Chapter 3

Accessibility

3 ACCESSIBILITY
3.1 Access To What, By Whom and When

Accessibility planning offers a new way to find and solve local problems – checking whether people experiencing social exclusion can reach the services they need and identifying action to take if they cannot. Action could be through improving public transport, introducing more innovative travel options, or changing the location or delivery of the services people need. Accessibility planning is about transport, but it is also about locating services and delivering key activities in ways that make it easier for people to reach them.

Accessibility includes how and where people can move between points, use services and facilities globally, in a European context and nationally. This document takes these areas into account but does concentrate on the connectivity within the UK and particularly cross boundary adjacent to and within Torbay. This LTP has therefore followed Accessibility Guidance and will deliver a comprehensive report later in 2006 including supporting data and information some of which is already contained within this document.

3.1.1 Background

Torbay Council faces unique challenges as it engages in improving accessibility in the district. Torbay's population includes high proportions of elderly (see Figure 3.1), disabled and deprived residents, and its environment is predominantly urban with an undulating topography. The population has difficulties in terms of below average access to a car and greater than average need to access health and social services. Torbay is also extremely popular with tourists and this brings its own difficulties in terms of information dissemination and signage provision to ensure that our visitors are able to enjoy an unspoiled visit to the bay.

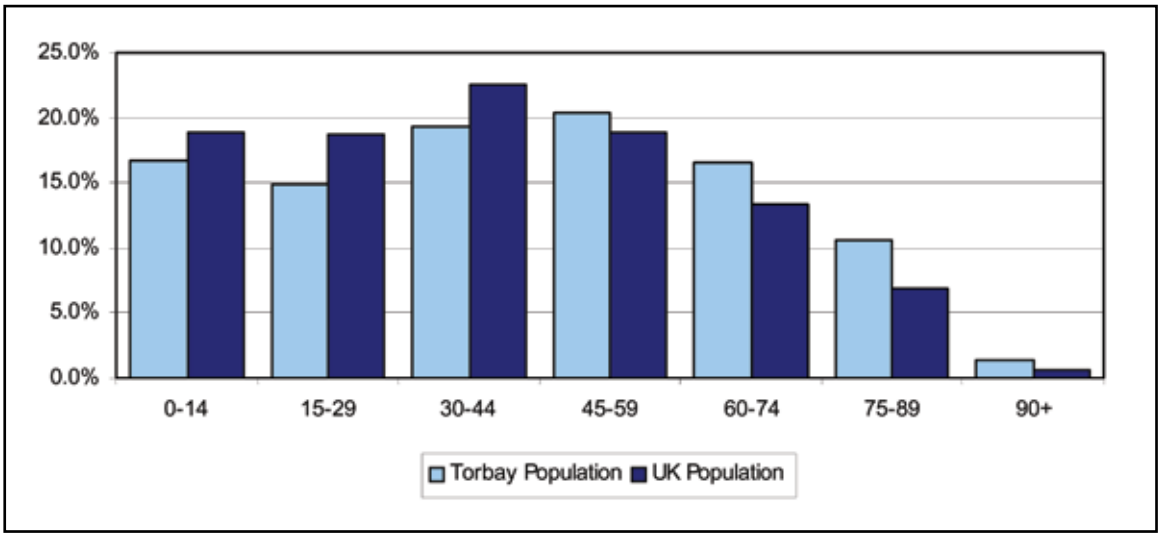


Figure 3.1 UK and Torbay Population by Age

In evaluating accessibility in Torbay, we have been guided by the Social Exclusion Unit's report "Making the Connections"[1]

This report defined accessibility as the ability of people to get to key services with reasonable cost, time and ease. Accessibility is dependent on the existence of transport links and the quality of those links. Additionally people need to be physically and financially able to access transport.

1.www.socialexclusion.gov.uk/trackdoc.asp?id=228&pid=7

Five themes are highlighted as being the most important in terms of accessibility which are shown in Figure 3.2.

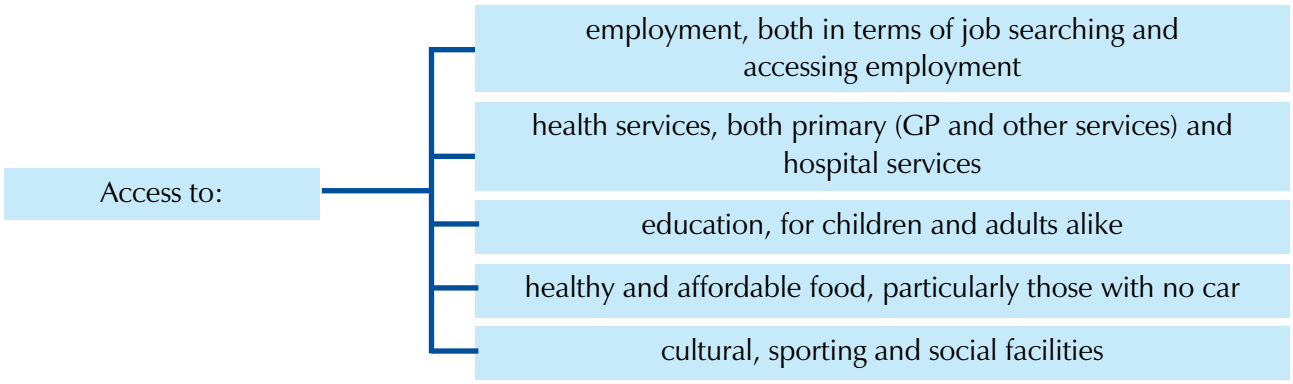


Figure 3.2 Access to key areas from 'Making the Connections'

The DfT "Guidance on Accessibility Planning in Local Transport Plans" provides more guidance on ensuring that service development and delivery consider access issues.

This advice sets out how the accessibility problems faced by people from disadvantaged groups and areas can be identified and addressed through local transport plans (LTPs) and local authorities other functions, and through working with local partners.

A five-stage process for accessibility planning has been recommended, comprising:

- Strategic (e.g. LTP wide) accessibility assessment;
- Local accessibility assessments, focussed on priority areas, groups and issues;
- Option appraisal (including the identification of resources);
- Accessibility action plan development; and
- Monitoring and evaluation.

The involvement of partners, particularly those in the land use planning, health, education and welfare to work sectors has been and will continue to be crucial throughout the accessibility planning process.

3.2 The Accessibility Vision

Torbay Council's vision for accessibility is to provide the best possible links to important services, including services to people, across the district for its resident and visitor populations.

The Council will deliver this vision by:

- Working with partners to implement action plans that target the needs of the community effectively;
- Encouraging sustainable development which reduces the need for travel and enhances the public transport network; and
- Through prioritising schemes which integrate accessibility with the Council's other transport targets

In terms of commitment to accessibility, Torbay Local Plan policy T5 promotes a sustainable land use and transportation strategy, which seeks to achieve a balance between maintaining accessibility, reducing the environmental impact of transport and supporting Torbay's economic regeneration.

The following sections set out the main requirements for access in Torbay, particularly identifying key services in Torbay. The areas of Torbay identified as suffering from poor access to key services are shown in Figure 3.3.

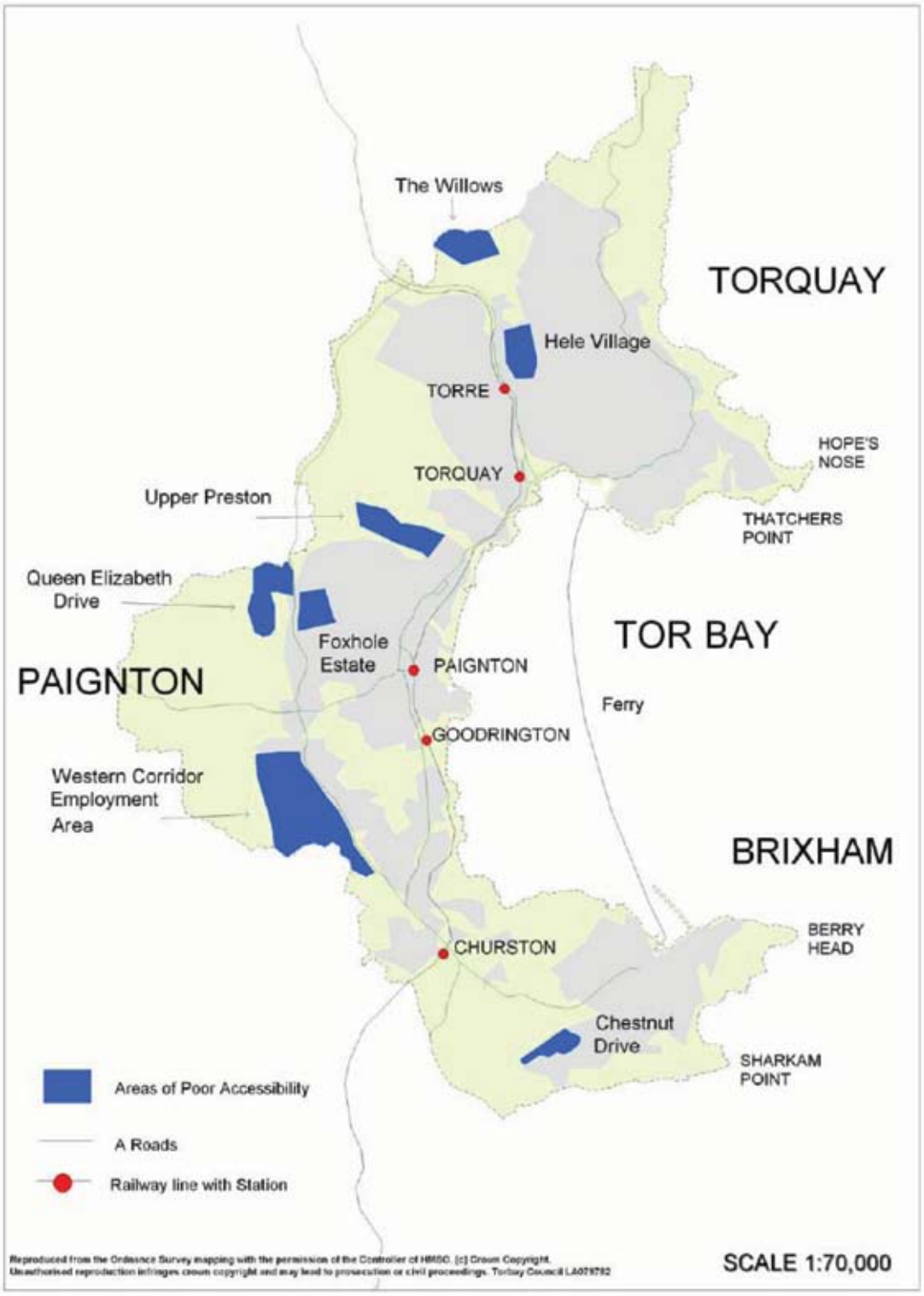


Figure 3.3 Areas of Poor Accessibility

3.2.1 Employment

Employment in Torbay generally takes 3 forms:

- Professional and semi-professional employment mainly concentrated on a relatively small number of employers, including Torbay Council, South Devon College, Torbay Hospital and a couple of smaller research facilities;
- Low paid and often part time employment in the service sector (including shops and tourist facilities), mainly concentrated in the three town centres, but including significant out of town shops; and
- Semi-skilled employment concentrated upon Brixham harbour, the area to the west of Paignton, and a number of smaller employment areas in Torquay and Paignton.

This breakdown of employment leads to a number of issues for Torbay, including the relatively low skill base in Torbay and a significant commuter population. The key issues identified in Torbay relating to access to employment in Torbay include:

- The need to provide 24 hour 7 day per week operation of bus services, to allow workers to reach jobs involving shift work or early starts or late finishes;
- The costs of transport, particularly in relation to transport to interviews and other job search activities;
- The need for longer distance, direct bus services, to mitigate problems relating to the location of many of Torbay's employment sites in the relatively remote western side of Paignton; and
- The need to provide direct links from the most deprived areas of Torbay to employment areas in Paignton.

Torbay Council has formed an employer's forum to provide businesses in Torbay with the opportunity to contribute towards a better understanding of the issues affecting Torbay as well as assisting the Council in appraising the options and developing action plans. This forum also provides employers with the opportunity to take advantage of the Keep Torbay Working initiative, a helping hand from Torbay Council for companies who are considering developing a travel plan.

3.2.2 Regeneration

A key objective of this LTP is to support regeneration schemes in Torbay. This includes improvements at Tweenaways Cross in support of the Long Road South, Brixham Regeneration and Yannons Farm developments, and improvements in Torquay to support the Torquay Harbour, and South Devon College site developments.

These schemes will improve the north/south corridor through the district providing the opportunity for quicker public transport links between all three towns. Brixham and the west side of Paignton in particular will benefit from the increased accessibility afforded by these infrastructure improvements.

3.2.3 Health

Health services in Torbay fall into several broad categories:

- NHS hospital services, provided from three main sites, Torbay Hospital, Paignton Hospital and Brixham Hospital;
- NHS primary healthcare, provided mainly by general practices located throughout Torbay;
- Private healthcare services, provided from a number of private hospitals; and
- A wide range of other healthcare facilities, such as dentists, pharmacies and alternative therapists, provided from mainly town centre based locations.

The two main categories that are of particular concern in accessibility planning, are NHS primary healthcare and NHS hospital services. These are discussed in more detail below.

'We welcome the focus on improving access to a range of services, including health services, for people living in the four areas that are in the top 10% most deprived in the country'

Torbay PCT, 2005

NHS primary healthcare is provided mainly by community based GP practices and access to these services, particularly for the elderly can be a significant issue. Although there are many reasons for these difficulties, Torbay's topography and the lack of these facilities in the more recently built up areas are particularly important.

The following have been identified as target areas for improving access to primary healthcare in Torbay:

- Reducing the need to travel between related services, such as GP practices and pharmacies;
- The lack of such facilities in The Willows (Torquay), Great Parks (Paignton), Upper Preston and Chestnut Drive (Brixham) areas, amongst others; and
- Improvements to non-car access to GP's surgeries and medical centres through public transport, patient transport services and community transport

Through the planning process, Torbay Council has been able to secure more buses to develop and improve the transportation network which will also help to provide greater access to more primary healthcare facilities.

Also the rebuilding of Torbay Hospital offers a major opportunity to re-engineer the network services that can access the site during construction and after completion of the new facility. Torbay Council is heavily involved in preparation and delivery of a new Travel Plan for this site.

3.2.4 Service Changes

Torbay Primary Care Trust will consolidate many primary healthcare services in Paignton through a new medical centre, Clennon Hill, in 2008. This centre will combine general practice, day care, social care and other services into one facility in Paignton. Two general practice facilities will re-locate to this centre.

Torbay Council have assessed this scenario, using the Accession software, against the existing provision of general practice in Paignton and concluded that patient accessibility will not be greatly affected.

There are predicted benefits in terms of sustainability arising from this development. Social care for Paignton is currently provided from a centre in Union Street, Torquay and the transfer of this service to Clennon Hill will reduce journey distances for patients.

As Torbay Primary Care Trust and the South Devon Healthcare Trust continue to develop strategies for new and improved facilities, Torbay Council will assist in evaluating potential approaches in terms of accessibility.

