

Chapter 9:

Monitoring and Appraisal

“Unless priority is given to pedestrians, cyclists and good public transport through more funding, then I fear we shall see little change”

Beth Dowdeswell, Transport Development Worker, Torridge Transport Group

This Chapter explains how the success of the Plan will be monitored and includes the results of the overall Appraisal of the Plan. **Topic Paper 9** sets out the approach to monitoring and appraisal in more detail.

Monitoring the Plan's Success

The implementation and success of this Plan in achieving its Objectives will be monitored over the next five years. This will be carried out by measuring progress towards the **headline targets** that have been established for each of the Devon Strategies (Chapter 7). Each target has been set at a realistic level so as to deliver the Objectives of the Plan.

A **performance indicator** has been identified for each Devon Strategy as a way of assessing whether progress is being made in the right direction. These headline targets and performance indicators are reproduced on pages 130-131 in accordance with **DETR Table 4**. Some of the performance indicators are also being developed for the purposes of Best Value and are included in the County Council's Best Value Performance Plan (“Working for a Better Devon”, March 2000).

Effective monitoring of the Plan will require the gathering and interpretation of data. For the Plan period the information included in the County Council's annual “Traffic and Transport Statistics” provides a baseline for:

- Traffic flows
- Walking
- Cycling
- Bus and rail use
- Heavy goods vehicles
- Road safety
- Highway maintenance

Much of the existing information is based on returns from:

- automatic traffic counters at strategic sites which provide information on changes in traffic flows

- manual classified counts which identify the type of traffic at a particular location
- pollution monitoring assessing the effects of road traffic on air quality

The bus services supported through the Rural Bus Support Grant are the subject of regular monitoring of patronage and revenue. The County Council also carries out targeted on-bus passenger surveys soliciting information on vehicle quality and requests for timetable or route variations. Page 51 sets out the approach to monitoring bus punctuality.

Further information will be gathered to monitor the progress of the Plan through:

- Use of National Travel Survey data to give a general indication of travel patterns
- Use of the national census data and Labour Force Survey data on travel to work and car ownership
- Destination based surveys focussing on:
 - School travel - with information from the Safer Journeys to School programme (see Chapter 8)
 - Travel to work - with information from those employers developing employers' travel plans
 - Travel for other purposes - with information on walking, cycling and bus use through surveys at railway stations and leisure centres. Surveys at other key destinations which attract large numbers of people to establish how they have travelled and where from.
- Bus and rail patronage - surveys of passenger numbers and use of information made available by operators. The introduction of electronic ticketing machines and smart cards will enable the most detailed possible research into levels of patronage and travel patterns.
- Cordon and screenline surveys - site specific roadside interviews for focused before-and-after studies to measure the effects of particular elements of the Implementation Programme. Key corridors for monitoring are the East Devon screenline (along the boundary with Somerset and Dorset) and the West Devon screenline (along the boundary with Cornwall).
- Travel diaries - information from small, selected samples of households who complete diaries of their journeys.
- Rural Services Survey 2000 - parish based data being gathered by the Countryside Agency.

Further information on the Devon County Council's Best Value Performance Plan can be found at:
www.devon-cc.gov.uk/bestvalue

Devon Local Transport Plan 2001 - 2006 Headline Targets and Performance Indicators

The table below will form the basis of Annual Progress Reports on the Plan which will begin in 2001. The Progress Reports will include information on the performance indicators and progress towards achieving the headline targets. The Reports will also include details of expenditure and the delivery of the Implementation Programme.

	Devon Strategy	Headline Target	Performance indicator
1	Journeys to school and college	To implement the phased programme for Safer Journeys to School in five Zones by 2006	The number of adopted School Travel Plans
2	Journeys for work	To support employers (or groups of employers) to implement 20 Travel Plans by 2006	The number of employees covered by Employers' Travel Plans
3	Journeys to shop	To implement a programme in 28 Local Areas for improving journeys to local shops by 2006	The number of Local Areas where improvements have been undertaken
4	Journeys for recreation and leisure	To increase the number of visitor attractions with links to public transport	The information published on public transport links to leisure and recreational opportunities
5	Journeys to community facilities	To provide improved public transport to community facilities in 28 Local Areas by 2006	The number of health centres and hospitals served by community transport
6	Integration	To enhance nine public transport interchanges in the period to 2006	The number of Local Plans containing transportation policies and proposals consistent with the Devon Local Transport Plan
7	Mobility	To provide improved access to, and within, 28 Local Areas by 2006	The number and type of improvements carried out per annum to assist mobility
8	Walking	To implement the objectives of the Devon Walking Strategy in all Local Areas by 2006	The percentage of the total length of footpaths and other rights of way that were easy to use by members of the public
9	Cycling	To contribute to the national target for increasing cycle use by doubling the number of Local Areas with integrated cycle links by 2006	The number and type of cycle journeys to key destinations
10	Bus Travel	To provide enhanced passenger facilities on strategic routes serving 27 Local Centres in Devon in the period to 2006	The number of bus stations, interchanges and stopping places with enhanced facilities developed through Bus Quality Partnerships
11	Public Transport Information	To ensure the implementation of SW TRIPS projects across the whole of Devon	Percentage of users satisfied with public transport information
12	Community Transport	To set up Local Transport Partnerships to cover the whole of Devon by 2002	The number of Ring and Ride and Shopmobility schemes in Devon.
13	Rail Travel	To increase the range and frequency of train services available to Devon's residents and visitors.	The number of station calls made daily in Devon by passenger trains

