within this LTP, pollution relating to local air quality has been separated from that which causes climate change. Local air quality impacts on quality of life and health including life expectancy.

6.5 Noise and air pollution from road and air traffic can have major impacts on the health of those living or working near main roads or the airport. The council is responsible for taking steps to reduce pollution in these areas where air quality may impact on health. It is worth noting that people walking and cycling breathe in significantly lower levels of pollution than those driving.

6.6 Transport-related noise is increasingly recognised as a nuisance and a serious public health problem. Noise causes annoyance, and in some instances stress, leading to disrupted sleep patterns, and possible heart and mental health problems.

6.7 Furthermore, access to health care and other services and opportunities improve health. This issue is dealt with in the Equality of Opportunity chapter and not duplicated here.

17 Plymouth 2020, Plymouth's Health, Social Care and Well-being Strategy 2008-2020 http://www.plymouthpct.nhs.uk/CorporateInformation/reportsandinquiries/Documents/Healthy%20Plymouth%20main%20web.pdf

Enabling Active Travel

6.8 Levels of exercise have fallen dramatically over the last 20-30 years; partly because many walking and cycling journeys have been replaced by car travel. This ongoing change in our lifestyles is having a worsening effect on our health and quality of life.

6.9 Most of the journeys we make are of a relatively short distance, but our perception of distance has been distorted by car and bus travel because, firstly, the route we take by car or bus is often not the most direct route and, secondly, in urban areas average speeds are lower than we think. Most commuter trips are less than 3 miles[18], highlighting the potential for increased walking and cycling.

6.10 Plymouth has a number of plans which support the increased uptake of walking and cycling and contribute to the delivery of the objectives set out in this LTP:

- The Green Infrastructure (GI) Delivery Plan has been produced by a partnership consisting of Natural England, Plymouth City Council, South Hams District Council, the Forestry Commission and the Woodland Trust and covers an area which stretches beyond the edge of the city. Our green spaces provide an opportunity for people to walk and cycle and the GI plan will deliver key elements of the SCN
- Public Rights of Way represent both a significant leisure as well as a transport resource. The Rights of Way Improvement Plan (ROWIP), which will be supported by the LTP, identifies how we can protect and develop this vital network. It provides a deliverable and evidence-led statement of proposed actions which contribute towards the objectives of this LTP
- Increasing healthy and sustainable journeys to school must play a significant part in our approach and will be encompassed in the Sustainable Modes of Travel Strategy and delivered through the School Travel Plan process. The way education is delivered to 14 to 19 year olds, with courses open across the city, presents significant challenges which requires work with schools to minimise the financial and environmental costs and maximise health benefits.



18 Office for National Statistics, 2001 Census http://www.ons.gov.uk

Barriers to cycling

6.11 Towns and cities similar to Plymouth have demonstrated that it is possible to significantly increase levels of cycling. Exeter, with similar "hilliness" and weather to Plymouth, was one of the top performing cycle demonstration towns with a 40% increase in cycling over four years.[19] Plymouth is learning from such experience elsewhere.

6.12 Evidence from different sources, including consultation, indicates that the following areas are cited as barriers to cycling:

Table 6.1 Barriers to cycling

Issue	Detail
Safety	The risk of accidents is often cited as the major barrier - See Chapter 7 (Safety and Security).
Lack of cycling culture	Cycling is something that is simply not considered because it is seen as an activity for leisure or sport.
Lack of cycling infrastructure	Lack of continuous routes for end to end journey
Concern over theft of cycle	Lack of secure cycle parking.
Lack of facilities at destination	Many employers no longer provide facilities for showering, changing or lockers for their staff. It is unlikely that staff will want to cycle to work without these facilities being available. The quality of facilities is as important as their availability.
Plymouth is too hilly	The topography of the city means that many direct routes include some hills
Too far	Trips to many activities considered too far to cycle.
Too much to carry	It's not practical to carry a lot of shopping or other goods on a cycle
Can't afford to buy and maintain a cycle	For some people the cost of buying a cycle may be prohibitively expensive

6.13 Some of these barriers we can address but others are beyond our control. We can't change the topography of the city but know that cycling is popular in many places just as hilly as Plymouth. In terms of travel distances we know that most trips are less than three miles so there are some opportunities for cycling.

19 Department for Transport, Analysis and synthesis of evidence on the effects of investment in six Cycling Demonstration Towns, November 2009 http://www.dft.gov.uk/pgr/regional/ltp/localtransportinitiatives-/demotowns/pdf/cyclingdemotowns.pdf

Barriers to walking

6.14 Walking for leisure has increased over the past 20 years, whilst walking for transport continues to fall. The reasons for this are undoubtedly complex but some of the barriers to walking in the urban environment are summarised in Table 6.2.

Table 6.2 Barriers to walking

Issue	Detail
Safety	Fear of accidents or fear of crime can be major barriers to walking - See Chapter 7 (Safety and Security).
Lack of infrastructure	Lack of continuous routes. Lack of pedestrian crossings on busy roads or simply the lack of dropped kerbs. Rivers or railway lines also act as barriers with detours to reach the nearest crossing point.
Too far	Travelling by foot for a long distance can take too long and some people don't feel fit enough to walk.
Don't know the way	There is not adequate signage particularly for routes which don't follow main roads.
Have a disability	For some walking is just not an option.

6.15 Again, it is not possible for us to overcome all of these barriers but in terms of distances being too far to walk then perceptions of distance have been skewed over time by our increasing use of cars and many people don't know the best way to get to places on foot. Our "mental maps" have developed by travelling around by car or bus but it is sometimes quicker to walk somewhere within a neighbourhood if people know the best route.

A nudge in a different direction

6.16 Partnerships with communities and delivery agencies is key to enabling walking and cycling. A walking and cycling partnership will be developed and delivered with a range of stakeholders.

6.17 People need to be encouraged and reassured that walking or cycling is possible for some journeys. For example, providing safer routes in residential areas by reducing speed limits to 20mph can promote and encourage walking and cycling. Ensuring that cyclists and pedestrians are not restricted to routes in the same ways as cars can help to reduce distances.

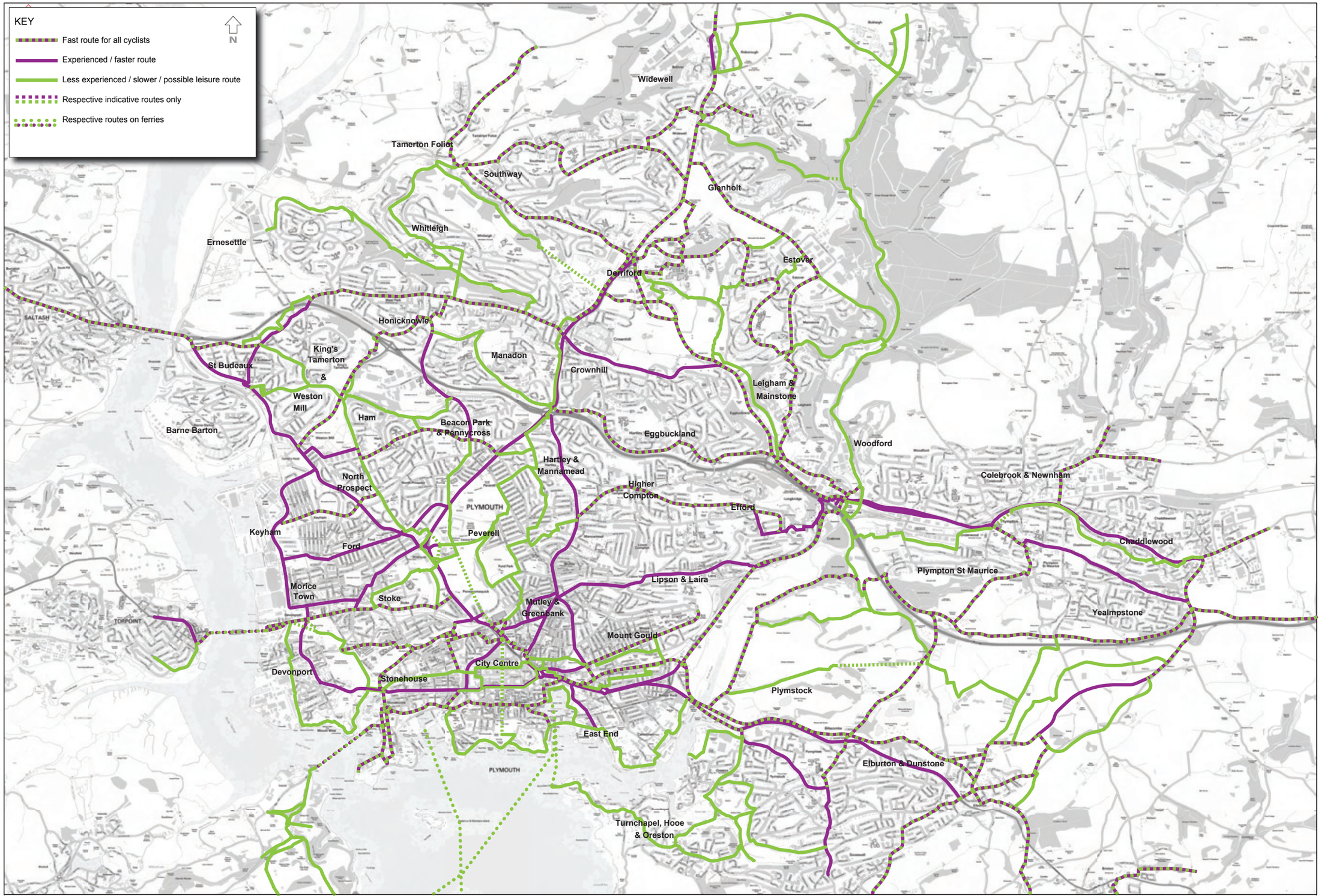
6.18 People who are mobility impaired, through physical disability or because they are carrying shopping or with a pushchair perhaps, are more likely to find it difficult to travel around. Small changes to the street environment such as dropped kerbs can significantly improve mobility and accessibility.

6.19 Great progress has been made in recent years in making Plymouth a more walkable and cycle friendly city. This will continue, with more leadership being provided to give transport professionals the confidence to innovate in order to find the best possible solution. Encouraging people to try an active mode of transport needs both infrastructure, awareness raising and activities to build confidence.

6.20 Measures will include:

- Delivery of the Strategic Cycle Network (Figure 6.1)
- Increase the delivery of Bikeability cycle training to primary school children and adults
- Engage in an intensive smarter choices campaigns across the city, with a particular focus on areas with infrastructure improvements to maximise the impact
- Walking and cycling direction signs will include journey times to key destinations
- Facilitate cycling events including the delivery of a mass participation cycle ride
- Continue to work with schools, businesses and other organisations to help develop and implement their travel plans
- Measures to formalise more of the public rights of way network and encourage increased use
- A well-maintained, signed and promoted Public Rights of Way Network
- Fewer restrictions on where you can walk and cycle to reduce distances
- 20 mph speed limits for residential areas
- Development of green spaces for walking and cycling for transport and leisure
- Improved maintenance of footways and cycle ways through the TAMP
- Cycle parking provided at prominent locations with natural surveillance
- Encourage developers and businesses to provide shower and changing facilities at employment destinations
- Improve street lighting
- Deliver improved infrastructure for the mobility-impaired.

