Devon and Torbay Local Transport Plan 2011 - 2026

Evidence Report The State of Transport in Devon and Torbay

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1. LTP3 Evidence Report: The State of Transport in Devon and Torbay

1.1. Introduction

- 1.1.1. Local transport authorities have a statutory requirement to produce a Local Transport Plan that contains strategies and implementation plans. The Devon and Torbay third local transport plan has been produced in line with current guidance and sets out the Devon and Torbay strategy for transport for the period 2011 2026.
- 1.1.2. This report outlines current data and facts about Devon and Torbay circa 2009, and where possible offers past data in order to establish data trends. The aim is to provide a picture of Devon and Torbay past and present, and where possible provide an insight into their futures. The data was used to inform the development of the LTP3 strategies and implementation plans. A summary of the national and local policy framework is also included.
- 1.1.3. The data in this report has been arranged into sections relevant to the LTP3 strategies with Devon and Torbay data being documented separately. Chapter three explores national demonstration evidence, Chapter four looks at Devon data, Chapter five explores Devon and Torbay strategic connections, Chapter six looks at Exeter data, Chapter seven at Torbay data and Chapter eight presents Devon market and coastal towns and rural area data.
- 1.1.4. Disclaimer: Some of the data contained within this report is incomplete and/or assumptions have been made. This data is solely for the purpose of informing the LTP3 and may not be suitable to apply to other studies.

2. Glossary of Terms

AADT – average annual daily traffic.

ANPR – automatic number plate recognition.

Free flow – journey time with no delay.

GPS – global position system.

Devon Town Area – Devon has been divided into 29 town areas. Each town area is comprised of a centre and its surrounding hinterland; the area that looks to the individual town for employment, shopping and local facilities.

RSI - road side interview.

 $\mathbf{95}^{\mathsf{th}}\ \mathbf{percentile} - \mathbf{95\%}$ of the time, the usage or occurrence is below this amount.

3. The National and Local Policy Framework

- 3.1.1. The development of a Local Transport Plan (LTP) has to take place in the context of other national and local policies. Transport's role in enabling all aspects of our lives to function means that almost all policies from education to the economy have some impact or reliance on those for transport. In the longer term planning policies have one of the greatest impacts on the LTP. This section outlines the recent changes to transport and planning policies and how they are expected to influence the LTP. National policy is very much in transition and the LTP will need to be reviewed on a regular basis to ensure that it continues to reflect the latest position.
- 3.1.2. Central Government is in the process of devolving greater power to communities including local authorities as part of their drive towards localism and the 'Big Society'. This will result in many policy changes at local as well as national levels once all the details and implications are known. This will not be the case until well into 2011.

3.2. Transport Policy

- 3.2.1. The production of Local Transport Plans is a legal requirement under the Transport Act 2000, as amended in 2008.
- 3.2.2. Government policy on transport prior to the election of the Coalition Government in May 2010 was based on the document 'Delivering a Sustainable Transport System'. This was supplemented by specific guidance on the production of Local Transport Plans published in July 2009.
- 3.2.3. The Coalition Government did not release its replacement for 'Delivering a Sustainable Transport System' until early 2011. The new White Paper 'Creating Growth, Cutting Carbon Making Sustainable Local Transport Happen' was published in January¹. This reflects a greater focus on the twin objectives of economic growth and carbon reduction together with a more local emphasis on delivery. There will be fewer targets and indicators sets at the national level. There is a particular emphasis on reducing the number of short car journeys, particularly in urban areas. The funding streams between central and local Government have been simplified although this is in the context of the lower total level of funding announced in the Comprehensive Spending Review in October 2010. They include the launch of the Local Sustainable Transport Fund from which local authorities can bid for funding. More detail on this can be found in the LTP Implementation Plan.
- 3.2.4. Some small changes have also been made to Planning Policy Guidance (PPG13) on Transport². These are primarily focussed on giving local

¹ http://www.dft.gov.uk/pgr/regional/sustainabletransport/?view=Standard

http://www.communities.gov.uk/planningandbuilding/planningsystem/planningpolicy/planningpolicysta tements/ppg13/

authorities greater flexibility over levels of parking. PPG13 is likely to be cancelled during 2011 once it is replaced by the new National Planning Policy Framework (see 3.5 below).

3.3. Health Policy

- 3.3.1. A radical overhaul of health policy has been announced by the Government in its White Paper on public health³. The current Primary Care Trusts will be abolished in 2013 with their roles being split between GPs and local authorities. The latter will play a frontline role in persuading people to adopt healthier lifestyles such as walking and cycling more often. A Health and Social Care Bill will bring forward reforms requiring new legislation, including the public health duty for local authorities, likely to be in place from April 2013.
- 3.3.2. A new body, Public Health England, will manage the public health budget and allocate some of this to upper tier and unitary authorities including Devon and Torbay. It will also run national behaviour change campaigns and develop a 'knowledge bank' for evidence on the effectiveness of behaviour change techniques.

3.4. Economic Policy

3.4.1. There have, as with Health, also been large scale changes to economic policy. The removal of the regional tier of planning noted below has also included the abolition of the Regional Development Agencies at that level. The Government has placed a strong emphasis on the greater involvement of businesses in developing local economic strategies and priorities. This is expressed through the creation of Local Enterprise Partnerships (LEPs⁴). Devon, Torbay, Plymouth and Somerset have joined forces to submit a proposal for their area to the Government following the approval of a single LEP for Cornwall and the Isles of Scilly.

3.5. Regional Planning and Structure Plans

Planning policies have seen some of the biggest changes in the period 3.5.1. since the Coalition Government came to power. One of the most significant has been the removal of the regional tier of planning including the Regional Spatial Strategies (RSS). These were the primary tool for setting the levels of housing and employment provision in different parts of each region in the context of national policies and targets. The Local Development Framework for each District area was then required to set out how this translated into specific local policies and site allocations. Regional Spatial Strategies will be abolished in the Localism Bill which is expected to be enacted towards the middle of 2011. Structure Plans had previously been the link between national and local policy prior to the RSS. Devon (including Plymouth and Torbay) had an adopted Structure Plan for the period 2001 to 2016, some policies from which were saved until the RSS for the South West was fully adopted. The Government has confirmed that the Localism Bill will also abolish Structure Plans.

³ http://www.dh.gov.uk/en/Aboutus/Features/DH_122253

⁴ http://www.bis.gov.uk/policies/regional-economic-development/leps

3.6. National Planning Framework

- 3.6.1. The Government has also signalled that it intends to significantly simplify the national planning policy framework. There is currently a range of Planning Policy Guidance or Statements and Circulars that sets out national policies that local policies and decisions should generally conform too. The Government has indicated that this will be replaced by a single consolidated National Planning Policy Framework. The format and content of this is being consulted on in the first part of 2011. It is expected that it will be much less detailed than the current guidance, placing much greater emphasis on local decisions.
- 3.6.2. A new Major Infrastructure Planning Unit, established within the Planning Inspectorate, will manage consents for nationally important infrastructure projects and grant permissions The new Unit will provide advice to Ministers who will take the decisions.

3.7. Local Development Frameworks and Neighbourhood Plans

- 3.7.1. The system of Local Development Frameworks will remain, but with less direction from the Government on their format and a greater local flexibility to make changes after an Examination in Public.
- 3.7.2. The Localism Bill will also introduce the new concept of Neighbourhood Plans, typically based on council wards and / or Town and Parish Councils. These will form a tier of plans below Local Development Frameworks and will be driven by the local community. Key exclusions include:
 - development which would breach thresholds for EU Directives
 - nationally significant infrastructure projects
 - minerals and most waste development
 - large scale housing and economic development
- 3.7.3. There will be a light touch examination of the plan undertaken by a qualified person. Where the examination shows that the plan is not aligned with:
 - the strategic elements of the local development framework
 - legal requirements or
 - national policy
- 3.7.4. The local planning authority will not be obliged to carry out a referendum or adopt the plan. The plan will therefore have no statutory status or form part of the area's development plan or grant planning permission for any development envisaged within it. Where the examination shows that the plan is in conformity, the local authority has to legally adopt the plan.

3.8. National Policy Implications for the Local Transport Plan

3.8.1. The development of the LTP including the first stages of consultation started towards the end of 2009. There has been a significant degree of

change in Government policy in the period since the election. The nature and timing of announcements has meant that the national policy changes were released over the period between May 2010 and January 2011 with further detail and clarification following as it becomes available.

- 3.8.2. The LTP has therefore had to be written during a period of significant policy changes and only partial detail upon which to base policies and proposals. This has had a knock-on effect on the progress of Local Development Frameworks in the Torbay and District Council areas which have direct relationships with the LTP. The strategy will therefore need to be reviewed on a regular basis to ensure that it supports and builds on national policies.
- 3.8.3. The LTP Strategy and Implementation Plans also had to be developed in the context of the Comprehensive Spending Review for the period to 2014/15 in October 2010. The implications of this are still being worked through at the time of writing in early 2011 and the Implementation Plan sets these out in more detail.

3.9. Local Policy Framework

- 3.9.1. Local policies are being reviewed in the context of the policy and funding changes at national level. The Government has confirmed that some specific plans that local authorities were previously required to produce have been deleted. This includes Local Area Agreements.
- 3.9.2. Devon's key policy statement is the DCC Strategic Plan⁵ covering the period 2009 to 2013. Torbay's key documents are the Torbay Community Plan for the period 2007 to 2027⁶ produced by the Torbay Strategic Partnership and the Mayor's Vision⁷ to 2026. Torbay's Local Development Framework⁸ (LDF) will set out the future spatial development. Each authority has a number of other specific plans that have a close relationship with the Local Transport Plan including the Children and Young People's Plan. The emerging Local Economic Partnership will provide a strong lead for the County Council and Torbay's economic strategies.
- 3.9.3. Each district council in Devon has its own corporate business plan but the majority of spatial policies will be expressed through its LDF (see the relevant district council website for the latest positions). The County Council plays a major role in developing the LDFs in partnership with the district councils. Several district councils in Devon have declared Air Quality Management Areas which triggers a requirement to produce an Air Quality Action Plan. Transport is an important factor in the majority of these and the County Council therefore works closely with the district

⁶ <u>http://www.torbay.gov.uk/index/council/torbay-</u> partnerships/torbaystrategicpartnership/communityplan.htm</u>

⁵ <u>http://www.devon.gov.uk/dcc-strategic-plan-09.pdf</u>

⁷ <u>http://www.torbay.gov.uk/mayoralvision</u>

⁸ <u>http://www.torbay.gov.uk/ldf</u>

council in each case to develop potential solutions. National Parks are also responsible for producing Local Development Frameworks for the areas they manage. They also produce Management Plans which County Council supports the production and monitoring of.



4. National Demonstration Evidence

4.1. Cycling Demonstration Towns

- 4.1.1. The Cycling Demonstration Town programme was launched in 2005 in six towns; Aylesbury, Brighton & Hove, Darlington, Derby, Exeter and Lancaster. The towns received funding of £500,000 per year from Cycling England; this money was then match funded by each authority.
- 4.1.2. The project significantly increased the level of investment in cycling from the English average of approximately £1 per head per year to approximately £10 per head per year.
- 4.1.3. A comprehensive evaluation from the first three years, October 2005 to March 2009 has shown:
 - Increasing trips by bike: For the first time in the UK outside of London the national trend of a gradual decline in cycling levels has been reversed. The average increase inc cycling across all six towns was 27% between 2006 and 2009.
 - More people cycling: The proportion of adults doing any cycling increased by 14% between 2006 and 2009. This means that the recorded increase is the result of more people starting to cycle, or returning to cycling again, not just the result of cyclists using their bikes for more trips.
 - Cycling to school has more than doubled where towns invested most in children: In schools that benefited from Bikeability training, more cycle parking facilities, and a Bike It Officer, the proportion of pupils who cycled to school on a regular basis increased considerably. In schools involved in the Bike It programme the proportion of pupils who cycled to school on a regular basis – either every day or at least once or twice a week – increased by 126%.
 - A healthier population: The increase in cycling did not just occur among those already physically active. Survey data showed a decrease in the proportion of people in the towns classed as physically inactive: the group most at risk of premature death.
 - These results were not found in comparable towns: The increase in cycling activity for either occasional or regular cyclists in the Cycling Demonstration Towns is not observed in local authorities of a similar size and nature. Nor is the increase in cycling in the Cycling Demonstration Towns because of any general trend of growth in cycling in medium-sized urban areas.
 - Growth matches that in London: Cycling levels grew by 107% in London between 2001 and 2009. The growth rate in cycling levels for the Cycling Demonstration Towns matches growth rates in London, and also other international cities which have demonstrated sustained long-term commitment to cycling.
 - Investment pays back at least 3:1: Using data from this programme, appraisal carried out by the Department for Transport shows that the benefit to cost ratio is at least 3:1, and may be as high as 5 or 6:1 if benefits are sustained over 30 years. These calculations are based on conservative assumptions, and do not include all the benefits of the programme.

4.2. TravelSmart

- 4.2.1. Sustrans TravelSmart projects provide people with tailor made information and support to encourage them to walk, cycle and use public transport more often. It is based on Individualised Travel Marketing (ITM) and highlights travel choices people may not realise they have. Participants are provided with locally relevant information and support and motivation to change their daily travel habits.
- 4.2.2. TravelSmart has achieved a 10 14% reduction in car use wherever it has operated and with typical costs of £25 per household and a benefit to cost ratio of 8:1 it offers real value for money. Sustrans predict that if Travelsmart was introduced UK-wide it would save around 0.9 million tonnes of carbon per year.

5. **Devon Wide Data**

5.1. Introduction

5.1.1. Devon is the third largest county in the country, but also one of the most sparsely populated. The county attracts nearly six million visitors per year and the population is growing at over twice the national average. The quality of the environment attracts residents, visitors and businesses alike.

5.2. Demographics

- 5.2.1. Population figures at 2006 base are taken from the Registrar General, and population figure forecasts are estimated by Devon County Council. The figures for Devon County Council are based on post RSS⁶ calculations. Please note that these figures are estimates and therefore real figures may be higher or lower than those estimated. Whilst figures are provided more emphasis should be placed on the percentage change rather than the actual figures.
- 5.2.2. The table below give numbers of people and the predicted percentage change between 2006 and 2026. The data shows that in Devon the number of people over the age of 65 will increase by 50% by 2026, compared to the number of people under 65 increasing by just 2%.

Devon County Council							
2006 2026 % change							
under 65	581,720	592,258	2%				
65+	153,980	231627	50%				
total	735,700	823,885	12%				

Table 1: population numbers and % change Source: Registrar General and DCC estimates

5.2.3. Analysis of age profile percentage suggests that 28% of Devon residents will be 65 and over by 2026. This is considerably higher than the projected national average which predicts that by 2026 16% of the population in England will be over the age of 65^{10} .

Devon County Council					
	2006	2026			
under 65	79%	72%			
65+	21%	28%			

Table 2: population age groups
 Source: Registrar General and DCC estimates

⁹ Regional Spatial Strategy. Their revocation was announced by the new Conservative/Liberal Democrat government on 6 July 2010

Office for National Statistics

5.3. Health

- 5.3.1. Rates of obesity and overweight have increased sharply since the mid 1980s and are projected to continue to rise. Devon specific data on the prevalence of obesity and overweight is limited. The National Child Measurement Programme (NCMP) shows obesity prevalence in Devon is slightly lower than the national picture in children. Adult obesity estimates from Foresight¹¹ show Devon is very similar to the national picture. In England nearly 25% of men and women are now obese, and almost 20% of 2-5 year olds are obese. The Foresight report indicates that on current trends, by 2025 36% of males and 28% of females will be obese.
- 5.3.2. The cost of physical inactivity and subsequent ill health within Devon has been estimated at approximately £11 million per annum¹².
- 5.3.3. Life expectancies for Devon residents vary between different locations around the County. Life expectancy at birth at ward level is longest in Chagford (West Devon) at 87.5 years, and shortest in Ilfracombe Central (North Devon) at 74.7 years; a difference of 12.8 years. There are a number of reasons for this difference; for further information refer to the Devon "Annual Public Health Report 2008-2009".



5.4. Deprivation

Figure 1: index of deprivation map Source: DCC

5.4.1. There are 457 super output areas¹³ in Devon, of these 21 are in the most

deprived quintile (one-fifth) in the country. These areas are mainly in Exeter and North Devon. In comparison, 43 super output areas are in the least deprived quintile. For further information refer to the DCC report "The indices of deprivation".

5.5. Economy

- 5.5.1. In 2009 Devon had an employment rate of between 75% and 82% of the working population which compares to the national figure of 73%. Rates of part-time working in Devon are 36%, considerably higher than the national average. This may be because residents want the flexibility to combine work with other responsibilities, but there are likely to be a proportion of these wanting full time work.
- 5.5.2. Devon was hit hard by the recession and experienced large numbers of redundancies early on. This led to the percentage of residents claiming job seekers allowance rising from 1% in June 2009 to 2.6% in March 2010. Claimant figures are now at 1.9%¹⁴ and lower than the UK average of 3.8%.
- 5.5.3. The percentage of employment by sector provides a different picture to the national one. Devon has four times more agricultural activity and twice as many tourism businesses than the national average, and is characterised by many small businesses.