	Devon Strategy	Headline Target	Performance indicator
14	Highway Network Management	To implement six route management strategies in the period to 2006	The number of routes on the Devon High Quality Road Network which have benefited from sustainable improvements
15	Sustainable Distribution	To implement four Freight Quality Partnerships in the period to 2006	The number of planning permissions for major development making provision for sustainable distribution by road, rail, or sea
16	Air Travel	To contribute to the implementation of the 2000 to 2005 Action Plan in the Exeter Airport Surface Access Strategy	Modal split of travel to work by Airport employees
17	Powered Two Wheelers	To implement the Devon Road Safety Action Plan 2000 - 2006 for motorcycling	The number of powered two wheeler casualties
18	Taxis and Private Hire Vehicles	To work with the District Councils to develop, and implement, a strategic approach to taxi and private hire vehicles by 2001	The number of taxi schemes which complement and extend public bus services
19	Ports and Waterways	To ensure that the role of ports is recognised in four Freight Quality Partnerships in the period to 2006	The number of transport measures undertaken to improve sustainable access to/from ports in Devon
20	Parking	In partnership with the District Councils and the National Park Authorities, to fully implement the Devon Parking Strategy by 2006	The number of Local Plans which include car parking policies consistent with the Devon Parking Strategy
21	Road and Bridge Maintenance	To implement the Devon Local Transport Plan's Road and Bridge Maintenance Programme in five Zones over the period to 2006	The number and type of maintenance schemes on the Principal Road Network
22	Road Safety	To meet the Government's targets of -a 40% reduction of the number of people killed or seriously injured -a 50% reduction in the number of children killed or seriously injured in road accidents by 2010 compared with the average for 1994-98 -a 10% reduction in the slight casualty rate, expressed as the number of people slightly injured per 100 million kilometres	The number of road accident casualties per 1000,000 population, by nature of casualty and type of road user.
23	Air Quality	To work in partnership with District Councils on transport related air quality issues.	Trends in measured levels of local air quality directly attributable to reduction of road transport related pollutants.
24	Noise	Pending EU and national legislation, to undertake an assessment of the Devon Highway Maintenance Programme on noise each year to 2006	The number of low noise highway surfacing improvements carried out in noise-sensitive areas in Devon
25	Climate Change	To work with key partners to further quantify the effects of transport on greenhouse gas emissions in Devon	The contribution of transport to carbon dioxide emissions in Devon

The Appraisal of the Devon Local Transport Plan

The format for this section has been taken from page 121 of *Guidance on Full Local Transport Plans* (DETR, March 2000). This section represents a summary of the methods and results of the Appraisal. **Topic Paper 8** should be consulted for further information.

Introduction

The Appraisal information presented below represents the Appraisal of the Implementation Programme of the Devon Local Transport Plan including the Major Scheme. It does not include a comparative Appraisal without the Major Scheme. It has been decided, with the approval of GOSW, to focus the detailed Appraisal of the Major Scheme on the Northern Devon Zone and consider it as part of the development of the alternative options for that Zone.

The following levels of analyses have been carried out on the Plan:

1. Assessment of the degree to which the **Central Government objectives** for transport would be achieved
2. Assessment of the degree to which the **local authority's objectives** for transport would be achieved
3. Assessment of the degree to which **problems** would be mitigated
4. Supporting analyses of **distribution and equity** of the impacts, **affordability and financial sustainability** of the Plan, **practicality and public acceptability** of the Plan and an assessment of the **plan's impact on social exclusion**.

In addition, a supporting analysis has been carried out to test that the Plan's strategic approach is consistent with other organisations' Plans and Strategies. Also, an appraisal against the requirements of the Government's Annex D tables as set out in its *Guidance on Local Transport Plans* has been carried out. These are both detailed in **Topic Paper 8**.

The Impacts of the Devon Local Transport Plan

The balance of all the Appraisal information gives the overall value for money of the Plan. The Appraisal concludes that the Plan gives **good value for money** as it helps to solve the problems identified in the transport system, meets the Government's and its own objectives (scoring particularly highly on the Plan's priority objectives of safety and integrated transport) and does this in a way that is financially sustainable and supported by partners and the public. The information derived from the individual analyses are:

Will the Plan help to achieve the Government's objectives?

The Plan scores positively against the Government's objectives with the exception of neutral scores against biodiversity and water. The largest improvements are likely to be for the objectives of safety and integrated transport, the priority Objectives of the Plan. The Plan also scores very positively against other Government objectives - this is because of the benefits for mobility, child safety and alternatives for socially excluded groups.

Will the Plan help to achieve its own objectives?

The Appraisal finds that the Plan will have significant health and environmental benefits as the extensive investment into more sustainable modes results in modal shift.

Will the Plan help to solve Devon's transport problems?

The Plan will help to solve the transport problems identified through public consultation, with the most positive improvements occurring in speed reduction and improvements in facilities for the mobility impaired.

How are the impacts distributed and is this equitable?

The Appraisal finds that the main environmental improvements are likely to be in towns where congestion is causing problems, because it is here that most modal shift is likely to occur. The Local Areas Programme will ensure that accessibility and mobility are improved in rural areas and market/coastal towns.

Is the Plan affordable and financially sustainable?

The Plan is both affordable and financially sustainable and in many cases is the minimum investment needed to ensure safety and accessibility. Many of the proposals will bring wider economic benefits that make them good value for money.

Is the Plan practical and acceptable to the public?

The Appraisal shows that the Plan is a practical one and with Devon County Council working with partners during implementation, it is likely to be successful. It is also clear that the public and key partners are on board with the process and agree with the Plan's framework.

What is the impact on social exclusion?