Figure 6.1 Strategic Cycle Network



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Published 2009

Scale 1:15000

Strategic Cycle Network

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Managing Transport-Related Noise and Air Pollution

Air quality and transport

6.21 Road transport pollution is the significant contributor for the vast majority of air quality problems in urban areas. Whilst the city only suffers from peak hours traffic congestion, excessive pollution for even a short period can have a detrimental impact on health. Air quality in Plymouth is generally good. However, poor air quality can result when a number of factors combine, including the traffic type and volume, weather conditions and the scale and design of buildings close to roads.

6.22 Legislation determines the maximum levels of human exposure to pollutants after which point a local authority has to intervene. Regular monitoring is undertaken across the city to identify potential problem areas for which a more detailed assessment is carried out and reported to the Department for Environment, Food and Rural Affairs (Defra). If decided appropriate, the problem area is then formally declared as an Air Quality Management Area (AQMA) and an Air Quality Action Plan (AQAP) is produced. The city already has two AQMAs declared for Mutley Plain and Exeter Street/Embankment Road.

6.23 We are now in the process of having to declare three additional AQMAs within the city, at Royal Parade, Stoke Village and Tavistock Road. Work to manage these areas will be defined within an action plan and partially delivered through the Local Transport Plan. All AQMAs have been declared on the basis of Nitrogen dioxide (NO_2) for which the main source is road traffic.

6.24 The most obvious method to reduce the impacts from road noise or air pollution is to reduce or remove the vehicles that are creating the problem, but it is simply not possible to do this in most situations.

6.25 Measures which enable people to switch from using a car to walking, cycling and public transport will all contribute towards reducing pollution. However, where this may not solve the problem it may be necessary to consider how vehicles travel through an area, how they wait or park in an area, or even which vehicles should be allowed to travel through an area.

6.26 The increasing density of the buildings in our urban areas can exacerbate air quality problems. Tall buildings next to main roads can cause an urban canyon effect where locally stagnant air concentrates pollutants near ground level. The growth agenda will need to be carefully managed as increased building scale, massing and density could contribute towards this effect happening in Plymouth, particularly in the city centre or Derriford areas.

6.27 Measures to manage air quality include:

- Review and produce AQAPs for AQMAs identifying measures to improve air quality both specific to an area and city-wide
- Contribute to the development of an Air Quality Strategy for the city
- Continue to monitor, assess, and review the action plan process and the partnership approach to the air quality issue, between the transport and environmental departments in particular
- Support and promote greater use of cleaner fuel vehicles including through regulation and licensing controls related to vehicle emission standards and the provision of dedicated infrastructure
- Consider Low Emission Zone principles for Plymouth AQMAs
- Promote eco-driving
- Identify and use new technology to deliver air quality benefits through improved and steady traffic flow, dynamic pollution-responsive traffic management systems and priority for cyclists, pedestrians and public transport
- Provide increased information on journey times for different transport modes and pollution levels through various media and VMS to enable people to make more informed choices about the time, route and mode of travel available
- Recognise impact of design and scale of development on air quality and manage, reduce and mitigate this impact through environmentally-friendly design and the land-use planning system
- Promote the bus, train, cycle and walking as alternatives to the private motor car.

Managing noise from transport

6.28 Noise comes in many forms, from neighbourhood noise such as burglar alarms, to noise experienced in the workplace. Transport noise can be a significant contributor to noise levels and even though new aircraft and road vehicles have to comply with continually reducing noise emission levels there has been no significant decrease in road noise.

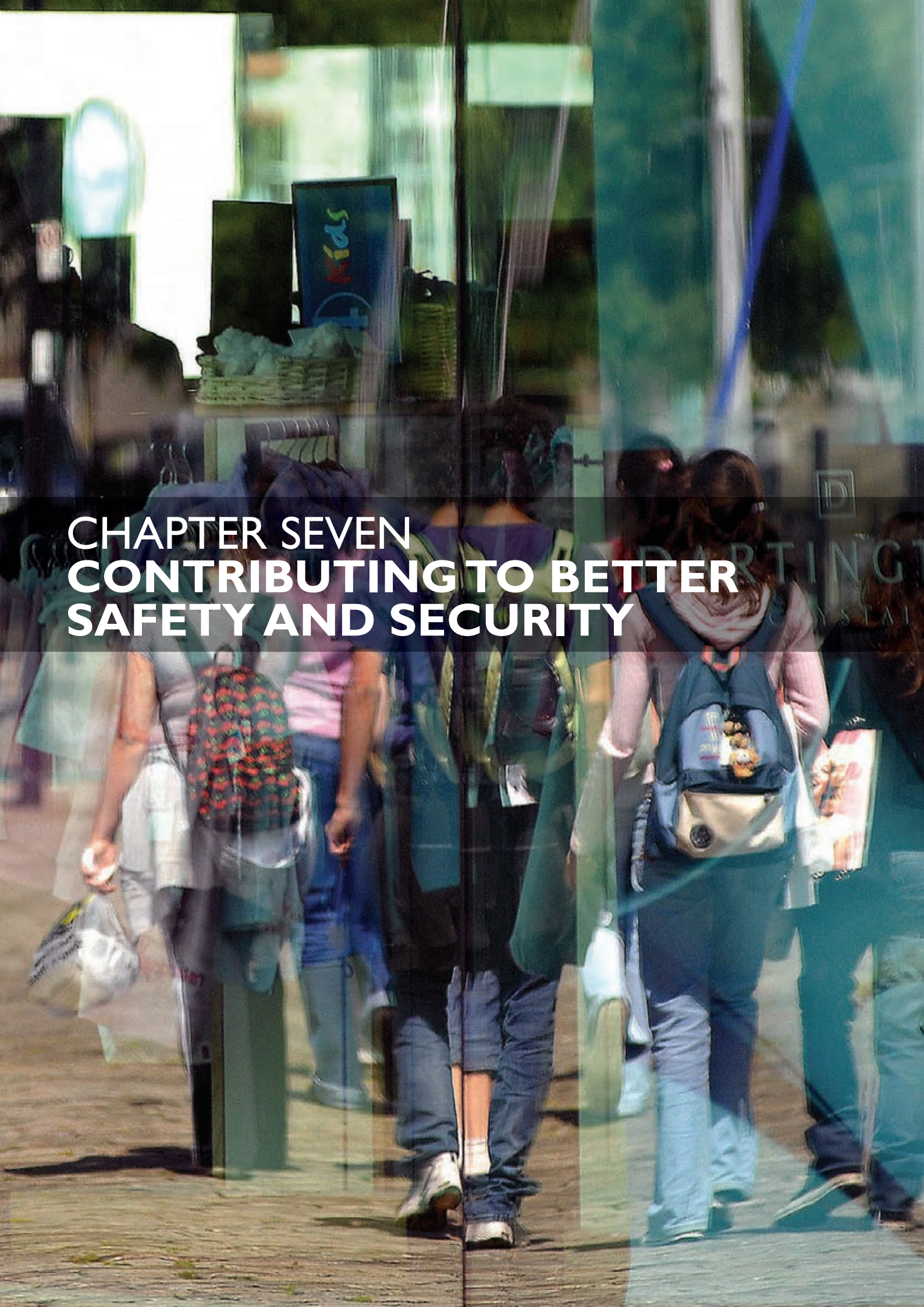
6.29 The European Noise Directive requires the production of maps showing the noise levels outside of buildings. Plymouth is being included within the second round of development of strategic noise maps by Defra, which should give us an understanding of average noise conditions within the city. Major roads and railways have already been mapped by Defra and show a number of city roads where traffic noise is a problem. Further Defra guidance will enable us to develop and implement specific action plans, and consideration of identifiable road traffic noise issues will also be afforded greater consideration in this Local Transport Plan.

6.30 Through the Defra Noise Action Planning (NAP) process we will identify the transport infrastructure responsible for significant noise problems and produce Action Plans to reduce the identifiable noise impacts, working with relevant bodies where noise from transport infrastructure is not the City Council's responsibility, such as the trunk road network, railway, sea port and airport infrastructure.

6.31 Ahead of the more detailed Defra NAP guidance we will ensure low-noise road surfacing is considered for all carriageway improvement schemes but afforded greater priority for those roads already identified as exhibiting high traffic noise levels. New development assessed as generating traffic requiring mitigation and that will use these roads must contribute to reducing the cumulative noise impact.

6.32 Measures to manage transport related noise include:

- Identify transport infrastructure creating significant noise problems in relation to Defra NAP guidance
- Develop Noise Action Plans to reduce noise impacts if necessary
- Ensure low-noise road surfacing is considered for all carriageway improvement and maintenance schemes but afforded greater priority for those roads already identified as exhibiting high traffic noise levels
- New major development to contribute towards mitigation for cumulative noise impact for roads identified in Defra NAP process
- Work with appropriate bodies where noise from transport infrastructure not the responsibility of the City Council is identified.



CHAPTER SEVEN
CONTRIBUTING TO BETTER SAFETY AND SECURITY

CONTRIBUTING TO BETTER SAFETY AND SECURITY

Strategy at a glance

Contributing to better safety and security by

- improving road safety through a new, minimal infrastructure approach which includes 20mph limits in residential areas
- managing the perceptions of safety and crime
- ensuring the security of the transport networks through emergency planning in partnership with relevant agencies.

Introduction

7.1 This chapter will describe how the City Council will manage security and safety issues that may affect the transport systems and networks that operate in, through and to the city.

7.2 It will focus principally on the three areas of:

- **Road safety** - how the duties of the Road Safety Act 1988 will be achieved through the Council's Local Road Safety Strategy
- **Perceptions of safety and crime** - on people's travel behaviour
- **Ensuring the security of our transport networks** - through appropriate planning and co-ordination.

7.3 Over the course of the last 10 years excellent progress has been made in reducing road related injuries and deaths in Plymouth with the Council on track to meet its 2010/11 target of a 60% reduction in the number of people killed or seriously injured (KSI) on the city's roads from the 1994-98 baseline average of 139 KSIs. However, there are still nearly 900 people injured on Plymouth's roads every year making action on improving safety for road users a continual high priority.

7.4 We will seek to maintain the progress achieved through the study of incidents of collisions, taking preventative measures to reduce the likelihood of casualties on new roads and comprehensive safety audit processes alongside targeted educational programmes for vulnerable and identified risk group road users.

7.5 In recent years police statistics show that most types of crime in Plymouth have fallen, including violent and vehicle crime. However, in Plymouth's Quality of Life Survey in 2006, a large number of people in the city said they felt unsafe in their home or when out late at night and this affects if, and when, they travel as well as the mode of transport they will use to get to the places they want to go. There is also less public confidence in the police and council to manage and resolve issues of crime with this a particular concern in deprived and less economical-advantaged neighbourhoods.[20] Good quality transport systems that are safe and reliable will contribute to reducing the affect the perception that something may go wrong will have on people's quality of life.