Sector	England	Devon
Agriculture & fishing	1%	1%
Energy & water	0%	1%
Manufacturing	10%	9%
Construction	5%	5%
Distribution hotels & restaurants	23%	28%
Transport & communications	6%	6%
Banking, finance & insurance	23%	15%
Public admin, education & health	26%	30%
Other	5%	5%
Total Employment	23	293,700
	million	

Table 3: Percentage of total employment by sector 2008
 Source: Annual Business Inquiry (via Nomis)

5.5.4. High levels of economic activity and relatively high employment rates sometimes mask the low productivity and low average wages within the county. Mean gross annual pay in 2009 in Devon was £22,358, lower than the England average of £27,144¹⁵. Devon's productivity per head lies well below the national average; GVA per head is substantially lower than the national or regional average; in 2006 the Devon GVA per head

¹¹ Foresight reports directly to the Government Chief Scientific Adviser and the Cabinet Office. It is a part of the Government Office for Science within the Department for Business, Innovation & Skills. ¹² HM Government, Be Active, Be Healthy: a plan for getting the nation moving, London 2009.

 ¹³ Super output areas are small geographical areas created by the Office of National Statistics and show areas of deprivation for similar size population to allow for more consistent comparisons.
 ¹⁴ JSA claimant count, June 2010

¹⁵ 2009 Annual Survey of Hours and Earnings (ASHE) Analysis by place of residence by Local Authority <u>http://www.statistics.gov.uk/downloads/theme_labour/ASHE-2009/2009_res_la.pdf</u>

was 74.9%¹⁶ of the national figure. The current under representation of more productive, high value added sectors such as high tech manufacturing and financial services in the Devon economy partly explains this gap and compounds the problem of low wages and deprivation in parts of the county¹⁷.

5.5.5. Tourism is important to Devon attracting over six million staying visitors per year and the value of tourism to the county in 2008 was calculated at £2.1 billion¹⁸. The scale of this activity is reflected in the contribution tourism related industries make to the Devon economy. Hotels and catering can be seen as a proxy for the tourism industry and make up 7% of the Devon economy; over twice the contribution the sector makes to the national economy. The 'seaside' areas of Devon benefit most from the tourism related industries; North Devon contributes the most towards the output of the hotels and catering sector, followed by East Devon, Teignbridge and South Hams. In Devon as a whole there were over 25 million trips (day trips and overnight stays) in 2008.



5.6. Accessibility

Figure 2: Accessibility to town centres Source: DCC

5.6.1. Access to services is monitored by Devon County Council by evaluating

¹⁶ Devon and Cornwall Economic Models 2008

¹⁷ State of the Devon Economy 2008, DCC <u>www.devon.gov.uk/state of the devon economy.pdf</u>

¹⁸ Value of Tourism 2008: Devon

http://www.swtourism.org.uk/files/download.php?m=documents&f=100419152046-3Devondistricts08.pdf

access to a town centre. The data examines the number of people who can access a town centre by daily public, community or voluntary transport, when leaving home between 7am and 10am. The 2009 figure for population in Devon without access to services is 33,430 and is a 22% improvement on 2005 (42,860). The figure above shows the plotted data.

Car ownership

5.6.2. Data from the 2001 census shows that car ownership in Devon is higher than the England average.

Area	No cars	1 car	2 cars	3 cars	4+ cars
England	27%	44%	24%	5%	1%
Devon	19%	47%	26%	5%	2%
					1

 Table 4: household car ownership 2001

 Source: 2001 census

5.7. Countryside and Heritage

- 5.7.1. Key environmental features of Devon include:
 - UNESCO Biosphere Reserve North Devon
 - Marine Conservation Zone Lundy
 - 2x World Heritage Sites
 - 2x National Parks
 - 5x Areas of Outstanding Natural Beauty
 - 6x National Character Areas (landscape)
 - 10x National Nature Reserves
 - 18x Internationally designated nature conservation sites (Ramsar, SAC, SPA)
 - 40x Areas of Great Landscape Value
 - 45x Local Nature Reserves
 - 60x Registered Parks and Gardens
 - 103x Sites of Special Scientific Interest geology
 - 118x Sites of Special Scientific Interest biodiversity
 - 150+ County Geological Sites / RIGS
 - 330+ Conservation Areas
 - 1,900 County Wildlife Sites
 - 2,114 Scheduled Monuments
 - 31,500 Listed Buildings (425 Grade I and 1,256 Grade II*)

5.8. Transport Assets

- 5.8.1. Devon County Council has the most extensive highway network in England. Devon's highway and bridge network represents the largest capital asset managed by the Council. The asset has been valued at £9.6 billion (gross replacement cost) under newly published CIPFA guidance. Devon County Council has the duty to maintain:
 - 12,830 km of road
 - 2,750 km of footway
 - 3,200 bridges
 - 9,000 culverts
 - 73,000 street lights
 - 13,000 illuminated signs

- 60,000 other traffic signs
- 235 sets of traffic signals¹⁹
- 5.8.2. Devon has many Public Rights of Way (PROW), of which 95% are classed as "easy to use". There are 3,727kms of footpaths, 1,177kms of bridleways and 82kms of byways. Devon also has over 150 miles of National Cycle Network.
- 5.8.3. Machine based ("SCANNER") condition surveys evaluate the condition of the highway network. The table below show the proportions of each part of the Devon network that are green, showing only minor deterioration, and red, that should be considered for maintenance works immediately, with the other colours indicating stages of deterioration in between. The C and unclassified roads have far less percentage green and far more percentage red than A and B roads and are therefore far more susceptible to potholes forming in them over the coming months and years.

2010/11 Road condition index									
	Α		A B		С		U/C*		
	%	road length	%	road length	%	road length	%	road length	
Red	4%	84km	5%	67km	16%	695km	20%	197km	
High amber	5%	87km	5%	69km	11%	489km	15%	153km	
Mid amber	11%	202km	11%	141km	15%	670km	19%	189km	
Low amber	10%	195km	11%	144km	12%	533km	13%	127km	
Green	70%	1330km	67%	875km	46%	2025km	33%	333km	

*2008/10 data

Table 5: Road condition index

 Source: DCC Asset Management

- 5.8.4. Devon County Council commissioned a study to develop a series of scenarios to explore the relationship between expenditure by road class and the predicted National Indicator (condition of principal and non principal classified networks) in 2026. The model included the following key scenarios:
 - Backlog: cost to clear all the red defects in the network in 15 years
 - Steady State: cost to maintain the red defects in the network over 15 years
 - Zero Budget: condition of the network if £0 is spent annually over 15 years

The results show a distinct inverse relationship between the annual budget and the predicted NI. The predicted NI's (2026) and the average annual network budgets are shown in Table 6.

Road class Scenario		Average annual network budget for road class	NI (2026)
	Backlog	£5,778,607	0.0%
Α	Steady State	£5,021,216	4.4%
	Zero Budget	£0	28.7%
В	Backlog	£3,751,426	0.0%

¹⁹ Devon Transport Asset Management Plan

	Steady State	£3,165,579	5.1%
	Zero Budget	£0	31.2%
	Backlog	£28,148,692	0.0%
С	Steady State	£22,277,491	10.6%
	Zero Budget	£0	53%

Table 6: NI and average annual network budget for A, B and C class network

 Source: WDM for DCC

5.8.5. Devon has a considerable number of street lights exceeding their design life of 25 years. There are just over 18,000 columns aged 30 years and more and 3,700 columns aged between 25 and 30 years²⁰. To-date instructions have been issued to convert 11,000 lights to part-night operation of which approximately 8,000 of these have been completed.

Bridges

5.8.6. Devon County Council has the duty to maintain 3,026 bridges.

Bridge type				
Туре	Number	%		
Masonry	1732	57%		
Metal bridges	213	7%		
Concrete	815	27%		
Other	266	9%		
Total	3026	100%		

Table 7: Bridge typeSource: DCC

- 5.8.7. Although the overall Bridge Stock Condition Indicator (BSCI) at 93 is described as "Very Good", the variation in range of condition of the County's bridge stock is considerable and is often dependent on age, construction type and locality. Deterioration of safety critical bridge components is not necessarily accurately reflected by this figure.
- 5.8.8. Bridge Condition Indicators are based on a nationally recognised standard and Code of Practice published by ADEPT (previously the County Surveyor Society). At 93, Devon's condition description states that "very few structures may be in a moderate to severe condition" and therefore "represents very low risk to public safety".

Bridge Stock				
Age	Number	%		
Less than 50 years	500	17%		
50 to 100 years	806	27%		
100 to 170 years	1400	46%		
Over 170 years	320	11%		
total	3026	100%		

 Table 8: Bridge stock age

 Source: DCC

²⁰ Data correct 30th September 2010

5.8.9. 57% of the existing bridge stock of 3,200 is over 100 years old. Over 200 bridges are identified as weak, having load carrying capacities below the standard 40 Tonne.

Breakdown of substandard bridges and load capacity						
Weight Destriction	No. of Dridges		Road Class			
weight Restriction	No. of Bridges	Α	В	С	U/C	
3 Tonnes and under	57	1	-	16	40	
7.5 Tonnes	41	-	2	20	19	
10 Tonnes	19	-		5	14	
13 Tonnes	14	-	-	2	12	
18 Tonnes	57	1	1	21	34	
25 Tonnes	7	-	-	2	5	
38 Tonnes	9	2	-	3	4	

Table 9: Breakdown of substandard bridges and load capacity

 Source: DCC

- 5.8.10. Despite the relatively old age of its bridge stock Devon has a significant number of modern bridges (up to 40 years old) which has increased significantly since hand over of the A361 North Devon Link and A39. Joints and bearings on larger bridges of this age need regular maintenance and replacement on a 20 to 40 years cycle when they become safety critical.
- 5.8.11. 175km of retaining wall supporting the highway, ranging in height from over 1.5 metres to 15 metres have been identified on Devon's network. The equivalent BSCI for retaining walls has been assessed at 65 which is described as "Poor". This is due to historic under funding resulting in a significant maintenance backlog. Despite having established a database and greater understanding of their condition, failures and collapses occur on a regular basis due to the inherent unpredictability of walls of uncertain age and construction.

5.9. Targets

- 5.9.1. Devon County Council set targets to monitor performance as part of LTP2. The targets and performance in relation to these are set out below. For accessibility to town centres target see 3.6.
- 5.9.2. Index of vehicle KM travelled in Devon based on ATC data collected across the county road network:

Year	Target	Actual	Target met?
2006/7	<104	100	Yes
2007/8	<106	100	Yes
2008/9	<109	102	Yes
2009/10	<112	102	Yes

 Table 10: vehicle KM travelled in Devon

 Source: DCC

5.9.3. Improve bus punctuality; increase the punctuality of scheduled bus services starting their route on time (1mins early-5mins late):

Year	Target	Actual	Target met?
2006/7	>74.5%	61%	No
2007/8	>77.1%	87%	Yes
2008/9	>79.7%	87.1%	Yes
2009/10	>82.2%	88.7%	Yes

Table 11: bus punctuality starting points in Devon

 Source: DCC

5.9.4. Improve bus punctuality; increase the punctuality of scheduled services at intermediate timing points on their route:

Year	Target	Actual	Target met?
2006/7	>64.5%	44%	No
2007/8	>68.7%	66.1%	No
2008/9	>73%	68.2%	No
2009/10	>77.2%	71.5%	No

Table 12: bus punctuality intermediate points in Devon

 Source: DCC

5.9.5. Improve bus punctuality; increase the punctuality of scheduled services at non-timing points (1 mins early - 5 mins late):

Year	Target	Actual	Target met?
2006/7	>64.5%	55%	No
2007/8	>68.7%	64.3%	No
2008/9	>73.0%	69.8%	No
2009/10	>77.2%	67.6%	No

 Table 13: bus punctuality non timing points in Devon
 Source: DCC

5.9.6. Improve bus punctuality; reduce the excess waiting time on frequent service routes:

Year	Target	Actual	Target met?
2006/7	<1.76	3.14	No
2007/8	<1.67	1.36	Yes
2008/9	<1.59	1.36	Yes
2009/10	<1.50	1.38	Yes

 Table 14: bus punctuality excess waiting time in Devon
 Source: DCC

5.9.7. Ensure the quality of bus information for the Traveline database; completeness and accuracy measurement to all stop level data:

Year	Target	Actual	Target met?
2006/7	>99%	99%	Yes
2007/8	>99%	100%	Yes
2008/9	>99%	100%	Yes
2009/10	>99%	100%	Yes

Table 15: bus completeness and accuracy measurement stop data in Devon

 Source: DCC

5.9.8. Ensure the quality of bus information for the Traveline database; accuracy of verified Traveline data:

Year	Target	Actual	Target met?
2006/7	>99%	95%	No
2007/8	>99%	95%	No
2008/9	>99%	93%	No
2009/10	>99%	95%	No

Table 16: quality of bus information for Traveline database in Devon Source: DCC

5.9.9. Rail patronage in Devon:

Year	Target	Actual	Target met?
2006/7	2,650,040	2,760,252	Yes
2007/8	2,700,000	3,029,044	Yes
2008/9	3,060,000	3,269,126	Yes
2009/10	3,302,000	830,983*	Yes

* First quarter

Table 17: rail patronage in Devon Source: DCC

5.9.10. Road safety on a county wide level is not a target, but an indicator. The indicator measures percentage change in the number of people killed or seriously injured during the calendar year compared to the previous year. Figures are based on a 3 year rolling average, up to the current year. 2008/09 figures were 268, a reduction of 15% compared to 2007/08. This figure is well below the three year rolling average and therefore meets the indicator.

5.10. **Climate Change**

- 5.10.1. Most of the observed increase in global average temperatures since the mid 20th century is very likely due to human activities²¹. Plymouth has recorded an increase of 0.75℃ since 1900, Exmouth 1.05℃ and Ilfracombe 0.64°C. Seasonal rainfall appears to have decreased in summer and increased in winter, although with little change in the latter over the last 50 years. Between 1961 and 2006 the South West has experienced an increase in the contribution to winter rainfall from heavy precipitation events and a reduction in summer rainfall totals. Relative sea level (sea level taking into account changes in land height) in the South West has risen by approximately 250mm since 1916²².
- 5.10.2. The latest climate change projections for the UK (UKCP09), released in 2009, offer projections of the future climate that are based on the current understanding of the climate system – there may be scientific unknowns that would affect the information provided. Hence UKCP09 should be seen as providing possible projections rather than absolute predictions of future climate.
- 5.10.3. Climate projections use emissions scenarios to demonstrate how future

²¹ Intergovernmental Panel on Climate Change (2007). *Climate Change 2007: The Physical Science* Basis: Summarv for Policymakers. Geneva.

World Meteorological Organisation. URL: http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1spm.pdf
²² UK Climate Impacts Programme (2009), The Climate of the UK and Recent Trends. Available

online: http://ukclimateprojections.defra.gov.uk/content/view/830/500/

climate might change compared to the 1961-1990 climate baseline depending upon society's effectiveness at reducing emissions. Within UKCP09 these scenarios are termed low, medium and high. Average temperature rise in the South West by the 2050s under the low emissions scenario, which assumes global society rapidly reduces its emissions, is very likely to be more than 1.2°C and less than 3.2°C. Under the high emissions scenario, which assumes 'business as usual', average temperature rise in the South West by the 2050s is very likely to be more than 1.8°C and less than 4.0°C.

- 5.10.4. Global emissions of CO₂ are reportedly at levels similar to that assumed within the high emissions scenario models²³. Under this scenario the central estimate of change in winter precipitation is 32% wetter and 50% drier in summer by the 2080s. On an annual basis the central estimate of change for total precipitation under the high emissions scenario shows very little change; a 0.5% increase by the 2020s and 0.8% by the 2080s, but accounting for a wider range of uncertainty the projections suggest that change in annual precipitation by the 2080s is very likely to be between 7% wetter and 10% drier.
- 5.10.5. The frequency of storm events (depressions) passing over the UK shows little change up to 2080 under UKCP09. The previous projections (UKCIP02) suggested an increase in storm event frequency over the UK. This highlights the inherent uncertainty in climate modelling. Therefore, the future increase in winter precipitation projected by UKCP09 suggests that these events will become more intense or longer in duration, rather than more frequent.
- 5.10.6. By 2080, under the high emissions scenario, relative sea level around Devon's coast is very likely to rise by between 20 and 69cm and the rate of change will increase through the century. Government guidance recommends assuming 3.5mm/yr up to 2025, 8mm/yr from 2025 – 2055, and 11.5mm/yr from 2055 – 2085²⁴. By 2095 the 50 year return period storm surge is projected to increase sea level temporarily by 1.2m above high tide, compared to 0.9m experienced today.

5.11. Carbon Evidence

- 5.11.1. The Centre for Energy and the Environment (CEE) carried out a carbon evidence base study as part of the sub-regional DaSTS transport options project for the far South West. Within this study CEE provided baseline data for carbon emissions from transport in Devon and Cornwall, and assessed the potential impact of the Low Carbon Transition Plan (LCTP) on these emissions through to 2022. In addition, the study reviewed further potential measures that could be carried out to help reduce carbon emissions in the area.
- 5.11.2. To take these findings forward, Devon County Council requested further modelling work of the additional carbon reduction measures to assist

²³ Le Quéré et al. (2010), Recent Trends in CO₂. Real Climate. URL:

http://www.realclimate.org/index.php/archives/2010/06/recent-trends-in-co2-emissions/ 24 DCLG (2010), *Planning Policy Statement 25: Development and Flood Risk.* URL: http://www.communities.gov.uk/documents/planningandbuilding/pdf/planningpolicystatement25.pdf

development of the LTP3. The initial list of transport measures was reviewed and a more focused list was identified. The measures fell into three broad categories: demand reduction, vehicle technology measures and driver behaviour measures. The measures within each of the categories were generic rather than specific and were intended to give an indication of the impact of implementing different types of action.