The Appraisal shows that all levels of the Implementation Programme will help to improve both the mobility and safety of a number of different social groups.

Appraisal Methods

The Appraisal has been undertaken through the following methods:

1. The Central Government Appraisal Summary Table - CG AST

The assessment of the degree to which central Government's objectives would be achieved has been made using a one-page Appraisal Summary Table (CG AST), set out on page 134. The Appraisal against the Government's objectives has been carried out using the GOMMMS methodology (*Guidance on the Methodology for Multi-Modal Studies*) and the advice given in *Appraisal of Local Transport Plans: Advice on Simplified Procedures* (DETR, June 2000). As no transport model exists of the County as a whole, quantitative impacts were not possible to judge. Therefore, simplified procedures have been used to come to a view of the impacts on each of the objectives and the quantitative column in the AST has been removed. The scores in the assessment column of all the AST's are marked using the 7-point scale (stipulated by the Government) of:

- Large Beneficial
- Moderate Beneficial
- Slight Beneficial
- Neutral
- Slight Adverse
- Moderate Adverse
- Large Adverse

It is also possible to appraise major elements of the Implementation Programme separately. The Government has issued a list of policy instruments and related advice on modelling and Appraisal in *Appraisal of Local Transport Plans - Advice on Simplified Procedures* (DETR, June 2000). This will be used to assess the environmental impact of schemes as the Plan is being implemented.

2. The Local Authority Appraisal Summary Table - LA AST

Government Guidance recommends that if a local authority's transport objectives are not reflected in the CG AST the authority should appraise against the objectives not covered, using a Local Authority AST (LA AST). It has been decided to appraise the Implementation Programme against all of the Plan's own Objectives to ensure comprehensiveness. A set of performance measures has been defined to measure the performance of the Plan against, as set out on page 135.

3. Problem Analyses

Government Guidance on Appraisal states that evidence should be provided which shows how a Plan addresses the problems it is intended to solve. It is necessary to find appropriate performance measures to indicate whether implementation of the Plan moves the system towards a threshold of acceptable performance. The problems and opportunities used are ones that are common to all the Plan's Zones. Although under the Government's Guidance it is not necessary to show this analysis in an AST, this form has been taken to display the results (see page 136). It is felt that the AST format is the clearest way to show the performance comprehensively against all of the problems identified.

4. The Supporting Analyses

• Distribution and equity

Distributional analyses have been carried out in terms of the following Government objectives - Noise, Local air quality, Landscape, Townscape, Biodiversity, Heritage of historic resources, Water resources, Accidents, Transport economic efficiency and Access to the transport system.

• Affordability and financial sustainability

The main criterion against which Plans are assessed is value for money and it is important to consider the financial performance of the Plan. This consists of an explanation of how financially sustainable and affordable the Plan is, with reference to the DETR finance forms (see **Topic Paper 4**).

• Practicality and public acceptability

The practicality and public acceptability analysis is designed to avoid situations where schemes may be desirable and not fundable and may not be acceptable to the public and / or implementing partners. Therefore, there needs to be an overall assessment of the practicality of the Plan and, if relevant, what complementary measures are needed to make the Plan practical. The Guidance followed to carry out this analysis is contained in GOMMMS Volume 1.

• The Impact on Social Exclusion

Government Guidance on Appraisal of Local Transport Plans requires local authorities to carry out an assessment of the Plan's expected effect on social exclusion. The Guidance suggests that no extra work needs to be done for this. However, to ensure that a balanced and accurate view is formed of this important policy issue, Devon County Council has carried out an extra level of analysis, to inform this assessment. This consists of two stages (see **Topic Paper 8** for these analyses in full):

1. For a number of social groups, (women, the mobility impaired (including older people), younger people, those on low incomes and those living in rural communities) a matrix shows how sections of the Implementation Programme will impact on them.
2. For two of these groups, rural communities and women, a checklist has been provided of the kind of issues that should be considered as the Plan is being implemented. Devon County Council will consider these issues as part of its investment frameworks.

Central Government Appraisal Summary Table (AST) for the Devon Local Transport Plan Implementation Programme

Description: Implementation Programme of the Devon Local Transport Plan (2001-2006).

1) Total cost of the Plan £m: £132.72m 2) Cost to Government £m: £132.72m

Problems: See Problem Mitigation AST (page 136) for summary of problems and assessment of how the Plan would mitigate those problems