3.2.5 NHS Hospital Services

These services are provided from three locations, Torbay Hospital (South Devon Healthcare Trust), Paignton and Brixham Community Hospitals (Torbay Primary Care Trust). However, the majority of healthcare services are provided from Torbay Hospital to the north of Torquay. Torbay Hospital's catchment area extends over a wide area of south Devon. SDHT operates a fleet of ambulances and a patient transport service for the elderly and mobility impaired which provide essential transport for both day and in-patients. However the capacity of this service is limited, leaving most patients and all visitors to make their own transport arrangements

The following have been identified as target areas for improving access to primary healthcare in Torbay:

- Expanded bus services to assist staff and visitors in reaching the hospital out of hours and at weekends;
- Improving transport links to Torbay Hospital for its large catchment area, particularly from Brixham;
- Increasing the number of direct bus services to Torbay Hospital, avoiding the need for an interchange between services; and
- A reduction in the number of missed appointments at all three hospitals through liaison with the healthcare trusts.

As part of the accessibility indicators the accessibility of each of the three hospitals in Torbay (Torbay Hospital and Paignton and Brixham Community Hospitals) has been assessed. Each indicator value is related to the ability of a household to access a) their nearest hospital, b) Torbay Hospital with a combined walking/public transport trip. 97.0% of households in Torbay were able to access their nearest hospital within 45 minutes. 49.0% of households were able to access Torbay Hospital within 45 minutes.

3.2.6 Education

Education provision in Torbay can be broken down into four categories:

- Mainstream schooling for children aged 3 – 16;
- Full time post-16 schooling, provided by school sixth forms and South Devon College;
- Part time adult education, provided mainly by South Devon College; and
- Educational establishments, offering a mix of courses including language schools, private colleges and vocational courses.

For the purposes of accessibility planning, the latter of these can be disregarded as transport to these establishments is generally provided privately. The other three categories are discussed below.

3.2.6.1 Mainstream schooling

Torbay Council currently has 43 schools (32 Primary, 8 Secondary and 3 Special schools). Although these are widespread throughout Torbay, a number of areas have insufficient provision. These include the Willows (Torquay) and Great Parks (Paignton) areas. Torbay has strong grammar and denominational sectors, which attracts students from a wide catchment. Torbay's 3 special schools also attract students from wide catchments, with most transport being provided by contract vehicles. A significant number of Torbay students travel daily outside the area to take advantage of specialist facilities in, for example, Newton Abbot and Exeter.

An audit of accessibility to education, using the Accession software, showed that the Willows and Great Parks were the least accessible. The audit indicated that 57.4% of primary school aged pupils in the Willows area are within a 10 minute walk of the nearest primary school and 61.0% in the Great Parks area compared to 68% for Torbay as a whole.

The following have been identified as target areas for improving access to mainstream education in Torbay:

- targeting a reduction in car borne trips through a variety of initiatives, including Safer Routes to Schools, school travel plans and improved public transport;
- analysis of the effects of parental choice in education on travel distances to school, particularly in reference to the grammar and denominational schools in Torbay;
- monitoring of the limited capacity of schools in certain areas, for example Brixham Community College.
- Improving transport links between the Willows and Great Parks to the nearest primary schools.

3.2.6.2 Post 16 Education

Post-16 education in Torbay is currently provided through 6 sixth forms and South Devon College. South Devon College has recently relocated from Torquay to a site on the edge of Paignton. As part of this move a fundamental re-assessment of transport needs has been undertaken. Key to this has been the need to set up new and improved bus services to meet likely demands for transport, from both students and staff. As a result the Stagecoach 12 service now operates a double-decker service every 7.5 minutes during peak periods.

As part of the work of the Torbay Post 16 Education Transport Forum a consultants' study was commissioned, specifically targeted at an examination of the main issues relating to access to post 16 education. The key issues identified include:

- Students will often begin a course of study without considering transport, requiring greater levels of information at the time of registration;
- The lack of a sixth form in Brixham, which means Brixham students must travel at least as far as Paignton;
- The need for flexibility in transport provision, both in terms of service provision and ticketing, allowing visits to different establishments or at non-core times of the day;
- The need for out-of-hours access, particularly for vocational courses where evening study may be required;
- The needs of learning disabled students, particularly relating to information provision; and
- The potential impact of learning contracts, which may lead to the need for flexible transport during the day, allowing students to travel between sites.

A significant part of the decision to continue with education past the age of 16 is the location of a suitable establishment within a reasonable travel distance. If access to Post 16 Education is difficult, potential students may defer or leave courses early. This has potential implications for the skills base of the district.

Drawing on the consultant's study and the relocation of the South Devon College, the following have been identified as target areas for improving access to Post 16 education in Torbay:

- increased flexibility in travel arrangements for students through schemes such as car sharing, moped/scooter (Wheels to Work) lease schemes and improved public transport provision;
- an improved understanding of the demand for Post 16 education in terms of courses through liaising with the Local Education Authority and the current student population
- new publicity to inform potential students of the options available to them regarding transport to Post 16 education in Torbay

Torbay Council has worked with bus & taxi operators to ensure full accessibility for all to the new South Devon College site at Vantage Point, Paignton and in so doing have been able through a successful Kickstart bid, provide new channels and services to this site Paignton Sports and Community College, Churston Ferrers Grammar School, Torquay Boys & Girls Grammar Schools and at least eight primary schools in Paignton, Torquay and St Marychurch.

A major poster and media campaign with onsite elements at colleges and schools is underway at the end of the 2005/06 financial year encouraging public transport usage and selling value term tickets that cover journeys 24/7 for up to a year on Stagecoach Devon's network and promotes First Day and First Week tickets to young travellers.

3.2.6.3 Lifelong Learning

Adult education, through evening classes, is provided by a number of establishments, including a number of secondary schools. The main establishment offering adult education, however, is South Devon College (SDC). SDC is currently in the process of moving sites, to a new site on the edge of Paignton. As part of this move a fundamental re-assessment of transport needs has been undertaken. Key to this has been the need to set up new and improved bus services to meet likely demands for transport, from both students and staff.

A number of key issues have been identified in relation to access to lifelong learning in Torbay, including:

- The need for out of hours access, particularly for out of town sites, requiring bus services until at least 10 pm;
- The costs of transport for evening courses, where it may be necessary to travel between towns; and
- The likely impact of moving South Devon College to a remote site on the edge of Paignton.

Implementation of a Section 106 Agreement has delivered new infrastructure at the SDC bus interchange as well as clearance of new routes added to the route 66, carrying increasing numbers of students daily.

The Council and Stagecoach Devon have won a joint Kickstart bid of £589,000 which has already delivered the expected 20% increase in passengers for the first year within three weeks. In fact, since February 2006, the new service 12A carries more passengers daily than the original route 12, which is itself one of the most heavily used routes in the UK.

Delivery of a S106 agreement with SDC has greatly improved opportunities to access Post-16 education for both youngsters and adults.

3.2.7 Healthy and Affordable Food

Access to healthy and affordable food is an important issue in Torbay, particularly in the most deprived parts of the area. This problem is accentuated by the peripheral locations of many of these areas. Healthy food can be defined as food, which has not been processed. For the purposes of this work this includes fresh, frozen and tinned fruit and vegetables. Affordable sources of this food can include supermarkets, local greengrocers, markets and co-operatives. A number of initiatives have begun to assist in the provision of healthy food. These include the work of Devon Foodlink, Surestart Torbay and the Torbay PCT. These initiatives are concentrating on three potential sources of food as briefly detailed below:

- Food co-operatives, based in the most deprived areas of Torbay;
- Farmers markets, concentrating on the provision of staple foods at affordable prices; and
- "Grow Your Own" schemes, including the development of allotments in key areas of Torbay.

'We note the reference to access to healthier and affordable food. This is extremely important, particularly for those areas where there are few, or no car owners, poor public transport and difficulty in accessing affordable fresh fruit and vegetables.'

Torbay PCT, 2005

Through the work of these groups the following have been identified as target areas for improving access to health and affordable food in Torbay:

- Targeting new food retail in areas identified as having poor access to health food (Parts of Hele (Torquay), Queen Elizabeth Drive (Paignton), Foxhole estate (Paignton) and Chestnut Drive (Brixham),
- Improving public transport links between residential areas and town centers and supermarkets and
- initiatives aimed at improving access to healthy food include encouraging schools to use locally sourced fresh produce, education for parents in using fresh produce, and schemes to assist in setting up allotments and allotment societies.

3.2.8 Social, Cultural and Sporting Activities

A wide range of facilities are included in this category. The varied nature of these facilities brings its own problems as each has its own characteristics and patterns of travel demand. Examples of the types of facilities that should be included in this category, in Torbay are:

- Libraries and museums;
- Theatres and cinemas;
- Sports facilities, including those located at schools;
- Social clubs and day centres for the elderly and disabled; and
- Public open spaces and parks.

These facilities present a series of different issues for accessibility, as some are open at all times, some are only open for specific periods each day and some only during evenings. In most cases however, demand for transport is likely to be highly variable.

The need for transport to support youth activities has also been raised. The Youth Green Paper[2] highlights the problems accessing transport identified by young people attending sporting and other constructive activities. It is therefore important to ensure that these needs are taken into account when considering accessibility issues in this LTP.

2. www.dfes.gov.uk/publictions/youth

The following key issues relating to accessibility to these facilities in Torbay have been identified:

- The need to provide out of hours access, often late into the evening;
- Disabled access for the elderly and mobility impaired will often be required, leading to a need for more widely available community transport; and
- The need to provide sustainable access to all locations incorporated where possible.

3.2.9 Visitors to the Area

The large number of visitors to Torbay presents a number of additional problems and requirements that need to be met. Key amongst these is the need to provide high quality links to the rest of Devon and beyond. As stated elsewhere these links are relatively poor and exacerbate Torbay's peripheral location. The key issues and opportunities for each mode of access are discussed below.

One of the key opportunities for improving accessibility in Torbay is the provision of improved information on transport services. There are three occasions when improved information could be a significant benefit. These deal with the three stages of a visit and are discussed below.

3.2.9.1 Access to Torbay from outside

The key issues relating to accessibility to Torbay include:

- Road access to Torbay is constrained by the congested and sub-standard A380. This forms the main link to the trunk road network. It is considered that this link is a significant deterrent for both businesses and tourists to visit Torbay;
- Rail services to Torbay, particularly during the winter, offer only a very limited service. Other than a clock face frequency local service, the Greater Western franchise proposes two London services, in addition to the existing Cross Country service to Birmingham;
- Torbay's bus links are relatively good. Regular services to Newton Abbot, Teignmouth, Totnes, Plymouth and Exeter offer a good alternative to rail services. In addition, Torbay benefits from a regular service from National Express. The next stage of improvements to these services must be the provision of step-free access, improving access for the elderly and disabled;
- Torbay is an integral part of the National Cycle Network (NCN). The main link through South Devon runs through Torquay, Paignton and Brixham and will be completed within the period of the Second Local Transport Plan.

3.2.9.2 Information provision

A lack of information can often be a bigger deterrent to travel, or to the use of a particular mode of transport, than the transport itself. Key to improving accessibility is improving people's understanding of the travel options available to them. This requires improved information on all modes of transport, highlighting the best or better options for a particular journey, the costs of each option and the constraints on each mode such as areas of congestion, or missing links. Good information provision can be broken down into three areas. These are discussed below:

- Providing people with good information before they leave home is a key element in encouraging the use of non-car modes. Providing information with travel bookings, hotel information or tourist attraction leaflets is an important aspect of the accessibility strategy;
- Improving the information provided to people as they travel is also important. Enabling people to change route or mode to avoid congestion or delays, or to choose an alternative mode based upon more detailed information closer to their destination, will encourage more efficient use of the transport network. Improving variable message signing, broadcast announcements and in vehicle announcements is another key element of the strategy;
- Whilst people are in Torbay, it is possible to influence mode choice through provision of improved information. Improving the information provided by tourist attractions, hotels and other accommodation and transport operators will encourage the use of non-car modes for what are often short trips.

Torbay Council publishes twice each year their Getting Around Torbay Guide – Torbay's Public Transport Guide, this is available at a wide range of outlets and is handed personally to rail travellers on their way into Torbay on the key summer Saturday trains. Many hotels now stock the publication and a new awareness campaign is planned for April/May 2006 to encourage public transport use by visitors whilst in the Bay.

3.3 Access for the Disabled

3.3.1 General Principles

In identifying an appropriate strategy for providing high quality access for the disabled, it is important to recognise the varied requirements of people with different disabilities. Therefore within the overall strategy developed for disabled access, sub-strategies have been developed for each of the categories discussed below.

The overall strategy has however, been developed in line with the broad principles of Torbay Council's Equality and Inclusion Policy[3] , namely that:

- Everyone has the right to be included;
- Everyone has the right to be treated fairly; and
- Everyone has the right of equality of access.

3. www.torbay.gov.uk/equalityinclusionpolicyscheme2004.pdf

These principles are reflected across a wide range of Council policies, including those on information provision, access to services and employment. A significant aspect of the transport strategy is the aim of encouraging the use of public transport by as many disabled people as possible as an alternative to private transport.

3.3.2 Learning Disabilities

Through its Learning Disabilities Forum, Torbay Council has a good working relationship with groups representing those with learning disabilities. The strategy adopted for this LTP is based upon a series of workshops held with learning disabled people, specifically to discuss their needs and problems. A wide range of issues have been raised through these workshops, including:

- The need to provide information in different formats that can be easily understood;
- The need for specific training for public transport operators, particularly drivers, on how to serve learning disabled people; and
- The need for training learning disabled people on how to use transport.

A further aspect of the work of this forum is to assist the carers of learning disabled people. This provides an additional insight into some of the problems met by these people.

Since the first workshop one of the major steps forward has been the production of a video, jointly by Torbay Council and Stagecoach Devon, highlighting some of the issues raised by learning disabled people.

3.3.3 Mobility Impaired

The term 'mobility impaired' covers a wide range of people and at its widest can include:

- Physically disabled people;
- Elderly people with restricted mobility;
- Parents with pushchairs; and
- Those with heavy luggage.

Although these are very different groups, their needs are generally similar. This is true, even though the impairment for the latter categories is only temporary. Through the work of the Torbay Environment Access Forum, ongoing consultation with mobility impaired groups is maintained. The work of this forum has highlighted the main requirements of mobility impaired people as:

- level access to all areas;
- sufficient space to manoeuvre for wheelchairs, electric scooters, or pushchairs; and
- specific information showing accessible routes and services.

As part of the programme of meeting the needs of mobility impaired people, the existing Shopmobility facilities will be reviewed and improved as appropriate.

3.3.4 Sensory Impaired

Torbay Council is committed to the provision of services and information in ways that can be utilised by those with sensory impairment. These groups include the sight impaired and hearing impaired. Torbay Council regularly liaises with both local and national groups representing these people. From this consultation, the following issues have been highlighted:

- Improving signing and information provision in formats that can be easily read by those who are sight impaired;
- Making public service vehicles, car parks and walking routes easy to use and free of danger for all people; and
- Providing training to transport operators, drivers and other road users, on how to assist sensory impaired people.