7.6 The City Council and its partners including the emergency services, voluntary groups and businesses have been recognised by the Audit Commission for their exceptional performance in protecting local people in relation to large scale emergencies and in particular the way they plan ahead and respond to emergencies to keep the city safe. A co-ordinated approach involving appropriate partners in managing large-scale emergencies will be crucial in ensuring transport systems can continue to function and is increasingly important with the threat of global terrorism and the adverse weather conditions we now experience.

20 Home Office, British Crime Survey 2004-08

Road Safety

7.7 The Road Traffic Act 1988 placed a duty on local highway authorities to prepare and carry out a programme of measures designed to promote road safety. This includes studying the occurrence of collisions, taking preventative measures and reducing the possibility of casualties on new roads (i.e. collision investigation, prevention and safety audit).

7.8 The last two road safety strategies, contained in LTP1 and LTP2, have been very successful, cutting deaths and serious injuries on the roads by 68% to the end of 2009. It is apparent that some measures underpinning the success have been particularly effective with road safety engineering projects and speed management initiatives having played a significant role in reducing casualty numbers.

7.9 Enforcement measures have been key in reducing the number of traffic related offences, with programmes of driver and rider education helping to reduce the numbers of motorcyclist and new and inexperienced driver/rider injuries.

7.10 Every injury has a physical, emotional, social and financial cost to the victim, family, community and the country as a whole. One slight injury costs, on average, over £14,000, a serious injury costs over £180,000 and a fatal injury costs over £1.6m.[21] During 2009 the reduction in casualties on Plymouth's roads, as a result of various interventions, has saved the UK economy over £23m from a capital investment of c. £1m alongside supporting revenue-funded activities.

7.11 Whilst the most recent casualty data is encouraging, it is clear that in some areas there is opportunity for further accident reductions.

7.12 A study of the causes of collisions in the city revealed that the majority of injuries came about as a consequence of user error, with car drivers and passengers aged 17-24 years being the most commonly injured, with accidents most likely to happen during evening traffic, with a high number occurring on Fridays.[22]

7.13 There is a strong link between speed and road casualties. Reducing the average speed of traffic on a road by 1 mph leads to an expected reduction of 5 per cent in the number of collisions on that road, while reducing the speed of the fastest drivers has the largest effect on collisions. There is a well-understood relationship between the speed of a crash and the impact – and therefore the likely severity of any injuries.[23]

21 Department for Transport, Transport Analysis Guidance, 2009

22 Plymouth Road Safety Audit, Accsmap data for Plymouth from 1994-2009, PCC

23 DfT, A Safer Way: Consultation on Making Britain's Roads the Safest in the World, April 2009



7.14 In addition, the police are still recording a high proportion of drivers and riders who continue to flout laws about mobile phone use, seat belt use and driving whilst under the influence of alcohol and drugs demonstrating the need for road user education, particularly for those aged 17-24, alongside safety engineering and traffic regulation enforcement.

7.15 The fear of being injured in a traffic-related collision is a real concern for residents and the perceived danger acts as a barrier to travel for many, often deterring people from choosing to walk or cycle. Fear for safety is particularly prevalent when choosing how to travel to school, for example. Parents who drive to school often cite safety as the main reason for choosing to drive their child every day rather than walk or cycle. However, Plymouth school travel plan surveys clearly demonstrate that the majority of children would much prefer to walk or cycle.

Interventions

- Continue to deliver road safety improvements through interventions that will seek to provide both preventative and reactive benefits with vulnerable road users such as cyclists, pedestrians and motorcyclists afforded increased attention for greater provision and priority.
- Safety cameras have proved to be a cost effective and good value for money measure in maintaining and improving safety on our roads and will continue to be a key part of the approach to improving the safety of users on Plymouth's transport network.
- Physical improvements will continue to be an essential component in providing safer roads and streets in the city with identified accident cluster sites still being afforded high priority. A new approach to providing physical improvements for road safety purposes will be followed seeking to use minimal infrastructure changes and natural traffic calming effects in order to maximise resources and deliver benefits for a greater number of people. School routes, socially-deprived neighbourhoods, important community facilities, accident sites and recognised traffic rat-runs will be afforded priority. Sensitive street design guidance such as Manual for Streets and Streets for All will be consulted to inform the measures to be used particularly for streets within or close to Conservation Areas or other assets of historic or architectural significance or value, in order to complement and enhance the city's existing high quality built environment.
- Changes to the highway will be guided by the route hierarchy contained within the Network Management Plan (see Chapter 4) that will ensure that measures on strategic routes do not slow emergency vehicle response rates, hinder public transport, cause increased congestion or reduce the options for delivery of out-sized freight.
- Alongside physically changing the layout of roads and streets, educating road users will have an ever-more crucial role. The council, in partnership with other road safety organisations like the police, will deliver targeted road safety education programmes, training and publicity.

Perceptions of Safety and Crime

7.16 How safe people feel can significantly influence their travel choice and behaviour. Although recorded crime in Plymouth fell by nearly 8%[24] and the risk of being a victim of crime is lower than at any time since the survey began in 1981, the fear of crime remains high, with two thirds of Plymouth's residents expressing that they feel unsafe outside after dark[25].

7.17 In particular people living in deprived areas tend to experience more crime, perceive more crime and anti-social behaviour, and have lower confidence in local criminal justice.[26]Residents of two of the city's most deprived wards, North Prospect and Barne Barton, expressed the highest concerns of all the city's wards about being a victim of street crime.

7.18 Greater car ownership has increased the number of cars parked on our streets and many streets are now overcrowded, with cars lining either side requiring increased enforcement of on-street parking and the need for individuals to take greater responsibility for their own actions.

7.19 Annually, criminal damage in Plymouth is estimated to cost £7m, the most prevalent being vehicle damage and, more recently, emerging acquisitive crime such as theft of vehicles, theft from vehicles, theft of fuel and theft of metal (such as drain covers), and damage to bus shelters. Criminal damage is strongly linked to young people, anti-social behaviour and substance misuse. Vehicle crime accounts for 14% of all crime in the city.[27]

7.20 The design of residential areas can contribute to both how safe people perceive an area to be and the actual level of crime the area suffers from. To try and improve the perception of an area and the extent and type of crime that is committed within it, we have adopted the Manual for Streets (MfS) as a guide for designing new residential developments and have parking policies that will increase the number of spaces provided for new houses. The MfS defines principles to be used when designing streets with the aim of reducing the dominance of the car and making our streets more friendly and welcoming to use.

7.21 Provision of greater and more accurate transport information will allow people more certainty in planning journeys, reducing the fear that they may have of making a certain trip.

Interventions

- Improve people's perception of crime and safety
- Encourage and provide greater availability of real-time travel information for different transport modes to enhance journey-planning and reduce situations of perceived risk
- Investigate greater use of surveillance cameras by transport operatives such as parking attendants for identifying suspicious and abnormal behaviour
- Strengthen the auditing process for highway infrastructure to consider safety, security and environmental issues.

24 Home Office, British Crime Survey 2004/05-2007/08
25 Plymouth Quality of Life Survey 2006
26 Plymouth Community Safety Partnership Strategic Assessment Crime and Disorder 2009/10)
27 Plymouth Community Safety Partnership Plan 2008-2011

Ensuring the Security of our Transport Networks

7.22 Ensuring the city's transport systems and networks are resilient to different threats and pressures is a significant concern particularly with the global terrorist threat and violent weather patterns we are subjected to.

7.23 The council has taken significant steps to protect the city, its population, environment and local economy against major emergencies. Major emergencies are defined within the Civil Contingencies Act 2004 as those that threaten serious damage to human welfare, including disruption to facilities for transport.

7.24 The Act sets out the framework for civil protection on a local level in the UK. Duties include the requirement to assess the risk of an emergency occurring, and to review and maintain emergency response plans.

7.25 There is no intelligence or information to suggest that Plymouth is a specific target of terrorism at this time.

7.26 Forward planning and consideration of future risks will be integral to managing and ensuring the security of our transport networks. A Network Management Plan (NMP), a Transport Asset Management Plan (TAMP) and a Surface Water Action Management Plan (SWAMP) will be produced and reviewed regularly to ensure the most appropriate processes are in place for managing the network in different situations and events.

7.27 We will ensure that the design and materials used in transport infrastructure are selected to reduce the severity of injury from collisions and attacks.

7.28 In the event of a major emergency, Plymouth's transport network would play a vital role during and after the event. During an event the transport network will enable access to affected areas by the emergency services and utility providers. However parts of the network could also be affected by long periods of closure or damage. Public transport providers have been aided by the council in the production of business continuity plans and emergency transport agreements have been negotiated to deal with such issues.

7.29 In the case of potentially environmentally damaging collisions, such as an oil tanker spillage, emergency planning procedures would need to be followed, as outlined in the Network Management Plan, to ensure that pollutants do not enter our water system. The role of the Surface Water Action Management Plan (SWAMP) is shown in Chapter 5 - Tackling Climate Change.

7.30 After an incident occurs the first response of those involved is to make contact with family and to try to get home. Evidence suggests that the sooner people get back home the faster their recovery from the event and the quicker things can return to normal. However as a result of an occurrence people are unlikely to have personal belongings on them such as money, mobile phones and keys to enable them to make contact with family or to pay the fare to return home. This is where the emergency transport agreements come into effect.

Interventions

- The Council's emergency action planning processes will facilitate continued co-ordinated, effective partnership-working across agencies including the emergency services to assess future risk, and develop and review appropriate emergency procedures
- The TAMP will target investment and resources into ensuring the transport network can meet the demands placed upon it and will seek to deliver invest-to-save preventative maintenance to secure greater value and longevity from our transport asset base (see more detail on the TAMP in Chapter 4 - Supporting Growth)
- The NMP will detail the hierarchy of routes for the city's roads and streets from strategic to residential and the criteria for how they will be managed and improved, along with the alternative routes available in emergency situations (see more detail on the NMP in Chapter 4)
- The SWAMP will detail how measures to reduce pollutants entering our water and marine systems for everyday use and emergency situations will be incorporated into new and improved transport infrastructure (see more detail on the SWAMP see Chapter 5 - Tackling Climate Change)
- Transport infrastructure design will seek to consider security and safety issues through an extension of the auditing process to include checks for resilience to weather conditions and for potential personal security and safety risks such as bus stops in poorly lit areas.



CHAPTER EIGHT
PROMOTING EQUALITY OF OPPORTUNITY

PROMOTING EQUALITY OF OPPORTUNITY

Strategy at a glance

Promoting equality of opportunity by

- improving access for those without a car through working in partnership to develop and deliver accessibility action plans
- enabling bus use by providing bus priority infrastructure, improving physical access to bus stops and providing better information about services
- supporting the provision of community transport and the use of taxis
- influencing the changing shape of our communities to enable improvements to local access.

Introduction

8.1 Plymouth is set in an outstanding natural environment with a wide range of services and opportunities. However, for many different reasons, it can be difficult for some of our residents to access what is available. This can have a negative impact on wealth, health and quality of life.

8.2 New development within the city brings with it new opportunities. In planning future development, we need to ensure that access is improved for everyone by bringing new services into neighbourhoods or improving access to existing services.

Why is transport an important factor in increasing equality?