OBJECTIVES	QUALITATIVE IMPACTS	ASSESSMENT
ENVIRONMENT Noise	If safety improvements are successful and walking and cycling routes are improved, people are more likely to switch to walking and cycling. Park and Ride and pedestrianisation should lead to improvements in towns	Slight / moderate beneficial
Local air quality	If safety improvements are successful and walking and cycling routes are improved, people are more likely to switch to walking and cycling. Park and Ride and pedestrianisation should lead to improvements in towns	Slight / moderate beneficial
Greenhouse gases	If safety improvements are successful and walking and cycling routes are improved, people are more likely to switch to walking and cycling.	Slight / moderate beneficial
Landscape	Possible reductions in car use in certain areas will lead to a small improvement.	Slight beneficial
Townscape	Further town centre pedestrianisation and the removal of through traffic from Barnstaple will cause an improvement in the townscape. The Plan will also help regeneration within towns, including Exeter.	Slight beneficial
Heritage of historic resources	This is neutral in most areas but the major scheme will have a benefit for historic resources such as Longbridge in Barnstaple and other historic resources in town centres.	Slight beneficial
Biodiversity	The switch to walking and cycling will help reduce the impacts all over the County but the Major Scheme will have some mitigated impacts (see the Major Scheme NATA table).	Neutral
Water environment	The switch to walking and cycling will help reduce the impacts all over the County but the Major Scheme will have some mitigated impacts (see the Major Scheme NATA table).	Neutral
Physical fitness	If safety improvements are successful and walking and cycling routes are improved, people are more likely to switch to walking and cycling and this will contribute to fitness. The investment in leisure routes will have a large impact.	Moderate beneficial
Journey ambience	Reduction in speeds, parking restraint, pedestrianisation and provision of more off road walking and cycling links will help to improve journey ambience.	Moderate beneficial
SAFETY Accidents	The investment in safety improvements, improved road maintenance, speed restrictions, traffic calming and local safety schemes will all contribute to lower accident rates for all modes.	Moderate / Large beneficial
Security	CCTV provision, secure station schemes and lighting improvements will all help to increase security	Moderate beneficial
ECONOMY Transport Economic Efficiency	Changes will make public transport more efficient in most areas and operators will benefit through improvements in efficiency. (See top of table for costs of Plan for the 5 years of spend).	Slight beneficial
Reliability	Reliability of buses will improve with bus priority measures and possible reduction of congestion within town centres. Reliability will improve in Barnstaple with the removal of through traffic.	Moderate beneficial
Wider economic impacts	Many of the measures will help regeneration of communities and improve access to places of business, especially within the Northern Devon Zone.	Slight beneficial
ACCESSIBILITY Option values	The whole Programme aims to provide better interchange, walking and cycling routes and improved information so people have more options of how to travel.	Moderate beneficial
Severance	Speed reductions will help to reduce severance	Slight beneficial
Access to the transport system	Improved interchanges will help to improve access to the transport system as will improvements to help people with mobility problems	Moderate beneficial
INTEGRATION Transport interchange	The Programme will improve a large number of interchanges of different scales.	Moderate / Large beneficial
Land use policy	The location of new development will consider sustainable transport. Changes will be fully integrated with land use changes.	Moderate beneficial
Other Government policies	The Programme aims to improve access to the countryside, provide alternatives for socially excluded groups through community transport, improve child safety and help people with mobility problems	Moderate / Large beneficial

Local Authority Appraisal Summary Table (AST) for the Devon Local Transport Plan Implementation Programme

Description: Implementation Programme of the Devon Local Transport Plan (2001-2006).

Problems: See Problem Mitigation AST (page 136) for summary of problems and assessment of how the Plan would mitigate those problems

PLAN OBJECTIVE	PERFORMANCE MEASURE	QUALITATIVE IMPACTS	ASSESSMENT
1 Integrated Transport	The provision of sustainable transport systems which meet the needs of new developments	Transport changes will be fully integrated with land use changes including the planning of the sustainable transport provision for the new settlements	Moderate beneficial
2 Safety	A decrease in the number of transport related accidents	The investment in safety improvements, speed restrictions, traffic calming and local safety schemes will all contribute to lower accident rates.	Moderate / Large Beneficial
3 Accessibility	More accessible public transport services	Better information, interchange and improvements to help people with mobility problems will lead to more accessible public transport services.	Moderate Beneficial
4 Economy	A shift to more sustainable modes for freight transport within Devon	The freight terminals and Freight Quality Partnerships that are planned will help with this shift	Slight beneficial
5 Environment	A shift to more environmentally friendly modes within Devon	The whole Programme aims to provide better interchange, walking and cycling routes and improved information to encourage people to switch.	Moderate beneficial
6 Health	An increase in walking and cycling levels	The whole Programme aims to provide better walking and cycling routes to encourage a higher use of these modes. Improvements in leisure routes could have a significant impact.	Moderate beneficial
7 Lifelong Learning	An increase in educational and training establishments that can be reached by public transport	Safer Journeys to School projects will aim to improve this.	Slight beneficial
8 Social Exclusion	An increase in people using public transport to access local services	Improved information, interchange and actions to help the mobility impaired will help to make public transport more accessible.	Moderate beneficial
9 Tourism	An increase in the number of public transport services serving popular tourist destinations from the main centres.	Increased integration between public transport and leisure walking and cycling routes will have the largest impact.	Slight beneficial

Problem Mitigation Appraisal Summary Table (AST) for the Devon Local Transport Plan Implementation Programme

Description: Implementation Programme of the Devon Local Transport Plan (2001-2006).

PROBLEM	PERFORMANCE MEASURE	QUALITATIVE IMPACTS	ASSESSMENT
1 Traffic congestion on major roads leads to long delays and increased journey times - problems are exacerbated during the summer period.	A reduction in average journey times.	Average bus times will decrease due to bus priority measures. Journey times in Barnstaple will improve due to the removal of through traffic. Journey times in other Zones should reduce due to the introduction of park and ride.	Slight beneficial
2 Difficult access to public transport from rural areas especially.	An increase in the number of rural communities using public transport services	Improved services, information, interchange and facilities to help especially the mobility impaired will help to make public transport more accessible to rural communities.	Slight beneficial
3 Poor standard of existing road network does not encourage confidence in the safe use of the network.	An improvement in the condition of the County's roads.	The Programme of highway maintenance will lead to an improvement in the condition of the County's roads.	Moderate beneficial
4 Poor standard of access to schools discourages the greater use of sustainable transport modes.	An increase in the number of pupils travelling to school by more sustainable modes.	Safer journeys to school projects will aim to improve this.	Slight beneficial
5 Air quality and noise problems on major routes and in town centres from congestion.	An improvement in air quality and a reduction of people suffering from traffic noise.	If safety improvements are successful and walking and cycling routes are improved people may switch to walking and cycling. Park and ride and pedestrianisation should lead to improvements in town centres in terms of both air quality and noise. The town centre of Barnstaple will improve through the removal of through traffic.	Slight / Moderate beneficial
6 People's ability to travel is restricted by safety fears, especially at night.	A decrease in the level of crime and fear of crime related to transport.	CCTV provision, secure station schemes and lighting improvements will all help to reduce crime and fear of crime.	Moderate beneficial
7 The opportunities for sustainable transport to, from and within the proposed new communities.	More sustainable transport services to, from and within the proposed new communities.	The proposed new communities are being planned for places where sustainable transport can be maximised.	Slight beneficial
8 Inadequate facilities to transfer between different modes of transport.	An increase in interchange points between different modes of transport.	Interchange points are being improved in many places and walking and cycling leisure routes will be much more closely integrated with public transport.	Moderate / large beneficial
9 Speed of traffic discourages cyclists and walkers	An increase in speed management measures.	An increase in 20-mph zones and other speed restrictions will help this.	Moderate beneficial
10 Inadequate facilities for those with impaired mobility.	An increase of public transport services, which cater to people with, impaired mobility.	Disabled audits and many other measures such as low floor buses and Shopmobility will be introduced.	Moderate beneficial