- 5.11.3. The carbon savings for each of the measures were assessed using the Centre's transport and carbon emissions tool. In addition some very simple public sector implementation costs were estimated and used to provide an indicative cost effectiveness metric in relation to costs and savings by 2025. The key findings of this basic assessment were as follows:
 - The combined set of measures assessed could potentially reduce carbon emissions in Devon by a further 6.5% compared to the expected impact of national policies by 2025.
 - In total the demand management measures generate a 3.6% saving, the technology measures a further 1.5% saving and ecodriving another 1.4% saving.
 - The most significant individual measures are seen to be eco-driving, IT measures, Smarter Choices and urban electric vehicles, each effecting a reduction in CO₂ emissions of 1.3 to 1.4% in 2025.
 - Area-wide 20 mph limits give an increase in emissions when modelled as a simple change in speed.
 - The potential cost effectiveness of the measures varies widely, from the workplace parking levy which could be potentially cost negative (i.e. providing a financial benefit) through to public transport investment which would seem extremely costly for the likely carbon savings.
 - Leaving aside the workplace parking levy, the most cost effective measures are urban electric vehicles, Smarter Choices, IT measures and Eco-driving at around £40-50 per tonne of CO₂ saved.
 - The least cost effective measure is public transport investment, followed by low carbon buses and access management.
- 5.11.4. The picture is likely to be more complicated than the simplified results suggest as there will be an interaction between the measures in terms of effectiveness, such as some level of public transport investment being required to support a Smarter Choices programme. There are also other benefits generated by some of these measures that have not been quantified, such as improvements in air quality and a reduction in congestion. However, given the limitations of the analysis, it does suggest there are three potential packages of measures that Devon could consider within their LTP to reduce carbon emissions:
 - 1. A package of soft measures covering Smarter Choices, promoting IT and travel substitution and eco-driving. This could avoid some 60 kt of CO_2 emissions per year by 2025 at a public cost of £55 per tonne or less.

- 2. Electric vehicle infrastructure programme which may be able to deliver 20 kt of CO_2 savings per annum by 2025 for potentially less than £10 per tonne.
- 3. A 'clear zone' type programme where packages of public transport improvement, low carbon buses, access management and workplace parking levy are combined in a cost effective way. This may generate another 20 kt CO₂ savings per year by 2025, but the costs are likely to be much greater than for the other measures. However, some of the costs may be offset by revenue generation from the parking scheme and potentially also from access management. Additional benefits are likely for congestion, air quality and cityscape.

5.12. Car Share Devon

5.12.1. Car Share Devon has 7900^{25} journeys registered. *Lift*share²⁶ estimate²⁷ that the Devon scheme is saving around 600 journeys daily; this represents savings of 6.3 million miles, 2.1million kgs of CO₂ and 3,000 grams of NO₂ per year. These estimated figures do not include additional trips being shared in Devon outside the Car Share Devon scheme that take place following promotion of car sharing, therefore the actual figures are expected to be much higher.

5.13. School Travel in Devon

- 5.13.1. The sustainable school travel team have helped to successfully ensure that every state school (including special schools and PRUs) completed a School Travel Plan before March 2010. Implementation of the plans has included both engineering and soft measures to achieve reduction in single occupancy car use. Action plans are continuing to be implemented to ensure car use continues to fall despite an increase in parental choice of chosen school. Over 45% of Devon children do not currently attend their nearest school.
- 5.13.2. School census data shows that between 2007 2009 those schools with a travel plan:
 - 60% had a reduction in car use
 - 72% had an increase in car sharing
 - 59% had an increase in cycling
 - 56% had an increase in walking

These statistics are calculated on percentage change and show that STP's are making positive differences in schools.

- 5.13.3. The Environmental Performance Statement 2010 stated that
 - Carbon emissions (tCO₂) arising from school children aged 5 16 travelling to school fell by 1.7% from 2008/9 to 2009/10.

²⁵ August 2010

²⁶ Car-share Devon scheme is part of the Liftshare network. Liftshare is the largest car-share network in the UK and provides individual car-share schemes to councils, businesses, hospitals, universities, events and business parks.

²⁷ based on feedback from 1178 registered users in 2010

 Over the same time period the percentage of children aged 5 – 16 travelling to school using sustainable travel modes rose slightly from 73.9% to 74.2% and is very near the target set for 2010/11.

5.14. Community Transport

- 5.14.1. Devon County Council has a number of additional services designed to complement standard services such as buses to enable residents to travel.
- 5.14.2. Fare Car is a shared public transport service operated by Private Hire cars by formal agreement with Devon County Council. This enables passengers to book and pay separately but share the advertised timetabled journeys. The fare charged is approximately equal to or slightly above the normal bus fare for the distance travelled but it is not a subsidised individual taxi service for people to use whenever and wherever they wish. Fare Car F17 is wheelchair accessible. It runs into and from Kingsbridge on Wednesdays and Fridays and enables passengers to travel in either a wheelchair or a standard car seat.
- 5.14.3. Ring & Ride Schemes operate within a number of towns and rural locations throughout Devon. They are the main initiative in the provision of public transport for Disabled and Frail Elderly people and provide a local service into local towns to allow potentially house bound people the opportunity to shop and use local amenities. The difference between a Ring & Ride and a conventional service lies in the flexible routing and the fact that the minibus is specially adapted with a wheelchair lift and removable seats to accommodate wheelchairs.
- 5.14.4. The community transport schemes and patronage figures are outlined in the table below.

Community transport scheme patronage					
Service	Year	Schemes	Passengers	% change	
Ping & Pido	2007/08	16	39223	E 9/	
Ring & Ride	2009/10	16	37099	-5 /6	
Fare Car Schemes	2007/08	11	18062	+8%	
supported by DCC	2009/10	12	19436		
	2007/08	1 scheme	208		
Wheels to Work ²⁸		80	114 Joans	- 45%	
	2009/10	scooters	114 104115		
Fare Car F17	31/8/09 - 31/12/09	1	145 trips	~	

 Table 18: Community transport services, Devon

 Source: DCC

5.14.5. Devon County Council has Ring and Ride services that cover 441 out of the total 495 parishes (2009/10). South Hams has the highest number of wards (21) without access to a service.

2003/10 Failslies Failslies Without	2009/10	Parishes	Parishes without
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²⁸ Wheels to Work scheme: loans powered cycles, mopeds or scooters to enable people to get to work in more remote areas. http://www.devonwheels2work.co.uk

		Ring & Ride service
East Devon	68	1
Mid Devon	62	1
North Devon	63	11
Torridge	64	12
West Devon	55	0
South Hams	61	21
Teignbridge	50	8
Exeter (wards)	18	0
Total	441	54

 Table 19: parishes served by ring and ride services

 Source: DCC

6. The state of Transport.... Strategic Road, Rail and Air Connections

6.1. Strategic: Routes

6.1.1. Key strategic road, rail and air routes to Devon and Torbay have been identified:



Figure 3: Strategic routes

6.2. Strategic: Road Safety

6.2.1. Road casualty statistics for the strategic road connections in Devon show reductions in casualties on the A30/303, the A38, the A380 and the A361. There was no change along the M5, and an increase in casualties along the A30.

Route	Year	Fatal	Serious	Slight	Total	% change
M5	2000	4	10	51	65	00/
boundary	2009	0	1	64	65	U /0
A30/303	2000	2	13	38	53	-0%
Somerset	2009	0	1	47	48	-370
Route	Year	Fatal	Serious	Slight	Total	% change
A30	2000	1	6	41	48	.450/
Cornwall boundary	2009	1	2	52	55	+15%
A38	2000	4	18	116	138	200/
Plymouth	2009	4	7	86	97	- 30 /8
A380 Evotor to Torboy	2000	2	7	94	103	_28%
boundary	2009	1	6	67	74	-20 /0
A361	2000	3	8	50	61	-52%
Portmore RAB	2009	0	2	27	29	-J∠ /0

Table 20: Type and number of casualties for strategic routes in Devon

 Source: DCC

6.3. Strategic: Highways

- 6.3.1. GPS data for the routes below was evaluated between 1st September 2008 31st August 2009. AM peak was taken as 7:30 9:30am weekdays and delays were calculated by comparing journey times to the average free flow journey time (10:00pm 6:00am).
- 6.3.2. ANPR data compares the AADT flows for the routes and identifies changes in flows between 2005 and 2009.

М5

- 6.3.3. Data shows no real delays on speeds at or below the speed limit along the M5 between A30 Okehampton Road junction to the Devon Border. Some minor delays are experienced during main summer holiday weekends where average traffic speeds reduce to 62mph (7:00am 7:00pm), however there are pockets of very busy and slow traffic within this time frame.
- 6.3.4. AADT data shows there has been a decrease in traffic between 2005 2009.

AADT M5			
Junction 27 - 28	2005	2009 (HA	%
		projection)	change
Northbound	30,576	28,261	- 8%
Southbound	31,723	24,231	- 24%

6.3.5. The figure below shows the hourly flow by annual hours northbound and southbound along the M5.







A30/303

- 6.3.6. Data along A30/A303 route from M5 junction 29 to Marsh (Devon Border) show average delays of up to 5 minutes during am peak (7.30 9.30am) inbound to Exeter, and average delays of up to 2 minutes outbound. The longest average delays were during school holiday weekdays where travellers on average are delayed by 8 minutes along the inbound direction. Some minor delays are experienced during main summer holiday weekends where average journey time delays of 3 minutes are recorded (7:00am 7:00pm) however there are pockets of very busy and slow traffic within this time frame.
- 6.3.7. AADT data shows there has been an increase in traffic along the A30 east

of Exeter, and a decrease in traffic along the A303 between 2005 – 2009.

AADT A30 east of Exeter				
Sowton Lane	2005	2009 (HA projection)	% change	
Westbound	16,425	16,754	+ 2%	
Eastbound	15,952	16,076	+ 1%	
AADT A303				
East of A30 junction	2005	2009 (HA projection)	% change	

7,281

7,176

6,218

5,776

Table 22: AADT A30/303 dataSource: DCC/HA

- 15%

- 20%

A30

Westbound

Eastbound

- 6.3.8. Data for the A30 shows very little delays in journey time with AM peak experiencing on average just 33 and 40 seconds delay.
- 6.3.9. AADT data shows there has been a decrease in traffic between 2005 2009.

AADT A30 west of Exeter				
Okehampton	2005	2009 (HA	%	
		projection)	change	
Westbound	11,218	10,396	- 7%	
Eastbound	11,195	10,576	- 6%	

Table 23: AADT A30 west of Exeter data

 Source: DCC/HA

A38

- 6.3.10. Data shows that along the A38 route between Marsh Mills, Plymouth Kenn, Exeter minor delays are frequent. The AM peak evaluation shows that traffic in the Exeter direction experience on average a 2 minute delay and traffic in the Plymouth direction experiences on average a 3 minute delay. With average journey times of 36 – 39 minutes this is not significant.
- 6.3.11. AADT data shows there has been a decrease in traffic between 2005 2009.

AADT A38			
Near Buckfastleigh	2005	2009 (HA	%
		projection)	cnange
Northbound	19,369	18,488	- 5%
Southbound	20,386	18,798	- 8%

Table 24: AADT A38 data

 Source: DCC/HA

A380

- 6.3.12. The A380 section between Torquay and Newton Abbot experiences long delays. The average free flow journey time in both directions is 4.5 minutes; AM peak average journey time is 11 minutes and weekday term time off peak (9:30 4:30pm) average journey time is 7 minutes south bound and 8 minutes north bound.
- 6.3.13. Data between Ware Cross and Kerswell Gardens demonstrates that journey time reliability along this route is very poor. There is considerable variation in journey times, taking over 25 minutes in some instances.

A380 journey time Ware Cross – Kerswell Gardens					
	Jour	variation			
	Free flow	average	95% ile time	variation	
AM peak	07:00	09:36	23:27	+ 13:51	
Inter peak	07:00	13:19	19:39	+ 06:20	
PM peak	07:00	15:39	34:22	+ 18.42	

Table 25: A380 Ware Cross – Kerswell Gardens journey time

 Source: DCC

6.3.14. AADT data shows there has been a decrease in traffic between 2005 – 2009.

AADT A380			
locations	2005	2009	% change
Olchard	27,377	27,913	+2%
Kerswell Gardens	33,777	32,459	-4%

Table 26: AADT A380 dataSource: DCC

A361

- 6.3.15. The North Devon Link Road to Barnstaple experiences regular but relatively short delays throughout the day. AM peak average journey time is 33 minutes to Barnstaple, compared to free flow journey time of 30 minutes. Peak summer weekends experience on average journey times of 33 minutes.
- 6.3.16. AADT data shows there has been an increase in traffic between 2005 2009.

AADT A361			
locations	2005	2009	% change
East of Aller Cross	12904	13017	+1%
Landkey	16494	18331	+11%
Ashmill	13070	13302	+2%
Sampford Peverell	23791	24794	+4%

Table 27: AADT A361 data Source: DCC/HA
A386

- 6.3.17. The route between Plymouth and Tavistock experience AM peak delays on average of 7 minutes in Tavistock direction and 11 minutes in Plymouth direction with average speeds reaching as low as 23 mph. Conditions improve little during weekdays term time off peak (9:30 16:30pm) with average delays of 7/8 minutes.
- 6.3.18. AADT data shows there has been an increase in traffic between 2005 2009.

AADT A386			
locations	2005	2009	% change
Roborough	17,318	18,337	+6%
North of Tavistock	6,481	6,598	+2%
Hatherleigh	2,462	2,582	+5%
Landcross	15,029	15,563	+4%

 Table 28: AADT A386 data

 Source: DCC/HA

6.4. Strategic: Rail

- 6.4.1. The strategic rail routes for Devon and Torbay are identified as:
 - Waterloo
 - Paddington
 - Bristol
 - Plymouth
- 6.4.2. Total number of journeys in Great Western Route Utilisation Strategy (RUS) area has increased from 52m in 1998 to 74m in 2007; growth of around 4% per annum. Around 40% of these journeys are into London Paddington. Since 2002 total passenger trips within Devon have increased by 59% to currently over 3 million per annum.
- 6.4.3. Total rail demand to Exeter and Plymouth has grown rapidly over the last 10 years. In 2007 Exeter St Davids handled 2m rail passengers (30% increase in ten years) and Plymouth also 2m (50% increase in ten years).
- 6.4.4. On Devon & Cornwall branch lines number of journeys increased from 1.7m in 2001 to 2.5m in 2008 an increase of 50%.
 - Barnstaple growth of 94% in last 8 years. 400,000 trips expected in 2010.
 - Exmouth growth of 40% in last 8 years. 1.12m trips expected in 2010
 - Gunnislake growth of 35% in last 8 years. 165,000 trips expected in 2010
- 6.4.5. The Planning Ahead 2010 document produced by Network Rail and ATOC (Association of Train Operating Companies) forecasts regional and rural markets to experience significant growth ranging between 90% and 115% over the period until 2034. For longer distances the growth forecasts is 70% up to 2034.

6.5. Strategic: Air

6.5.1. Exeter airport is well located on the A30 dual carriageway just off junction 29 of the M5. It was sold by DCC to Regional and City Airports LTD in 2007. It provides connections to the rest of the UK and internationally and has 2.5 million people living within a 1.5 hour drive catchment area.



Figure 5: drive time isochrones Source: Exeter Airport Masterplan 2009

6.5.2. Annual passenger numbers peaked at just over a million in 2007 but have since fallen to around 790,000 in 2009, 17% less than the number handled in 2008 and 6% less than 2005.

Elight type	Terminal	Terminal passengers			
Fight type	2008	2009	% change		
Domestic	356,145	311,465	-13%		
EU	541,469	442,416	-18%		
Other International	53,651	35,852	-33%		
Total	951,265	789,733	-17%		

Table 29: annual terminal passengers Exeter Airport 2008/09

 Source: CAA UK airport statistics

- 6.5.3. Despite these figures, Exeter Airports 2009 master plan forecasted that passenger traffic will grow from the 1.05 million passengers per annum (mppa) handled in 2007 to 1.9 mppa in 2015 and 3.4 mppa in 2030. This growth is planned to be achieved through an improved network and increased frequency of services with Air Traffic Movements (ATMs) growing from 13,276 in 2009 to 24,750 in 2015 and 38,000 in 2030²⁹.
- 6.5.4. In 2008 the airport supported 2,150 local jobs and contributed £105 million GVA to the South West. By 2030 it is estimated that the Airport will support 5,400 jobs in the local economy and add £264 million GVA.
- 6.5.5. Approximately 2,400 car parking spaces are provided in four car parks to the southside of the Airport. In addition, Flybe engineering has a dedicated car park adjacent to the maintenance bases with approximately 400 spaces.
- 6.5.6. Flybe destinations spring 2009 Aberdeen, Alicante, Amsterdam, Avignon, Belfast City, Bergerac, Brest, Chambery, Dublin, Dubrovnik, Edinburgh, Faro, Geneva, Glasgow, Guernsey, Inverness, Jersey, Leeds Bradford, Malaga, Manchester, Newcastle, Nice, Norwich, Palma, Paris, Rennes, Salzburg.
- 6.5.7. Weekly services operated by Air Transat serve Toronto in Canada during the summer months. SkyBus operate year round services to St. Mary's on the Isles of Scilly.
- 6.5.8. There are numerous seat only charter and fully inclusive package holidays on offer from Exeter International throughout the year. The primary destinations are: Bodrum, Corfu, Dalaman, Faro, Funchal, Fuerteventura, Geneva, Gran Canaria, Ibiza, Lanzarote, Larnaca, Mahon, Malaga, Malta, Palma, Paphos, Rhodes, Tenerif, Tunisia.
- 6.5.9. In addition, a number of specialist charters operate to destinations including: Bridgetown (Barbados)*, Enontekio Mauritius*, Palma Pula (Croatia), Rovaniemi [*non direct flights].