8.3 It is easy to assume that everyone has the option to just jump in the car, but many people do not drive nor have access to a car. About a third of households don't have a car and in some areas this is as high as two thirds of households. The neighbourhoods in the city most affected by poor health, higher unemployment and lower educational attainment tend to have lower levels of car ownership.





8.4 Similarly there may be reasons why other transport is not an option. The reasons for the lack of access to places are complex, some of them are explained in Table 8.1.

Table 8.1 Barrier to access and some of the reasons

Barrier to access	Reasons
Do not own or have access to a car	Can't afford to buy and run a car Unable to drive (too old, too young, not physically/ mentally able, can't afford lessons) Choose not to own or use a car for lifestyle or ethical reasons Not confident in driving ability and concerned about safety on the roads
Can't take the bus	Bus doesn't go to the right places at the right time Can't afford the fare Don't have information about the bus (times, destination, cost, etc) Don't know how to use the bus Can't get to the bus stop
Can't cycle	See Table 6.1 - Barriers to cycling
Can't walk	See Table 6.2 - Barriers to walking
Service / facility not open when people are able to access it	Service closed outside working hours If open outside of normal working hours there may not be a bus
Limited travel horizons	Unwilling to travel outside of neighbourhood - long journey times or distances a problem Do not trust transport services.

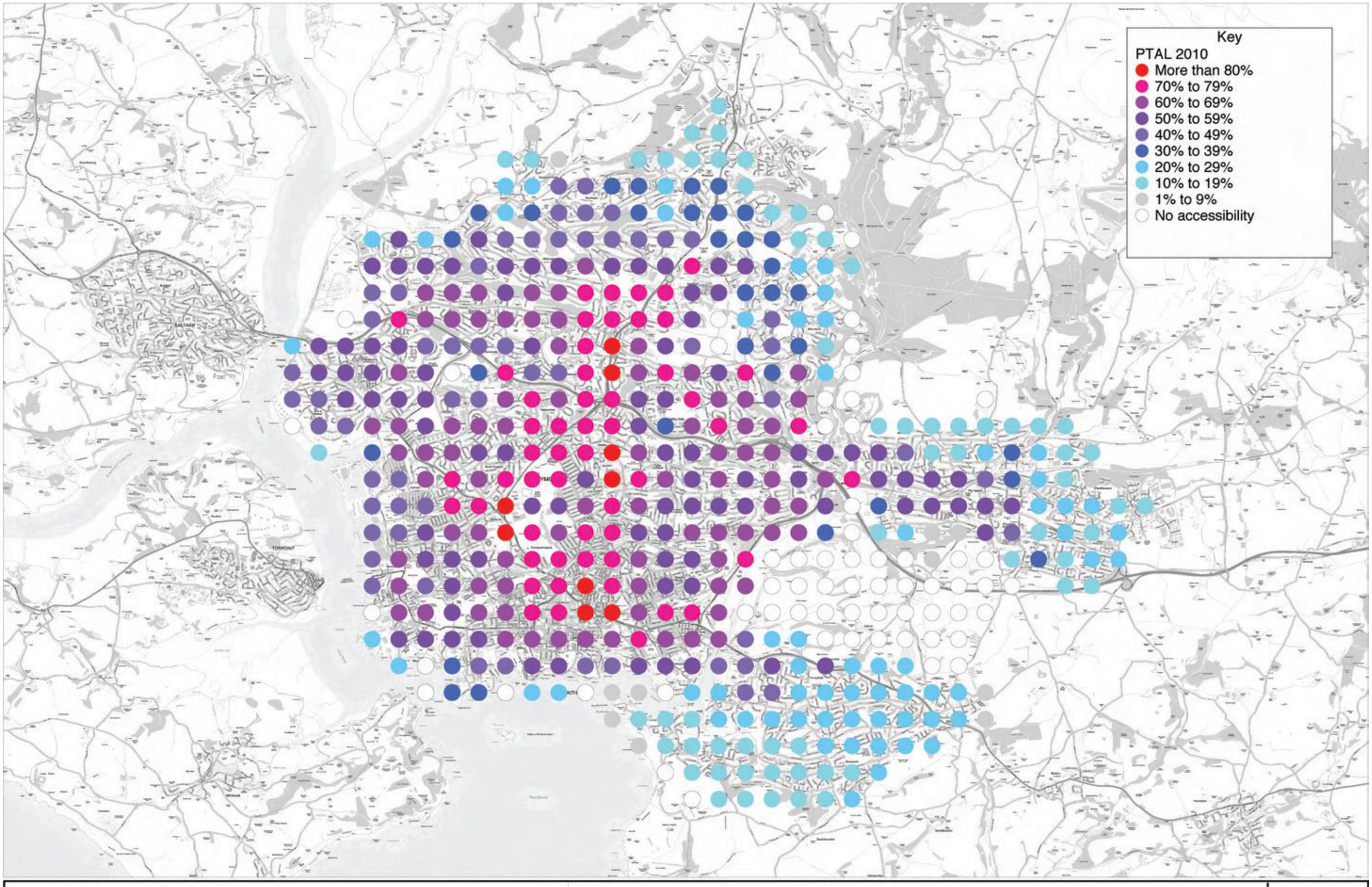
Buses

8.5 Plymouth has good bus provision in many areas during the weekday daytime, but provision in the evenings and weekends is deteriorating, severely restricting opportunities for some.

8.6 Evidence suggests that the bus network serves users' needs reasonably well. However, satisfaction amongst non-users tends to be lower. Further work is needed to understand the lower satisfaction amongst non-users and to gain a better understanding of the market segmentation in Plymouth in order to target non-users who have the potential to try bus travel with personalised travel planning and other motivational techniques.

8.7 Figure 8.1 shows the map of public transport accessibility (Monday - Friday daytime) showing the more accessible and the less accessible destinations in Plymouth as indicated by the percentage of city residents able to access them within 30 minutes by public transport (bus).

Figure 8.1 Accessibility map



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Scale 1:50857

Accessibility by Public Transport: % of People within 30 Minutes (2010)

City of Plymouth

Approach to improving access to opportunities

8.8 The main objective that supports reductions in inequalities by improving access to opportunities is:

Objective One - Link communities together

8.9 This is supported through the local transport objectives, as follows:

Table 8.2

Other local transport objectives	Examples of support for Equality of Opportunity agenda
Make walking, cycling and public transport the desirable choice.	Improving these modes will increase choice and provide more opportunities to get to key locations. Improve information and ease of use through smart ticketing and personalised journey planning
Use transport to drive the local economy	Economic growth can benefit all residents by increasing services and access to them.

Partnership Working

8.10 Partnership working with service providers and end-users is key to promoting equality by improving access to opportunities because it informs us of the needs of those in difficulty.

8.11 The table below lists the key partnerships between transport and highways and other stakeholders along with a brief description of the nature of each partnership. To ensure commitment, accountability and momentum, each partnership will sign up to a brief action plan.

Table 8.3 Partnerships

Partnership's objectives	Transport and Highways partners	Nature of the partnership
Maximising value for money and use of the bus network	Bus operators	Bus Punctuality Improvement Partnership; Voluntary Bus Partnership
Maximising value for money and use of community transport	Community Transport Providers	Contractual document and agreed action plan
Improving access to healthcare by public transport, walking and cycling	Plymouth Hospitals NHS Trust, bus operators	Accessibility Action Plan to healthcare
Improving access to opportunities by public transport walking and cycling for young people	Children and Young People's Services, Connexions and potentially other referral agencies, bus operators	Young People's Accessibility Action Plan
Improving access to opportunities for those with disabilities	Disabled groups such as Disability Action Network and Disabled Bus Users. Also Plymouth Advisory Partnership for Older People, bus operators	Accessibility Action Plan for disabled groups
Increasing walking and cycling	User groups and relevant bodies, such as Sustrans, Plymouth Cycling Campaign, Sports Development Unit, Public Health, Plymouth Local Access Forum, SWPTi	Walking and Cycling Action Plan

Accessibility Action Plans

8.12 A partnership approach known as accessibility planning is key to tackling barriers to services and facilities. This consists of a logical, evidence-based approach to identifying problems and solutions which the partners commit to delivering, focusing on improving access to a particular service or alternatively on improving access for a particular community or group.

8.13 Developing innovative solutions to improve equality of opportunity across the city, we need to take a more creative approach that allows for more sophisticated use of all the options available. There are resources that people could make better use of, such as taxis, or not-for-profit car clubs, such as the Moorcar scheme, which have been successful elsewhere.

Enabling bus use

8.14 Developing partnerships with a range of stakeholders is an essential part of enabling use of the bus network as detailed in Table 8.3.

8.15 We agree with the bus operators on the overriding need for reliability to improve quality; this is currently undermined by congestion at certain locations. We and the bus operators believe that improved punctuality is best achieved at certain times of the day through closer joint working such as through a Bus Punctuality Improvement Partnership (BPIP).

Interventions

- Providing information in a variety of formats, to include information on routes, times, costs and guidance for unfamiliar users
- Targeting the root causes of reliability issues whether it be driver training or infrastructure improvements
- Improving physical access to bus stops
- Continue to pro actively manage concessionary fares to maintain the 'no better/no worse off' situation for bus operators
- Subsidised services
- Improving the perceptions of public transport by non users
- Working to improve evening and weekend services to key strategic locations.

Community Transport and Shopmobility services

8.16 Partnership working is key to developing Ring and Ride, Community Car and Shopmobility services. Collectively these services offer a range of opportunities to access shops, healthcare and leisure facilities around the city. We have identified the key actions required to maximise availability and uptake of services. Continued effort will be put into developing a relationship with the current provider and seeking to offer greater opportunities to meet the growing demands of an ageing population whilst improving self-sufficiency.

8.17 Community transport plays a vital role in providing accessible transport solutions for some of the city's most vulnerable residents. However, the challenge of increasing use of the services to meet the needs of more residents whilst offering greater value for money must be achieved. Consolidation of services into a single demand responsive service and greater integration with existing public transport services will be investigated as a solution.

8.18 The Shopmobility scooter hire offers accessible mobility to the elderly and disabled within the city centre which is available for both residents and visitors. A priority will be to investigate the impact this service has on citywide priorities.





Taxis and private hire

8.19 Taxis serve an important function for many people with no access to a car and where bus travel is not an option. Taxis provide convenience for people who, for whatever reason, are not able to walk as far as a bus stop and, for families, can prove more cost-efficient. Operating on demand they are also available at times and for destinations not provided for by other public transport. In these ways taxis plug the gap that buses can not fill. We will continue to work with operators to help improve the quality and availability of taxis and private hire at a reasonable price.

8.20 We will also;

- Investigate drop off points for private hire in the city centre at key destinations
- Improve access to taxi facilities
- Work with the City Centre Health and Safety Executive (HSE) group to ensure safe provision where appropriate.

Walking and cycling

8.21 Walking and cycling are cheap, flexible forms of transport, which can be used by many people. Many of the measures that will improve accessibility have been included within Chapters 6 and 7 and are therefore not repeated here. It is important that measures to encourage walking and cycling meet the needs of all groups. Ongoing support for the wheels-to-work scheme, "BikeLinks", is one such measure.