Chapter 10: Road Traffic Reduction

“We understand the difficulties in setting road traffic reduction targets.”

Martyn Goss, Transport 2000 (Devon Group)

This Chapter summarises Devon County Council's Road Traffic Reduction Report (*Topic Paper 9*) which has been prepared to meet the requirements of the Road Traffic Reduction Act 1997.

The Government's Guidance requires reports on road traffic reduction:

- To provide an assessment of current levels of local road traffic
- To forecast expected growth in those levels
- Where appropriate, to specify targets for reducing the level of local road traffic or its rate of growth.

Assessment of current levels of traffic

The County Council's Report sets out an assessment of the current levels of road traffic in terms of traffic volumes.

The most significant traffic flows are along the main routes serving Exeter, Plymouth and Torbay. There are significant levels of traffic crossing the County's western boundary with Cornwall and across its eastern boundary with Somerset and Dorset. The volume of traffic crossing the eastern boundary is measured using counters along a “screenline” to give a measure of traffic entering and leaving the county. Over the past ten years traffic volumes across the East Devon Screenline have increased by nearly 20%.

The ten year growth pattern (1989 to 1999) across the Devon road network (see map on page 22) shows that traffic growth in excess of 50% occurred on the:

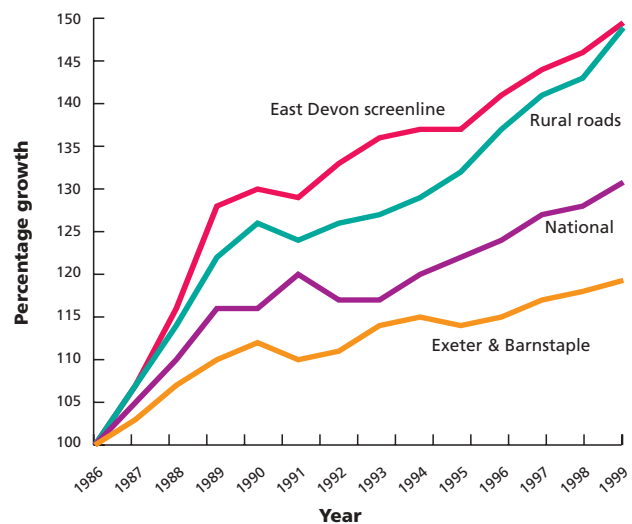
- A38 Ivybridge - Plymouth
- A361 (North Devon link)/A39 linking Barnstaple and Bideford to the M5
- A30 west of Exeter/Okehampton/Launceston route

Traffic has increased on many other routes by between 25% and 50%, for example on the A30, A38, A380 and M5.

Road traffic has grown significantly since 1986 both nationally and in Devon. Rates of growth, which were significant in the 1980s, slowed in the early 1990s.

The Road Traffic Reduction Report sets out details of traffic in each of the five Zones and highlights increases in traffic flows.

Traffic Growth 1986 - 1999 (1986 = 100)



Forecast of future levels of road traffic

The DETR Guidance recognises that forecasting future levels of road traffic is a difficult and uncertain process. Traffic growth depends on many factors such as population change, household size, car ownership, employment opportunities, economic growth, and the alternatives to the car.

Traffic growth in Devon has been compared with national and regional trends, using a national database model (TEMPRO), to forecast changes in the number of:

- cars per household
- households
- cars trips

Forecasts have been made for the periods to **2006** and **2011**.

This national model uses **1996 as its baseline** and takes account of the policies and initiatives pertaining at that time; for example, measures to reduce vehicle emissions, rates of fuel duty, the capacity of motorway/trunk roads, household projections, and improvements to passenger rail services. The model does not include the Government's policies in its integrated transport White Paper or the measures in this Plan.

Index of Forecast Growth to 2006 (1996 = 100)

	Growth in cars per household	Household growth	Growth in car trips generation
National	118	102	117
South West	120	105	120
Devon	120	105	120
East Devon	122	107	121
Exeter	119	101	117
North Devon	118	107	120
Plymouth	116	98	115
South Hams	124	111	124
Teignbridge	122	111	125
Mid Devon	121	108	121
Torbay	120	105	120
Torridge	122	109	121
West Devon	116	105	117

Index of Forecast Growth to 2011 (1996 = 100)

	Growth in cars per household	Household growth	Growth in car trips generation
National	125	102	126
South West	128	107	130
Devon	129	107	129
East Devon	132	111	133
Exeter	126	101	125
North Devon	130	110	130
Plymouth	121	97	120
South Hams	135	117	137
Teignbridge	135	117	137
Mid Devon	130	112	131
Torbay	129	108	130
Torridge	131	114	132
West Devon	123	107	125

Based on the position in 1996, the forecasts show that the number of car trips in Devon would grow by about 20% over the period 1996 - 2006 and by 29% over the period 1996 - 2011.