6.6. Strategic: Freight

6.6.1. In 2007 the South West Region generated 172 million tonnes of road freight, of which 82% (141 million tonnes) had a destination within the region – the highest proportion of all the English regions. The region is therefore fairly self-contained. The greatest freight exchange was with the South East Region (12 million tonnes) and the West Midlands (7 million tonnes).

²⁹ Exeter International Airport - Master Plan 2009

Destination > Origin	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Great Britain
North East	56	4	8	2	1	1	-	-	-	72	-	3	76
North West	5	164	14	10	13	3	1	3	3.	217	8	10	235
Yorkshire and The Humber	10	10	142	18	8	5	2	2	2	211	2	3	216
East Midlands	2	17	21	104	19	18	4	10	4	135	3	1	204
West Midlands	1	12	6	19	119	8	3	9	7	185	8	2	194
East of England	1	4	4	14	7	128	16	20	4	198	2	1	201
London	-	1	1	2	2	14	56	15	1	92	-	-	92
South East	1	4	2	6	7	12	17	134	9	192	2	-	195
South West	-	2	1	3	7	4	2	12	141	172	6	1	179
England	76	228	200	177	184	193	102	205	172	1538	31	22	1591
Wales	-	7	2	1	7	1	1	2	8	29	68	1	98
Scotland	2	7	2	1	1	1	-	-	-	16	1	164	181
Great Britain	79	248	204	180	192	194	103	208	180	1583	100	187	1870
Table 30: Freight Transport by road between English Reg													

eight Transport by road between English Regions Source: Regional Transport Statistics 2008

- 6.6.2. In terms of land based movements, road freight is by far the most prominent movement for freight leaving the region. Across the whole South West region road freight accounts for 82% of all freight tonne kilometres, compared to 18% by rail. However these values also take into the account the current high levels of movement of aggregates from the Mendips to the South East. Consequently, the true proportion of road freight in the Exeter and far South West region are likely to be higher than this.
- 6.6.3. Despite road freight still being the dominant movement there are still some significant issues affecting trunk road access into the region such as high journey times, and poor reliability.
- 6.6.4. In addition, the introduction of the EU working time directive for Lorry Drivers has created another issue for road freight into the region. Journey times for some long distance trips are now longer leading to greater costs. These higher costs are then picked up by South West businesses leading to increased operating costs, thus affecting their economic competitiveness.
- 6.6.5. Outlined below are the current freight flows across the South west rail network. The figure also includes the now removed scrap metal flows to Cattewater port (in Plymouth). Current freight services west of Exeter consist mainly of aggregates, with limited flows of metal, cement and other special flows.



Figure 6: Current South West Rail Freight Movements Source: Great Western Route Utilisation Strategy (RUS)

6.7. Strategic: Ferry

- 6.7.1. Plymouth's Millbay docks provide a daily Brittany Ferries passenger service to France, Roscoff, and a weekly service to northern Spain, Santander, although these services are less frequent in winter.
- 6.7.2. In 2008 the port handled around 570,000 passenger movements, (400,000 to Roscoff) 50% of whom originated from Devon and Cornwall, and the remaining 170,000 to Santander, Spain. Similarly the port handled 190,000 accompanied passenger cars, making it the 7th largest in the country accounting for 2.3% of the UK total.
- 6.7.3. With access through the residential and commercial areas of Millbay Road and Union Street the road links to the port are considered to be substandard and consequently improvements to the ports approaches have been identified in Plymouth's Port and Shipping objective.

6.8. Strategic: Long Distance Coach

- 6.8.1. National Express and Megabus both provide long distance coach services between a number of South West SSCT's and the major conurbations of London, Birmingham and Bristol.
- 6.8.2. Megabus provides 2 daily services from Exeter to London, one originating in Exeter. Journey times are around 4 hours from Exeter.
- 6.8.3. National Express provide a number of daily services between London and the South West. Torquay has approximately 6 daily services to London (journey time 6 hours), whilst Exeter and Plymouth (5-6 hours journey times) have around 10 services a day. A number of these services also call at Heathrow on the way to London. A one way fare is in the region of £20 for each of these.

6.8.4. National Express also offer a range of services to the rest of the country and Scotland. Plymouth has services to Newcastle and Rochdale, also calling at Bristol and Birmingham, whilst Paignton has 6 coaches daily to Bradford and there are 2 coaches a day from Westward Ho! to Grimsby. However these services call at a number of major settlements en route and consequently, although offering plenty of destination choice, are much slower than comparative journeys by train or private car.

7. The state of Transport... Exeter

7.1. Introduction

- 7.1.1. Exeter is a large employment (travel to work area with a population of 280,000), retail (shopping catchment of over 550,000) and cultural centre attracting people from a wide surrounding area. Rapid growth is planned in the city over the next 15 years, increasing the provision of housing and employment. This growth will help Exeter continue to be the vibrant and prosperous place it currently is and will offer further opportunities for economic growth.
- 7.1.2. This will increase the numbers of people moving around the city and will put additional pressures on the already congested roads, busy city centre car parks and the well utilised public transport system. Exeter is a historic city and therefore has little opportunity for expansion of the central road network without the loss of verges, gardens or properties. In addition, the high quality environment within Exeter needs to be maintained to ensure the high profile businesses are retained, as well as attracting further businesses.
- 7.1.3. Travelsmart offers Individualised Travel Marketing (ITM); providing tailor made information and providing people with support they need to walk, cycle and use public transport more. A "travelsmart" project was launched in Exeter in 2008 and involved undertaking a baseline travel survey of 1,955 people across Exeter and Exminster. The study found that on average respondents spent 62 minutes per day travelling and covered 21 km. For more information about Travelsmart please refer to the <u>Sustrans website</u>.
- 7.1.4. Road side interviews (RSI) were undertaken between 7am and 7pm along Alphington Road on 6th July 2010 (1,967 vehicles surveyed) and Paris Street on 11th May 2010 (1,024 vehicles surveyed). The results from these studies show that there are a significant number of daily car trips in Exeter that could be replaced with walking or cycling.

Trip distance and percentage (cumulative)				
Trip	RS	Travelemart		
distance	Alphington Rd	Paris St	car trips	
up to 1km	0%	1%	6%	
up to 2km	8%	9%	27%	
up to 5km	37%	41%	55%	
up to 10km	50%	54%	77%	
up to 20km	63%	73%	~	
total	100%	100%	100%	

 Table 31: trip distance and percentage

 Source: RSIs, Travelsmart. DCC / Sustrans

7.1.5. The data from the RSIs was evaluated and the trip purpose is shown in the tables below.

Definitions:

- Home based work are commute trips
- Home based other are between home and purposes other than home or work
- Non-home based other are between anything not from home and purposes other than home or work
- Non home based work are between purposes other than home or work and work
- Education are education trips

Alphington Road 6/07/2010	AM period (0700 to 0900)	Interpeak period (0900 to 1600)	PM period (1600 to 1900)	12 hour
Employers Business	4%	13%	3%	9%
Home based other	10%	38%	35%	32%
Home Based Work	72%	15%	40%	31%
Non-home based other	2%	16%	12%	13%
Non-Home Based Work	10%	17%	9%	14%
Education	3%	1%	1%	1%

 Table 32: Alphington Road trip purpose data

 Source:RSIs. DCC



Alphington Road

Figure 7: Alphington Road trip purpose data Source:RSIs. DCC

Paris street 11/05/2010	AM period (0700 to 0900)	Interpeak period (0900 to 1600)	PM period (1600 to 1900)	12 hour
Employers Business	8%	18%	8%	14%
Home based other	13%	35%	32%	31%
Home Based Work	61%	16%	37%	29%
Non-home based other	2%	11%	7%	8%
Non-Home Based Work	8%	13%	11%	12%
Education	8%	7%	4%	6%

 Table 33: Paris Street trip purpose data

 Source:RSIs. DCC

Devon and Torbay Local Transport Plan 2011 - 2026

Paris Street



Figure 8: Paris Street trip purpose data Source:RSIs. DCC

Topsham Road 22/06/2010	AM period (0700 to 0900)	Interpeak period (0900 to 1600)	PM period (1600 to 1900)	12 hour
Employers Business	5%	3%	2%	3%
Home based other	5%	10%	2%	7%
Home Based Work	12%	44%	40%	38%
Non-home based other	66%	18%	42%	32%
Non-Home Based Work	2%	10%	8%	8%
Education	11%	15%	6%	12%

 Table 34: Topsham Road trip purpose data

 Source:RSIs. DCC



Topsham Road

Figure 9: Topsham Road trip purpose data Source:RSIs. DCC



7.1.6. Trip purpose and modal choice data was analysed from the Exeter Travelsmart (2008) responses and is shown below.

- 7.1.7. The results above show that work related business trips are mostly by car, and education related trips are the most sustainable with high percentages of walking, cycling and public transport trips.
- 7.1.8. Total employment within Exeter is 84,800³⁰. The Exeter Travel to Work Tally 2009 asked the 6,700 respondents their home and work postcode. This data was then used to evaluate travel to work distances shown in the table below.

Travel to work distances: Exeter			
Distance	Frequency	%	
0-2 km	1122	18%	
3-5 km	1474	23%	
6-10 km	702	11%	
10-20 km	1551	24%	
20-30 km	818	13%	
30+ km	682	10%	
total	6349	100%	

Table 35: Travel to work distances Exeter

 Source: Exeter travel to work tally 2009. DCC

³⁰ Annual Business Inquiry (via Nomis), 2008

7.2. Exeter: Population

7.2.1. Population projections for Exeter town area indicate that there will be a small percentage increase in residents over the age of 65. This figure is higher than the national average, but considerably lower than the projections for Devon and Torbay.

Exeter			
	2006	2026	% change
under			
65	98,473	114,468	16%
65+	18,027	22,356	24%
total	116,500	136,824	17%

	% of population 65+			
Area	2006	2026		
Exeter	15%	16%		
Devon and Torbay	21% / 22%	28%		

Table 36: Population projections Exeter

 Source: Registrar General and DCC estimates

7.3. Exeter: Road Safety

7.3.1. Road casualty statistics for Exeter in the table below show that there has been a 16% reduction in accidents since 2000.

Exeter: Road casualty stats					
Year	Fatal	Serious	Slight	Total	% change
2000	3	37	399	439	-16%
2009	3	16	351	370	-10 /6

Table 37: Road casualties, Exeter

 Source: DCC

7.4. Exeter: School Travel

7.4.1. Data on how children aged 5 – 15 years travel to school is collated every year for the DfT for national indicator purposes. The data indicates that in Exeter the majority of children walk to school. There have been small increases in sustainable modes and a decrease in car use. Exeter can be compared to the national average; children in Exeter walk and cycle more, and are driven and use public transport less.



Exeter: School Travel

Figure 11: Exeter School Travel Source: DfT

National: School Travel



Figure 12: National School Travel Source: DfT

7.5. Exeter: Walking

- 7.5.1. Pedestrian counts around the city centre were undertaken on Thursday 10th and Saturday 12th June 2010. Results from these counts show that walking trips into the city centre via the five locations were 22,333 on the surveyed weekday and 16,682 on the surveyed Saturday.
 - AM peak 08.00 09.00 Thursday, 10.00 11.00 Saturday
 - PM peak 17.00 18.00 Thursday, 15.00 16.00 Saturday
 - 12 hour counts Thursday, 6 hour counts Saturday

Total in-bound to centre			
Thursday	Saturday		

0800 - 0900	1727	1000 – 1100	2424
1200 – 1300	2743	1200 – 1300	3312
1700 – 1800	1255	1500 – 1600	2274
12 hour counts	22333	6 hour counts	16682

Table 38: city centre pedestrian count summary

 Source: Jacobs for DCC



Figure 13: City centre pedestrian counts Source: PB for DCC

- 7.5.2. In order to establish estimated daily weekday pedestrian figures into the centre average figures from four of the count sites were multiplied by seven identified walking routes and then dived by two for a one way figure giving 10,500 daily one way walking trips into the centre.
- 7.5.3. There are a number of sources related to studying walking habits across the city, and nationally. The Exeter travel to work tally, and the national census were selected to be the indicators.

		% Wa	T · D	
Data Source	Area	year	2009	Trip Purpose
Travel to Work	Exeter	11%	13%	Work
Tally		(2006)	13 //	
Census	Exeter	14%	Due 2011	Work
		(2001)	Due 2011	
National Transport	England	31%	220/	All trip purposes
Survey 2009	_	(1999/01)	23%	·

 Table 39: Walking statistics
 Sources: As cited

7.5.4. Pedestrian casualty statistics for Exeter in 2008 show that there has been a 20% decrease in accidents since 2000.

Pedestrian casualties: Exeter							
Year	Fatal	Serious	Slight	Total	% change		
2000	0	15	79	94	-200/		
2008	1	4	70	75	-20 /0		

Table 40: Pedestrian casualties in Exeter

 Source: DCC

7.6. Exeter: Cycling

7.6.1. Exeter has twenty seven automatic cycle counters at various locations around the city. The data shows significant growth on all routes since 2005.

average 24hr daily flows mon - friday						
River crossings 2005 2008 % increa						
Bridge Road	132	160	21%			
Millers Crossing	207	256	24%			
Salmon Pool Lane	507	584	15%			
Western Way	58	74	28%			
Total	904	1074	19%			

average 24hr daily flows mon - friday							
Key routes	2005	2008	% increase				
Barrack Road North	х	143	х				
Barrack Road South	х	126	х				
Burnthouse lane North	48	56	17%				
Burnthouse lane South	57	65	14%				
Prince of Wales Road	х	119	х				
Rydon Lane North	42	90	115%				
Rydon Lane South	107	154	44%				
Total	254	753					

X – no counter in 2005 so % increase unable to be calculated **Table 41:** Daily weekday cycle flows

Source: DCC

7.6.2. There are a number of sources related to studying cycling habits across the city. The Exeter travel to work tally, and the national census were selected to be the indicators.

		% Cyc	cling	T · D
Data Source	Area	year	2009	Trip Purpose
Travel to Work Tally	Exeter	8.5% (2006)	10%	Work
Census	Exeter	3.6% (2001)	Due 2011	Work
National Transport Survey 2009	England	1% (1999/01)	2%	All trip purposes

 Table 42: Cycling statistics

 Sources: As cited

- 7.6.3. Cycling levels have increased significantly in the city since the Cycle Exeter project began in 2005. Automatic cycle counters have shown a 40% increase since 2005 along popular routes and cycle to work figures are higher than the national average.
- 7.6.4. The Cycle Exeter led Bike It initiative has resulted in an 11% increase in cycling levels to school. (Based on percentage of pupils cycling to school regularly ("every day" and "once or twice a week") at all 22 Bike It Schools in Exeter, taken from the surveys conducted at the start and end of intensive support from Bike It.) Overall, primary schools have seen a 14% increase in the levels cycling to school, and secondaries have seen an increase of nearly 5%.

	Mean Average	Primary	Secondary
Before Bike It	11%	10%	15%
After Bike It	22%	24%	20%
		<u> </u>	

Table 43: Percentage of pupils cycling to school regularly 2009
 Source: Bike It

7.6.5. The increase in cycling in both primary and secondary schools has been confirmed by an independent study conducted in all schools, called Fit to Succeed. Fit to Succeed is a partnership between the children of Exeter, Exeter Academic Council, Exeter City Council, Devon Curriculum Services, the Schools Health Education Unit and DC Leisure Management, to promote physical activity and achievement in schools. The programme includes an annual survey carried out each spring term, as a way of collecting information about young people's lifestyles and the impact of interventions of School Sports Partnerships. In 2009, a total of 10,532 pupils took part in 10 secondary and special schools and 51 primary schools. It found that 15% of primary school children say they cycle to school and 22% of secondary school pupils, compared to 8% and 14% respectively in 2006. (This is based on an open question of "Do you cycle to school?".)

	2006	2007	2008	2009
% that cycle to school (primary school)	8%	10%	14%	15%
% that cycle to school (secondary school)	14%	16%	20%	22%

 Table 44: Do you cycle to School?

 Source: Fit to Succeed

7.6.6. Cyclist casualty statistics for Exeter in 2009 show that despite a significant increase in cycle trips there has been a 9% decrease in accidents compared to 2000 figures.