The changing shape of our communities

8.22 A fundamental aspiration of our land use planning policy is to develop sustainable linked communities. The Core Strategy and each AAP have been put together with this in mind and are supported by detailed transport planning work, much of which also forms the evidence base to this LTP. In development is the Sustainable Neighbourhoods Development Plan Document, which will set out the approach for development in the areas of the city that are not covered by AAPs and will indicate local transport improvements. This process will ensure the balance of services within each neighbourhood and enable improvements to transport infrastructure and services.

Ensuring that we are tackling the problems

8.23 Table 8.4 below demonstrates how the planned interventions help resolve the barriers to access identified in Table 8.1.

Table 8.4 How the planned interventions help resolve the barriers to access

	Identified barriers to access						
Intervention	Bus fares expensive	Lack of appropriate bus information	Timetable doesn't fit needs	Mobility or mental impairments	Can't walk or cycle	Facility/ service unavailable / does not meet needs	Limited travel horizons
Continuation of Accessibility Action Plans	■	■■■	■	■■	■■	■■■	■
Concessionary fares for certain groups	■■■			■	■		■
Community transport development	■	■	■■■	■	■		■
Access improvements at new developments				■■	■		
Improved public transport information and marketing		■		■■			
Bus Punctuality Improvement Partnership and Voluntary Bus Partnership	■	■	■				
Walking and cycling interventions				■■	■■■		■
Bike links wheels-to-work scheme					■■■		■■
Sustainable l and use planning	■		■			■■■	

■■■ significant positive impact ■■ positive impact ■ slight positive impact



CHAPTER NINE
SUMMARY

SUMMARY

9.1 The LTP seeks to provide a balanced, realistic approach for all the respective transport modes and details how they will contribute to meeting the objectives and the ambitions the city has. This summary outlines how each mode will be supported and catered for throughout the period of the LTP to 2026 and covers all modes of transport.

Cars, vans and lorries

The strategy for cars, vans and lorries is to enable more efficient use of them by

- Improving the flow of vehicles on the main routes and ensuring these routes are well maintained
- Improving the quality of our car parks and the management of parking
- Increasing the availability of park and ride services
- Tackling poor driver behaviour and inconsiderate and unsafe parking
- Encouraging the use of 'greener-powered' vehicles, more efficient vehicles and more efficient driving
- Enabling increased opportunities for car sharing
- Ensuring goods can be transported efficiently
- Helping businesses to improve driving practice for work purposes through greener driving initiatives.

9.2 The increasing affordability of the car has been a revolution to the way we travel and it undoubtedly offers the most flexible form of transport for complex journeys. For many years Plymouth has been planned around car use and functions well in that respect. There are relatively low levels of congestion and reasonable parking charges compared to many cities that make the car the logical choice for those who have the option available to them. This LTP does not set out to disadvantage car users; cars are a vital part of the transport network and play a part in keeping our economy going. However, this LTP does not have a strong focus on car users as much of the provision for them is already of a reasonable standard compared to other modes. Car users are therefore well catered for in the TAMP and the NMP whose purpose is to ensure that the transport network and its management meets the needs of all its users.

9.3 The city does not have the luxury of space to build more roads, so we will have to make better use of our existing networks. The best way to do this is to make improvements that smooth the flow of vehicles on designated routes and to prioritise maintenance on those routes.

9.4 The changes to the city centre will enable us to raise the quality of our car parks, to improve their locations and the access arrangements. The council will also support the changes needed to our infrastructure that enables greater uptake of vehicles powered by electricity or other 'green' fuels.

9.5 Through the Development Guidelines SPD we have already started to put in place changes that will make residential streets better for all users. However, there is a greater need for personal responsibility, particularly when parking our cars on the highway. Improvements to on street parking regulations are already underway to rationalise the existing controlled parking zones, on street pay and display areas, and parking on single yellow lines, limited waiting and loading bays. Travel plans are encouraged for all new residential developments in the city and are instrumental in seeking greater use of sustainable travel modes and reducing reliance on single occupancy car journeys.

Park and ride

9.6 The council recognises that there are areas outside of the city that are not able to support a viable local bus or rail service into the city, and that often the easiest choice, or the only choice, to travel into the city centre is by car. For those who drive into the city because of an inadequate or absent public transport alternative, park and ride offers the opportunity to switch to public transport for at least part of their journey.

9.7 We plan to create a ring of high patronage park and ride interchange sites on the outskirts of the city. Each site will link into the city's HQPT network to become an interchange providing bus connections to other destinations in the city, not just the city centre.

9.8 The more cars that are intercepted at park and ride sites, the greater the benefits to the city in terms of reductions in traffic levels, congestion, pollution and reduced parking pressure.

9.9 Where available the use of a local bus service will be encouraged over driving to a park and ride site. Park and ride services should complement local bus services not replace them.

9.10 Park and ride charges need to be balanced with city centre parking charges and local bus fares to ensure that park and ride maintains a competitive advantage but does not abstract users from local buses. Charging will aim to achieve the optimum balance between long- and short-stay parking, and the needs of the city. Our strategy for implementing any new PandR will be to create the conditions possible to allow the commercial operation of services, achieving the best possible value for money for the council and the necessary freedom for bus operators to innovate.

Walking

The strategy for walking is to

- Improve safety for pedestrians
- Make it easier and more direct to travel between key destinations in the city on foot and for the mobility impaired
- Improve access for people with disabilities
- Promote the benefits of active travel
- Better maintain pavements and other pedestrian infrastructure.

9.11 Almost every journey is made partially on foot, even if it is to where the car is parked or to the bus stop. A key theme in this LTP is to enable more journeys to be made wholly on foot.

9.12 Described in Chapter 8 are the barriers that may be encountered when choosing to walk. The role of this LTP is to put in place measures which help to reduce those barriers.

9.13 During the first two years of this LTP we will develop a network, like the SCN, of primary routes for pedestrians. These will be focused on local trips to local facilities such as schools, shopping centres, medical centres and public transport interchanges. These routes will then be systematically improved in order to provide easy access for all, such as being afforded a high priority for the provision of dropped kerbs.

9.14 This process will enable us to focus on measures that will make walking a practical and desirable option for local journeys and for parts of longer journeys on public transport. In tackling problems we will first seek

solutions which will require limited new infrastructure.

9.15 Public rights of way form a vital part of the pedestrian network. Not only are these paths a valuable part of our history and heritage, they are also a valuable resource. Better integration of the use of rights of way into our network through delivery of the ROWIP Statement of Actions will give people the choice of walking, rather than taking the car or bus, with priority afforded to those rights of way that best support the city today.

Cycling

The strategy for cycling is to

- Make cycling safer, more convenient and more direct between destinations
- Address the needs of cyclists in transport schemes where appropriate
- Make cycling more pleasant
- Improve the skills and increase the confidence of cyclists
- Better maintain our roads and the infrastructure that supports our network.

9.16 Encouraging and enabling cycling is a key thread running through the LTP. Increasing the number of people cycling regularly for whatever purpose supports all aspects of delivering the long-term strategy.

9.17 The main concerns for would-be cyclists are safety and hills and other barriers to cycling have been highlighted in Chapter 6. In order to overcome these barriers it is proposed that a network of cycling routes is created within the city with a focus on key routes. This is defined by the SCN, which has been developed and adopted during the course of LTP2. The SCN will ensure that cycling infrastructure is developed in a joined-up manner, both geographically and across delivery bodies. More information about the strategic cycle network can be found on our website.

9.18 The network shows only the strategic routes. The links within communities, particularly to schools, are also important, just like branches off the main trunk of a tree. The aspiration is that the barriers to cycling are reduced so that many more people of all ages feel that they have the choice, to cycle to school, work or their local shops, for example.

9.19 The network will be delivered with a range of measures, including reduced speed limits and on- and off-road facilities, and will use public rights of way and parks where appropriate. The approach will be to limit the amount of new infrastructure wherever possible.

9.20 Maintenance of the cycle network is fundamental to encouraging use. Potholes, which are uncomfortable for car and bus users, can be dangerous for cyclists, and so ensuring our cycle network, whether on- or off-road, is well maintained is vital.

9.21 Infrastructure alone will not enable some people to cycle more and so we are committed to the provision of training for people of all ages and abilities.

Public Transport

9.22 For public transport this means connecting all areas of the sub-region with fast reliable links, ensuring the bus, rail and water networks are integrated.

9.23 In our previous local transport plan we proposed a strategic high quality public transport network and this still remains at the core of our plans to enable choice and improve connectivity.

9.24 The network of routes has been identified using national and local sources including census data, public transport patronage and future predictions of employment and population. It provides a clear statement of the commitment and intent of the council to enhance and modernise public transport provision, connecting principal centres of employment, residential areas, retail, leisure and services, as well as enabling sustainable urban expansion to the east and north of the city.

9.25 The Strategic Public Transport Network (shown in Figure 4.5) will increase frequency of services to create 'turn up and go' services on a core 'metro-like' network on the main corridors. Initially bus based, the network seeks to make best use of the existing highway infrastructure coupled with new links where it has been demonstrated that there is a sound business case.

9.26 A sequential approach to developing the Strategic Public Transport Network is being adopted. A number of measures have been implemented over the last 10 years to improve the bus passenger environment and the provision of passenger information.

9.27 The Strategic Public Transport Network demonstrates where investment in the public transport network will be targeted in order to achieve a step change in the use of public transport.

9.28 Delivering the network of routes will not, on its own, provide the high quality service needed by a modern city. The supporting infrastructure, including bus stops / stations,

information sources, ticketing, vehicles and interchange, all contribute to the quality of the experience for the user. Many of the improvements that are required are to 'back-office' systems which generally go unseen by the user but enhance the service.

9.29 Our role is to enable improvements to be made sooner than could be achieved by the private sector alone, by introducing initiatives that enable operators to try something new at lower risk. This includes funding trial services through a local 'kickstart' initiative, or investing in bus priority schemes that improve journey times and bus punctuality.

9.30 Investing in priority measures is one of the ways we have to equalise the costs of journeys. Throughout the life of the plan we will continue to seek measures which achieve this, allowing a better understanding for travellers of the cost of their trip, by whichever mode they chose.

9.31 Without a high quality road network, prioritised for bus use, the journey experience will be impaired. Ensuring bus routes are well maintained is key to preserving a good ride quality.

9.32 We are committed to working with public transport operators and regional partners to deliver smart ticketing in the city and surrounding area. Cashless transactions remove actual and perceived barriers to travel, increasing the opportunity for integrated and multi modal travel.



Buses

The strategy for buses is to

- Continue development of the network of high quality public transport services (HQPT)
- Reduce journey times and improve reliability and punctuality of buses on the network
- Improve access to the bus network
- Make bus travel an attract option for as many trips as possible
- Smartcard ticketing
- Partnership with bus operators to improve service efficiency
- Improve Plymouth's bus and coach station.

9.33 The strategy for the bus market is focused on moving into a circle of growth instead of the current cycle of decline. The deregulated bus market limits the direct influence the council can have on services, but by working with the bus operators and providing a more efficient road network for them to operate on, we can improve the efficiency of the service provided. Ensuring punctuality on key parts of the network will enable bus operators to expand their service commercially. Figure 9.1 below demonstrates how this might be achieved.