Devon is a large rural county where reliance on the car is high and there is limited scope for significantly reducing the distance travelled over the period of this Plan.

Distance travelled per person per year by mode of transport (miles)

	South West Region	Great Britain
Walking	188	200
Cycling	56	38
Public transport	512	798
Car	6464	5535
TOTAL	7220	6570

Targets to reduce the rate of growth of traffic

The Road Traffic Reduction Report (*Topic Paper 9*) assesses the extent to which the Plan is likely to contribute to road traffic reduction.

The table on the next page assesses the contribution of the Devon Strategies to road traffic reduction and demonstrates that over the period 2001-2006 the overall effect is likely to be limited. The outcomes in terms of, for example, improving road safety, health, increasing accessibility and reducing pollution are likely to be more important.

The Road Traffic Reduction Report highlights that:

- this Plan reflects the Government's approach of focusing on the impacts of road traffic on, for example, congestion, air quality, road safety, noise and climate change.
- achieving the headline targets that have been set for each of the Devon Strategies in Chapter 7 will have the effect of reducing the rate of growth of traffic.
- the Government's Guidance on choosing appropriate road traffic reduction targets confirms that the desirable outcomes include making roads safer, improving local amenity, reducing congestion, benefiting the local economy and improving air quality. These outcomes will be achieved through the measures and priorities in the Implementation Programme (Chapter 8).

Assessment of the Devon Strategies as a contribution to Road Traffic Reduction between 2001 and 2006

Why people travel	Journeys to School and College	Journeys for Work	Journeys to Shop	Journeys for Recreation	Other Journeys and Leisure
Percentage of total journeys	5.3%	15.6%	20.9%	33.4%	24.8%
Average journey length	4.5km	Commuting 13km Business 30km	6.3km	13.5km	6.9km
Percentage of distance travelled by mode	Walking 49% Cycling 1% Public Transport 20% Car 28%	Walking 11% Cycling 4% Public Transport 11% Car 72%	No data available	No data available	No data available
How people travel		People	Goods		
Integration	✓	✓	✓	✓	✓
Mobility	✓	✓	○	✓	✓
Walking	✓✓	✓	○	✓	✓
Cycling	✓✓	✓	○	✓	✓
Bus Travel	✓	✓	○	✓	✓
Community Transport	✓	✓	○	✓	✓
Rail Travel	✓	✓	✓✓	✓	✓
Highway Network Management	✓	✓	✓	✓	✓
Sustainable Distribution	○	○	✓✓	○	○
Air Travel	○	✓	✓	✓	✓
Powered Two Wheelers	○	✓	○	✓	✓
Taxis and Private Hire	✓	✓	○	✓✓	✓
Ports and Waterways	○	✓	✓	○	✓
Parking	✓	✓✓	✓	✓✓	✓
Road Safety	✓✓	✓✓	✓	✓	✓
Major Schemes	*	*	*	*	*
Overall effect on journey type	✓✓	✓	✓	✓	✓
Conclusion	Reasonable reduction in travel by car to school will be achieved.	Small reduction in travel by car to work will be achieved plus a slight reduction in HGV's.	Small reduction in travel by car to shops will be achieved.	Small reduction in travel by car will be achieved - may be more significant in the longer term.	Small reduction in travel by car will be achieved.
Contribution to road traffic reduction	✓	✓	✓	✓	✓

Overall conclusion: The overall road traffic reduction by distance is likely to be limited. The outcomes in terms of, for example, improving road safety, health, increasing accessibility and reducing pollution are likely to be more important.

Key

Significant change to sustainable modes of transport ✓✓
 Limited change to sustainable modes of transport but with other significant benefits to the community. *

Marginal change to sustainable modes of transport ✓
 No effect or not relevant ○
 Contributing to Road Traffic growth ×

The Road Traffic Reduction Report considers forecast rates of traffic growth in the Zones. The implementation of the Zones Programme will make an important contribution to road traffic reduction and the delivery of the Plan's Objectives.

The transport priorities, identified in Chapter 8, for the **Dartmoor and Tamar Valley Zone 2001-2006** are:

- To provide and promote interchange facilities within the market towns on the edge of Zone (in co-operation with the Market Towns Initiative being pursued by Dartmoor Towns Ltd).
- To increase and promote the provision for cycling and walking to support the Devon Structure Plan hierarchy of road use and to promote a healthier lifestyle.
- To improve facilities and access to/from local rail stations.
- To promote public transport and improve services for local communities.
- To further reduce accidents involving stock animals by seeking greater compliance with the 40 mph speed limit and by other measures such as verge remodelling
- To implement Safer Journeys to School schemes based on school clusters
- To manage parking provision and implement parking restraint where feasible.
- To monitor travel patterns and vehicle speeds within settlements and provide improvements
- To pursue a reduction in damage to roads, bridges and settlements through Freight Quality Partnerships.
- To undertake a "Quiet Roads" project within the Zone
- To undertake corridor studies on main routes into the Zone to enable action to be taken to encourage modal shift from car use to other modes of transport.
- To undertake access audits of settlements and main bus routes to improve access for those with disabilities.