Cyclist casualties: Exeter						
Year	Fatal	Serious	Slight	Total	% change	
2000	0	7	67	74	09/	
2009	1	5	61	67	-9 /0	

 Table 45: Cyclist casualties, Exeter

 Source: DCC

7.7. Exeter: Park and Ride, Buses, Community Transport

Park and Ride Patronage

7.7.1. Park + Ride services in Exeter have seen an 87% growth in patronage between 2003-04 and 2008-09.

	2003 / 2004	2008 / 2009
P&R 2,4,5 annual	832 852	1 374 685
patronage	052,052	1,574,005

 Table 46: P&R patronage, Exeter

 Source: DCC

7.7.2. Greatest growth has been seen on the PR2 with 104% increase in patronage since 2003. In contrast the PR4 has seen 46% growth.

	average d		
Service	2003/4	2008/9	% change
PR 2 (Honiton)	720	1469	104%
PR 4 (Sowton)	723	1056	46%
PR 5 (Matford)	1297	1996	54%
Total	2740	4522	65%

Table 47: Average daily trips for P&R 2,4,5

 Source: DCC

Bus Patronage (non Park and Ride)

7.7.3. Data supplied by Stagecoach shows patronage figures of city only (start and finish within the city) buses was 7.28 million in 2008/09. This is a 2.4% increase on 2000/01 figures. Stagecoach patronage figures for individual routes have been used to inform the Exeter strategy; however, these figures can not be published due to commercial confidentiality.

Bus Reliability

- 7.7.4. Bus reliability studies were conducted in November 2006 and 2009 to monitor targets set out in LTP2 as required by DfT:
 - Early = more than 1 minute
 - On time = 1 minute early to 5 minutes lates
 - Late = 5 15 minutes late
 - Very late = more than 15 minutes late

It should be noted that this data represents one day; caution should therefore be applied to the reliability of the data.

- IB inbound
- OB outbound

AM	Early		On Time		Late		Very late	
	2006	2009	2006	2009	2006	2009	2006	2009
Bus Station IB	33%	35%	26%	50%	13%	13%	6%	2%
Bus Station OB	16%	1%	58%	90%	13%	8%	0%	0%
Cowick Street IB	27%	19%	52%	79%	10%	2%	2%	0%
Cowick Street OB	16%	8%	58%	79%	12%	12%	0%	2%
Cowley Bridge Rd IB	0%	6%	96%	65%	4%	26%	0%	3%
Cowley Bridge Rd OB	70%	0%	25%	75%	5%	19%	0%	6%
Heavitree Rd IB	16%	6%	35%	63%	22%	2%	0%	30%
Heavitree Rd OB	8%	23%	54%	74%	16%	2%	3%	0%
Pinhoe Rd IB	15%	38%	65%	52%	8%	10%	0%	0%
Pinhoe Rd OB	23%	0%	42%	86%	23%	14%	0%	0%
Topsham Road IB	14%	25%	54%	69%	26%	3%	0%	3%
Topsham Road OB	7%	12%	73%	73%	20%	15%	0%	0%

PM	Early		On Time		Late		Very late	
	2006	2009	2006	2009	2006	2009	2006	2009
Bus Station IB	46%	34%	44%	51%	1%	13%	2%	3%
Bus Station OB	12%	1%	85%	94%	1%	5%	1%	0%
Cowick Street IB	31%	5%	65%	89%	4%	6%	0%	0%
Cowick Street OB	8%	0%	87%	85%	4%	14%	0%	2%
Cowley Bridge Rd IB	9%	13%	82%	80%	5%	7%	0%	0%
Cowley Bridge Rd OB	33%	6%	48%	81%	10%	13%	5%	0%
Heavitree Rd IB	41%	10%	31%	77%	8%	13%	0%	0%
Heavitree Rd OB	13%	6%	45%	61%	18%	33%	0%	0%
Pinhoe Rd IB	15%	0%	50%	76%	8%	24%	0%	0%
Pinhoe Rd OB	32%	18%	48%	77%	8%	5%	0%	0%
Topsham Road IB	21%	25%	70%	69%	9%	3%	0%	3%
Topsham Road OB	0%	8%	74%	84%	18%	8%	0%	0%

 Table 48: bus reliability in Exeter

 Source: PB for DCC

- 7.7.5. The data found that on average 12% of buses surveyed were early, 74% were on time, 11% were late and 2% were very late. The best performing routes on the day of the surveys were Cowick Street services, whilst the worst performing routes were the Heavitree Road services.
- 7.7.6. Figure 14 below from Stagecoach data shows the average speeds of Stagecoach buses recorded in Exeter in 2008/09 between 07.30 and 08.30.



Figure 14: Stagecoach average speeds 0730 – 0830 Data source: Stagecoach black box data

7.7.7. There were 29 real time information screens in Exeter bus shelters in 2008/09.

Community Transport

7.7.8. All wards within Exeter are served by Ring and Ride services. Patronage data is not broken down by area however county wide data is outlined in section 3.12.

7.8. Exeter: Rail

- 7.8.1. The busiest station in Devon, Exeter St Davids, had 1.98 million **entries and exits** with Exeter Central having 1.39 million in 2007/2008.
- 7.8.2. All stations in Exeter have seen substantial growth in passenger usage. Pinhoe station experienced a large growth in usage of 456% between 2002/03 and 2007/08, and Digby and Sowton station 105% growth. Daily exit data is calculated³¹ from annual exit data. It should be noted that the data is calculated from ticket purchases. Local short journeys are therefore likely to be undercounted due to purposeful non purchase of tickets, or, the conductor being unable to take payment from all passengers. Evaluation of exit data also results in only counting one way trips. If however entry and exist data were calculated this would result in double counting of trips within Exeter stations.

³¹ Annual data divided by 304 (days in a year minus Sundays and Bank Holidays)

Daily rail trip exits at all Exeter stations							
Train station	02/03	07/08	% increase				
Exeter St Davids	2511	3253	30%				
Exeter Central	1742	2257	30%				
Digby and Sowton	196	402	105%				
Exeter st Thomas	75	135	80%				
St James Park	46	62	35%				
Pinhoe	8	47	456%				
Polsloe Bridge	76	93	22%				
Topsham	175	280	60%				
Total	4829	6528	35%				
T 1 1 (0 1 1 1 1 1							

Table 49: daily exits at Exeter rail stations

 Source: Office of the Rail Regulator

7.9. Exeter: Highways

7.9.1. Devon County Council has a number of automatic number plate recognition (ANPR) cameras throughout Exeter. These cameras provide live data on the number of plate matches that various cameras make along a series of routes.

Description	Link Length (Km)	Free Flow Journey Time (mins)	Average Annual Daily Traffic (Vehicles per day)	Average Journey time (Weekdays 0730 - 0930) mins	Average speed (kph)	journey time reliability (weekday 0730 - 0930)
Alphington Road IB	2.0	3	13,775	7.6	16	78%
Alphington Road OB	2.0	2.9	14,245	4.7	26	75%
Heavitree Road IB	1.1	1.8	8,705	2.8	23	81%
Heavitree Road OB	1.1	1.7	8,035	2.5	25	39%
Pinhoe Road IB	2.1	3.6	8,730	4.9	25	67%
Pinhoe Road OB	2.1	3.1	7,610	4.1	30	75%
Topsham Road IB	3.3	5	11,295	7.2	28	86%
Topsham Road OB	3.3	4.6	10,840	7.2	28	82%
Total			83,235			

Table 50: ANPR dataSource: DCC

- 7.9.2. The data in the table above was collected between 1st January 2009 and 18th March 2009. The same data was used to create 24 hour journey time graphs (see appendix 1).
- 7.9.3. **Inbound:** The data shows that Alphington Road experiences considerably longer journey times during the AM peak, however whilst this falls after 9am it still remains relatively high throughout the day until approximately 19.00. Heavitree Road shows a similar picture to Alphington Road albeit with shorter journey times. Pinhoe Road data shows a large increase in journey time during the AM peak and considerable variations in journey times between 3.00pm and 7.00pm. Journey times along Topsham Road are the slowest during the AM peak and slower journey times are recorded throughout the day with some fluctuations in times between 2.00pm and 6.00pm representing unreliable journey times.

7.9.4. **Outbound:** Alphington Road experiences more scattered journey times, further illustrated by the lower journey time reliability during the AM peak. Heavitree Road journey times are much less reliable than other routes in Exeter as highlighted by the AM peak reliability of 39%. Pinhoe Road data shows an increase in journey time during the AM peak and significant variations in journey times throughout the day. Topsham Road experiences a peak in journey times during the AM peak, however there is a dramatic increase in journey time and reduction in reliability between 3.00pm and 6.00pm.

	AADT	AADT
	two way	two way
Description	1997	2009
Alphington Rd	Х	28020
Heavitree Rd	18200	16740
Pinhoe Rd	Х	16340
Topsham Rd	20200	22135
Cowley Bridge Rd	15500	14589
Cowick St	16700	13749
Okehampton St	9700	8279
Pennsylvania Rd	X	6500*
Old Tiverton Rd	Х	7000*
Total	~	119852

*estimated figures

 Table 51: AADT figures 97/09

 Source: DCC

7.9.5. The table above shows that the majority of routes within Exeter have experienced a fall in traffic flows since 1997.

Inbound Traffic Flows



Source: DCC

- 7.9.6. The figure above illustrates that traffic flows are consistently high throughout the day along key routes such as Topsham Road, Alphington Road and Heavitree Road. The ability for these roads to carry more traffic is limited.
- 7.9.7. There are a number of sources related to studying driving habits across the city. The Exeter travel to work tally, and the national census were selected to be the indicators.

Data Gauna Ana		% by ca	- · · -	
Data Source	Area	year	2009	Trip Purpose
Travel to Work Tally	Exeter	66% (2006)	64%	Work
Census (market town area)	Exeter	69% (2001)	Due 2011	Work
National Transport Survey 2009	England	58% (1999/01)	63%	All trip purposes

 Table 52: Car/van trip statistics

 Sources: As cited

Car occupancy data

- 7.9.8. Manual counts taken on Tuesday 19th May 2010 by Devon County Council found that along key inbound routes 78% of cars were single occupancy, 20% had two occupants and 2% had three or more occupants. Routes included:
 - Topsham Road
 - Pinhoe Road
 - Honiton Road
 - Cowley Bridge Road
 - Cowick Street
 - Alphington Street
- 7.9.9. Road side interviews taken along Alphington Road on 6th July 2010 between 7am and 7pm found that of the 1626 cars stopped, the average occupancy was 1.4 people. Similar interviews along Paris Street on 11th May 2010 found that of the 814 car stopped, the average occupancy was 1.5 people.

City centre car parking

7.9.10. Data from variable message signs (VMS) provides an outline of car parking usage for the key city centre car parks. The data shows the annual average daily maximum parking occupancy at key city centre car parks. This data shows that a number of car parks on an average day reach capacity or near capacity. Whilst there is no data available for Princesshay, local knowledge indicates that it often daily reaches capacity.



Figure 16: parking occupancy Exeter Source: variable message signs, DCC

- 7.9.11. The vehicle capacity for city centre car parks in 2009 was 3057.
- 7.9.12. The data below shows the total average daily entries to 9 of the 11 main city centre car parks below as 4158³². Data was unavailable for Princesshay and Summerland Gate car parks.

Car park	Total spaces	Entries
Guildhall	442	1108*
Dixies Field	306	337*
Paul St	94	188*
Broadwalk	148	364*
King William A	458	473*
King William B	78	146*
King William C	192	160*
Cathedral & Quay	410	370*
Mary Arches	430	1194*
Total	2558	4158*

Princesshay / Summerland Gate data not available *data calculated **Table 53:** parking entries Exeter Source: variable message signs, DCC

On street car parking compliance

7.9.13. Compliance surveys were undertaken during May and June 2008 and 2009 to illustrate the effectiveness of parking enforcement. Compliance is measured as a percentage of the vehicles observed that are parked legally and is established by surveying an area within the community with a mixture of parking restrictions. Exeter city results showed an average compliance of 72%; an improvement on 2008 compliance figure of 68%.

³² It should be noted that some data was missing therefore actual average daily numbers will be higher, especially when lower occupancy on Sundays and bank holidays is taken into consideration.

7.10. Exeter: Air Quality

7.10.1. Exeter declared an Air Quality Management Area (AQMA) that covers all the main routes into the city in 2007. This was required because nitrogen dioxide (N0₂) levels exceed the Government annual average objective level. Studies have shown that the high NO2 concentrations are caused by traffic emissions along congested routes. In 2009 studies identified that of the 50 locations monitored around the city, 34 registered readings above the annual objective level for NO₂. For further information please refer to the "2010 Air Quality Progress Report for Exeter City Council".

7.11. Exeter: Summary

Average ONE WAY workday daily trips by mode							
Mode	Circa 2004	Circa 2009	Options for increasing				
			capacity				
Car trips crossing centre cordon	~	(2009)	Low – due to high costs				
	~	60,000	and environmental impact				
Rail trips alighting in the main	(2002/03)	(2007/08)	Medium – relatively high				
stations (st davids, central and			cost of stations and rail				
digby sowton)	4,450	5,910	infrastructure				
Bus passenger trips on Exeter	(2000/01)	(2008/09)	Medium – difficulties in				
city network (Stagecoach)			identifying deliverable high				
	11,690	12,000	value improvements				
Park and Ride patronage	(2003/04)	(2008/09)	High – relatively low cost				
			and ease of delivery				
	1,370	2,260					
Cycle trips across the river	(2005)	(2008)	High – relatively low cost				
			and ease of delivery				
	450	540					
Cycle trips other	(2005)	(2008)	High – relatively low cost				
			and ease of delivery				
	130	380					
Walking – city centre cordon		(2010)	High – relatively low cost				
(5 sites see 4.4)	x		and ease of delivery				
		10,500**					

^all data calculated from annual figures

**Average of four edge of city centre walking counts multiplied by 7 identified walking routes into centre and divided by two for one way figure

8. The state of Transport... Torbay

8.1. Torbay: Summary

- 8.1.1. Overall public transport patronage is rising, traffic appears to be relatively constant or even declining in some areas, and walking and cycling are showing signs of increased use. Delay for traffic in the Bay is not significant except during peak summer periods.
- 8.1.2. The scope for increasing patronage for all forms of sustainable transport exists, but requires new investment to reach new users. This includes improvements to services and infrastructure for buses, improving the frequency and quality of rail services and stations, and building more cycle links. Promotion, education, and training will also be required to ensure all people can fully access existing and new services and facilities.
- 8.1.3. Given the levels of demand and supply for parking across the Bay, spare capacity has been identified to enable plans by the Mayor to redevelop some key central parking sites to be redeveloped to facilitate urban regeneration. Sustainable travel is at the heart of these ambitions.
- 8.1.4. Maintenance of the network and all its assets is increasingly challenging, with both a constrained budget and rising need arising from more severe weather conditions as well as pressures of traffic. The area has an excellent road safety record on its network, hence ensuring it is fit for purpose is essential if people's perceptions are to be changed to encourage them to switch modes on their journeys to school and work etc.
- 8.1.5. Demand on travel and transport will increase in the Bay during the Local Plan period as a result of socio-economic factors. The Bay has a growing as well as ageing population, plus with a currently weak economy, many people struggling on low incomes. Typically these groups are more reliant than average upon public transport for access to goods and services such as health, education, employment, retail and leisure opportunities. Maintaining such access for all residents in a sustainable manner is integral to the Mayoral Vision seeking "stronger communities" and "pride in the Bay" as well as support for the existing and new emerging economy.
- 8.1.6. Many Torbay residents travel beyond the area to fulfil some of their everyday needs, be it to shop, work or spend their leisure time. Torbay also attracts many incoming travellers, be it commuters, shoppers, day trip or longer stay tourists. Enabling all to reach their destinations as well as travel within the Bay is essential.

8.2. Torbay: Introduction

8.2.1. Torbay is made up of the three towns of Brixham, Paignton and Torquay which combine to produce the largest urban area in Devon. Also known as the English Riviera, it is one of the Country's premier tourist

destinations, and in the summer, the population increases by up to 50%.

- Torbay is isolated geographically being "at the end of the line" for both 8.2.2. road and rail links. This geography presents unique challenges for access in and out of the Bay, especially so for the local economy. The current delays and difficulties experienced entering and exiting the Bay for workers, for businesses, and for tourists, mostly on the A380 at Kingkerswell in Devon, must be addressed if economic growth and regeneration is to be achieved within the Bay. Transport provides the crucial links that allow people and businesses to prosper.
- 8.2.3. Like many seaside resorts, its economy is dominated by service and tourism sectors with seasonal employment and low pay. Combined with the loss of significant manufacturing employment over the last decade, this makes Torbay one of the poorest regions in the South West.
- 8.2.4. Torbay's population includes a high proportion of elderly residents above the average for England. For example, in 2007, 22% of Torbay residents were over retirement age, compared to 19% in England and Wales³³. Torbay also includes high proportions of disabled residents and those living in areas of high deprivation³⁴.

Torbay: Road Safety 8.3.

- Torbay continues to have one of the safest road networks within the 8.3.1. South West. The number of fatal road traffic casualties expressed as a percentage of the population is amongst the lowest³⁵ And as shown in the table below, the number of killed and seriously injured (KSI) casualtyies is falling.
- 8.3.2. The number of Child KSI's has fallen to below the 50% Government reduction target, and 2009 saw no child KSI's, as shown in Table 54 below.