3.3.5 Improving Mobility through Highway Maintenance

As part of the Council's maintenance scheme, it is Council policy to upgrade all crossing points with facilities for the disabled as a matter of course. This ensures that accessibility is improved for those with mobility issues, as well as compliance with the Disability Discrimination Act 1995.

3.4 Partners In The Process

3.4.1 Jobcentre Plus

Jobcentre Plus is the agency responsible for providing integrated work and benefits services. Operating from offices in Brixham, Paignton and Torquay, Jobcentre Plus is responsible for dealing with benefits claimants, providing advice and support and assist in providing training to jobseekers. As such, the agency has a key role in reducing deprivation in Torbay as the main link between jobseekers, employment and benefits.

As part of its programme of support to jobseekers, Jobcentre Plus is able to provide financial support towards the costs of transport. Clearly there is an opportunity here to ensure that there are a number of transport options available to those wishing to seek employment in Torbay.

3.4.2 South West Regional Development Agency (SWRDA)

A number of Torbay's main employment generation sites are being developed in conjunction with the SWRDA, particularly during the project development process, to ensure the sustainability of developments. This joint working includes reviewing the transport and access requirements for each site, advising on development mix and incorporating the needs of each development in other transport policies. Examples of this joint working include:

- Advising on the development of transportation assessments, to ensure that developments can be accessed properly via the infrastructure provided;
- Extending residents' parking zones, to meet the needs of development sites;
- Negotiating with bus operators, to secure service enhancements to serve particular sites;
- Programming maintenance and upgrade works, to support major developments; and
- Assisting in the development of travel plans, to ensure that they are robust and realistic.

3.4.3 Connexions

Connexions are the Government agency responsible for providing advice and assistance to people between the ages of 13 and 19. This advice and assistance includes education and careers advice, personal and family counselling and help with benefits. A key element of the work of Connexions is the Connexions Card, a secure smartcard, which allows young people to collect reward points for learning, work-based training and voluntary activities. Future migration of this information may occur onto an ITSO approved smartcard in the future and Torbay Council will ensure that these opportunities are explored.

3.4.4 Torbay Primary Care Trust

Torbay Primary Care Trust is responsible for the planning and delivery of primary health services in Torbay. This includes provision of GP's, dentists and pharmacies. The PCT and Torbay Council have formed a joint agency to deal with social care which aims to provide a new focus for health improvement, building upon past successes.

The PCT's Strategic Service Development Plan 2004-2014[4] outlines a number of Primary Care Trust priorities for investment in Torbay's healthcare. These include:

- Replacement of Brixham Hospital and Clinic. There is a recognised need to improve the healthcare infrastructure of the South Devon Hospital which serves the Torbay area and a wider catchment beyond. The redevelopment of the existing site is required to provide intermediate care, improved waiting times and potential to meet anticipated demands of new technology. The hospital has planning permission for redevelopment of a large proportion of the existing site to meet these changing demands.
- Reconfiguration of Fairweather Green at Paignton Hospital as an intermediate care facility
- The development of an Integrated Care Facility in both Torquay and Paignton. These sites are designed to provide a one-stop shop for a range of health services addressing the problems of physical separation of related facilities. It also allows rationalisation of existing smaller sites.

These developments have a number of implications for transport. In particular, it is clear that all of these developments will increase the demand for transport as facilities are concentrated in fewer locations, or expanded to treat more patients. Torbay Council is working closely with the developers of these schemes to minimise additional transport demands through improvements to bus services, linking developments to new park and ride facilities, and identifying sustainable locations for facilities.

4. www.torbay-pct.nhs.uk:8080/torbay/classes/06-ourservices/torbay10yrsbp.pdf

3.4.5 Torbay Children's Services

Torbay Children's Services is active in supporting a number of initiatives related to improving access to schools and encouraging sustainable transport. These include:

- Encouraging the implementation of school travel plans;
- Running the Healthy Schools programme;
- Working with public transport operators to improve services to schools, and improve student behaviour;
- Reviewing education transport provision to encourage greater use of public transport and less use of contract transport;
- Working with schools and others to vary school start times in congested areas; and
- Applying quality standards for education transport, such as seatbelt provision, disabled accessibility and driver training and accreditation.

Close work with Torbay Council Children's Services has enabled excellent communications to be developed with the schools. This allows positive work to be done with travel plans and other campaigns, such as Walk to School week.

3.4.6 South Devon College

SDC is the main provider of post 16 education in Torbay. This further education college has 11,000 students, of which around 4,000 are full time. The College itself moved to a new site at Long Road, Paignton in January 2006, from its existing site in Torquay. SDC's catchment includes all of Torbay as well as Torbay's hinterland, which includes Newton Abbot, Teignmouth, Ashburton and Totnes amongst others.

3.4.7 Torbay Cultural Partnership

The Torbay Cultural Partnership was set up to develop and deliver the Torbay Cultural Strategy[5] . Led by the Torbay Cultural Ambassador, the partnership includes both the public and private sectors. The overall aim of the partnership is:

"To create a more vibrant and diverse mix of cultural activities in Torbay's outstanding location which are recognised, valued and taken up by local people and visitors alike".

The partnership is also responsible for a number of subsidiary strategies, relating to the Cultural Strategy, which is shown in Figure 3.4 overleaf.

5. www.torbay.gov.uk

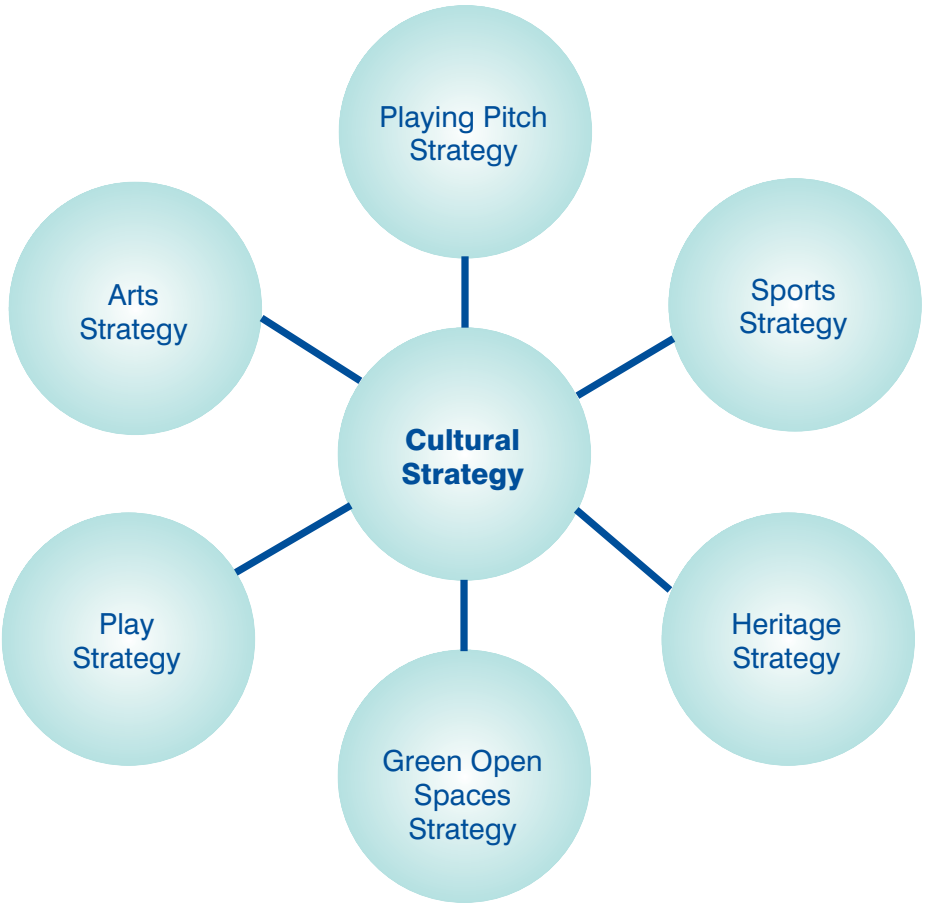


Figure 3.4 Strategies making up the Cultural Strategy

3.4.8 Community Transport

Under the provisions of Section 22 of the 1985 Transport Act, any community group is able to provide their own bus service. In Torbay, a Community Transport service was run by Torbay Voluntary Services (TVS) for 28 years until December 2001. Decline in passenger usage and increases in operating costs were the main causes of its demise with the result that Torbay Council took over the responsibility for its operation. With an increase in the number of disabled children requiring access to education and health-care services, mounting demands upon this service are beginning to cause operating problems. In common with all such services, operating budgets are insufficient to permit vehicle upgrading with the result that reliance on grant aid and match funding is vital. However, the real costs of this service, per passenger, have fallen since being taken over by the Torbay Council. Notwithstanding, Torbay Council continues to support the service and to seek additional funding streams that will help to maintain and grow the service for the benefit of Torbay.

3.4.8.1 Ring and Ride

The Torbay Ring & Ride service is another branch of the Community Transport provision which offers a vital link for residents of Torbay, at reasonable rates, who have difficulty using conventional transport due to age, disability or display other mobility restrictions. The service operates throughout Torbay and also offers special excursions for those wishing to visit key attractions out side of the Bay. A Ring & Ride leaflet is published defining the areas of operation, set-down and pick-up points and fares. With the recent growth in commercial public transport coverage in Torbay, the service is beginning to experience loss of patronage. However, robust advertising of the service has begun to reverse this trend and with the income generated the capacity to update the vehicle will undoubtedly bring added benefits in service provision.

3.4.9 Shopmobility

The Torbay Shopmobilty has been in operation since 1994, with the opening of the Paignton facility. Following Local Government Review in 1998, Torbay reviewed the operation of Shopmobilty with a view to expanding coverage across the Bay. In 2000, the Torquay facility was launched followed by one in the centre of Brixham in 2001. Despite being staffed by volunteer groups, the service has progressed remarkably well under difficult operating conditions. All three main units are managed by a Management Committee, which meets quarterly. Torbay Shopmobilty provides electric scooters and powered and manual wheelchairs to those persons with limited mobility whether they are residents or visitors to the Bay. The three facilities continue to gain local recognition and praise from the visitors who use the service which has led to the establishment of summer season outstations at the Country Parks of Cockington, Paignton and Berry Head, Brixham. In 2005, Paignton Shopmobility received a small grant from the National Lottery which was used upgrading hire equipment. The Council continues to support Shopmobility through allocated staff time, free rental of premises and grants for new equipment when required. The local performance indicator L2 is a measure of its ongoing performance.

3.5 Summary of Key Issues Identified

3.5.1 Use of Accession

Accession is a bespoke transport planning software application developed by MVA as a commission for the Department for Transport (DfT). The software is designed to assist the accessibility planner in undertaking a mapping- based audit of a locality.

Accession combines a geographical information system facility and a Microsoft Access database repository. A calculation engine is built into the software allowing the calculation of accessibility from origins to destinations using any transport mode or combination of transport modes modelled.

Transport network data can be imported in a variety of formats commonly available to local authorities. The Torbay model has the complete road network for Torbay imported in OSCAR format and complete bus network with full timetable information imported in ATCO CIF format.

Origins are a set of points that represent the start of any journey. The Torbay model has imported origins as output area centroids together with output area boundaries. Output areas were created for the 2001 Census and have a target of 125 resident households. Demographic data of the 2001 Census has been obtained from the Office of National Statistics and this can distributed across the output areas as required.

Destinations are a set of points that represent the end of any journey. Destination sets relate to a particular activity, e.g. education, employment, healthcare, food shopping or leisure.

The results of calculations within Accession can be produced in tabulated formats or as map based output. Accession calculates the journey cost (in terms of time, distance or as a function of both) between each origin and destination. Calculations can distinguish between transport modes and times of day and graphical outputs can display bands of accessibility over mapping of the area in question.

Torbay Council have utilised Accession to undertake a strategic audit of the district and to highlight areas of poor or limited accessibility.

3.5.2 Results of the Accessibility Analysis

The initial key conclusions of the Accession modelling work can be summarised as:

- The proportion of economically active people in Torbay, at 16%, is well below the national average;
- 21% of Torbay residents have a long term limiting illness, 48% of these are aged 65 or over;
- the proportion of households not owning a vehicle, is about 30% and is above with the national average;
- 99% of Torbay residents are able to access a bus service during a weekday AM peak period or a Saturday peak period within 30 minutes on foot; and
- for medical centres, primary schools and local food shops, more than 55% of the population is within a 10 minute walk of its nearest provision.

This modelling work is ongoing, with a final accessibility strategy being due for publication by the end of May 2006.

3.5.3 Missing Links

An important aspect in improving access to key services is the removal of missing links in the transport network. These include:

- sections of road without footways or which are difficult to cross due to the lack of crossing facilities;
- areas not served at all by bus services, or not served at certain times of the day;
- sections of the network which are difficult for cyclists, either through lack of facilities, poor surfacing or adverse traffic conditions; and
- areas without parking facilities.

A key part of providing good levels of access to services, is to fill these gaps. The first stage has been to identify the scale of such problems.

3.5.3.1 Bus Services

The first area considered was bus services, as these are often the easiest gaps to fill. The following missing links were identified:

- Upper Preston – AM Peak, evenings and Sundays;
- Livermead – AM Peak, evenings and Sundays;
- Meadfoot and the Warberries – early mornings, evenings and Sundays;
- Ellacombe – early mornings and evenings;
- Western Corridor – AM Peak, evenings and weekends; and
- Great Parks, Colley End – evenings and Sundays.

As a first stage in providing services to these areas, a number of service enhancements have been planned, although the installation of the Service 12A to South Devon College has already helped to improve accessibility along the Western Corridor. An opportunity has been identified to enhance services in Preston Down, Ellacombe, Meadfoot and the Warberries with additional early morning services. Further opportunities may arise to deliver improvements to areas with missing links through the planning process.

3.5.4 Accessibility and Flooding

The effects of localised flooding in Torbay, particularly along Torquay seafront, have lead to severe congestion and the closure of the heavily used 12/12A bus route. It has therefore been necessary to implement a flood diversion route to be put in place whenever flooding poses a danger to all users of the highway network.

This involved partnership working with the bus operators to agree that this route would stop at all bus stops located along the diverted route, despite this not being advertised. This ensures that accessibility to services and facilities remains as constant as possible in these periods of extreme weather.

3.5.4.1 Pedestrian Infrastructure

In determining the infrastructure required to make pedestrian access to services better, a full list is difficult to produce. This is due to the potential length of the list and the difficulties in defining precise requirements. However, it is important to develop a method for identifying priorities for investment. For the purposes of developing a programme for this LTP, the following hierarchy has been used:

- Those areas close to schools are the highest priority, linking in with the Council's programmes for road safety and school travel plans;
- Enhanced crossing facilities at locations with accident concerns are the next highest priority, in line with Council targets on casualty reduction;
- Those requirements which are on existing pedestrian desire lines are also high priority, linking to the Council aim of encouraging walking; and
- Infrastructure, which will support the area's tourist industry is also a high priority, in line with the need to support Torbay's main industry.

3.5.4.2 Public Rights of Way

Torbay Council is currently developing its Public Rights of Way (PROW) improvement plan and is due to publish the draft copy for consultation in April 2006. To date the Council has been working closely with the Torbay Local Access Forum and has carried out significant consultation in order to identify how the PROW network both meets the present and likely future needs of the public.