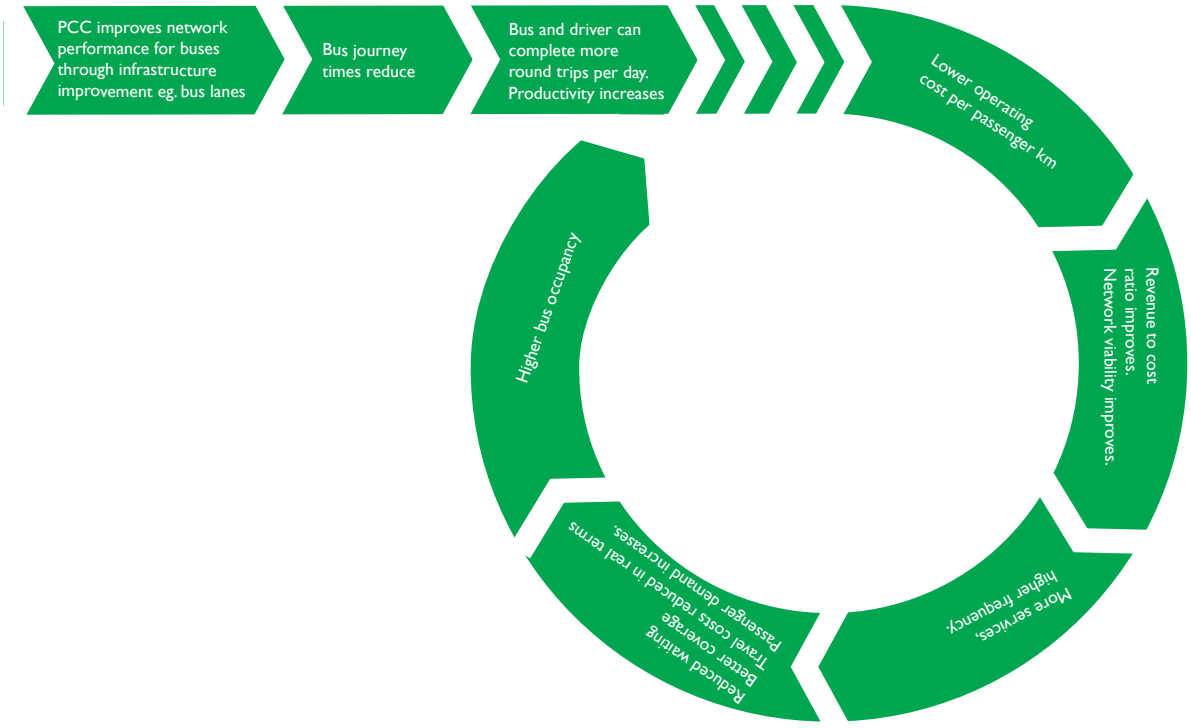


Figure 9.1 The virtuous circle of bus use

9.34 There will always be areas where traditional bus services cannot be sustained. These areas will need to be served differently which will require innovation and partnership working to understand the needs of the users in that area and then tailor a more cost effective solution.

Taxis and private hire vehicles

The strategy for taxis and private hire is to

- Investigate the designation of drop off points for private hire in the city centre at key destinations
- Improve access to taxi facilities by improving infrastructure and information
- Enable better integration with other public transport service
- Work with the City Centre HSE group to ensure safe provision where appropriate.

9.35 Taxis are a valuable resource that complement and reinforce other forms of public transport. They are also a lifeline to those people who are unable to access other forms of transport. We will continue to work with operators to improve the quality and availability of taxis and private hire vehicles.

Rail

The strategy for rail is to

- Give passengers a better journey experience
- Improve Plymouth Railway Station in partnership with rail operators
- Seek improvements to the South West rail infrastructure
- Encourage more freight to be moved by rail
- Improve connections to other parts of Devon and Cornwall
- Reduce journey times
- Provide more convenient arrival and departure at Plymouth and other destinations.

9.36 The rail network is a vital part of the city's transport system providing local services for commuters and day-trippers as well as longer distance travel to the rest of the country and Europe.

9.37 The vision for rail is that usage will increase for both short and long journeys for passenger and freight. However, the council has no control over the rail networks, which means working in partnership with Network Rail, rail operators and organisations, such as the Devon and Cornwall Community Rail Partnership, will be the only mechanism by which this aspiration can be achieved. We are also working with the local business community and neighbouring authorities to lobby central government for improvements to services to the region.

9.38 Known issues with the existing rail network have been identified in Chapter 4 - Supporting Growth.

Water transport

The strategy for water transport is to

- Support partners who promote more sustainable tourism
- Increase the use of Plymouth's waterfront
- Continue to support the use of water transport for the movement of people and freight
- Support the development and promotion of the South West Coast Path Waterfront Walkway.

9.39 The city is surrounded on three sides by water. It is a fundamental part of the city's history and a unique selling point as Plymouth aspires to be a vibrant waterfront city. The 10 miles of the South West Coast Path that pass through the city are recognised as one of the finest sections of urban coast path in the country, specifically promoting this historic relationship.

9.40 Several ferry services are already well established. We have provided the new Barbican Landing Stage to improve access to the waterfront and water transport. Better integration of water transport with other modes, through measures such as clockface timetables which integrate with buses, walking and cycling routes to and from ferries and improved ticketing potentially using smart-ticketing technology will enable increased use for a variety of journey purposes.

9.41 Increasing numbers of cruise ships are anticipated, and we will welcome more use of the water for transport for leisure and commuting where feasible. Indeed, we are

optimistic that short sea shipping will be a viable alternative for freight movements to and from the city, the Port of Plymouth Master Plan will be a key enabling factor.

Air Transport

The strategy for air transport is to

- Safeguard land to enable future airport expansion, through the planning process
- Work with the airport operator and public transport providers to improve surface access to the airport by sustainable modes to enable connections to main business districts including Derriford, Langage and the city centre.

9.42 Good connectivity between the city and air services is vital for business and tourism. Enabling efficient onward international links to be made via major European hubs particularly supports potential expansion into new markets.

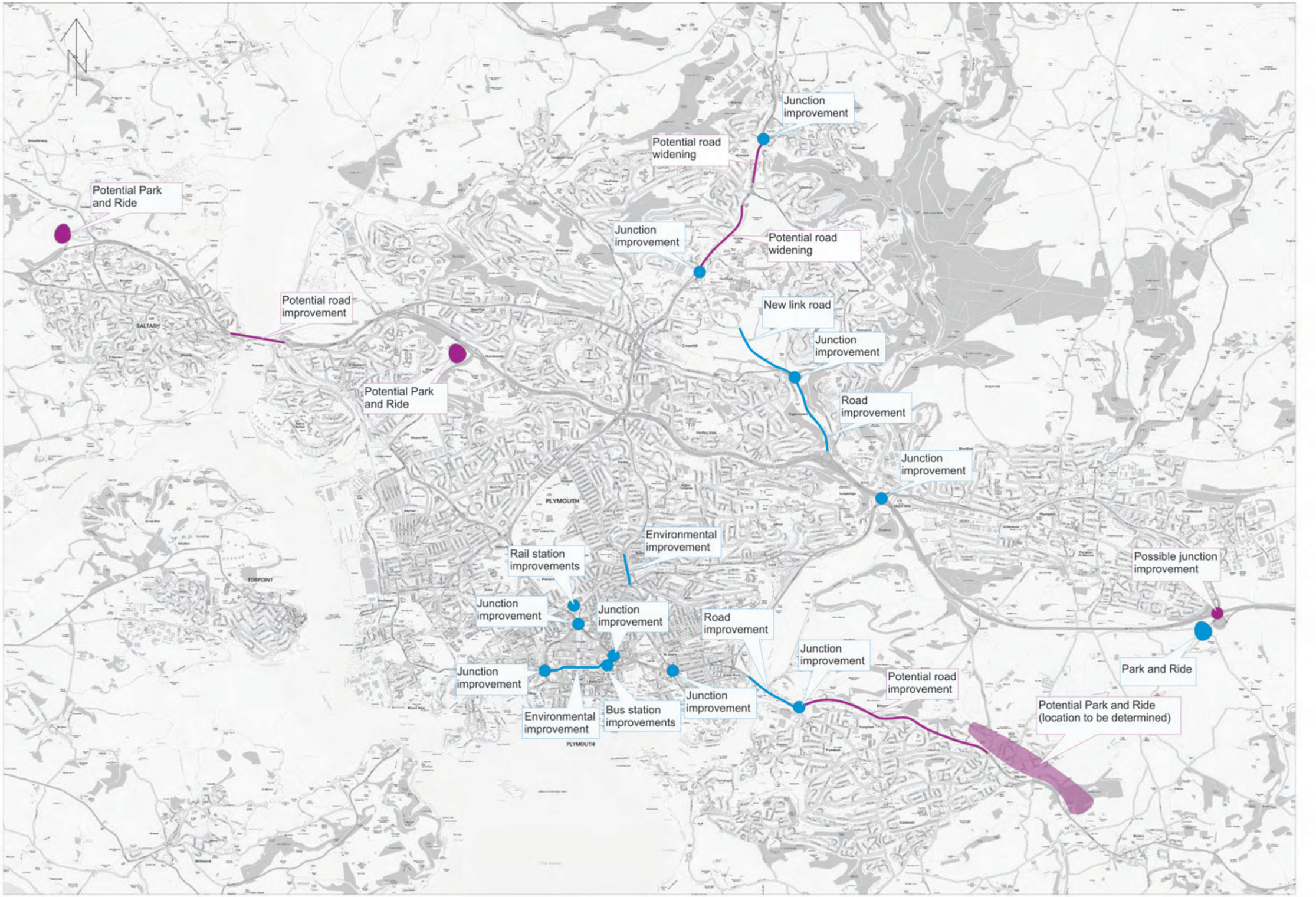
9.43 Plymouth City Airport is important to the business community of the sub-region, providing rapid access to the major mainland destinations, plus the Channel Islands and the Republic of Ireland.

Major Infrastructure

9.44 In order to deliver this strategy it will be necessary to make changes to the existing transport networks. Through the development of this LTP and the LDF a number of major infrastructure changes have been identified. These are shown in Figure 9.2 and more details are given in the Transport Implementation Plan.

9.45 To achieve the necessary level of progress on the priorities does not happen overnight. The strategy set out in this plan therefore supports an incremental approach to delivering improvements to infrastructure and the provision of travel information through innovative information technology. This is underpinned by the need to make more efficient use of our existing transport assets. These changes will be delivered over the life of the 15 year strategy, in most instances the exact changes have yet to be developed. The details of the schemes will be determined by considering a variety of issues at the design stage and will be subject to consultation processes.