	Child (0-15) Casualties						
Year	Fatal	KSI	Target KSI	Slight	Target Slight		
1998	0	6	6	83	83		
2008	0	3	4	41	76		
2009	0	0	3	44	75		

Table 54: Torbay's Casualty statistics, 1998-2009 Source: Torbay Road Casualty Reduction Report 2009

http://www.torbay.gov.uk/road_casualty_reduction_report_2009.pdf

8.3.3. Slight casualties continue to fall and now are below the Governments 10% reduction target. For children, there was a slight increase in 2009 but

³³ Kev Population and Vital Statistics, 2007, Office for National Statistics –

⁽www.statistics.gov.uk/downloads/theme_population/KPVS34-2007/KPVS2007.pdf) Torbay Public Health Report 2009, Torbay Care Trust

⁽www.torbaycaretrust.nhs.uk/publications/Publications/PHARSummaryreport2009.pdf) ³⁵ Torbay Road Casualty Reduction Report 2009, Torbay Council

Torbay remains well within the government targets.³⁶

8.3.4. The safety of the network is vital to facilitate modal shift to perceived vulnerable modes. New solutions such as occurs with school safety zones to minimise risk to vulnerable road users, especially children, will be required, using local surveys like Travel Plans, where perceived risks in the absence of any casualties take precedence.

8.4. Torbay: School Travel

- 8.4.1. During 2009/10 there were 17,351 school pupils in Torbay in 32 Primary and Nursery Schools, eight Secondary Schools (including three grammar schools), three Special Schools, four Pupil Referral Units, and three independent schools.³⁷
- 8.4.2. The school journey affects public transport patterns, causes localised congestion around schools and contributes to the sharp road traffic peak around nine o'clock each morning³⁸. Over the past 20 years school journeys by car have almost doubled despite many being under a mile. Most recently, longer journeys have been encouraged by freedom of choice and South Devon College's relocation out of town.
- 8.4.3. Torbay reflects the national picture with walking and car use dominant and little cycling. Many children are dissuaded from cycling by safety fears, or lack of secure parking at schools. Others are dissuaded from buses by perceived lack of services at the right time, perceived costs, or worries over anti-social behaviour.
- 8.4.4. Encouraging sustainable school travel could reduce traffic delays, improve child health, improve access to education especially for those living in more deprived areas, and facilitate schools to meet the change in the nature of the school day, with greater numbers of pupils attending more than one institution or staying for extra study, for extra-curricular activities and sport.
- 8.4.5. Innovative transport solutions have been created for students and young people to enable access to education and other services, including eleven new bus services to serve South Devon College from the three town centres, cheap fares and travel cards, cycle training, and implementation of Travel Plans. This helps the efficiency of the network, carbon reduction, and promotes healthier lifestyles for children.

³⁶ Torbay Road Casualty Reduction Report 2009, Torbay Council

³⁷ Childrens Services, Torbay Council

³⁸ Travelling to school : A good practice guide, DfT



Figure 17: Travel to School in Torbay, 2004/09 Source: DfT - National School Travel

8.4.6. The number of young people who are not in education, employment or training (NEET) is relatively low and below average at 3.6% of 16-18 year olds in December 2009, compared to 5.6% regionally and 7.7% for England.³⁹ It is vital to the local economy that people have the skills that employers in the local area need.

8.5. Torbay: Walking

- 8.5.1. Walking for short local journeys helps reduce car use, increases physical activity, cuts carbon, and improves social cohesion. It is free and available to almost all. By improving walking facilities which cost relatively little, real benefits can be achieved quickly by the Council, including assisting the Mayoral Vision of improved public realm and regeneration come to fruition.
- 8.5.2. Increasing walking amongst commuters, residents and visitors can be achieved given the stunning natural environment, proximity to work that many Bay residents live, and existing bus network. Partnership working with local stakeholders such as health providers, schools, and key employers, as well as residents, to identify missing links in the network and also improve information about walking in the area will target resources effectively, given lack of information.

³⁹ Sub-regional Employment and Skills Analysis 2010 - South West Observatory



Figure 18: Footfall in Fleet Street, Torquay Source: Torbay Council

- 8.5.3. At the time of the 2001 census, approximately 16% of Torbay's working population (53,547) walked to work⁴⁰. Whilst data on pedestrian numbers is limited, in Fleet Street, Torbay's main shopping centre, a fall in footfall since 2005 dipping in June 2008 at the height of the recession has occurred, as shown in the figure above.
- 8.5.4. Torbay has a particularly high proportion of registered disabled residents, around 21% at the 2001 Census and many are over 65. Shopmobility facilities exist in Torbay's 3 towns and are used increasingly as shown in the table below.

	2003/04	2004/05	2009/10		
Numbers using Shopmobility	6500	7150	12000		
Table 55: Torbay shonmohility					

ble 55: Torbay shopmobility patronage Source: Torbay Council

8.6. Torbay: Cycling

- 8.6.1. Scope to increase cycling beyond the relatively low proportion (1.7%) of the working population who cycled to work (as of the 2001 census) or to school exists with new routes like the National Cycle Route (NCN) and commuter routes, more cycle parking at key locations such as rail and bus stations, key employers, and schools, and improved promotion to all ages for all purposes including cycle training. All were identified during consultation for the Local Transport Plan and can ensure cycling increases helping health, carbon, and economic agendas.
- 8.6.2. These low cost solutions will lay the foundations for resurgence in cycling in the Bay linking into the objectives and ambitions of the Mayor's vision, and as an integral part of Travel Planning, whether with schools, employers, or health facilities, will help achieve the longer term objectives of this Plan.

⁴⁰ Source: Office for National Statistics (www.statistics.gov.uk/STATBASE/ssdataset.asp?vlnk=6031)



Figure 19: Levels of cycling in Torbay Source: Torbay Council

8.7. Torbay: Buses

- 8.7.1. With 59 bus routes, the Council has a good record of providing high quality, innovative bus services that continue to be sustainable in the long term in partnership with local bus operators. Currently just eight routes are subsidised of which two are joint with Devon County Council and two are subsidised just partially for early morning and evening journeys.
- 8.7.2. Originally subsidised, bus routes 60 and 61, as the table below shows, patronage figures have steadily increased and by combining the services and working closely with the bus operator, the services became commercial by the end of the 5-year subsidy agreement. Funds were then freed up to provide an express service from Brixham to Torbay Hospital, meeting a key accessibility target by offering the first quick and direct link. This service is itself already very popular and on the way to becoming commercially viable.

Bus Route	<u>Year</u>	Passenger Numbers	Subsidy per passenger (f)
60	09/10	41,909	0
61	09/10	71,487	0
60	08/09	40,827	0.79
61	08/09	69,476	0.28
60	07/08	35,408	0.83
61	07/08	45,134	0.65
60	06/07	32,851	0.82
61	06/07	28,174	0.99

Table 56: Bus patronage on Services 60 and 61

 Source: Torbay Council

8.7.3. In partnership with Stagecoach Devon, a new service to connect the out of town South Devon College site was set up under the Kickstart Scheme. It also provided a regular service from Newton Abbot to Brixham via

Torguay centre, Paignton, Yalberton Industrial Estate, Paignton Community and Sports College, the businesses on Long Road South previously served by just two buses per weekday, and the residential areas of Roselands.

- 8.7.4. Before, services within 1 kilometre of the site carried some 300,000 passengers. Within 18 months, 1.3 million passengers were using the new service to access learning, healthcare, employment, leisure and shopping. With a cost of £589,000, this equalled 45.3 pence per passenger, compared to Torbay's average 74 pence for subsidised services.
- 8.7.5. The Council recognises how important access to bus services and good quality public transport, and, information, whether at bus stops, in print, or on-line, is, in order to increase patronage. Many of the area's 1088 bus stops have been upgraded with clearer information, 156 bus shelters (some with seating), bus clearways to facilitate punctuality and reliability, and "bus boarders" to assist access for those with mobility impairments. There is also a bi-annual public transport guide for all the area's bus services.
- 8.7.6. As can be seen from the figure below, passenger numbers are increasing, even acknowledging the impact of concessionary fares scheme from 2005/06, and public satisfaction continues to improve reflecting the commitment of the Council to ensuring a quality bus network is provided. ⁴¹ More work is required however. In 2009, a Council survey found 71% thought Torbay's public transport system would not discourage their car use. Reaching these more reluctant groups remains a challenge.



Figure 20: Bus Patronage in Torbay Source: Torbay Council

8.7.7. The Council is planning improvements like bus priority, high quality routes, more services, and better customer experiences with the latest vehicles and technology to attract more passengers. It aims to link all residential areas to education, employment, and health opportunities

⁴¹ National Highways and Transport Public Satisfaction Survey 2010,

http://nhtsurvey.econtrack.co.uk/Content.aspx?1511

within 45 minutes, as well as increasing services before 9a.m., after 5 p.m. and at the weekend. This supports the Mayoral Vision by connecting people to key places sustainably.



Figure 21: Bus performance in Torbay measured by start times Source: Torbay Council

8.7.8. Torbay's traffic delays and those caused by the current A380 between Penn Inn and Kerswell Gardens predominantly in Devon, means that reliability remains an issue and priority improvement measures are required. The figures above and below show the performance of buses measured by their starting times and also at key points during their routes.



Figure 22: Bus performance in Torbay measured by timings during bus routes Source: Torbay Council

8.8. Torbay: Taxis

		Licenced Taxis						
	Total number of Taxis	Purpose Built Taxi Body	Converted Body Type	Other Body Type	Taxi Only Licenced Drivers			
Blackpool	256	190	30	36	748			
Bournemouth	249	10	33	206	460			
Torbay	162	0	27	135	0			
Poole	74	0	10	64	0			

 Table 57: Taxis and drivers in Seaside Unitary Authorities,, March 2007

 Source: Department for Transport

 http://webarchive.nationalarchives.gov.uk/+/http://www.dft.gov.uk/pgr/statistics/datatablesp

 ublications/public/taxiprivate/chapter4taxisandprivatehire.pdf

- 8.8.1. Taxis are an important service for locals and visitors. The Council provides ranks and alongside operators ensures the level and type of service provided is of a high standard and quality. Vehicle numbers for 2007 are shown in the table above⁴².
- 8.8.2. With regards the Mayor's Vision and transport goals for 2026, taxis could have an increasing role as part of an integrated sustainable travel package across Torbay. Longer ranks for at least 6 vehicles at key locations such as Torquay, Paignton & Brixham harboursides, railway stations, town centres and key tourist areas will be required.

8.9. Torbay: Community Transport

8.9.1. Community Transport addresses poor accessibility for specific groups. Torbay Council works with local people to develop and run services targeted to best serve community needs including for those with mobility impairments, the frail & elderly, or who are isolated in other ways. Community transport services can also serve the general public where no public or personal transport is available.

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Ring & Ride passengers	2312	2140	1808	1876	1576	1463	1544
Community Bus Day Trip passengers	n/k	45	74	24	47	38	12
Private Hires of Community Bus	336	544	288	368	112	336	256
Private Hires of Ring & Ride Bus	592	512	416	192	192	64	n/a
Ring & Ride Bus - School Service	n/k	n/k	n/k	n/k	n/k	18	18
Community Bus - School Service	n/k	n/k	n/k	n/k	n/k	18	18
Total Passengers	3240	3241	2586	2460	1927	1937	1848

 Table 58: Community Transport performance in Torbay

 Source: Torbay Council

8.9.2. The table above shows the number of community transport services and passengers within Torbay. Given they are serving more specialist

⁴² Unmet Demand Study Report, Torbay Council, May 2008

⁽http://www.torbay.gov.uk/index/business/licensing/safetyandlicensingcontact/licencetaxidrivers/unme tdemandstudyreport.htm)

clientele as users become more able to access standard bus services, patronage is falling.

8.10. Torbay: Rail

- 8.10.1. Torbay has poor connectivity to the main rail network. Key strategic routes bypass the Bay at Newton Abbot en-route to Plymouth, Cornwall, London, the Midlands and the North. As shown in Table 59 below, there are three daily direct trains to and from London. Timings do not enable a whole day in the capital whether for business or pleasure.
- 8.10.2. Passengers can access an almost hourly local service by changing at Newton Abbot, but journeys tend to be lengthened by numerous stops and the use of older, slower trains.

Departs Torquay	Arrives	Departs London	Arrives
07:46	11:38	07:06	10:50
11:13	14:17	10:00	13:34
14:21	17:24	17:36	21:08

Table 59: Direct rail services between Torquay and London Paddington

 Source: www.fgw.co.uk

8.10.3. For journeys to Bristol, the Midlands and the North, there are six daily direct services with five direct return services, as shown below in Table 60. Commuting to Bristol for a day's work can be achieved, however further north is difficult with journeys to Birmingham New Street of up to a further 80 minutes. Change of services at Newton Abbot and / or Exeter again will more often than not be required to enable business travel.

Departs		Departs	
Torquay	Arrives	Bristol	Arrives
07:07	08:55	08:11	08:55
07:46	09:58	09:39	11:17
10:12	11:53	11:15	13:06
12:52	15:17	11:47	13:34
14:07	15:57	17:14	18:49
20·18	21:51		

Table 60: direct rail services between Torquay and Bristol Temple Meads

 Source: www.crosscountrytrains.co.uk

- 8.10.4. The lack of direct main line connections and poor infrastructure is recognised in Torbay's Inward Investment Strategy as putting off new businesses in tandem with the delays and unreliability of road travel via the A380 at Kingkerswell. ⁴³
- 8.10.5. A 2005 passenger survey found up to a third of people would use trains if there were more services. Figure 23 below highlights key destinations from the three Torbay Stations, with Exeter and London accounting for nearly a fifth⁴⁴. Journey purpose was evenly distributed between commuting, leisure, and social.

⁴³ Torbay Interim Economic Assessment July 2010, Torbay Development Agency

⁴⁴ Survey of Torbay rail passengers, 2005 – Torbay Council



Figure 23: Rail passenger destinations from Torbay Source: Torbay Council



Figure 24: Frequency of rail use by Torbay passengers Source: Torbay Council

8.10.6. Figure 24 above shows over a third of passengers used trains regularly, at least weekly. Patronage is increasing, as shown in Figure X below, despite many services, especially at peak times into the Bay, being over crowded all year.



Figure 25: Rail patronage in Torbay Source: Office of Rail Regulation (<u>www.rail-reg.gov.uk/server/show/nav.1529</u>)

8.10.7. Based on the available services into the Bay, at the peak 06:00-10:00 commuting time, as shown in the table below, there is only scope for 1,820 passengers approximately, taking a starting point of Newton Abbot. Direct from Exeter it is less than 1000 seats.

Seat arrivals Monday - Friday into the Bay						
	06:00 - 10:00	06:00-17:00	06:00-22	2:00		
FGW	1,320	4,620	6	820		
Cross Country	500	2,750	4	250		
Total	1,820	7,370	11	,070		
····						

Note – assume departure from Newton Abbott

Table 61: Numbers of rail seats available into Torbay

 Source, Torbay Council

8.11. Torbay: Highways

8.11.1. The National Highways and Transport Public Satisfaction Survey 2010⁴⁵ highlight traffic congestion and maintenance as under performing, despite actual traffic flow reductions and improved journey times and reliability as shown in Figure 26 below. The area's poor connectivity to the strategic road network especially through Kingkerswell with average peak time delays of 20 to 40 minutes could account for public dissatisfaction, whilst increasing bus use and cycling may explain the improved actual performance.

⁴⁵ National Highways and Transport Public Satisfaction Survey 2010, http://nhtsurvey.econtrack.co.uk/Content.aspx?1511



Figure 26: Levels of traffic flow and journey time reliability measured by average speed across Torbay Source: Torbay Council

8.11.2. From the Council's own Saturn traffic modelling work, there are several existing, or, if growth including up to 10,000 new homes⁴⁶ and business developments as proposed in the Local Development Framework occur, potential congestion hotspots that exist or could do so as shown in Figure 27 below.

⁴⁶ Torbay Local Development Framework Core Strategy Development Plan Document, Sep 2009 – Torbay Council - www.torbay.gov.uk/reg25corestrategy.pdf




8.11.3. Overall the network is constrained in a few key areas by saturated junctions or natural environmental issues that make solutions extremely difficult to provide. Table 62 below highlights the average delay encountered by motorists on key routes into the Bay and highlights the route from Totnes to Tweenways from both South Brent and Buckfast is as significant an issue as the A380 through Kingkerswell. Delays are significantly worse during the summer tourist season.

Delay (Minutes)	South Brent	A384 Buckfast	A379/A380	A380 Penn	A380 Ware
	to	to Tweenways	Dartmouth	Inn to	Barton
	Tweenways	Cross, Paignton	to Kerswell	Kerswell	(A381) to
	Cross,	_	Gardens,	Gardens,	Kerswell
	Paignton		Torquay	Torquay	Gardens,

					Torquay
am peak 07:30-09:30	5	6	6	5	5
am peak term time only 07:30-09:30	5	7	8	6	6
mon-thur 07.45-08.45 term time	6	6	10	n/k	8
school holidays weekdays 7 to 7	5	6	8	5	5
weekends 7 to 7	2	3	4	3	3
(15/7/9-31/8/9) 7 to 7 weekends	3	4	8	4	4

• Delay is the difference between the average journey time and the free flow journey time.

Free flow journey time is the average journey time for 22:00 - 06:00 all days.