The draft PROW improvement plan has been developed to contribute towards the priorities set out with the Torbay Community Plan and works under the policies set out within the Torbay Local Plan, Torbay Tourism Strategy and the Area of Outstanding Natural Beauty Strategy. The statement of action is also being developed to contribute towards the Council's approved walking strategy and will be integrated into the aims and objectives identified in the LTP 2. The vision of the PROW improvement plan is therefore based on the following themes:

- Enhances health, well-being and enjoyment of life, though the use of public paths for outdoor exercise and appreciation of the environment.
- Increases economic prosperity, by attracting more visitors to the countryside and the area of Torbay.
- Improves sustainable travel, by providing traffic free safe routes to urban and rural facilities.
- Provides access for all, by being available for the less mobile and those with disabilities.

Within the draft PROW improvement plan the following policies have been developed:

- Maintain and enhance the condition of the public rights of way network.
- Improve the perceived and actual safety of the public rights of way network for all users.
- Increase the awareness of the PROW network to both residents and visitors and enhance opportunities for recreation and tourism.
- Enhance accessibility of the PROW network to as great a proportion of the population as necessary
- Develop the public rights of way network to support social inclusion.
- Develop the PROW network to support opportunities for enhancing the health of residents and visitors.
- Improve the PROW network in a manner that protects and enhances the environment including opportunities for sustainable travel.
- Maintain and update the definitive map and statement of the PROW and other information to ensure availability of accurate information and publicity to the public.

The draft PROW improvement plan is still being developed but the statement of action will include the following actions and will commence in 2006. Many of the improvements will be funded through the LTP although it is hoped that other funding will be identified through partnership working. The key actions for the next five years are outlined below.

3.5.4.3 Improved maintenance of the PROW network

In order to increase the use of PROW for both recreational purposes and as a means of travel Torbay Council proposes to improve the maintenance of the network over the next three years by introducing an improved inspection regime and developing a maintenance code of practice. Torbay Council also proposes to introduce a cyclic maintenance programme.

It is also proposed that some linking footpaths in urban areas will be upgraded to a bituminous surface in order to encourage their use. The Council also proposes to survey the lighting levels to all urban paths and improve lighting levels where appropriate.

3.5.4.4 Improved signing

Torbay Council proposes to continue to implement its PROW signing review and extend the use of way markers to some routes.

3.5.4.5 Improved access

Over the next two years stiles will be replaced with kissing gates where appropriate and four disabled routes will be introduced over the next six years.

3.5.4.6 Routes for horse riding and cycling

Torbay council has carried out an assessment of the Footpaths which could be upgraded to Bridleways. The feasibility and user demand for upgrading of these Footpaths to Bridleways will be investigated, as referred to in Section 5.4.3.

3.5.4.7 Routes for walking and improve publicity

In close liaison with the Council's Tourism department and the Torbay Coast and Countryside Trust the Council propose to develop and publicise six circular walks and ten linear walks. The walks will be publicised through leaflets and on the Councils' website and it is planned there will be information boards on site and way markers. The linear routes will be connected to public transport links. These routes will be phased in over the next ten years.

3.5.4.8 Links to the South West Coast Path

It is proposed that new paths will be created to the South West Coast path from the highway network.

3.5.4.9 Update the Definitive Map

Within the next ten year the Council will review and update its definitive map and statement. The Council also propose to have the map available on the website.

3.5.4.10 Taxi Facilities

Taxis form an integral part of the transport opportunities within Torbay, with 162 Hackney Carriages supported by 7 seasonal vehicles (May – Sept) and 272 licensed Private Hire vehicles offering comprehensive 24/7 coverage of the authorities area and beyond.

The key journeys required of these vehicles are for:

- Private one way or two way trips by individuals or small groups to access key facilities, for leisure or personal journeys
- Trips to hospitals or local healthcare facilities
- Journeys to schools and colleges
- To access other travel modes either locally such as buses or express coaches and trains for regional or long distance journeys and these may themselves link either directly or otherwise through to airports or seaports for international trips

Taxis and Private Hire vehicles also provide accessibility to areas where there may be no other reasonable or timely alternative to support employment and tourism as an on call type of service.

Accessibility is being enhanced with more vehicles having wheelchair and other facilities for the less able with the council's Overview and Scrutiny Committee in the process of updating the minimum standards required and number of vehicles required in the total fleet by type.

A draft Taxi Strategy is being prepared and will be put to public consultation in April 2006 prior to publication as an adopted Torbay Council Strategy in Summer 2006.

3.5.4.11 Parking Facilities

Although Torbay is generally well served by parking facilities, these do not always provide the most appropriate type of parking. Gaps in provision can include the lack of blue badge spaces, insufficient short stay parking, or poor access to parking facilities. Whilst expanding the total stock of parking is considered to be inappropriate, matching parking provision to identified needs is an important aspect of the Council's policy. A number of aspects of parking are under constant review, including:

- Providing additional blue badge parking, where necessary, usually at the expense of general parking;
- Reviewing the split of off-street parking spaces between long and short stay, to allow for short duration parking at the expense of commuter parking;
- Improving access to off-street car parks, particularly by re-routing traffic away from town centres, improving walk links and introducing variable message signing to manage parking demand.

3.5.4.12 Ferry Services

Making use of the natural transport corridor provided by the waters of Torbay is an important aspect of the long term plans for transport in the area. Although some services already exist, these have a number of problems related to:

- Old vessels which do not meet modern standards for disabled access and cannot operate in poor weather;
- Difficult boarding due to the poor nature of existing harbour facilities; and
- A lack of integration with other modes, due to the location of landing facilities away from bus stops.

However, ferry services potentially offer the fastest journey times between Torquay and Brixham town centres, around 20 minutes compared to a bus journey of 40 minutes and a car journey of around 30 minutes. The long term transport strategy for Torbay therefore highlights this mode of transport. Development of these services will, however, require substantial investment in conjunction with the private sector.

3.5.4.13 Coach Services

Torbay Council is currently producing a comprehensive coach strategy that will be consulted upon and delivered within the first year of this LTP. Assistance from operators, the Confederation of Passenger Transport and other interested parties has been sought including the leisure and tourism industries together with council officers representing Children's and Adult Services including the Torbay Primary Care Trust. The primary objective is to ensure that coaches form an integral part of our transport network and are able to operate effectively and safely on our highway network whilst delivering reasonably priced travel into and within Torbay.

3.6 Strategy Objectives and Options

3.6.1 Aims and Objectives

The overall LTP objectives for accessibility are:

Ensure good access to all key services and facilities from all parts of Torbay

Fully consider access when identifying new sites for key services

Maximise the level of access by all modes through the imposition of stringent section 106 and 278 agreements

Ensure that transport is not an impediment for people with disabilities and other disadvantaged groups

Ensure good access to Torbay from outside and provide easily accessible information on travel options to and within Torbay

3.6.1.1 Accessibility or Mobility?

In considering the quality of access to key services, it is important to understand the main aim of the process. There is generally a conflict between strategies which aim to increase mobility and those which aim to reduce greenhouse gas emissions or improve local air quality. In Torbay, where the key to the local tourism industry and other local businesses is the quality of the environment, it is clear that the main aim must be to provide access to key services, whilst minimising the environmental impact of additional travel.

It is considered that the main emphasis for Torbay should be on improving accessibility, rather than mobility. However, doing this will involve a mix of measures, some of which will require the provision of transport to centralised facilities, such as Torbay Hospital, and some of which may require the relocation of key services, closer to the people who use them.

3.6.1.2 Reducing the Need to Travel

The key to providing improved accessibility is to bring the services closer to the people who need them, or to improve links by sustainable modes. This needs to be addressed for a number of reasons:

- Around 30% of Torbay's residents do not have access to a car;
- Further increases in traffic levels will exacerbate air quality problems and increase congestion;
- Improving conditions for car users whilst not improving other modes will make the car relatively more attractive and further dent the viability of local public transport services, reducing accessibility for non-car users; and
- Reducing the penetration of cars into shopping and residential areas is important for the Council to meet its objectives on casualty reduction, air pollution, congestion and environmental issues.

The Council will ensure that new developments are located close to residential areas and will encourage service providers to explore opportunities to take services to the people requiring them.

3.6.1.3 Crime and the Fear of Crime

Levels of crime in Torbay are generally below the national average; however the fear of crime and concerns for personal safety remain high. This is particularly true for women, the young and the elderly. Increasing access to key services for both day and night time activities by non-car modes therefore requires the fears of these groups to be mitigated, to encourage the use of buses, walking and cycling, where personal security risks are perceived to be greatest.

Tackling these issues is therefore a key element in the strategy for improving access. This requires a number of important issues to be addressed, including:

- Providing increased security for bus users, both on bus and at bus stops, through CCTV, better lighting, and more staff;
- Reducing anti-social behaviour, particularly around bus stops and on residential streets;
- Improving the perception and reality of personal security risks when walking or cycling, through improved street layouts, better lighting, better design of open spaces, CCTV and through the planning process;
- Improving access for the mobility impaired, through improved walkways, easier access vehicles, better signing and improved staff training; and
- Better publicity and education in respect of the actual minimal risks related to non-car modes, in comparison with the overlooked risks associated with car travel.
- Improvement of existing Public Rights of Way, linking footpaths by better maintenance, provision of hard surfaces where non exists and installation of lighting
- Careful design of footpaths and access ways to encourage people to use them without fear of crime

3.6.1.4 Information Provision

The lack of high quality information can be a significant impediment to travel. This is shown by the substantial investment made in information sources in recent years. Good information is needed at all stages of a journey, at home, at the bus stop or rail station, on vehicle and on arrival. However, different groups will have different information requirements, particularly in terms of the media used

Further improving the quality of information provided to people will require the following key actions:

- Continuing to improve the sources of information that can be accessed from home, including Traveline and Transport Direct, and information that can be accessed via mobile phone;
- Improving bus stop information, through the provision of stop-specific information, information that can be read by all, and real-time information;
- Improving the information provided by trip attractors, such as schools, tourist attractions, employers and shops;
- Initiating a programme of providing personalised travel planning advice to residents of Torbay, highlighting travel options and costs; and
- Improving signing for both car users and public transport users, through the use of variable message signing, in vehicle screens, improved signing and broadcast media announcements.

3.6.1.5 Making Bus Services Easier to Use

An important aspect of the consultation undertaken during the development of this LTP was the opportunity provided by Torbay's relatively dense network of bus services. However, it is clear that despite improvements in information provision and bus services, there is a continuing need to make bus services easier to use. This requires easier and more flexible ticketing, better and more accessible information, improved infrastructure, and more reliable bus services. Key elements of both this LTP and Torbay's Bus Strategy (see Annex B) are therefore designed to address many of these issues. Where appropriate these measures are included in the proposed (Statutory) Quality Partnership Agreement, included in Annex C. Proposed measures include:

- Expanding current multi-operator ticketing systems, including rail/bus tickets;
- Improving bus stop infrastructure to improve the perception of personal security;
- Installing raised kerbs at selected bus stops to ease boarding;
- Making minor improvements to the road network to ease the flow of larger vehicles;
- Implementing cashless payment systems, initially for students but eventually to everyone;
- Implementing real-time information systems at all bus stops, to improve the perception of bus services and provide operational efficiencies; and
- Improving the information provided at bus stops, with more user friendly formats.

3.6.1.6 The Impact of Free Local off Peak Bus Travel for the Elderly and Disabled

In its 2005 annual budget, the Government announced the introduction of free local off-peak bus travel for those over 60 or registered disabled. This proposal has a number of implications for accessibility for these groups and for bus services generally:

- Improved perceived access to key services by removing the cost of transport;
- Significant financial implications, as bus operators will need to be compensated for lost revenue. In Torbay, this is expected to cost around £1.4 million, on top of existing concessionary fares payments this will total £1.7 million;
- There is likely to be a substantial increase in off peak travel similar to that seen in Wales, when free bus travel was introduced there. This will require operators to review service capacities on all services; and
- There is likely to be considerable demand for additional services outside current operating hours. In particular, it is expected that enhancements to services during evenings and weekends will be necessary.

To accommodate these issues, Torbay Council has reviewed its bus service network which involved detailed discussions with operators to assess the implications of the scheme. This has resulted in provision being made for introducing additional evening and weekend services and to monitor the need for extra disabled accessible vehicles.

3.6.2 Options

In identifying the programme to be included in this LTP, two broad strategy options have been assessed, moving services closer to residents and providing improved transport for residents to access services. In assessing the relevance of these two strategies it should be understood that they have different impacts in the short and long terms. In particular, changing the locations of service providers is something that is unlikely to be possible in the short term. With this in mind, the proposed LTP strategy includes a mix of transport improvements in the short term with proposals for reviewing the locations of service providers in the medium term.

3.6.2.1 Locational Changes

Within Torbay there are several ongoing initiatives relating to the location of essential services. These include school places reviews, development of Integrated Care Facilities, development of employment areas, and amalgamation of health and social services facilities. It is important that access is fully considered when locations for these facilities are being identified. Torbay Council is working closely with developers to ensure that the new locations for these facilities are consistent with both the Local Plan and Local Transport Plan.

However, this must be seen as a medium to long term solution to the problem of poor access. In order to ensure that services are located appropriately, the need for high levels of access will be stressed in the upcoming Local Development Framework (LDF).

3.6.2.2 Providing More Transport

In the short term, it is unlikely that the locations of many key services can be changed to provide better access. Therefore, in order to improve access to key services, it is likely to be necessary to provide additional transport services. These services will be a mix of public bus services, patient transport, improved walking routes and more focused information.

As part of its ongoing review of bus services, Torbay Council will identify the need for service enhancements to provide access to key services. These enhancements will build on upcoming service improvements, which will transform accessibility to the western corridor.

In addition to the provision of new or improved bus services, Torbay Council will review the opportunities for other forms of transport that could improve access. These will include community transport, car clubs, car pooling schemes, shared taxis, and demand-responsive transport services. The potential for these modes will be assessed particularly where traditional bus services are not considered to be appropriate.

Continuing cross boundary and operator partnership working is key to improving public transport into and within Torbay, such as Quality Partnership Agreement and Schemes including provision of red routes to assist in bus punctuality, successfully installing the 2005 Kickstart for the new service 12A, regular operator monitoring and positive forward planning meetings forming a planned framework for the future

3.7 A Five Year Plan for Improving Accessibility

3.7.1 Programme of Investments

The following actions have been identified to deliver improved access to key services:

National Cycle Network (£400,000) (Torbay Local Plan Policy T3) – Torbay Council is committed to the completion of the NCN in the area. This scheme would enable completion of the NCN during the LTP period. This would have a significant effect on accessibility, to, from and within Torbay, opening up opportunities for commuter and leisure cycling. The NCN would form the backbone of the Torbay Cycle Network, with links being provided to town centres, employment areas and tourist facilities. This would assist in delivering a doubling of cycle usage by 2011 (Indicator LTP3) and have a positive impact on the local economy, building on the links already established with the tourism sector.

South West Public Transport Information (£125,000) – As part of the South West PTI consortium, Torbay Council is committed to continuing to provide high quality public transport information. This scheme would ensure future funding for the consortium, towards development and administration costs. This will assist in delivering a 23% increase in bus patronage, achieving a 75% satisfaction rating, and a 400% increase in information provision (Indicators BVPI102, BVPI104, L11).