The delivery of these priorities will assist in **reducing the distances travelled by car and the rate of increase in traffic growth in the Dartmoor and Tamar Valley Zone over the Plan period**. Average daily traffic flows in the Dartmoor and Tamar Valley Zone increased by 9% over the last three years.

The transport priorities, identified in Chapter 8, for the **Exeter Zone 2001 - 2006** are:

- Two Exeter "Gateways" with public transport interchanges at St David's Station, and at Honiton Road serving the main A30/M5 junction.
- School Travel Plans and Safer Journeys to School initiatives based on secondary school clusters
- Extension of 20 mph zones to side roads in all residential areas in the City
- Advanced 'real time' traffic management and driver information using Intelligent Transport Systems
- A high quality Pedestrian Priority Area in Exeter City Centre linked to safe walking and cycling routes including a new 'landmark' bridge over the Exe
- Enhanced Park and Ride facilities and bus services making

use of bus priority measures with Intelligent Transport Systems and 'real time' information on strategic routes serving the City Centre

- Employers Travel Plans for major employment premises with an Exeter Freight Quality Partnership
- Enhanced facilities, particularly for people with disabilities, at bus and rail stations throughout the Zone
- Enhanced services, information and passenger facilities under Bus Quality Partnerships on strategic bus routes linking Exeter and surrounding urban and rural communities.
- High quality walking, cycling and public transport infrastructure serving major development proposals such as the Princesshay city centre scheme, Exeter International Airport, the prestige site development at Skypark and the planned new community in East Devon.

The delivery of these priorities will assist in **reducing the distances travelled by car and the rate of increase in traffic growth in the Exeter Zone over the Plan period**. Average daily traffic flows in the Exeter Zone increased by 3% over the last three years.

The transport priorities, identified in Chapter 8, for the **Newton Abbot Zone 2001-2006** are:

- To implement the conclusions of the A380 Newton Abbot - Torbay corridor study
- To enhance walking and cycling networks within Newton Abbot and other towns with a particular emphasis on safe and attractive access between key destinations and links with the National Cycle Network's South Devon route
- To increase the efficiency and attractiveness of the bus network within Newton Abbot and between market and coastal towns to minimise the need to use the private car
- To provide an enhanced rail station interchange and a new bus station in Newton Abbot
- To develop public transport interchange facilities at Buckfastleigh and promote public transport accessibility to other interchange points
- To improve access to rail stations
- To support Employers Travel Plans and, through the Newton Abbot Freight Quality Partnership, reduce the impact of HGVs and other goods vehicles on other road users (particularly pedestrians and cyclists) and on air quality, particularly in Newton Abbot and to/from Teignmouth
- To implement the Safer Journeys to School programme based on school clusters
- To manage the availability, pricing and distribution of parking to reduce traffic problems and promote the use of alternative modes.

The delivery of these priorities will assist in **reducing the distances travelled by car and the rate of increase in traffic growth in the Newton Abbot Zone over the Plan period**. Average daily traffic flows in the Newton Abbot Zone increased by 4% over the last three years.

The strategic priorities, identified in Chapter 8, for the **Northern Devon Zone 2001-2006** are:

- To build on the success of recent investment through the Barnstaple Package and associated programmes including the Rural Bus Support Grant, development of Community Transport services and the construction of link roads serving industrial areas.
- To relieve traffic congestion and promote economic competitiveness by the construction of the Barnstaple Western Bypass. This will **reduce traffic levels in the town centre by as much as 53%** and improve access, particularly, to the economically deprived area between Barnstaple and the North Devon coast.
- To ensure that future land use, planning and regeneration policy is an integral part of sustainable transport networks, especially walking, cycling and public transport.
- To optimise the place of sustainable transport in public and private investment, especially social and economic investment (eg under Objective 2).
- To enhance walking, cycling and bus priority measures as part of urban safety management to take advantage of the capacity released in Barnstaple town centre by the bypass. Bus priority measures are critical to the attractiveness and efficiency of services from the key surrounding towns including Ilfracombe, Braunton, Lynton / Lynmouth, South Molton, Great Torrington, Holsworthy and Bideford / Northam. These also benefits school and community transport from across the Zone.
- To enhance the Park and Ride network linking with bus priority measures and interchange facilities. Park and Ride is a key facility for those living in the rural areas and tourists / visitors.
- To ensure close integration between improved physical walking, cycling and public transport facilities and associated investment through programmes including the Rural Bus Grant, Rural Bus Challenge (Buses are Cool - access to further education from rural areas), and public / private / locally raised funding for buses and community transport.
- To extend the existing Bus Quality Partnership to cover the Ilfracombe / Braunton / Barnstaple / Bideford / Westward Ho! routes. This links together enhanced interchanges at Bideford Quay and Barnstaple rail station with the new Barnstaple bus station, providing improved passenger facilities along the route. Additionally there are significant improvements to bus waiting facilities on key routes in the rural areas.
- To support co-ordinated investment in Community Transport facilities to continue the significant progress in this key area of rural transport.
- To develop a transportation strategy for Exmoor National Park recognising the particular challenges and pressures facing the area, including rural bus services and traffic management.
- To promote the upgrading of the Tarka rail line linking Northern Devon to Exeter by providing an hourly service and a step change in the attractiveness of the route for leisure, business and other users.

- To provide a co-ordinated approach to freight distribution incorporating a new Freight Quality Partnership, an intermodal freight terminal and improved journey times and reliability resulting from the Barnstaple Western Bypass.
- To provide further mobility improvements for the people with disabilities, building on the significant achievements of the Barnstaple Package.
- To continue the demand management strategy building upon recent increases in urban parking charges, extension of residents parking areas and priority measures for pedestrians, cyclists and buses.