 Table 62: Average delay on main routes into Torbay
 Source: Torbay Council (Strategis)

8.11.4. Maintenance of the 522.5 kilometres of highway network and associated assets to be fit for purpose is essential to help reduce delays and maintenance. Torbay's key assets are shown in the table below. Maintenance revenue and capital budgets are under strain with increased traffic and climate issues⁴⁷. The budget in 2007/08 was £2,389,500, substantially less than previously and the bare minimum required to arrest deterioration.

ltem	Quantity	
A Class	Dual Carriageway, Rural	2.2km
A Class	Single Carriageway, Rural	5.7km
A Class	Dual Carriageway, Urban	5.0km
A Class	Single Carriageway, Urban	32.3km
B Class	Single Carriageway, Urban	8.4km
C Class	Single Carriageway, Rural	5.5km
C Class	Single Carriageway, Urban	44.4km
Unclassified	Single Carriageway, Rural	27.2km
Unclassified	Single Carriageway, Urban	391.8km
Unsurfaced Road		10km
Pedestrianised		
streets		1.4km
Footways		817km
Green Lanes		10km
Bridleways		2km
Dedicated Cycle		
Ways		0.7km
Public Footpaths		76.4km
Belisha beacons		63
Bus shelters		156
Highway bridges		36

 Table 63: Highway Maintenance Plan

 Source: Torbay Council

8.11.5. In the last two years, severe winters have prevented opportunities to catch up with maintenance backlogs. The coastal road is susceptible to flooding. A Shoreline Management Plan has been developed to enable

⁴⁷ Draft Torbay Council Highway Maintenance bid, 2010, Torbay Council

planning ahead and considerations of all options with regards rising sea levels48.

- 8.11.6. The highway network is already failing, with the current level of funding the condition data is now deteriorating. With even less money we the rate of this deterioration is expected to increase and customer satisfaction levels to reduce even further.
- 8.11.7. The Council shares best practice and benchmarks its performance based upon a series of performance indicators, both national and local, to compare service delivery though the South West Highway Service Improvement Group (SWHSIG). In addition to commissioning research and preparing annual reports over a number of years, there are bimonthly coordinator's meetings including sharing of best practise. Torbay Council traditionally scores well; indeed last year's report showed it as the 'best performer in overall performance' in over half of the measured service areas even though spend per person was the 4th lowest amongst the 9 local Unitary Authorities taking part.⁴⁹ The combination of being both a well performing and relatively low spending authority suggests that Torbay is already delivering good value for money in terms of highway management.

8.12. Parking: Torbay

8.12.1. As shown in the Figure below, capacity in Bay' car parks is rarely met and up to 16% excess supply in Torguay and Paignton has been identified for the Mayoral Vision redevelopment sites. Combined with more walking, cycling and bus use, capacity can be cut whilst still retaining sufficient parking supply on and off street.

⁴⁸ http://www.torbay.gov.uk/index/environment-

planning/theenvironment/coastalflooding/southdevonanddorsetsmp.htm

South West Highways Service Improvement Group - Annual Highways and Transport Performance Report 2008/09 (http://swhsig.econtrack.co.uk/Content.aspx?186)



Figure 28: Torbay car park occupancy levels, 2009 Source: Torbay Council

- 8.12.2. Torquay's maximum overall occupancy is 48% weekdays and 53% Saturdays, and Paignton's is 19% and 15% respectively. Slightly higher occupancy occurred in car parks within a 10 minute walk of the town centres, 54% weekdays and 63% Saturdays in Torquay, and 21% and 20% respectively in Paignton.
- 8.12.3. A temporary summer only park and ride facility exists at Churston for Brixham but is under utilised increasing vehicle emissions in Brixham's air quality management zone. Long term proposals for park & ride sites include at Churston, Occombe Farm and / or adjacent to the Willows to serve Torquay town centre and the hospital, and in association with Devon County Council, near Newton Abbot railway station that could address congestion issues along the A380.

8.13. Travel to Work: Torbay

8.13.1. As shown in the figure below, in 2001 most of the Bay's workers drove to work and just 5.1% used public transport. Walking accounted for a fifth, higher than average, encouraged by 80% of its workers living in the Bay⁵⁰. A third of the jobs in the Bay (over 7000) are public sector related hence in the current economic climate are particularly vulnerable to risk of cuts which could have impacts upon future travel to work patterns.

⁵⁰ Torbay Local Economic Assessment Interim Assessment – July 2010 - www.torbay.gov.uk/torbayeconomicassessment-july2010.pdf



- Figure 29: Mode of travel to work, 2001 Source: Office for National Statistics http://www.statistics.gov.uk/STATBASE/ssdataset.asp?vlnk=6031
- 8.13.2. Torbay's links with its neighbouring District Council areas, South Hams and Teignbridge, as well as the wider Devon area are clear. From the Annual Population Survey and as shown in Figure 30 and Figure 31 below, in 2008 84.8% of jobs within the Torbay local authority boundaries were filled by Torbay residents, an increase of just over 10% since 2001. The rest of the jobs in were filled by residents of the two neighbouring districts; 10% lived in Teignbridge (down from 13.7%), and 4.3% in the South Hams (down by 5.7% from 2001).



Figure 30: Place of residence for Torbay workers Source: Annual Population Survey – Office for National Statistics



Figure 31: Place of work for Torbay residents Source: Annual Population Survey – Office for National Statistics

8.13.3. Figure 32 below shows the proportion of residents who live and work in the same area is similar to that for Devon, Cornwall and Somerset, but significantly higher than Plymouth, Bristol and Exeter. For urban areas the high self containment is unusual as although there may be more jobs within a small area, there are also more people and generally more out commuting. Torbay's economy is thus rather unusual.

8.13.4. The survey data also suggests Torbay residents out commuting travel further than non-residents travel to work in the Bay, implying some residents choose to live in Torbay for the quality of life, but cannot find sufficiently highly paid work in the area so commute elsewhere. Transport information supports this data, suggesting that about two thirds of peak morning trips are within Torbay, but a significant number are to Exeter and Newton Abbot.



Figure 32: Self-containment – Percentage of jobs filled by workers from the same authority

Source: Annual Population Survey – Office for National Statistics

8.14. Air Quality: Torbay

- 8.14.1. Air quality is generally good meeting six out of seven air quality objectives specified in the Air Quality Regulations 2000 (as reported to DEFRA in March 2004). However in 2006-2007 nitrogen dioxide (NO2) levels were high at two locations close to busy roads, leading to Air Quality Management Areas (AQMA's) being declared at Hele Road in Torquay, and Bolton Cross in Brixham.
- 8.14.2. Given the relatively low levels of industrial activity, most pollution is derived from traffic especially nitrogen dioxide or households, and is exacerbated in the summer when roads are congested with visitors in these canyon type areas. Table 64 below shows the concentrations of NO2 in these areas.

	Annual mean concentrations (μg/m³)			
Location	2006 *	2007 *	2008	
Hele - Hele Baptist Church, Hele Rd, Torquay	35.7	46.3	41.0	
Brixham - Town Hall, Middle St	49.7	47.8	51.3	

Table 64: Annual mean of NO2 concentrations (µg/m3)

Source: Torbay Council

8.14.3. Air quality is still declining despite an improvement plan and a range of measures implemented to reduce congestion and improving air quality levels in vulnerable areas. At Hele changes to parking restrictions to improve traffic flow and to signing to encourage rerouting of traffic occurred. In Brixham there are ongoing works to improve the junction at Bolton Cross to improve traffic movements, as well as a controlled resident's parking zone. Throughout the Bay the urban traffic control system has been upgraded, new variable message signing has been introduced, and public transport has being improved, with cleaner vehicles and more frequent services to increase patronage. This will have the effect of reducing congestion and improving traffic flow.

8.15. Torbay: Economic statistics

- 8.15.1. Torbay has pockets of high deprivation with a large percentage of people unemployed or low paid. In 2009, 20.6% of the Torbay population were claiming benefits, with one in ten in receipt of incapacity benefit. This total is 5% above the national average, and 7% higher than the regional figure⁵¹. Deprivation (poverty, health, poor housing and poor access to services) affects 15,000 residents; the Bay is the 71st most deprived area out of 354 in England⁵², but also has several wards in the top 10 most deprived categories in the Country⁵³.
- 8.15.2. The Bay is only two thirds as wealthy as the national average and, in the last five years, has had just half the growth of the rest of Devon. This has led to higher unemployment than in Devon or England despite having a working population sector below average. Table 65 below illustrates Torbay's below average status, and

⁵¹ Torbay Interim Economic Assessment July 2010, Torbay Development Agency

⁵² The English Indices of Deprivation(2007) key findings for Torbay

⁵³ Torbay's Economic Regeneration Strategy (undated)



Figure 33 shows how rates of unemployment in the Bay have consistently been higher than the South West and Great Britain in recent years.

Torbay's employment rates	Torbay	South West	England
Percent of the working population economically active - June 2009	72.5%	78%	74%
Percent of the economically active working age population unemployed - February 2010	7.4%	5.4%	6.9%

 Table 65: Levels of economically active population and unemployment

 Source: Office for National Statistics

 https://www.nomisweb.co.uk/reports/lmp/la/2038431911/report.aspx?#ls



Figure 33: Unemployed Percentage of Torbay economically active residents Source: Office for National Statistics <u>https://www.nomisweb.co.uk/reports/Imp/la/2038431911/subreports/ea_time_series/report.</u> aspx

- 8.15.3. With a majority of jobs within the service and tourism sectors, being typified by seasonal employment and lower wages, 44% of those employed in Torbay earn less than £250 per week compared to just 28% in England & Wales as a whole.
- 8.15.4. Torbay's mean gross salary is £19,012, some £3000 below the national average. This gap has been increasing; in 2006 average earnings for workers in Torbay were 88% of the regional average, and by 2009 this figure had dropped to 78%. Unlike both the regional and national trends, Torbay residents earnings in 2009 were below the level of 2006, with an average of £372, against the previous figure of £379.⁵⁴
- 8.15.5. A third of the jobs in the Bay (over 7000) are public sector related in the areas of education, local authority, and health and in the current economic climate are particularly vulnerable to national and local budgetary constraints, which could further affect the area's economy.
- 8.15.6. In partnership with the business community, the Torbay Strategic Partnership is committed to regenerating the economy in each town, and the Mayoral Vision provides a clear direction. Sustainable transport provision is the glue that cements successful and sustainable economies and communities together. Ensuring that the transport and travel network can live up to all the expectations and ambitions will be vital.

8.16. Torbay: Demographics

⁵⁴ Torbay Interim Economic Assessment July 2010 – Torbay Development Agency

- 8.16.1. Torbay's population is 133,200, but as a popular tourist destination can rise by up to 50% at the peak holiday periods⁵⁵. Most of the residents live in the three towns of Torquay (65,000), Paignton (50,000) and Brixham (18,000).
- 8.16.2. As shown by Figure 34 below, Torbay has a more elderly population than average, and numbers are growing. 43% of people are over 50, and 30% are over 60. The ethnicity of the area is mostly white, with numbers of black and minority ethnic groups below average at just 5% of the total population.
- 8.16.3. With a higher than average proportion of older people, in Torbay there is consequently a higher prevalence of people living with chronic illnesses on GP disease registers. This situation is expected to worsen given future projections that anticipate growth of over 16% by 2020, and Torbay's elderly population is expected to increase at a higher rate than the England average with 16% (26,000 people) aged 75 years and over by 2029. ⁵⁶
- 8.16.4. Given more people living longer and that more than 25% of people aged 50 and over are living alone, these demographic pressures ⁵⁷ have significant implications for the future provision of services, the need for future development, and, of key relevance to the Local Transport Plan, for generation of extra traffic and the need for travel opportunities and access to facilities. Public transport in particular will play a greater role, especially given the more elderly age profile of the area.

⁵⁵ Sustainability Appraisal Baseline Report, May 2009 - Torbay Local Development Framework 2006 - 2026

⁵⁶ Torbay PCT, Director of Public Health Annual Report (2007)

⁵⁷ "Looking Ahead – Our Promises to You" – Torbay Care Trust, Oct 2008

⁽www.torbaycaretrust.nhs.uk/publications/Publications/Strategic%20Improvement%20Framework%2 0-%2017.10.08.pdf)



Torbay's 2006 Mid-Year Estimate Population Pyramid Figure 34: Torbay's 2006 Mid Year Population Estimate Source: Office for National Statistics www.statistics.gov.uk

- 8.16.5. The demands on services are demonstrated by the shortage of housing and affordable housing waiting lists. As of May 2010 there were 407 people on the Homebuy shared ownership list and 2494 on the housing association lists.⁵⁸
- 8.16.6. The proposals in the emerging draft Local Development Framework indicate that approximately 10,000 additional homes could be built, mostly along the western corridor. Ensuring that these are served by sustainable transport adequately will help reduce inequalities that could be experienced in any new developments, as well as ensure carbon produced from transport is minimised, and the impacts of increased delays as predicted by the Torbay Saturn Model are managed effectively

8.17. Torbay: Health

8.17.1. Significant health inequalities exist across the Bay which is a reflection of the wider inequalities affecting people's lives, as previously described above, plus poor educational attainment by certain groups of young people and child poverty.

 ⁵⁸ Torbay Interim Economic Assessment July 2010 – Torbay Development Agency
 ⁵⁹ Torbay Saturn Model –

⁽www.torbay.gov.uk/index/transportandstreets/transportpolicy/transportplan/saturnmodel.htm)

- 8.17.2. People in the more income deprived areas have higher rates of mortality than average for Torbay, with higher rates for cancer, circulatory and respiratory diseases. A fifth of the Bay's adult population is obese; nationally 17% of men and 21% of women are obese.
- 8.17.3. Health inequalities are highlighted by the differences in life expectancy, with a gap of around 8 years for men and 6 years for women between the wards with highest and lowest life expectancy.
- 8.17.4. Overall, life expectancy at birth for men in the Bay is below the average for England and the South West, whilst for women in Torbay, life expectancy at birth is above the English average and mirrors the picture for the South West. Men in Torbay can expect to live to 78.1 years and women to 82.44 years⁶⁰.
- 8.17.5. The health of the adults of the future is being affected by the inequalities facing the children of today and specific action needs to be continued to help young people live healthier lives. Transport has a critical role to ensure access to goods and services is available, and people, especially from the income deprived areas who typically will rely on public transport the most, can have the ability to make positive changes that can enhance their own lives as well as those of their family.
- 8.17.6. Poor accessibility, that is the ability of people to get to key services with reasonable cost, time and ease, was found to correspond with Torbay's deprived areas in the development of the second Local Transport Plan. This led to improvements being made to bus services in areas such as Chestnut Drive, Brixham, the Western Corridor employment area, and Hele Village in Torquay.
- 8.17.7. However more work is required in Queen Elizabeth Drive, Paignton, Upper Preston, and for the Willows at Torquay to improve bus services and increase patronage by residents of these less affluent areas. Poor accessibility, lack of knowledge, or lack of information about travel and transport opportunities cannot be allowed to increase the health equality gap further.

8.18. **Torbay: Retail**

- 8.18.1. Torquay, Paignton and Brixham offer typical key town centre shops and services including typical multiple high street chains as well as distinctive and unique retail clusters. Additionally the Willows is a major out of town shopping attraction including Sainsbury's and Marks and Spencer on the outskirts of Torquay.
- 8.18.2. The regional retail sector is extremely competitive with Plymouth and Exeter both having major new retail complexes. This can be demonstrated by the decline in shops on the Bay's high streets. During 2009, 50% of all retail units in the three towns were "A1 use"⁶¹, for

⁶⁰ Torbay Public Health Report 2009, Torbay Care Trust

⁽www.torbaycaretrust.nhs.uk/publications/Publications/PHARSummaryreport2009.pdf) Torbay Retail Monitor, Torbay Council

example shops, post offices, travel agents or hairdressers, the typical heart of any high street and vital to a successful and thriving business and shopping area. However both the numbers of actual units and those in occupation have been declining as shown in the table below.

Relati Units in Turbay				
Year	A1 Retail Units	Vacant Units		
2003	700	N/k		
2006	652	94		
2007	633	109		
2008	618	131		
2009	593	157		

Petail	Units	in	Torbay
Clair	Units		IUIDay

 Table 66: Torbay's A1 retail units' performance

 Source: Torbay Council

8.18.3. Transport must therefore enable access to the wider retail destinations as well as to the commercial centres of the three towns, offering convenient, quality access by all modes to and from residential areas, as well as a competitive regime of parking supply and charges. As part of the Mayor's Vision, achieving this balance to support the ambitious plans for redevelopment will involve provision of a fully integrated sustainable travel product for the 21st Century.

8.19. Torbay: Key Trends

8.19.1. Given the large amount of data relating to travel and transport across Torbay, key trends are highlighted in the Table below which provides an approximate snapshot of an average weekday's travel activity and an idea of how realistic delivering improvement could be.

Average workday daily trips by mode <u>into</u> the Bay	Before	Latest	Options for increasing capacity / Priority Assessment for deliverability (based on traffic light system)
Car trips into Bay	(2005) 246,625	(2009) 252,594	(i) Western corridor junction improvements and associated dualling(ii) Kingkerswell Bypass
			Barriers: High costs and environmental impact
			Deriverability. Low
Rail trips into the Bay	(200/03)	(2008/09)	(i)Half hourly service to Exeter (ii) More modern trains
(alighting at the 3 stations)	1,248*	1,602*	 (iii)Better bus / rail interchange (iv) Park and ride facilities (v) Improved station infrastructure (vi) Edginswell new station
			Barriers: Relatively high cost of stations and rail infrastructure, needs Network Rail's support
			Deliverability: Low to medium

Ferry Kingswear		(2009)	
Ferry Brixham - Torquay		(2008) 1600**	 (i) Fast ferry Torquay to Brixham with integrated bus interchange Barriers: High costs of infrastructure
Cycle trips in the Bay	(2003/04) 650	(2008/09) 1146	 (i) Develop cycle networks, especially links to workplaces, NCN, and secondary schools (ii) More accessible information Barriers: Relatively low cost, but some delivery issues
Walking in the Bay – Fleet Street, Torquay	(2005) 1438	(2009) 1025	 (i) Improved walking routes (ii) More accessible information Barriers: Relatively low cost, reasonable delivery options Deliverability: High
Torbay Bus Services (annual passenger journeys)	(2001/02) 21,224 *	(2008/09) 25,737 *	 (i) Routes linking to key destinations (ii) Better information Barriers: Difficulties identifying affordable and deliverable prioritised routes Deliverability: Medium

* estimated by dividing by 304 working days

** estimated by dividing by 21 working days

9. The State of Transport... Market/Coastal towns and Rural Devon

- 9.1.1. Devon's market and coastal towns all vary in character; for further indepth information on each town area refer to <u>Devon Town Profiles</u>.
- 9.1.2. Road side interviews (RSIs) were undertaken in 2008 at 6 strategic routes within Barnstaple. The table below evaluates trip purposes for two of the sites; Eastern Avenue (5th November 2008) and B3233 (6th November 2008).