Figure 9.2 Major infrastructure diagram



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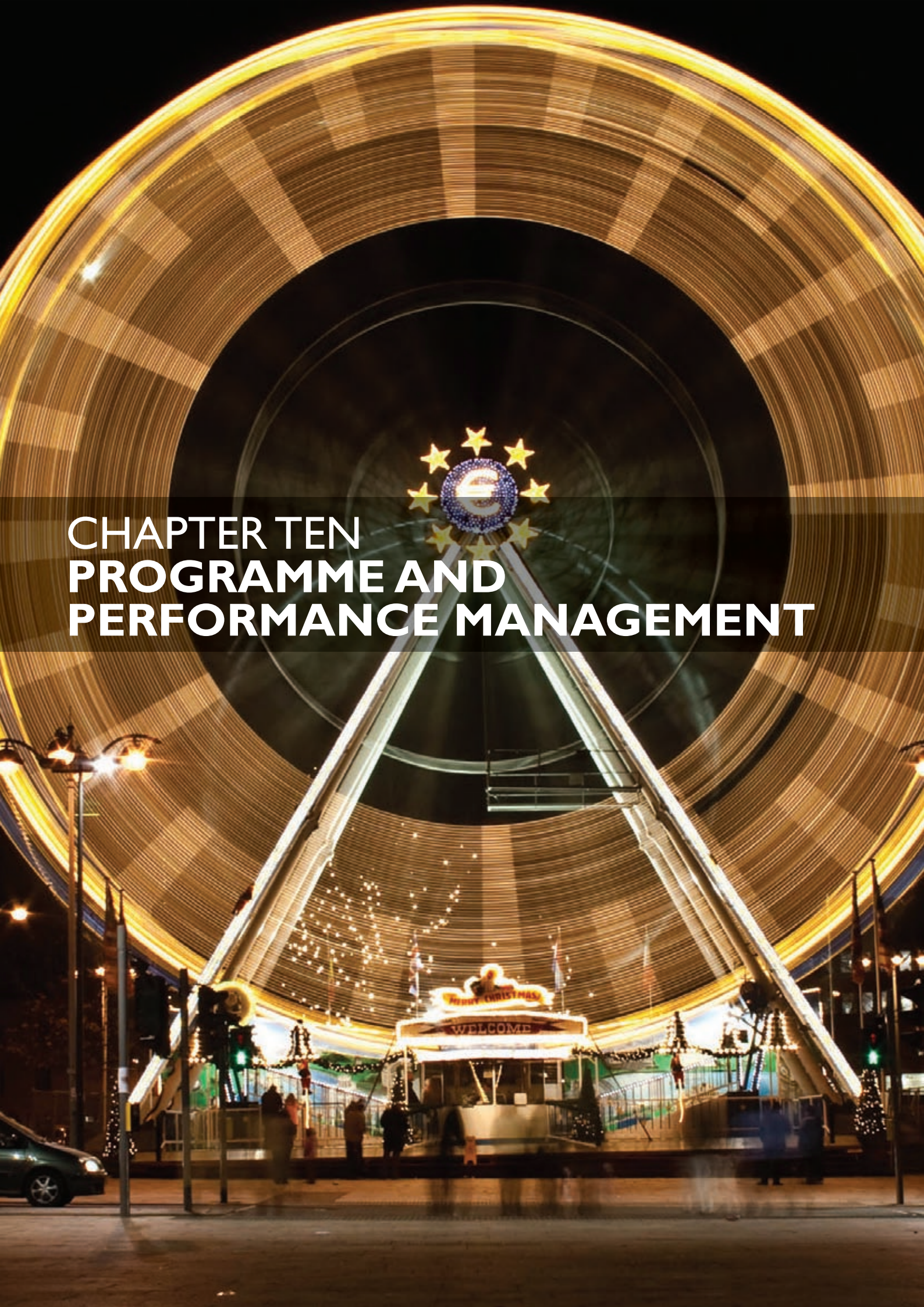


CHAPTER TEN
PROGRAMME AND PERFORMANCE MANAGEMENT

PROGRAMME AND PERFORMANCE MANAGEMENT

Programme Delivery and Performance Management

10.1 The first nine chapters of the Local Transport Plan have set out the context, vision, aims and objectives, identifying the priorities to deliver the required strategic outcomes. To achieve successful delivery will require robust management of LTP3. This chapter sets out the necessary processes and disciplines to provide robust programme management to ensure delivery and how we will monitor performance against targets. The programme of schemes, along with sources of funding, is set out in a separate Implementation Plan, which accompanies this LTP3.

10.2 It is essential for every local authority preparing a Local Transport Plan to ensure value for money and efficient delivery. The programme must address the problems and needs identified in the strategy and enable the council to meet both its transport objectives as well as the objectives of the local authority as a whole. It examines the delivery framework, how schemes have been prioritised and assessed to deliver the goals and objectives of the LTP3, how the programme of schemes will be managed, including the management of risks, and the Performance Management Framework to monitor delivery of strategic outcomes.

The Delivery Framework

10.3 To ensure that Plymouth Transport and Highways partnership focuses on delivery of the Council's priorities, delivery of the programme is governed through a Transport Programme Board, which operates with membership drawn from managers across the Partnership. This creates good decision making by focusing on delivering priorities with delivery of the right schemes at the right time. The capital element of the Programme, the Capital Programme, has to be further approved by the Council's Capital Delivery Board prior to being approved by full Council in March of each year. Additions to the Capital Programme, irrespective of the funding source, have to be signed off by Capital Delivery Board. This enables the Council to manage its entire Capital Programme and align it to delivery of wider corporate priorities.

10.4 In December 2008, Plymouth City Council entered in to a Highways Services Contract with Amey LG Limited to form the Plymouth Transport and Highways Partnership. This seven-year contract includes for the provision of design, construction, operations and maintenance functions relating to highways services as operated by Amey LG Limited. The contract can be extended by up to a further three years subject to performance. It is anticipated that the total value of the contract over the full ten-year term could be approximately £150m.

10.5 The purpose of the partnership is to deliver improved and more efficient services by adopting collaborative and integrated working methods, incorporating 'Rethinking Construction' and 'Lean Thinking' principles.

10.6 Financial benefits will be realised through:

- Economies of scale of the provider - the Council will benefit from the provider's buying power.
- Streamlining of procurement practices - costs and time spent procuring and managing the supply chain will be saved as well as contingent pricing would be reduced.
- Savings in the costs, risks and time of information technology implementation - the Council will largely be implementing proven systems, which, in turn, have already been through the testing and evaluation process.
- Standing charges from non-utilisation of staff will not be incurred.
- Maximising staff efficiency and shared back office systems, and common research and development costs with other public sector clients of the provider.

10.7 It is through this partnership that the majority of schemes will be delivered. However, the changing nature of public services will see an increasing number of schemes and initiatives being delivered by a number of different partners working together. This will apply particularly to the delivery of high level objectives that involve improving connectivity not only to Plymouth, but to the whole south west peninsula to and from the rest of the UK. The Council has identified key partners who it will need to work with to deliver these high level objectives including: Plymouth Chamber of Commerce, the Highways Agency, Sustrans, Network Rail, Train Operating Companies, other transport providers, Association of British Ports, local National Health Trust, Devon County Council, Cornwall Council and the Environment Agency

Local Enterprise Partnership

10.8 The 2010 Government White Paper, 'Local growth: realising every place's potential', has set up the framework for the development of Local Enterprise Partnerships (LEP) around England to replace the Regional Development Agencies. LEPs are partnerships between local authorities and the business community which provide the strategic leadership in their areas.

10.9 Local enterprise partnerships provide the clear vision and strategic leadership to drive sustainable private sector-led growth and job creation in their area. Areas of interest include transport, housing and planning as part of an integrated approach to growth and infrastructure delivery.

10.10 The council is currently working with local partners in developing a suitable LEP to support growth.

Prioritisation and assessment of schemes

10.11 Plymouth City Council will always strive to deliver a quality transport service and achieve good value for money. As has been demonstrated so far in this LTP, the service that is provided by the Council is broad and has to be delivered to a finite budget. Plymouth Transport and Highways, with its responsibility to deliver, will use this LTP to provide the necessary focus to ensure that schemes are prioritised on the basis that they must deliver our strategic transport objectives:

- Link communities together
- High quality transport standards for a vibrant city
- Make walking, cycling and public transport the desirable choice
- Maximise the transport contribution to Plymouth's carbon reduction target (60% reduction by 2020)
- Use transport to drive the local economy.

10.12 The Implementation Plan provides the programme of schemes to be delivered with an indication of when they will be needed. An essential element of prioritising is having the flexibility to bring forward schemes or delay schemes in response to changing circumstances, for example, development coming forward earlier than anticipated. More importantly, as is spelt out in the Implementation Plan, is the need to maximise funding opportunities to keep the Implementation Plan on track. Therefore, those schemes which have the potential to provide match funding to support funding bids will need to be prioritised.

Programme management

10.13 Managing the Implementation Plan will follow established processes and best practice within the authority including "gateway" reviews. The LTP sets out the strategy having identified the problems the city needs to address as a priority. Implementation Plans will be updated throughout the life of LTP3, as a result of assessing and prioritising schemes as part of the programme management process. These disciplines have evolved within the authority through the delivery of major schemes over the last ten years, such as the A386 Northern Corridor Public Transport Improvement scheme and the current East End Transport Improvement Scheme, as well as the delivery of smaller schemes through the LTP2 Integrated Transport Block.

10.14 The strategy sets out the high-level strategic objectives from which the required outcomes are determined. These outcomes need to be broken down into manageable schemes, each delivered individually. LTP strategic objectives will only be reviewed after five years, enabling time to bring forward and deliver sufficient schemes to deliver against strategic objectives. Regular internal Programme Board meetings will facilitate well-informed decision-making, allowing adjustments to be made to the programme. The LTP has been produced through consultation and community engagement, particularly with partners and stakeholders, and it will be vital to the achievement of strategic outcomes that partners adopt common values and a shared responsibility for delivering these outcomes.

10.15 The LTP is a long-term strategy which will be achieved through delivering a programme of schemes for which outcomes will be monitored and adjustments to the programme made as necessary. This process is shown in Table 10.1.

10.16 Plymouth Transport and Highways was asked to contribute to the Department for Transport's guide to best practice in the management of transport programmes incorporating our method of programme and risk management. The management activities that we undertake to ensure delivery against strategic outcomes is summarised in Table 10.2.

Risk Management

10.17 An integral part of good project and programme management is the management of risk. Risk can be defined as uncertainty of outcome from actions or events. The impact of a risk can be positive or negative. Risk can be looked at in two ways: first, the likelihood of a risk happening and second, the potential impact on the project if the risk did occur. This is a systematic process of managing this uncertainty by identifying, assessing, communicating and controlling risks. Risk management should ensure that a project's exposure to risk is kept at an acceptable level in a cost effective way without impeding the delivery of the required outcomes.

10.18 The Council has experience of managing risks in relation to undertaking transport projects. It is an area that is well understood, particularly the need to ensure that risks are managed within acceptable levels, neither compromising nor unduly delaying the delivery of the programme. Risks are identified and managed, from scheme concept through to delivery.