Public Transport Infrastructure (£500,000) – This budget would be maintained to allow the Council to respond to both planned and ad hoc requests for improvements to the infrastructure used by bus services. During the first LTP period, this budget was partly used to fund minor highway realignments to accommodate larger vehicles, install bus stop clearways, and purchase new bus shelters. These schemes will assist in delivering a 23% increase in bus patronage, a 60% improvement in bus service reliability and a 50% improvement in the quality of interchanges (Indicators BVPI102, LTP5, L12).

Highway Signage (£150,000) – This scheme would continue the work done in the first LTP period to rationalise highway and pedestrian signing and to improve the routing of traffic away from unsuitable routes. This will help to reduce the amount of vehicle kilometres on the network (Indicator LTP2).

Brixham Town Centre (£500,000) (Torbay Local Plan Policy T6) – This scheme would fund the enhancement of the central area of Brixham, in support of the Brixham Regeneration Scheme. Balancing the needs of users of the town centre will be critical, as the scheme would involve improvements to pedestrian and bus stop infrastructure as well as removing conflicts between different modes. This scheme will help to reduce air pollution in the area, improve accessibility and increase footfall in shopping streets (Indicators LTP1, LTP8, L5, L1).

New bus services to Western Corridor (revenue only) (Torbay Local Plan Policy T22) – Torbay's Western Corridor of Torbay, along the ring road, serves the major concentration of existing and proposed employment sites. This scheme would enable the Council to continue its work to improve bus services between this area and the major residential areas in Torquay and Paignton. Priority would be given to providing direct links between Torbay's most deprived areas and the Western Corridor. These services will assist in delivering a 23% increase in bus patronage, improvements in accessibility, a 5% decrease in the number of students being driven to school, and a 5% reduction in the number of people driving to work (Indicators BVPI102, LTP1, LTP4 and L7).

Reduce contract buses for school travel (revenue only) – currently the majority of Torbay schoolchildren who use buses are transported on contract bus services. However, increased contract prices and a desire to provide more flexible transport for schoolchildren, mean that moving these children onto public bus services is necessary. This will have the added benefit of improving the viability of public bus services as additional revenue will accrue. This will help to deliver a 23% increase in bus service

patronage, the maintenance of current costs of supported services and a 5% reduction in the number of students being driven to school (Indicators BVPI102, LTP4 and L14).

Ticketing Initiatives (£100,000) – This scheme would allow Torbay Council to implement a range of schemes to improve ticketing facilities, including bus/rail ticketing, introduction of mutli-operator tickets and flexible tickets for students. This would improve access to public transport for many users, by reducing costs, enabling pre-payment and simplifying multi-operator journeys. This scheme will assist in delivering a 23% increase in bus service patronage, improving accessibility, a 5% reduction in the number of people driving to work, and a 5% reduction in the number of students being driven to school (Indicators BVPI102, LTP1, LTP4, L7).

Evening bus services (revenue only) – Torbay Council has identified the potential for the introduction of additional bus services during evenings, particularly to improve access to further education, cultural and sporting facilities, and to shift based employment. This scheme would enable Torbay Council to fund these services, on a Kickstart basis, to identify viable service options. These services will help to deliver a 23% increase in bus patronage, improvements in accessibility, and a 5% reduction in the number of people driving to work (Indicators BVPI102, LTP1 and L7).

Rail/bus Integration (£100,000) – The need has been identified through a series of Rail Summits in Torbay, for funding for a wide range of minor schemes aimed at improving the integration between local bus and rail services. This scheme would allow Torbay Council to provide match funding for a range of rail industry initiatives, as well as to improve pedestrian and cycle links around rail stations. These improvements would assist in delivering a 23% increase in bus service patronage, a bus service satisfaction rating of 75%, and a 5% reduction in the number of people driving to work (Indicators BVPI102, BVPI104 and L7). Links have been established with station operators in order to deliver additional cycle parking at stations, building on the example of the covered, CCTV equipped stands recently installed at Paignton.

Learning disabled transport packs (£10,000) (Torbay Local Plan Policy T7) – Through its Learning Disabilities Forum Torbay Council has identified significant perceived difficulties for this group when using transport. These include poor information, personal security issues and the need for training. This scheme would enable the Council to produce a wide-ranging pack giving information in accessible formats. The Council would also undertake training and education as part of this programme. This will help to deliver a 23% increase in bus service patronage, and a doubling of community transport users (Indicators BVPI102 and L9).

Infrastructure for the disabled (£50,000) (Torbay Local Plan Policy T7) – Torbay Council has a good record of responding to requests for improved infrastructure to assist the disabled. This includes drop kerbs, increased maintenance and Shopmobility facilities. This budget would enable the Council to continue these programmes, increasing accessibility and social inclusion. This would enable a doubling of the number of Shopmobility users, a doubling of the number of community transport users and a 50% increase in the number of blue badge parking spaces (Indicators L2, L3, L9 and L15)

Smart cards (£500,000) – Smart cards are considered to be a significant step forward in terms of reducing delays at bus stops and increasing accessibility for vulnerable groups. This scheme would fund the development of a scheme suitable for implementation in Torbay, including the initial phases of a back office operation. The scheme will initially be targeted at students and job seekers. This scheme would support a 23% increase in bus service patronage, a 60% improvement in bus service reliability, a 5% reduction in the number of children being driven to school, and the maintenance of the costs of supported bus services (Indicators BVPI102, LTP5, LTP4 and L14).

3.7.2 Value For Money Assessment

The proposed programme for the LTP period will have major benefits:

- Filling identified gaps in the transport system;
- Making the transport network easier to use for disabled people;
- Encouraging the use of sustainable modes of transport such as cycling, walking and buses;
- Improving information provision; and
- Making the transport network easier to use with new methods of payment and better information.

In identifying the value for money offered by the proposed programme an assessment based upon the relevant NATA sub-objectives of option values, severance and access to the transport system, has been undertaken. These benefits can respectively be described as:

- the benefits of having an additional travel option available for use;
- the benefits of areas not being cut off by transport arteries; and
- the benefits of making access to the transport easier.

Whilst at the time of writing it is possible to identify in general terms the benefits that will accrue from improvements in access to key services, without the results of the detailed accessibility planning exercise, details of the numbers of people who will benefit are difficult to identify. It is expected that it will therefore be possible to update these value for money assessments once that work is complete.

However, general assessments of the benefits that will accrue can be completed as follows.

3.7.2.1 Evening and Weekend Bus Services

One of the significant issues identified with regard to accessibility in Torbay is the lack of public bus services during evenings and weekends. Whilst many of the commercial routes operate at these times, from many areas, services that would connect to these core routes are not available at these times. These areas include Upper Preston, Livermead, Meadfoot and Warberries and parts of Ellacombe.

The lack of these services restricts access to a wide range of key services, including lifelong learning, cultural and sporting facilities. It is estimated that around 20,000 residents do not have a bus service during a weekday evening and 15,000 residents have no bus service at weekends. Although this is relatively small proportion of Torbay's residents, it is clear that the difficulties resulting from these gaps in bus services, impact disproportionately on the elderly, young, poor and disabled, all of whom have limited access to cars. Filling these gaps will have a major impact on reducing social exclusion.

These effects add to the value for money from the LTP, related to option values.

3.7.2.2 Access for the Disabled

Torbay has a particularly high proportion of registered disabled residents, around 21% according to the 2001 Census. Almost 50% of these people are over 65. Although during the first LTP period major progress has been made in improving transport for the disabled, there are still a number of areas where disabled access is poor. This is particularly highlighted in Torbay, which has a high number of users of disabled buggies, which require additional infrastructure, such as wider footways, dropped kerbs and areas for parking.

Continuing to improve the provision of this infrastructure, together with blue badge parking spaces, Shopmobility services and the Torbay Community Bus, will further ease accessibility for around 25,000 of Torbay's residents.

These programmes will add to the value for money from the LTP, particularly related to minimising severance and making transport services easier to use.

3.7.2.3 Encouraging Walking and Cycling

Encouraging the use of these two modes will have significant benefits. Walking and cycling is effectively free and so is available to all without the purchase of expensive equipment, or high operating costs. Providing improved infrastructure to encourage walking and cycling, including new routes and paths, high quality crossing points and better signage, will have an additional effect of reducing severance.

Torbay Council has targeted a doubling of the number of people cycling, and increases the number of people walking by 7%. Figures suggest that already around 22% of people walk to work and 2% cycle, amounting to around 13,000 people. Improved infrastructure provided through the LTP will benefit new and existing users.

3.7.2.4 Improving Information Provision

Improving the information available to those wishing to travel will benefit everybody. This LTP includes measures to improve information provision for car drivers, bus users, pedestrians, and cyclists. Information provision at all stages of a journey will be improved, including providing better information before people travel to inform mode and route choice, information at the beginning of a journey, particularly at bus stops, and improved information en route, allowing travellers to avoid congested areas, find available parking and react to delays and unreliability.

This programme will provide positive effects for all three areas related to access, by improving the information on the mode choice options available for each journey, reducing the effect of severance through improved signing, and by making transport services easier to use. These benefits will accrue to all of Torbay's 130,000 residents.

3.7.2.5 Making Transport Easier to Use

Efforts to make transport easier to use will include improved information as discussed above, and easier ways to pay for transport. A number of methods will be used including improving the marketing and take up of pre-paid season tickets, improving roadside ticket sales, and the use of cashless payment mechanisms such as smart cards.

The effect of these measures will be to improve travel options, by reducing the marginal cost of travel and by making transport more flexible, particularly for students and those using season tickets, and by making access to the transport system easier. These measures are likely to mostly benefit existing and future bus service users, which are expected to amount to around 8 million per annum, although synergies with other transport such as parking will be investigated.

3.7.3 Revenue Funding

Torbay Council funds both maintenance and repair of shelters it currently owns and this funding was increased in 2005/06 by nearly 300% to bring its stock into better condition, all shelters are checked at least annually and comprehensive reports are maintained for action.

Additionally more and more shelters are being replaced through either LTP capital or more often provision of advertising shelters provided by Fernbank Advertising at no cost to the council.

Bus service support has seen its revenue budget expanded over the last three years and there this will be supported with monies from retailers who have until now provided free buses to their sites. With the advent of free concessionary fares for the over 60's and less able some of their budget is being used by Torbay Council to expand a small number of current and possibly one new route to serve areas that need connecting to the network and still give access to key retail sites.

Community transport continues to be supported and controlled by Torbay Council with free travel on our Ring & Ride services from 1st April 2006 with the introduction of free concessionary fares.

Torbay Council is a member of the Devonwide concessionary fares partnership and has registered a scheme with government that meets the legal criteria and offers travel throughout the old county of Devon and some limited cross border services into Plymouth, Cornwall, Somerset and Dorset

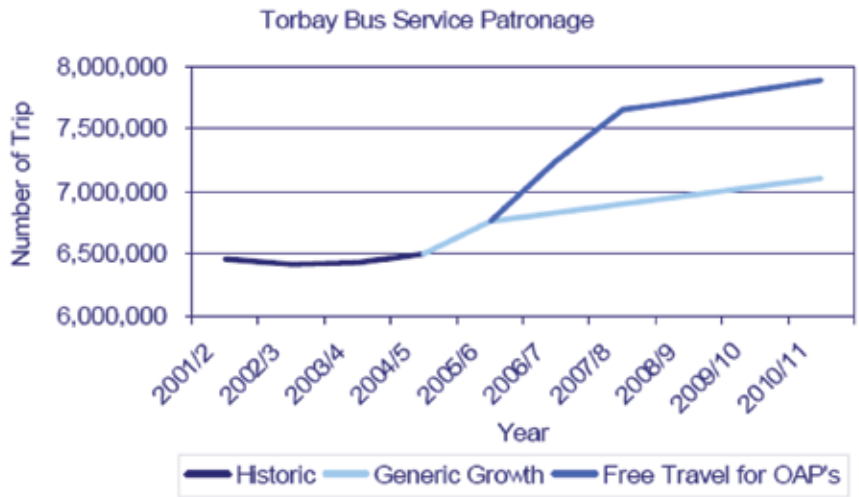
3.8 Accessibility Targets

3.8.1 Key Outcome Indicators

The indicators presented below are those which are key outcome based and directly measure the achievement of the objectives of this LTP. The key outcome indicators for accessibility are:

- BVPI 102 – Public Transport Patronage
- BVPI 104 – Satisfaction with Bus Services
- BVPI 187 – Footway Condition

BVPI102 – Public Transport Patronage



Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
6,430,000 Passengers (2003/04)	6,498,000	6,758,000	7,235,000	7,652,000	7,729,000	7,884,000	8,035,000

This measures the total number of trips made in Torbay on all bus services. Following recent increases in public transport patronage, the target for this indicator is a 25% growth in patronage between 2004 and 2011, as shown.

- LTP1 – Accessibility
- LTP5 – Percentage of Scheduled Bus Services on Time
- L2 – Growth of Shopmobility Usage
- L9 – Growth of Residents Benefiting from Community Transport Services
- L15 – Growth of Residents Benefiting from Entitled Concessionary Travel

The full list of the baseline targets and trajectories, by further developing the DfT Pro-Forma issued in December 2005, can be found in Annex B.

BVPI104 – Satisfaction with Bus Services

Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
58% Satisfied (2003/04)	60%	62%	65%	67%	70%	75%	75%

This is measured through Torbay Council's Viewpoint Survey. There has been a significant improvement in satisfaction over recent years, which is expected to continue. The target for this indicator is to achieve 75% satisfaction by 2010.

BVPI187 – Footway Condition

Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
30.41% In need of repair (2003/04)	19.85%	18%	16%	15%	13%	11%	10%

In 2004 this indicator was adopted as Torbay Council's indicator for footway condition. There has been a steady improvement in condition with 80.15% of footways meeting the national standard in 2004/5, in comparison with 69.59% during the baseline year of 2003/04. This trend is expected to continue, with the target being to improve footways so that 90% meet national standards by 2011.

LTP1 – Accessibility

Base Data		2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
LTP1a	60.4% (2004/05)	60.4%	68%	74%	80%	86%	92%	100%
LTP1b	80.5% (2004/05)	80.5%	84%	88%	92%	96%	98%	100%
LTP1c	78.5% (2004/05)	78.5%	80%	82%	84%	86%	88%	90%
LTP1d	49.0% (2004/05)	49.0%	55%	60%	65%	70%	75%	80%

LTP1a - % of households within 400m of an hourly or better bus service
LTP1b - % of households within 30 minutes of a major town centre by bus
LTP1c - % of households within 30 minutes of a hospital by bus
LTP1d - % of households within 45 minutes of Torbay Hospital by bus

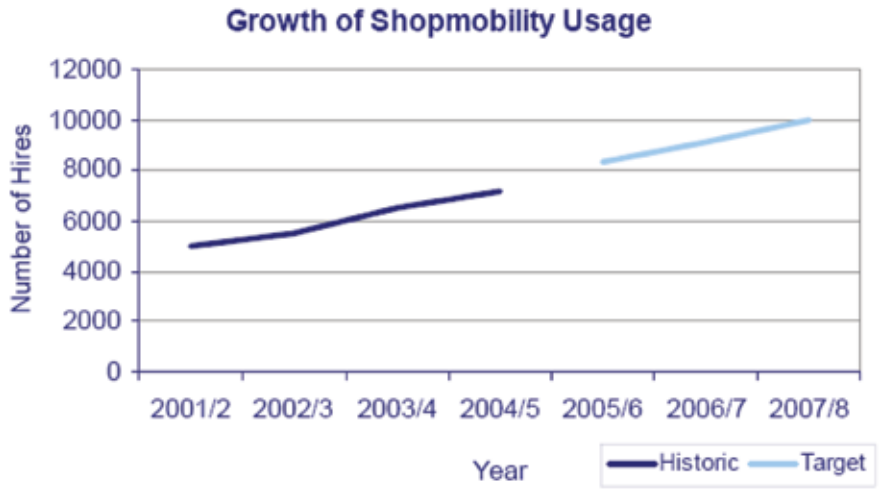
This indicator provides a measure of improved service provision across Torbay and therefore directly links to BVPI102 relating to bus patronage.