Burnoso	Eastern	Avenue	B3233		
Fulpose	Origin	Desťn	Origin	Desťn	
Permanent Home	39%	30%	57%	11%	
Employers Business	11%	15%	12%	13%	
Work	14%	11%	10%	17%	
Education	2%	3%	4%	2%	
Personal Business	4%	12%	4%	11%	
Shopping	24%	14%	6%	31%	
Social /Leisure	5%	14%	5%	16%	

Table 67: trip purpose and percentage

 Source: DCC

9.1.3. Travel to work tallies were undertaken in Barnstaple, Newton Abbot and Totnes in 2008. Postcode analysis was used to evaluate travel to work distances and are shown in the table below. Frequency numbers are lower than the total responses to the surveys as some people chose not to answer the question.

Travel to work	Barnsta	nstaple Newto		Abbot	Totnes	
distance	Freq	%	Freq	%	Freq	%
0-2 km	482	27%	174	18%	106	19%
3-5 km	375	21%	206	22%	35	6%
6-10 km	291	17%	290	31%	174	31%
10-20 km	474	27%	163	17%	186	33%
20-30 km	76	4%	62	7%	31	5%
30+ km	58	3%	47	5%	38	7%
Total	1756	100%	942	100%	570	100%

Table 68: Travel to work distances Barnstaple, Newton Abbot and Totnes

 Source: Travel to work tally 2008. DCC

9.2. Market/Coastal towns: Population

- 9.2.1. At 2009 mid year estimates an estimated 276,986 people lived in a market or coastal town. This is 31% of Devon and Torbay population.
- 9.2.2. Population projections for Barnstaple, Bideford and Northam, and Braunton town areas indicate that there will be a considerable increase in residents over the age of 65.

Ba, Bi/No, Br	
---------------	--

	2006	2026	% change
under 65	74,245	73,214	-1%
65+	18,736	30,128	61%
total	92,981	103,342	11%

	% of population 65+		
Area	2006	2026	
Ba, Bi/No, Br	20%	29%	
Devon and Torbay	21% / 22%	28%	

Table 69: 65+ population projections

 Source: DCC

9.3. Market/Coastal towns: Road Safety

9.3.1. Road casualty statistics show that there has been a decrease in accidents of 27% in Barnstaple, and an increase in accidents of 10%, 24% and 23% in Newton Abbot, Honiton and Exmouth.

Barnstaple: road casualty stats						
Year	Fatal	Serious	Slight	Total	% change	
2000	1	12	78	91	270/	
2009	2	2	62	66	-21/0	

Newton Abbot: road casualty stats						
Year	Fatal	Serious	Slight	Total	% change	
2000	2	8	130	140	. 100/	
2009	1	6	147	154	+10 /0	

Honiton: road casualty stats						
Year	Fatal	Serious	Slight	Total	% change	
2000	0	1	24	25	1240/	
2009	0	0	31	31	+24 /0	

Exmouth: road casualty stats						
Year	Fatal	Serious	Slight	Total	% change	
2000	1	8	47	56	1 2 2 0/	
2009	0	3	66	69	+2370	

 Table 70: Road casualties; Barnstaple, Newton Abbot, Honiton and Exmouth

 Source: DCC

9.4. Market/Coastal towns: School Travel

9.4.1. Data on how children aged 5 – 15 years travel to school is collated every year for the DfT for national indicator purposes. School travel in market towns is variable. In some, car use has fallen dramatically since 2007 (see Figure 35), in some it has risen slightly. In Barnstaple for example primary schools show reduced car use, whilst amongst secondary pupils however it has risen. Where this pattern is true in market towns, it is often due to the changing pattern of bus availability and parental choice of secondary school in particular.



Figure 35: Market towns - % car use for school journeys Source: DfT

9.5. Market/Coastal towns: Walking

9.5.1. There are a number of sources related to studying walking habits across selected market towns. The Barnstaple, Newton Abbot and Totnes travel to work tally, and the national census were selected to be the indicators.

		% Wa	% Walking		
Data Source	Area	Circa 2000	circa 2009	I rip Purpose	
	Barnstaple	14% (2008)			
Travel to Work Tally	Newton Abbot	9% (200	% 08)	Work	
	Totnes	10% (2008)			
	Barnstaple	17% (2001)			
Census (market	Newton	10%	Due 2011	Work	
town areas)	Abbot	(2001)			
	Totnes	(2001)			
National Transport Survey 2009	England	31% (1999/01)	23%	All trip purposes	

 Table 71: Walking statistics
 Sources: As cited

9.5.2. Pedestrian casualty statistics for Barnstaple and Newton Abbot in 2008 show that there has been a 55% and 31% decrease in accidents since 2000.

Pedestrian casualties: Barnstaple						
Year	% change					
2000	0	8	21	29	-55%	
2008	0	2	11	13	-55%	

Pedestrian casualties: Newton Abbot							
Year	Year Fatal Serious Slight Total				% change		
2000	0	5	21	26	210/		
2008	0	1	17	18	-31/0		

Table 72: Pedestrian casualties in Newton Abbot

 Source: DCC

9.6. Market/Coastal towns: Cycling

9.6.1. Automatic cycle counters in Barnstaple and Newton Abbot indicate increases in usage between 2005 and 2009.

Barnstaple AADT cycling					
Cordon	2005	2009	% change		
Eastern Avenue	130	121	-7%		
Anchorwood	135	162	+20%		
Pottington Ind Est	285	338	+19%		
North Road	53	59	+11%		
Sticklepath Hill	85	58	-32%		
Bishops Tawton					
Rd	56	56	0%		
Braunton Road	39	34	-13%		
Cordon Total	783	828	+6%		

Newton Abbot AADT cycling						
Cordon	2005	2009	% change			
Minerva Way	62	63	+2%			
Newton Road	44	48	+10%			
N of Jetty Marsh	50	54	+8%			
Jetty Marsh	39	46	+18%			
Salisbury Road	77	95	+24%			
Total	271	305	+13%			

Table 73: Newton Abbot daily traffic flows - cycling

 Source: DCC

9.6.2. There are a number of sources related to studying cycling habits across selected market towns. The Barnstaple, Newton Abbot and Totnes travel to work tally, and the national census were selected to be the indicators.

		% Cy	T : D	
Data Source	Area	Circa 2000	Circa 2009	Trip Purpose
	Barnstaple	6% (2008)		
Travel to Work Tally	Newton Abbot	2% (2008)		Work
	Totnes	2% (2008)		
Census (market town areas)	Barnstaple	4% (2001)	Due 2011	Work

	Newton Abbot	1% (2001)		
	Totnes	2% (2001)		
National Transport Survey 2009	England	1% (1999/01)	2%	All trip purposes

 Table 74: Cycling statistics
 Sources: As cited

9.6.3. Cycling casualty statistics for Barnstaple in 2009 show a 35% decrease in accidents since 2000, whilst Newton Abbot experienced a 113% increase in accidents.

Cycling casualties: Barnstaple						
Year Fatal Serious Slight Total % change						
2000	1	0	16	17	25%	
2009	0	1	10	11	-33 /6	

Cyclist casualties: Newton Abbot						
Year Fatal Serious Slight Total % change						
2000	1	0	7	8	113%	
2009	0	1	16	17	11370	

 Table 75: Cycle casualties in Barnstaple and Newton Abbot

 Source: DCC

9.7. Market/Coastal towns: Park and Ride, Buses, Community Transport

Barnstaple Park and Ride Patronage

9.7.1. Barnstaple Park and Ride patronage figures show an 81% increase since 2004/05.

Park and Ride annual trips				
04/05 09/10 % change				
54,647	109,631	+81%		

 Table 76: Barnstaple Park and Ride Patronage figures

 Source: DCC

Barnstaple Buses Patronage

9.7.2. Barnstaple patronage figures show a 118% increase since 2003/04. This figure is collected from bus companies and only includes buses that run in the town, not those that pass through it. It should also be noted that the network has experienced a lot of changes in the last few years.

Barnstaple bus patronage				
03/04	08/09	% change		
243,428	531,054	+ 118%		

 Table 77: Barnstaple bus Patronage figures

 Source: DCC

Barnstaple Bus Reliability

- 9.7.3. Bus reliability studies were conducted in November 2006 and 2009 to monitor targets set out in LTP2 as required by DfT:
 - Early = more than 1 minute
 - On time = 1 minute early to 5 minutes lates
 - Late = 5 15 minutes late
 - Very late = more than 15 minutes late

It should be noted that this data represents one day; caution should therefore be applied to the reliability of the data.

- IB inbound
- OB outbound

АМ	Ea	rly	On	Time	La	ite	Very	late
	2006	2009	2006	2009	2006	2009	2006	2009
Ashford turn IB	4%	47%	30%	47%	17%	7%	0%	0%
Ashford turn OB	0%	0%	78%	73%	22%	27%	0%	0%
Braunton George Hotel IB	27%	0%	64%	75%	0%	20%	0%	5%
Braunton George Hotel OB	25%	0%	63%	94%	13%	6%	0%	0%
Bus Station IB	47%	41%	43%	40%	10%	19%	0%	0%
Bus Station OB	14%	6%	39%	83%	14%	9%	2%	1%
Green Lanes IB	52%	26%	17%	63%	9%	5%	0%	5%
Green Lanes OB	5%	17%	10%	63%	19%	17%	0%	3%
Newport Road IB	29%	14%	65%	71%	6%	7%	0%	7%
Newport Road OB	24%	18%	65%	82%	6%	0%	6%	0%
Sticklepath Hill IB	43%	29%	39%	52%	13%	17%	0%	2%
Sticklepath Hill OB	42%	15%	46%	73%	4%	12%	0%	0%

PM	Ea	rly	On	Time	La	ite	Very	late
	2006	2009	2006	2009	2006	2009	2006	2009
Ashford turn IB	4%	75%	0%	25%	8%	0%	0%	0%
Ashford turn OB	0%	0%	1%	93%	0%	7%	0%	0%
Braunton George Hotel IB	63%	6%	25%	83%	0%	11%	0%	0%
Braunton George Hotel OB	9%	11%	82%	89%	0%	0%	0%	0%
Bus Station IB	29%	41%	53%	50%	13%	4%	5%	5%
Bus Station OB	17%	2%	75%	93%	6%	4%	1%	1%
Green Lanes IB	19%	44%	57%	49%	19%	3%	0%	5%
Green Lanes OB	0%	26%	89%	65%	11%	9%	0%	0%
Newport Road IB	19%	0%	69%	82%	6%	18%	6%	0%
Newport Road OB	18%	0%	59%	100%	24%	0%	0%	0%
Sticklepath Hill IB	4%	33%	30%	56%	61%	8%	4%	3%
Sticklepath Hill OB	4%	17%	72%	71%	20%	9%	0%	3%

Table 78: Bus reliability in Barnstaple Source: PB for DCC 9.7.4. The data shows that on average in 2009 19% of buses surveyed were early, 70% were on time, 9% were late and 2% were very late. The data shows that some services were consistently early; notably services inbound at Ashford turn, to the bus station and at Green Lanes.

Community Transport

9.7.5. Patronage data is not broken down by areas however county wide data is outlined in section 5.13.

9.8. Market/Coastal towns: Rail

9.8.1. Market and coastal town rail stations have seen a growth in passenger trips; a growth across all stations of 25% since 2002/03. The figures quoted are based on ticket sales, so actual passenger numbers may be higher.

Market / Coastal Town stations						
		02/03	07/08	%		
Station	District	exits	exits	change		
Axminster	East Devon	84,406	103,879	+23%		
Exmouth	East Devon	370,407	351,552	-5%		
Honiton	East Devon	118,790	143,815	+21%		
Barnstaple	North Devon	88,535	130,870	+48%		
Crediton	Mid Devon	10,878	14,184	+30%		
lvybridge	South Hams	16,331	31,877	+95%		
Totnes	South Hams	159,404	243,923	+53%		
Dawlish	Teignbridge	133,462	182,136	+36%		
Newton Abbot	Teignbridge	318,110	425,016	+34%		
	Total	1,300,323	1,627,252	25%		

Table 79: exits at market/coastal rail stations
 Source: Office of the Rail Regulator

9.9. Market/Coastal towns: Highways

- 9.9.1. A39 The route from Bideford to Barnstaple experiences regular delays. The AM peak journey time takes on average 50% longer to complete than free flow journey time; 12 minutes compared to 8 minutes. The delay reduces during weekday off peak (9.30 – 16.30) to an average 10 minute journey time.
- 9.9.2. The tables below show that the majority of routes within Newton Abbot, Crediton and Exmouth have experienced very little change in traffic flows since 2005.

Newton Abbot AADT vehicles						
Cordon	2005 2009 % change					
East Street	16,918	17,171	1%			
Highweek Street	17,003	17,705	4%			

Jetty Marsh	16,540	16,733	1%
Newton Road	24,567	23,080	-6%
The Avenue	21,477	21,217	-1%
Cordon Total	96,504	95,906	-1%

Crediton AADT vehicles					
Cordon	2005	2009	% change		
Half Moon	11721	11889	1%		
Barnstaple Cross	8609	8395	-2%		
Mill Street	8863	9100	3%		
Cordon Total	29,193	29,383	1%		

*2005 flows for Mill Street estimated using flows from ATC at A3072 Cadbury Cross

Totnes AADT vehicles					
Cordon	2005	2009	% change		
South of Totnes	10239	9796	-4%		
Tigley	5079	5270	4%		
East of A385	18222	18006	-1%		
Old Mill	13968	13936	0%		
Cordon Total	47,508	47,008	-1%		

 Table 80: Newton Abbot, Credition and Totnes AADT - vehicles

 Source: DCC

9.9.3. Table 81 shows AADT figures for Barnstaple. Traffic flows have fallen along central routes, however it is likely that this is due to displacement onto the newly constructed Western By-pass.

Barnstaple daily flows				
Cordon	2005	2009		
Eastern Avenue	17400	14830		
Alexandra Road	24790	22194		
North Road	11898	12158		
Braunton Road	19964	18107		
Longbridge	29371	16737		
Total	103423	84026		
Western By-Pass Sth	~	16136		
Western By-Pass Nrth	~	22231		
Total	~	38367		

 Table 81: Barnstaple AADT - vehicles

 Source: DCC

9.9.4. Figure 36 below illustrates that traffic flows steadily rise throughout the day along key routes reaching a peak around 4.30pm.



Figure 36: Average daily traffic flows 2009, Barnstaple Source: DCC

9.9.5. There are a number of sources related to studying driving habits in selected market towns. The Barnstaple, Newton Abbot and Totnes travel to work tally, and the national census were selected to be the indicators.

	Area	% by car / van		.
Data Source		Circa 2000	Circa 2009	Trip Purpose
	Barnstaple	73% (2008)		
Travel to Work Tally	Newton Abbot	82% (2008)		Work
	Totnes	83% (2008)		
	Barnstaple	61% (2001)		
Census (market town areas)	Newton Abbot	71% (2001)	Due 2011	Work
	Totnes	62% (2001)		
National Transport Survey 2009	England	58% (1999/01)	63%	All trip purposes

Table 82: car trips Barnstaple, Newton Abbot and Totnes

 Sources: As cited





Newton Abbot Maximum Parking Occupancy (annual average) 2009

- 9.9.6. Data from variable message signs (VMS) provides an outline of car parking usage for Barnstaple and Newton Abbot car parks. The data suggests that currently there are sufficient levels of parking within the towns.
- 9.9.7. The data below shows the total average daily entries to the eight Barnstaple car parks listed below as 4,433⁶².

Car park	Total spaces	Entries
Belle Meadow	124	419*
Queen St MSCP	339	350*
Civic Centre	240	275*
Seven Brethren	350	626*
Cattle Market	310	1409*
Fair View	247	380*
North Walk	71	171*
Green Lanes	406	803*
Total	2.087	4.433

*data calculated

Table 83: car park entries Barnstaple Source: variable message signs, DCC

Figure 37: Maximum parking occupancy 2009 – Newton Abbot Source: DCC

⁶² It should be noted that some data was missing therefore actual average daily numbers will be higher, especially when lower occupancy on Sundays and bank holidays is taken into consideration.

Appendix 1 – Exeter Journey Time Recordings

Alphington Road

Inbound:



Outbound:



Heavitree Road

Inbound:





Pinhoe Road Inbound:





Topsham Road

Inbound:





Topsham Road Inbound