Table 10.1 The lifecycle for LTP3

Stage Number	Stage	Activity
1	Prepare Local Transport Plan with the transport vision for Plymouth	Set out objectives that represent our transport priorities to deliver the vision
2	Prepare the Implementation Plan	Prioritise and assess schemes against ability to deliver against objectives
3	Management and monitoring the delivery of the Implementation Plan	Programme management of schemes monitoring progress and delivery of benefits
4	Annual refresh of Implementation Plans	Adjust the Implementation Plan in response to changing needs, risks and funding opportunities, rolling activities into following years as required
5	Monitoring Implementation Plans	Monitoring LTP indicators against targets and the impact of adjustments to the Implementation Plan on delivery of strategic outcomes
6	Maintain or refresh the strategy with revision to LTP after 5 years	Identify any external influences which may change the strategy

Table 10.2 Programme Management process to deliver LTP3 successfully

Questions that should be asked during management of the LTP	Programme Management Issue	How PCC addresses issues through Programme Management	The Principles PCC adopts in its Programme Management processes	Programme Management Activity
How do we ensure that all strategic outcomes in the LTP are addressed in the Implementation Plan?	Completeness of the planning	All schemes, capital and revenue and irrespective of funding source are managed as one single transport programme	Develop the LTP Programme of schemes through business case procedures taking into account contribution of schemes to delivering the LTP strategy, as well as wider corporate and community strategies	Programme management
How is the Implementation Plan controlled?	Overall control	Monthly monitoring meeting between Programme Manager and individual Project Managers	Management of Programme through Project Management processes through monitoring: Finance, resources, prioritisation, delivery, risks and benefits and outcomes	Programme management
	Assurances	A Programme Board consisting of senior officers in the Department was established in 2007 to deliver the transport programme	Undertake a "Gateway" review process for schemes in development. Monthly Transport Programme Board meetings are able assess independently from Project Manager the status and progress of each individual project	Assurances
Are the financial resources in place to enable delivery of the Implementation Plan?	Financial control	The LTP strategy and scheme option testing prior to development of the Implementation Plan has been informed by the likely levels of funding available and best value targets (BCRs)	The Implementation Plan is determined by funding available from all sources. Monthly finance meetings to plan and manage expenditure enable adjustments to be made to the Implementation Plan	Financial management

Questions that should be asked during management of the LTP	Programme Management Issue	How PCC addresses issues through Programme Management	The Principles PCC adopts in its Programme Management processes	Programme Management Activity
Are the skills and resources available to enable delivery of the Implementation Plan?	Resourcing	The LTP Strategy and development of the Implementation Plan have been informed by levels of resources available and informed resource planning	Work with delivery partners to determine level and allocation of appropriately skilled resources to deliver schemes throughout the life of the Implementation Plan	Resource management
Have we got the right schemes being delivered at the right time in the Implementation Plan?	Prioritisation	An assessment of the projects which will deliver the most against local strategic outcome targets and when delivery should be scheduled	A robust prioritisation process that is scored against strategic outcomes as well as corporate and wider community objectives and priorities	Prioritisation
Will the schemes in the Implementation Plan be delivered on time?	Managing delivery	Programme Manager will hold monthly meetings with Project Managers and deviations from the schedule are reported up to Programme Board	Corporate sign up to the programme schedule for each Implementation Plan which is maintained from the outputs from meetings with Project Managers	Schedule Management
What are the risks of schemes going wrong and how do we reduce the likelihood and impact of schemes going wrong?	Managing risks	Identify risks and maintain a risk register for each project. Risk levels are identified and mitigation measures planned for each project and rolled up to the Programme or Corporate Risk Register if they pose a significant risk to the Authority or delivery of the LTP	The Authority has a positive and open approach to managing risk with project and programme owners encouraged to report and escalate high risks for wider discussion at the earliest opportunity	Risk management
How does the authority resolve risks when they become issues that impact on delivery?	Managing issues	Identify risks that become issues as early as possible. Have mitigation plans in place.	Implement mitigation plans promptly, prioritise obstacles to delivery according to impact on delivery, communicate to all those affected and escalate if decision exceeds limit of delegated powers	Issues management

Questions that should be asked during management of the LTP	Programme Management Issue	How PCC addresses issues through Programme Management	The Principles PCC adopts in its Programme Management processes	Programme Management Activity
Will the Implementation Plan achieve the strategic outcomes and when?	Achieving outcomes	Define the outcomes that are sought from delivery of the strategy.	Establish a monitoring framework with indicators, targets and trajectories for delivery of strategic outcomes	Management of Benefits and Outcomes
Do the schemes actually deliver the outcomes as set out in planning stage?	Achieving benefits and outputs	The Implementation Plan will have a schedule of delivery of scheme outputs and scheme benefits to keep to and which are forecast to realise strategic outcomes	Determine a schedule of expected level of benefits and monitor benefits against that schedule	Management of benefits and outputs
Who controls the LTP?	Decision-making	Decision making is made in line with corporate policies and appropriate delegations. Complex projects including cross border projects will include relevant stakeholders in the decision making process	The Authority has clear roles and responsibilities for individuals and Governance Groups: Project Manager, Programme Board, Strategic Programme Boards, Corporate Delivery Board, Cabinet Member, Cabinet and Full Council	Programme governance

Performance Management

10.19 Performance monitoring for LTP3 will provide a robust framework for measuring the success of the strategy and implementation plan, and for guiding decision making over the life of the strategy. The aims of the performance monitoring framework will be:

- To make intelligent use of performance information and other background information to support corporate policy, LTP3 objectives and programme management.
- To make LTP3 performance transparent and accountable to stakeholders.

10.20 Given that the LTP3 strategy spans 15 years, it follows that the policy environment is likely to evolve during its lifetime. Therefore, performance monitoring in LTP3 needs to be sufficiently flexible to be able to adapt to changing demands. It should also be able to take advantage of pre-existing data streams whenever possible, to enable baselining of any new indicators and to minimise the use of resources.

Plymouth's performance management framework

10.21 Plymouth City Council's corporate performance framework consists of four levels of indicators, with clearly defined objectives and responsibilities.

- **Level 1**: Key Plymouth 2020 indicators – these are reported to the LSP and set out targets for long-term transformation of the City
- **Level 2**: Indicators at this level are critical supporting outcomes which in most cases are delivered in partnership with other agencies
- **Level 3**: This consists of significant 'business as usual' indicators which are specific to a service area
- **Level 4**: This consists of information for monitoring and managing outputs at a team level.

10.22 The performance monitoring of LTP3 will fit within this framework, ensuring that its outcomes and outputs are aligned with the city's vision.

10.23 However, it is important to focus on the processes of performance management as much as on the indicators themselves. This involves making links between delivery of outputs, achievement of outcomes and contribution to the city's goals. This means that analysis and interpretation of indicators and supporting information will be as important as the numbers themselves – we need to understand the stories behind the numbers.

10.24 To this end, the LTP3 strategy will adopt a framework for smart monitoring (see text box), making intelligent use of data in decision making, rather than following the rigid, target-driven regime of LTP2.

10.25 The main indicators used will be drawn from the outcomes such as those in the right-hand column of Table 10.3. The exact specifications for indicators are not given, as some flexibility as to definitions is desirable. Furthermore, in some cases definitions and targets may need to be agreed with stakeholders, as is the case with Level 2 corporate indicators.

10.26 The majority of indicators are either existing ones or can be drawn from existing data streams; the remainder may be developed as required.

Smart monitoring

This refers to a flexible and responsive strategy for year-on-year measurement of success in the achievement of LTP3's objectives. The main characteristics of smart monitoring are:

- Responsiveness to evolving policy environments – this is necessary for a strategy spanning 15 years, with the potential for changes in government etc.
- Facility to make connections between indicator measures – this enables us to understand the 'why' as well as the 'what' of transport interventions.
- Integration with LTP3 programme management – this ensures the information reported is useful and adequate for making efficient use of resources.
- Transparency – this enables easy sharing of performance information with public and stakeholders.

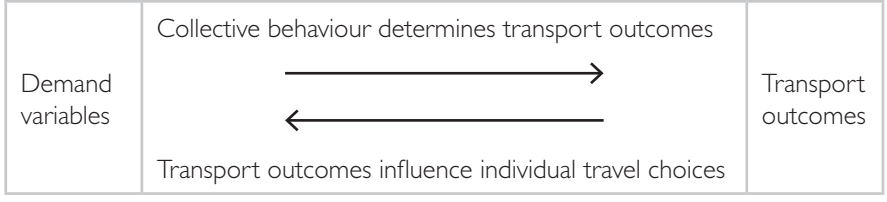
This will be achieved through a flexible framework of measurement, analysis and reporting of appropriate data, which will be outlined here and fully specified in a separate document.

Table 10.3 Demand variables and outcomes

Demand variables	Outcomes	
Traffic flows ■ Into centre ■ On main corridors Mode split ■ Work trips ■ School trips Vehicle occupancy Bus patronage Vehicle mileage on network Cycle flows Footfall ■ City centre ■ Rail station	Network outcomes	Journey times ■ Car ■ Bus
		Journey time variability ■ Car ■ Bus
		Bus punctuality
		Accessibility (level 2 indicator)
		Asset condition
		National and international connectivity ■ Rail ■ Road ■ Internet Connectivity with Travel to Work Area
	User outcomes	Customer satisfaction ■ Public transport ■ Asset condition / provision ■ Network management
		Business satisfaction
	Social / environmental outcomes	Road traffic accident casualties
		Air quality
		Noise
		Carbon emissions
		Renewable energy use

10.27 It can be seen therefore that indicators are divided into demand descriptors in the first column and transport outcomes in the third column. There is hence a two-way relationship between these two groups of indicators as shown below:

Figure 10.1 The two-way relationship between indicators



10.28 Smart monitoring will focus on understanding the dynamics of relevant aspects of these relationships and hence the likely effectiveness of interventions. For example, comparing city centre footfall with traffic entering the city centre on a Saturday would give an indication of how successful policies are at achieving modal shift for shopping trips. Likewise, comparing journey times with flows on routes which serve new developments will give valuable evidence of how well extra demand from these is being handled.

10.29 It may also be possible to highlight undesirable side effects of interventions on certain outcomes; an example might be to obtain evidence of the likely effect on road casualties of an improvement in journey times on a certain route.

10.30 For corporate purposes, Level 2 and 3 targets will be set for indicators selected from the outcomes in the right-hand side of Table 10.3, as these are more likely to be key influences on our economic, social and environmental success as a city. They are also more transparent to customers and stakeholders than the purely statistical information on the left-hand side.

10.31 Level 4 targets will be measures of success in achieving the outputs from the LTP3 implementation plan, and hence will be set and reviewed on an annual basis.

How this would support programme management.

10.32 The main mechanism for feeding performance information into programme management will be the Programme Board of Plymouth Transport and Highways. A performance summary will be presented to the Board at regular intervals for review.

10.33 Questions to be discussed by the Board would include:

- How accurate and reliable is the information contained in the indicators?
- What is known about the relationships between them?
- Do they represent what is known to be happening 'on the ground', in terms of real events or tendencies?
- Are the transport outcomes reported appropriately supporting all corporate and local goals?
- Are there any long-term effects which might not yet be manifested in the measured outcomes?
- How well is the Implementation Plan supporting the desired outcomes?
- Are there any new or significantly changed risks to the outcomes?
- Are corporate transport targets still sufficiently realistic and challenging?

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Local Transport Plan 2011-26
Transport Implementation Plan
Published by Plymouth City Council
April 2011

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