LTP5 – Percentage of Scheduled Bus Services on Time

	Base Data	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
% of buses starting route on time	85%	85%	87%	89%	91%	93%	95%
% of buses on time at intermediate timing points	76%	76%	79%	83%	87%	91%	95%
% of buses on time at non-timing points	74%	74%	78%	82%	86%	90%	95%
Average excess waiting time on frequent service routes	8.4 minutes	8 minutes	8 minutes	8 minutes	8 minutes	8 minutes	8 minutes

This indicator measures the success of bus operators in meeting the national standards for bus services and follows on from the target set in LTP1 that 90% of bus services should be within the national standards by 2010. In 2004/05, 59% of services met the Government's standards for bus service punctuality. However for the second Local Transport Plan, the Percentage of Bus Services on Time will be split into four parts as shown above. Therefore a baseline will be set and submitted in the next delivery report. Trajectories have been carried on from the previous target in the first Local Transport Plan, with a new target where the average wait will be no more than 8 minutes for a bus on frequent service routes.

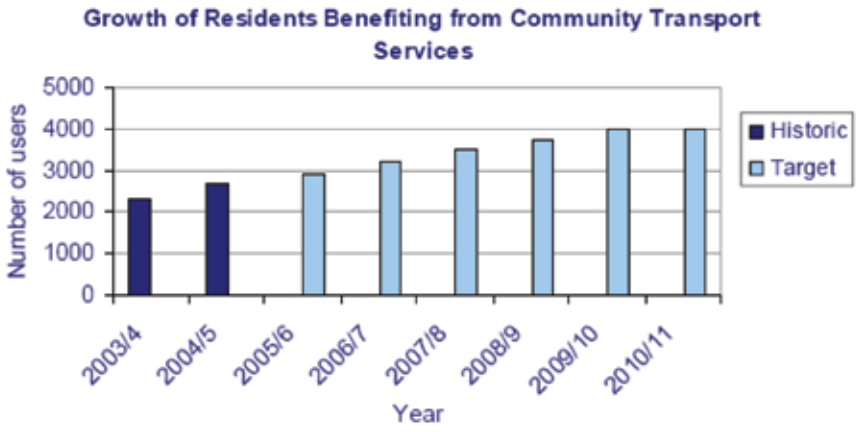
L2 – Growth of Shopmobility Usage



Base Data	2004	2005	2006	2007	2008	2009	2010
5,000 Hires (2001)	7,150	8,300	9,100	10,000	10,500	11,000	12,000

This indicator monitors the success of the investment in Shopmobility facilities in improving accessibility for disabled people. Thus far the number of hirers has risen by around 20%. The target for this indicator is to raise the number by a further 50% by 2011.

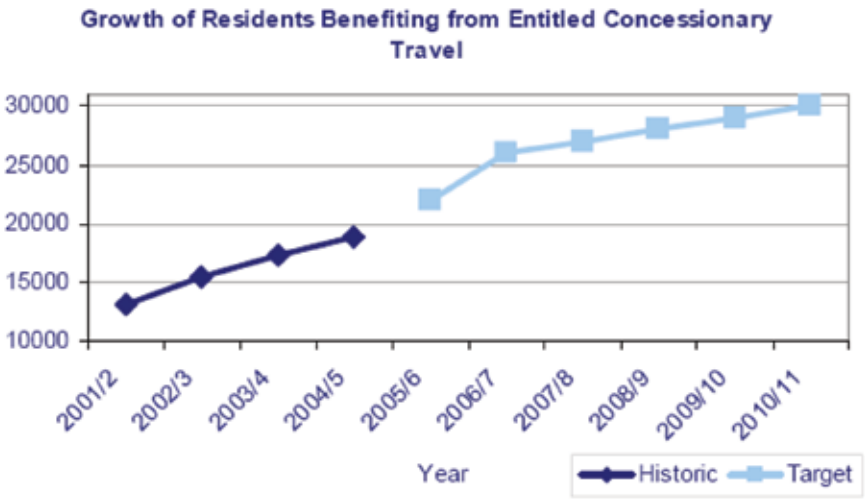
L9 – Growth of Residents Benefiting from Community Transport Services



Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
2,666 Users (2004/05)	2,666	2,900	3,200	3,500	3,750	4,000	4,000

As shown, although the number of people using community transport in Torbay fell in 2003/4, the numbers using community transport recovered in 2004/5. The target is to increase by 33% between 2005 and 2011

L15 – Growth of Residents Benefiting from Entitled Concessionary Travel



Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
15,479 Passes (2002/03)	18,867	22,000	26,000	27,000	28,000	29,000	30,000

This indicator has been in place since the start of the LTP process. Since 2001 the number of passes issued has risen by over 30%. As shown, the target is to increase the number of passes issued by a further 75% by 2011.

3.8.2 Intermediate Outcomes

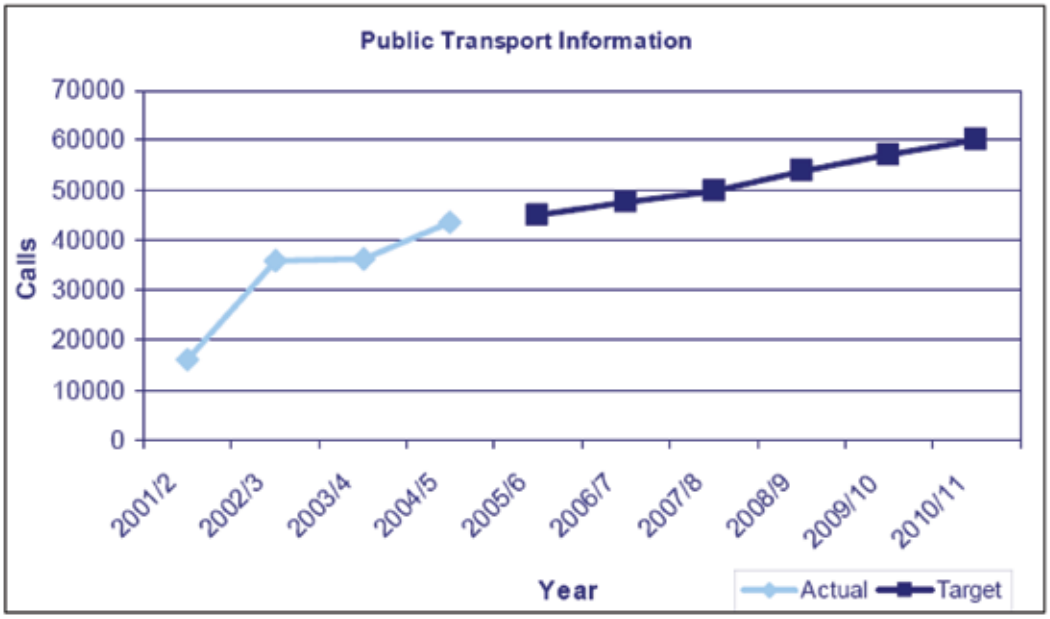
The indicators presented below are those which provide intermediate outcomes and represent proxies or milestones towards the key outcome indicators presented above. The intermediate outcome indicators for accessibility are:

- L1 – Pedestrian Counts
- L11 – Provision of Public Transport Information
- L12 – Quality of Public Transport Interchanges

The full list of the baseline targets and trajectories, by further developing the DfT Pro-Forma issued in December 2005, can be found in Annex B.

L1 – Pedestrian Counts							
Base Data	**2004/5**	**2005/6**	**2006/7**	**2007/8**	**2008/9**	**2009/10**	**2010/11**
7,568 Pedestrians (2004/05)	7,568	7,600	7,700	7,800	7,900	8,000	8,100
This indicator is used to assess the success of measures to improve the pedestrian environment in Torbay's shopping and recreational areas. The indicator is based upon counts in 3 locations in Torbay to measure progress. The target for this indicator is to increase the numbers of pedestrians counted by 7% by 2011.							

L11 – Provision of Public Transport Information



Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
15,975 Calls made to Traveline (2001/02)	43,682	45,000	47,500	50,000	54,000	57,000	60,000

Torbay Council, together with the other south west local authorities and the main bus operators have invested in the SW public transport information system, as the primary source of bus service information. This target measures the success of that investment in terms of the number of calls made to Traveline. The target is to increase the number of calls by just under 380% between 2001 and 2011. This indicator links directly to the success of indicator BVPI102.

L12 – Quality of Public Transport Interchanges

Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
34.6 Annualised index value (1999/00)	37	38	40	45	50	53	55

This year Torbay Council has developed a new index to measure the condition and facilities at its public transport interchanges. Using data collected in 1999, it has been possible to identify a significant improvement in the quality of these facilities. The target is to continue this improvement with the index moving from 37 in 2005 to 55 by 2011. Torbay Council has developed a Public Transport Interchange Quality Indicator (PTIQI), based on a system used in the logistics industry to test customer satisfaction with express parcel and Just in Time (JIT) services, including added value issues. This allows the council to identify areas of key concern, prioritise them and carry out planned remedial actions then recheck the outcomes. A detailed copy of this process is shown in the Bus Strategy at Annex D.

3.8.3 Contributory Output Indicators

The indicators presented below are those which provide contributory outputs and measure the deliverability of schemes, policies or initiatives, which will contribute towards the delivery of outcome indicators presented above. The contributory outputs indicators for accessibility are:

- BVPI 165 – Percentage of crossings with facilities for the disabled
- L3 – Number of Blue Badge Parking Spaces
- L13 – Age of Bus Fleet
- L14 – Cost of Supported Bus Services

The full list of the baseline targets and trajectories, by further developing the DfT Pro-Forma issued in December 2005, can be found in Annex B.

BVPI165 – Percentage of Crossings with Facilities for the Disabled

Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
47.6% In need of repair (2003/04)	67.6%	70%	75%	80%	85%	90%	95%

The number of crossings being upgraded in Torbay is continuing to increase. The target is to upgrade 95% so that they meet national standards by 2011.

L3 – Number of Blue Badge Parking Spaces

Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
135 Spaces (2002/03)	150	156	165	175	180	190	200

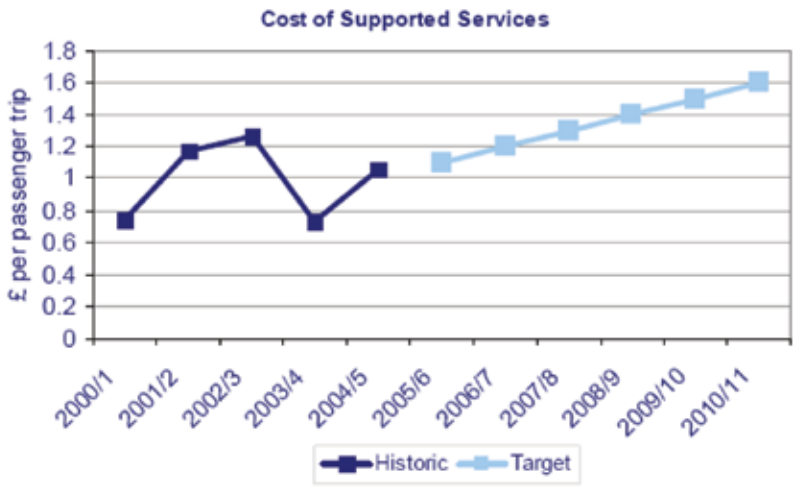
Adopted in 2003 this indicator shows the progress made in improving access for the disabled. Between 2003 and 2005 the number of spaces has risen by 15, with a target increase to 200 spaces by 2011

L13 – Age of Bus Fleet

Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
8 Years old (2002/03)	5.5	3.5	3	3.5	4	4	4

Providing modern buses is a key part of the strategy to encourage the use of buses. In recent years Torbay's bus fleet has been the subject of substantial investment. This has led to a reduction in the average age of the fleet. It is expected that this will be continued in the next 2-3 years as a result of section 106 agreements and work with operators and once this is complete we will maintain an average age of around 4 years. This indicator directly contributes to achieving BVPI102.

L14 – Cost of Supported Bus Services



Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
£0.74 per journey (2000/01)	£1.06	£1.10	£1.20	£1.30	£1.40	£1.50	£1.60

Despite substantial rises in tender costs throughout the bus industry, Torbay Council has been successful in keeping its cost increase to a minimum. Despite increasing in wages, maintenance and fuel costs, Torbay Council is allowing only a small rise in cost for supported services by judicious removal of poorly used services and increased patronage. This indicator directly contributes to achieving BVPI102.

3.8.4 Regional Indicator – L10 – SWPTI Information Quality

The South West Passenger Transport Information contract agreements require Local Authorities to input, develop and maintain all public transport service data, to bus stop level. This dataset is used to run the Traveline call centre, website, SMS and is available for individual Authorities to use to support Real Time Information Systems, Bus Punctuality Indicator monitoring, and for use in Transport Asset Management Plans and Bus Information Strategy implementation. The information supplied by Torbay Council is also used in the Accession Planning software database along with that held by Transport Direct, it is vitally important that the quality of information is never less than 100%

L10 – SWPTI Data Quality

	Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
Traveline Data Completeness and Accuracy Measurement to Timing Point Level	100% Accurate (2004/05)	100%	100%	100%	100%	100%	100%	100%
Traveline Data Completeness and Accuracy Measurement to All Stop level	100% Accurate (2004/05)	100%	100%	100%	100%	100%	100%	100%
Verified Traveline Data	N/A	N/A	N/A	65%	75%	80%	85%	90%

The targets outlined should, in the national context be regarded as 'challenging but realistic'. However, achieving these targets will make a significant contribution towards a number of national and regional objectives.

Chapter 4
Air quality

4 IMPROVING TORBAY'S AIR QUALITY

4.1 What Is Air Quality?

4.1.1 Introduction

Part IV of the Environment Act 1995 requires local authorities to review and assess the air quality within their area. This must take in account Government guidance and statutory Air Quality Objectives for 7 pollutants, each with a specific concentration and compliance date between 2004 and 2010. The 7 key pollutants were identified as carbon monoxide, benzene, 1,3-Butadiene, lead, nitrogen dioxide, sulphur dioxide and PM10. These pollutant concentration targets are based upon their effect on health. All potential sources of these pollutants throughout Torbay and the immediate surrounding area were identified. This provides the framework for what is known as Local Air Quality Management. Between 1998 and 2001 Torbay Council completed the first phase of review and assessment.