The delivery of these priorities will assist in **reducing the distances travelled by car and the rate of increase in traffic growth in the Northern Devon Zone**. Average daily traffic flows in the Northern Devon Zone have increased by 4% over the last three years.

The transport priorities, identified in Chapter 8, for the **South West Devon Zone 2001-2006** are:

- To maintain and develop communications based upon Devon Expressway, National Road Network, local and Inter urban bus network, existing rail network and National Cycle Network in a sustainable way
- To improve access to local bus services on the main corridors into Plymouth and Totnes
- To ensure that the proposed new community in the South Hams is served by quality sustainable transport networks
- To complete the National Cycle Network's South Devon route
- To include the Great Western main rail line in the next review of TENS and maximise use of the whole rail network in the Zone
- To study with partners the proposed reinstatement of Bere Alston - Tavistock rail link and South Brent station
- To promote research for an appropriate Park and Ride site on the western part of the Zone to enable current and future needs to be met
- To improve the local rural bus network including access from rural settlements to centres of services and employment
- To implement safety and disability audits for all forms of transport
- To implement the Safer Journeys to School programme based on school clusters
- To protect sensitive areas and the character of countryside and villages from the adverse effects of transport
- To manage freight transport through Freight Quality Partnership

The delivery of these priorities will assist in **reducing the distances travelled by car and the rate of increase in traffic growth in the South West Zone over the Plan period**. Average daily traffic flows in the South West Zone increased by 4% over the last three years.

Glossary of Technical Terms

AST Appraisal Summary Table, as set out in DETR's Guidance on Local Transport Plans.

CCTV Closed Circuit Television, used for example for town centre security.

CO2 (Carbon Dioxide) One of the greenhouse gases which contribute towards Global Warming.

Community Appraisals Community-based studies about social, economic and environmental issues important to people's daily lives. Further information can be found at www.devon-cc.gov.uk

DDA Disability Discrimination Act

Detrunking The transfer of responsibility for non-core trunk roads from the Highways Agency to local highway authorities.

DETR Department of Transport, Environment and the Regions.

Development Plans Structure Plans and Local Plans which set out policies for development and land use.

Devon Agenda 21 An independent charity working on sustainable development across Devon's communities.

Employers Travel Plan Also known as a Green Travel Plan, it involves practical measures to encourage staff to choose alternatives to single - occupancy car use.

ESDP The European Spatial Development Perspective (1999). A non-statutory document produced by the European Union outlining land use, transport and economic strategies for all member countries.

Global Warming The gradual increase in temperature caused by gases collecting in the air and preventing heat escaping into space.

GOMMS DETR's Guidance on the Methodology for Multi-Modal Studies

Green Travel Plan see Employers Travel Plan

The Greenhouse Effect The increase in the amount of carbon dioxide and other gases in the atmosphere which is believed to be the cause of a gradual warming of the surface of the Earth.

GDP Gross Domestic Product, the total money value of all final goods and services produced.

Interchange Passenger facilities that enable people to change conveniently from one mode of transport to another.

Intermodal Freight Terminal A terminal equipped with facilities to transfer freight between road, rail, sea and/or air.

ITS (Intelligent Transport Systems) They include positioning systems to give priority to pedestrians and buses at traffic signals, parking management systems and real time public transport information.

MOLASSES The programme for Monitoring of Local Authority Safety Schemes established by the Transport Research Laboratory.

Multi-Modal Study A study examining the roles of different modes of transport along a corridor.

Modal Shift A shift from one mode of transport to another, particularly away from car use

Modal Split The indication of the distribution of use across the various modes of transport

National Planning Guidance Issued by DETR, it includes
RPG Regional Planning Guidance
PPG Planning Policy Guidance

NATA New Approach to Appraisal, the Government's method for appraising how well a transport scheme or policy meets the its five objectives for transport.

Objective 2 An EU structural fund provided to support areas undergoing economic and social change, including declining rural areas.

Peripheral Areas Locations considered to be remote and economically disadvantaged when compared to more central and prosperous regions.

PSECETS Plymouth and South East Cornwall and Environs Transportation Study

PTI 2000 Public Transport Information 2000, the Government's regional initiative to provide enhanced information.

Quality Partnerships Cooperative arrangements between local authorities and transport operators. They particularly cover bus and freight services.

SELCA the Salisbury to Exeter Lineside Consortium of Authorities, a regional partnership of local authorities, transport operators and Railtrack that is promoting improvements on the Waterloo rail line between Exeter and Salisbury.

Social exclusion A term for what can happen when people or areas suffer from a combination of linked problems such as unemployment, poor skills, low incomes, poor housing, high crime environments, bad health and family breakdown.

Stakeholders People or organisations with a stake in a particular issue or resource.

Sustainable Development Integrating economic, social and environmental policies to ensure a better quality of life for everyone, both now and for generations to come.

Sustrans A national charity promoting sustainable transport (particularly the National Cycle Network).

TENs the European Trans European Network, including road, rail, shipping and air links between Devon, the UK and the rest of Europe.

Trunk roads National routes (including motorways) for which the Highways Agency is responsible.

Virtual Bus/ Walking Bus A group of children, walking to school with two parent volunteers - a 'driver', who leads the way, and a 'conductor' at the rear. The walking bus follows a set route, stopping at agreed pick up points in the neighbourhood.

VMS (Variable Messaging Systems) electronic display systems e.g. signs that show when car parks are full.

www.devon-cc.gov.uk Devon County Council's website, containing detailed information about Devon

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DEVON COUNTY COUNCIL

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