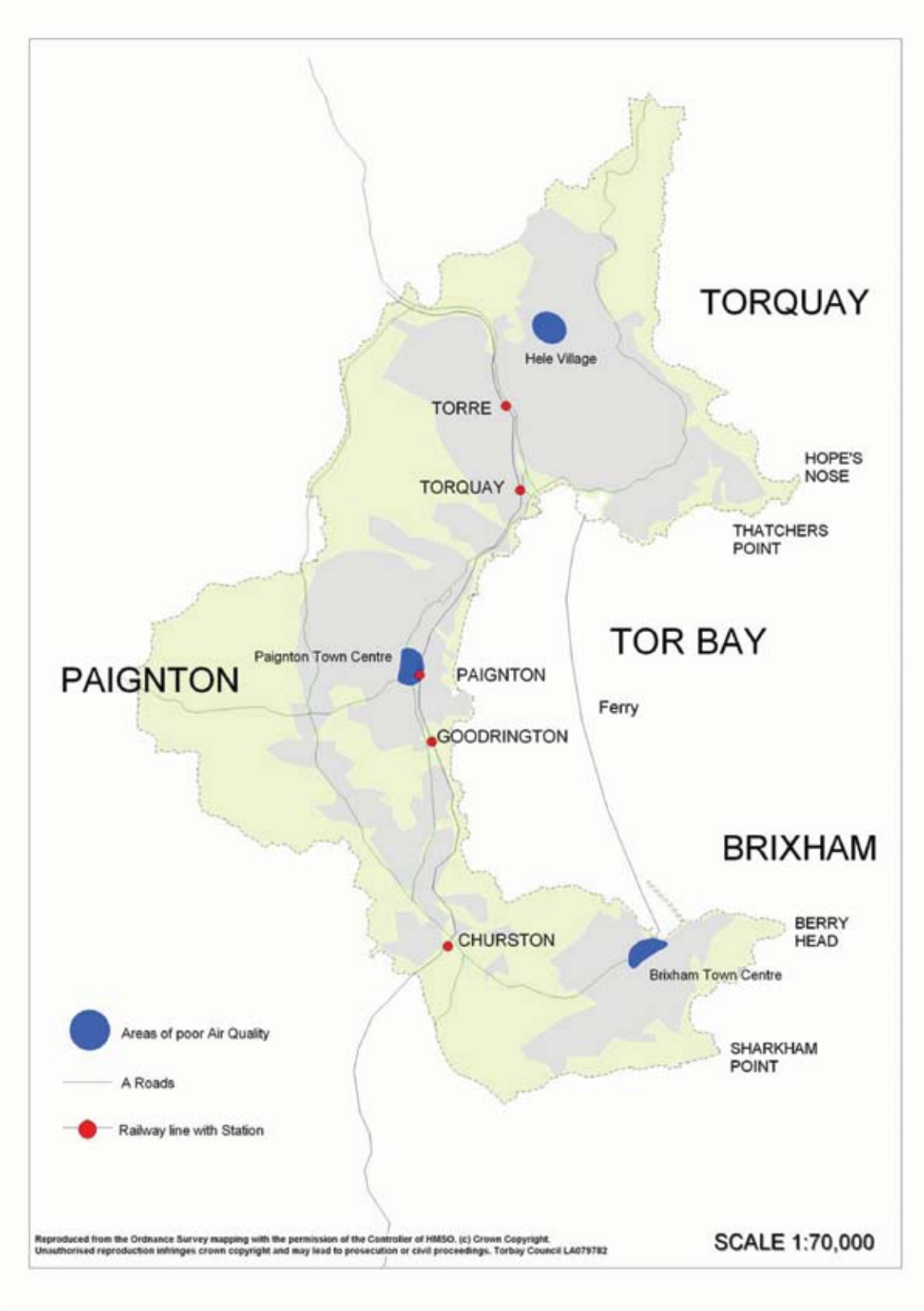
A period of monitoring commenced in 2002 and required the publication of an Updating and Screening Assessment (USA) report which was completed in May 2003. The USA concluded that a Detailed Assessment was required for 1 of the 7 pollutants, Nitrogen dioxide (NO2) at Hele Road, Torquay. The Detailed Assessment report was published in November 2004 and concluded that the annual mean Air Quality Objectives for NO2 (40 ug/m3) are unlikely to be met. The USA and Detail Assessment reports have been subject to a formal appraisal and approval process by the Department for Environment, Food and Rural Affairs (DEFRA).

The studies undertaken have also identified that, two other locations give cause for concern. In addition to Hele Village, the other areas are, the Bolton Cross area of Brixham and the area immediately to the south of Paignton town centre. In these areas, air quality monitoring results show significant rises in pollutant concentrations.

The results of the USA for the areas of poorer air quality are shown in Table 4.1 right. The general areas identified as having poorer air quality are shown in Figure 4.1.

Sampling Location	2005 (ug/m3) Monitored	2010 (ug/m3) Predicted
Brixham - Bolton Street	23.72	20.74
Brixham - Middle Street (black down pipe)	33.56	29.35
Brixham - Town Hall	36.83	32.21
Paignton - 25 Dartmouth Rd	28.73	25.12
Paignton - 311 Torquay Rd	20.07	17.55
Paignton - 35 Dartmouth Rd	22.78	19.92
Paignton - 59A Hyde Road	23.34	20.41
Paignton - Dartmouth Rd (Coop Funeral)	30.93	27.05
Paignton - Gerston Place	24.51	21.43
Paignton - Totnes Rd	27.70	24.22
Torquay - 103 Hele Rd	26.66	23.31
Torquay - 156 Hele Rd (opp Co-op)	25.56	22.35
Torquay - 17 Hele Rd	37.79	33.05
Torquay - 33 Hele Rd	35.24	30.82
Torquay - Baptist Church Hele Rd	29.36	25.68
Torquay - Baptist Church Hele Rd	31.42	27.48
Torquay - Baptist Church Hele Rd	32.76	28.65
Torquay - Co-op Hele Rd	23.06	20.17
Torquay - Newton Rd	16.88	14.76
Torquay - Newton Rd	17.03	14.89
Torquay - Newton Rd	17.21	15.05
Torquay - Orchard Rd	36.41	31.84
Torquay Conservative Club Hele Rd	24.94	21.81
Torquay - Rear of 37 Hele Rd	24.37	21.31

Table 4.1 Locations monitored in more detail resulting from the initial USA


TORQUAY
Hele Village
TORRE
HOPE'S NOSE
TORQUAY
THATCHERS POINT
TOR BAY
Paignton Town Centre
PAIGNTON
PAIGNTON
Ferry
GOODRINGTON
BRIXHAM
BERRY HEAD
CHURSTON
Brixham Town Centre
SHARKHAM POINT
Areas of poor Air Quality
A Roads
Railway line with Station
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4.1.2 Where Does The Pollution Come From?

Road traffic has been identified as being the only significant source of air pollution in Torbay. However, different pollutants come from different sources. For example, particulates (PM10) generally result from diesel engines, whilst nitrogen oxides generally result from the action of catalytic converters.

The concentration of pollutants in certain areas can be as a result of a number of factors including:

- Excessive levels of traffic;
- Topography and building layout; and
- Congestion and inefficient junction operation.

The potential solutions to the pollution problems identified are therefore wide-ranging, from re-routing traffic, or re-designing roads, to reducing traffic levels through demand management measures.

4.2 Air Quality Management Areas in Torbay

4.2.1 Hele Road

Hele Road forms an important part of the distributor road network in Torquay, as shown in Figure 4.2, and is designated in the local plan as a key part of the limited District Distributor Road Network. As such the road is heavily trafficked, with a daily flow of around 20,000 vehicles per day. Table 4.2 shows the breakdown of traffic on Hele Road by type.

Figure 4.2 Location map of Hele Village, Torquay

As part of the process of monitoring air quality in Hele, classified traffic surveys have been undertaken and permanent air quality monitoring equipment has been installed. The initial results (Figure 4.3) shows the average pollutant concentrations measured during March 2005, based upon continuous monitoring. Figure 4.4 shows the results of a one day classified traffic count survey undertaken alongside the air quality monitors. Comparisons of these two data sources has made it possible to identify a clear link between traffic flows and pollutant concentrations on Hele Road.

Bicycles	45	(0.2%)	HGV's	590	(3.2%)
Motorcycles	144	(0.8%)	Artics	34	(0.2%)
Cars	15,604	(83.5%)	Buses	239	(1.3%)
Vans	2,025	(10.8%)			

Table 4.2 Hele Road Traffic Survey Results

It is important to note that Hele Road carries very heavy traffic. The problem of heavy traffic is exacerbated by the heavy flows of vans and medium sized trucks accessing surrounding industrial areas. The canyon form of the Hele Road valley, plus the proximity of high density housing to the road, are additional factors in explaining both the cause of significant air pollution and the seriousness of its impact on the residents of Hele Village.

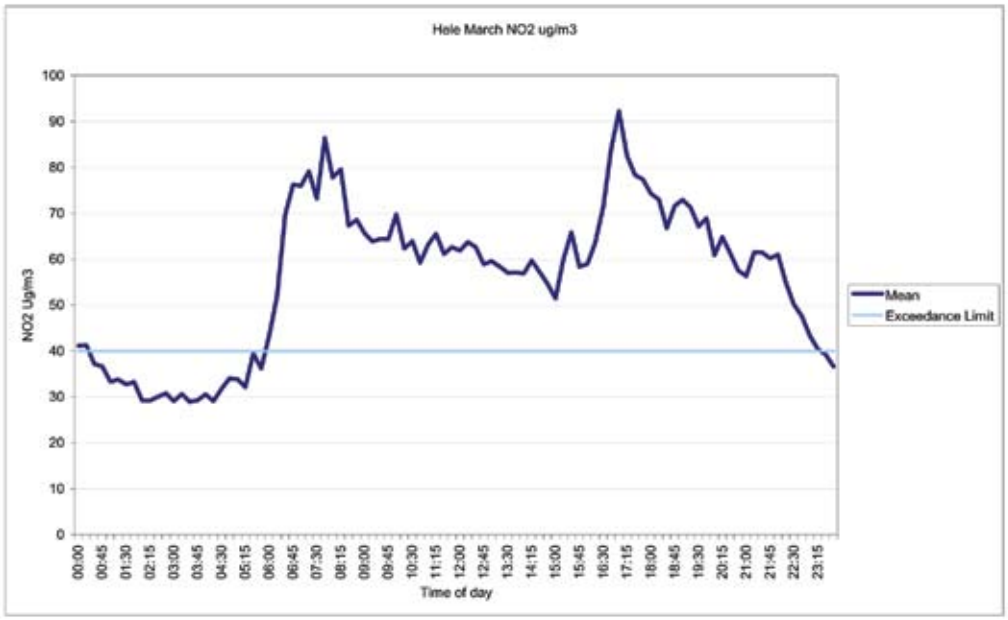


Table 4.3 Hele Road Air Quality Data March 2005

Figure 4.4 below shows the results of traffic surveys, showing the hourly flows of traffic along this section of road. As can be seen traffic flows along the road are fairly even throughout the day. There is however a noticeable peak in flows between 1500 and 1600, with a more extended peak between 1500 and 1800. The reasons for this include the effect of school run traffic and the large commuter flows, which use this route to leave Torquay.

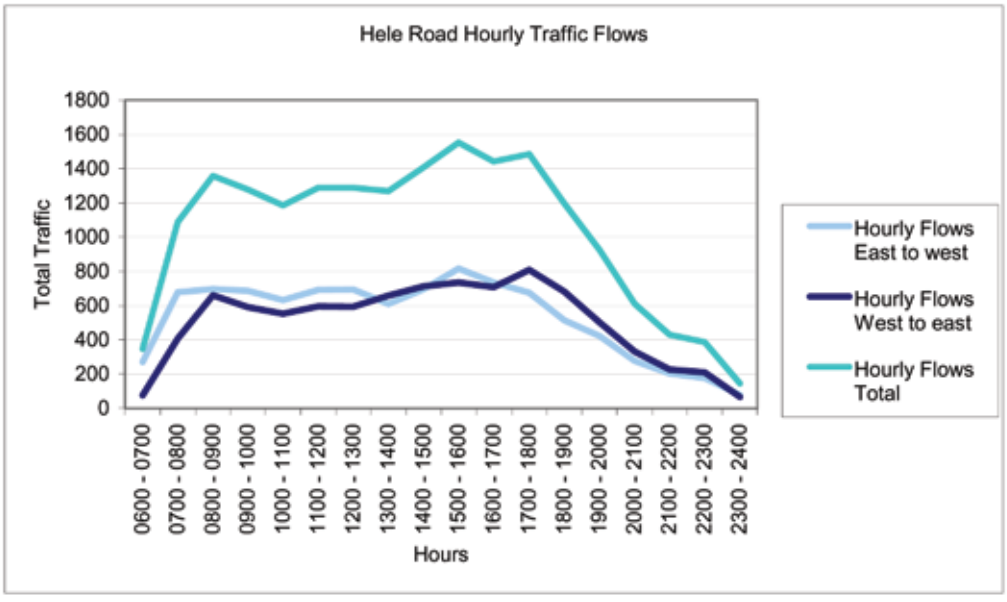


Table 4.4 Hele Road Traffic Flows

A programme of public consultation has begun for the residents and businesses of Hele to assess measures for reducing pollutant concentrations in the area.

A detailed action plan will be developed for the Hele Village area, building upon the work already done under the Hele Traffic Management Zone and the Community Planning project. Key opportunities within this plan are likely to include:

- An assessment of on-street car parking on Hele Road, particularly looking at its effect on traffic flow;
- Amendments to the local signing strategy to divert unnecessary traffic away from the area;
- A series of experimental traffic restraint measures to assess the effectiveness of various options, including parking bans and HGV restrictions;
- A review of the potential for restrictions on types of vehicle based upon emission standards;
- Continuing to work with local schools on implementing school travel plans, particularly with schools in the area, including St Cuthbert Mayne school and local primary schools;
- Assessing the potential of junction design and management, to enable easier traffic flows out of Hele Road at each end of the critical eastern half of the road;
- Discussions with transport operators regarding ways to remove inappropriate vehicles from the area, particularly coach operators; and
- An overall assessment of traffic flows in the area to assess the scope for re-routing traffic, further traffic management measures and the potential for alternative modes of transport.

Based upon current traffic data on both volume flows and vehicle type, traffic modelling is being conducted to assess maximum concentrations of permissible traffic flow through the Hele Village road network. A process of traffic reassignment will then be modelled to assess the impact on other parts of the local road network and the resulting highway infrastructure work required ensuring that the resulting traffic flows do not lead to additional congestion

4.2.2 Brixham Town Centre

'We support the main thrust of the plan for Brixham. The plan rightly identifies the regeneration of Brixham as one of the major economic events destined to take place during the currency of the new plan. This will inevitably increase the demand placed upon the transportation infrastructure in and around the town, and it is important that this change is managed effectively and sympathetically.'

Brixham Chamber of Trade, 2005

The Bolton Cross area of Brixham is also the subject of additional air quality data collection. The area referred to is shown in Figure 4.5. This is showing levels of pollution close to the thresholds for AQMA declaration and declaration may occur during 2006.

Figure 4.5 Location of Brixham Town Centre

Monitoring of air quality in Brixham Town Centre has been almost continuous throughout 2004/5. In addition to 2 part time sites on Bolton Street and Market Street, diffusion tubes have been deployed outside the Town Hall for 11 out of the 12 months. During this time Brixham has experienced a number of changes, the most important of which has been the demolition of the town centre multi-storey car park in January and February 2005. Figure 4.6 summarises the monitoring results for two of these sites since September 2004.

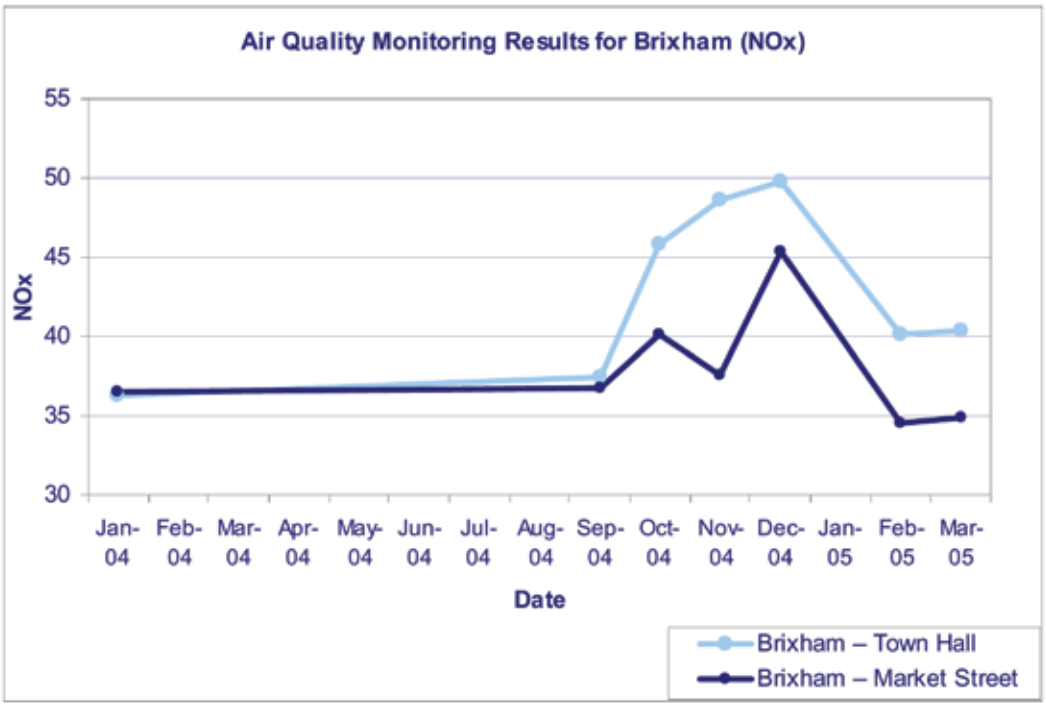


Figure 4.6 Air Quality Monitoring Results for Brixham

The monitoring results for Brixham show worrying rises in pollutant concentrations, a 10% rise, year on year, at the Town Hall. However, it is too early to give a definitive conclusion regarding air quality in Brixham, as a number of upcoming opportunities may affect future levels.

The area is currently subject to detailed studies as part of the Brixham Central Area Transport Strategy. This strategy is being developed in response to wide ranging regeneration proposals for the town centre,

which include a review of car parking, new housing development, additional industrial facilities and a revised layout for the town square. One proposal is the development of a park and ride service, from the northern outskirts of Brixham to reduce the demand for car parking in the town centre. Further to this are proposals for a revised layout in the Bolton Cross area, to ease traffic movement.

4.2.3 Paignton Town Centre

The area directly to the south of Paignton town centre, along Dartmouth Road, has been identified as an area of concern regarding air quality, as shown in Figure 4.5. Ongoing data collection at this point is indicating levels of pollution very close to the thresholds for an AQMA declaration. The council's mobile 'Groundhog' monitoring station has been relocated in this area as a measure to pinpoint when the highest concentrations are occurring. This process will take twelve months to complete. The assessment will be further expanded to encompass both the Hyde Road and the Railway Station areas where development of the Station Lane site could have an adverse effect on projected traffic flows, if mitigation measures are not taken during the design stage.

Figure 4.7 Location of Paignton Town Centre

Recent traffic studies carried out in the central area of Paignton indicated that there are several locations that will increasingly become prone to the adverse effects of congestion as traffic levels continue to rise. These areas will be monitored over the period of the Plan so as to ensure that early intervention, through adopting changes in the towns traffic management system, will offset the need to declare an AQMA.

4.2.4 Air Quality and Climate Change

There are a number of challenges associated with the air quality – one being the predicted rise of temperatures due to climate change caused by increased carbon emissions. As a coastal location, Torbay is already vulnerable to flooding. A rise in sea level may increase conflict between urban areas, farmland and protected habitats, which is likely to have an impact on the types of species that can exist in this altered conditions. Reducing emissions in Torbay is therefore vital to ensure that the local, national and global impact of climate change is minimised.

Encouraging alternative modes of travel to the car will help improve air quality in the affected areas of Torbay.

4.3 Partners In The Process

4.3.1 Torbay Council Environmental Health Department

Torbay Council's Environmental Health Department is responsible for undertaking the monitoring of local air quality in the area. This Department is also responsible for declaring Air Quality Management Areas.

The Council Departments responsible for the LTP and air quality monitoring are working closely together to anticipate air quality problems and to devise solutions, before AQMA's are declared.

4.3.2 Torbay Freight Quality Partnership

The Torbay Freight Quality Partnership (FQP) was set up in 2003 to provide an opportunity for freight transport providers and users to be involved in setting local policy with regard to the management of HGV's. To date the FQP has been instrumental in the production of an HGV routing plan for Torbay, which aims to reduce HGV traffic in residential areas and on unsuitable roads. This has led to reductions in HGV traffic in sensitive areas. This is described in more detail in Section 8.5.1.

4.4 Objectives and Options

4.4.1 Aims and Objectives

The overall LTP objective for air quality is

Improve air quality in Torbay through the expeditious resolution of declared air quality management areas and to reduce the declaration of future AQMA's.

4.4.2 Options

There are a number of possible options, which could be used to reduce pollution levels in the affected areas, including:

- Improving highway infrastructure including junction design to ease traffic flow;
- Removing inappropriate, dangerous and illegal parking;
- Restricting the use of sections of the highway network by certain types of vehicle;
- Encouraging the use of greener fuels;
- Reducing the demand for car travel, through demand restraint measures such as travel plans;
- Reducing the demand for car travel by improving provision for alternative modes such as buses, cycling and walking.

In reality for most areas of Torbay, it is likely that a package of measures will be needed in each area to solve the identified problems. The measures to be implemented will be determined on the basis of data collection, consultation and consultants' studies, as appropriate.

4.4.2.1 Infrastructure Improvements

Improving the road infrastructure in areas which suffer from poor local air quality can play a role in reducing emissions, so long as no additional traffic is generated. However, in each of the existing areas with air quality problems, schemes are being pursued which ease traffic flow, such as redesigning junctions and improving competing routes to encourage the re-routing of traffic.

4.4.2.2 Control of Parking

Controlling parking is a key element in Torbay's transport strategy. The implementation of decriminalised parking enforcement has provided Torbay Council with an important tool in controlling parking. In some of the areas where poor air quality has been identified, illegal or inappropriate parking has been identified as a possible contributory factor in increasing emissions levels. As these areas are identified, experimental parking bans will be introduced to allow an assessment of the impact of parking on traffic flow and air quality.

4.4.2.3 Restricting the Use of the Network

Restricting the use of the road network must be the last resort. This is particularly true in those areas currently identified, where the existing network forms a key part of the distributor road network in the area. However, in order to improve local air quality it may be necessary to reduce flows of the most polluting vehicles. In the case of Hele Road, the number of HGV's and vans using the route is a particular cause for concern. As with parking, before permanent bans are imposed, experimental bans will be implemented to gauge the effect of these vehicles.

4.4.2.4 Greener Fuels

Torbay Council is in the forefront of encouraging local residents and businesses to switch to greener fuels. To date the Council has converted all of its small vehicle fleet to LPG operation and invested in the only LPG re-fuelling facility in Torbay. However, encouraging others to do the same is an important element in the strategy to improve local air quality. This will be a staged process which will begin with discussions with bus operators regarding replacement of local fleets with less polluting vehicles.

4.4.2.5 Demand Restraint

Restraining demand is a fundamental element of this LTP. A number of measures are proposed with the aim of reducing, for example, the amount of car borne commuting and the impact of the school run; and increasing the attractiveness of walking, cycling and public transport use. These efforts will be concentrated in those areas where poor air quality is identified, but will complement wider programmes across the bay. For example in Hele, local schools, which have a combined population of more than 6,000 students, will be targeted for school travel plan implementation.

4.5 A Five Year Plan For Improving Air Quality

4.5.1 Programme of Investments

Hele Village Traffic Improvements (£300,000) – This scheme would form the basis of Torbay Council's action plan to deal with air quality problems identified in this residential area in the north of Torquay. As an Air Quality Management Area, a package of measures will be implemented aimed at easing traffic flow, reducing traffic levels and removing conflicts between modes. This scheme will have a

direct effect on traffic levels and therefore air pollution in the area, leading to the removal of the AQMA (Indicators LTP8 and L4).

Brixham Bolton Cross (£1 m) (Torbay Local Plan Policy T6) – This scheme is designed to compliment other programmed traffic management and town centre improvements geared to support the regeneration of Brixham. This will involve a radical review of the current layout, management and operation of the central area of the town around Bolton Cross. This scheme will implement the outcomes of ongoing development studies with the specific aim of improving bus and coach stopping facilities, increased pedestrian priority, and enhanced road safety and air quality. This scheme would ease existing traffic flow restrictions in the Bolton Cross-area, thus reducing the adverse effects of air pollution. It would also assist in offsetting the requirement to declare an AQMA or indeed help in removal if one should be declared in the intervening period (Indicators LTP8 and L5).

4.5.2 Value For Money Assessment

The benefits of improving local air quality are widespread, including improving human health, reducing environmental degradation, and improving the economy. Whilst there are a small number of schemes targeted directly at improving air quality, many of the schemes included in the LTP programme will have spin-off effects that will reduce pollution. These benefits will result from transfers from car to other modes, reducing traffic levels in vulnerable areas, and reducing congestion.

To prove value for money from the schemes proposed, two analyses have been completed, a qualitative analysis based upon the NATA Appraisal Summary Table (AST), and a more quantitative analysis based upon an attempt to monetise the overall benefits of improving local air quality.

4.5.2.1 NATA AST Qualitative Analysis

NATA includes a specific element, related to local air quality, under the Environment objective. This general category does however take in a number of elements, including human health and environmental degradation. For the purposes of this LTP the effects of the LTP programme can be summarised as follows.

Human health – by reducing traffic levels in the areas specifically identified as suffering poor air quality, conditions for around 600 residents of these areas will be improved. The results of this will be improved health and extended life expectancy. While there are no specific statistics relating to the areas affected, national research[1] suggests that it is likely that poor air quality in these areas is resulting in reduced life expectancy of between 1 and 6 months for around 3% of the residents of polluted areas. This is due to an increased occurrence of respiratory disease due to NOx emissions, and increased levels of heart disease resulting from particulate ingestion, amongst other effects.

Environmental degradation – whilst the environmental degradation affects of local air pollution are well recognised, their quantification remains difficult due to the need for complex pollutant distribution and dispersion predictions. These are not currently available at a sufficiently detailed level in Torbay, to allow the quantification. However, it should be noted that the existing AQMA in Hele is adjacent to a number of County Wildlife Sites and that some degradation of these sites is likely to be occurring.

4.5.2.2 Analysis based upon Monetised Benefits

Research throughout the world, has attempted to quantify the costs of poor air quality, particularly upon human health and environmental degradation. This research is summarised by the Victoria Transport Policy Institute[2] . These studies have focussed upon attempts to assess the monetary cost of poor air

1. www.advisorybodies.doh.gov.uk/comeap/statementsreports/airpol7.htm
2. www.vtpi.org/tca/tca0510.pdf

quality. Many of these studies have employed willingness to pay methods to determine how much people would pay to avoid, say reduced life expectancy due to air quality. Studies in Europe and the United States have produced similar figures for the pollution resulting from road traffic. These values have been compared with resource cost estimates for similar effects to determine the consistency of the results. This analysis is detailed in Annex I.

The effects of poor air quality should be assessed on the basis of estimating the numbers of people affected in each case. However, at this stage it has not been possible to undertake sufficient detailed modelling of poor air quality in Torbay to produce reliable estimates of such effects. A more general approach has therefore been taken, utilising estimates of these effects on a per vehicle kilometre basis. Values of the costs of air pollution have been estimated for four vehicle types which have been applied to known traffic splits in Torbay.

Using estimates of vehicle kilometres avoided through the outcomes of LTP schemes, it is possible to determine the overall savings that would results. From this analysis and taking into account the non-quantifiable effects of poor air quality, it can be seen that this LTP programme offers the highest category of value for money, with a benefit:cost ratio of more than 4.

4.6 LOCAL TARGETS

4.6.1 Key Outcome Indicators

The indicators presented below are those which are key outcome based and directly measure the achievement of the objectives of this LTP. In determining appropriate indicators by which to monitor the success of the Local Transport Plan, in meeting Torbay Council's air quality management targets, one general indicator has been adopted together with three specific indicators related to the areas identified above. The key outcome indicators for air quality are:

- LTP8 – Number of Air Quality Management Areas in Torbay
- L4 – Pollutant Concentrations in Hele
- L5 – Pollutant Concentrations in Brixham Town Centre
- L6 – Pollutant Concentrations in Paignton Town Centre

The full list of the baseline targets and trajectories, developed from the DfT Pro-Forma issued in December 2005, can be found in Annex B.

LTP8 – Number of Air Quality Management Areas in Torbay							
Base Data	**2004/5**	**2005/6**	**2006/7**	**2007/8**	**2008/9**	**2009/10**	**2010/11**
1 (2004/05)	1	1	2	2	2	1	0
That there will be no Air Quality Management Areas in Torbay by 2010, for all those sites identified as relevant receptors as defined by the Government's air quality strategy.							

L4 – Pollutant Concentrations in Hele							
Base Data	**2004/5**	**2005/6**	**2006/7**	**2007/8**	**2008/9**	**2009/10**	**2010/11**
44.2 ug/m³ (2003/04)	41.8 ug/m³	40.6 ug/m³	39.5 ug/m³	38.2 ug/m³	36.9 ug/m³	35.4 ug/m³	34.2 ug/m³
To date Hele is the only area of Torbay which is subject to an Air Quality Management Area so the aim is to reduce NO2 levels by 2010/11 and lift the declaration.							

L5 – Pollutant Concentrations in Brixham Town Centre							
Base Data	**2004/5**	**2005/6**	**2006/7**	**2007/8**	**2008/9**	**2009/10**	**2010/11**
36.5 ug/m³ (2003/04)	40.2 ug/m³	42.9 ug/m³	41.7 ug/m³	40.4 ug/m³	39.0 ug/m³	37.5 ug/m³	36.1 ug/m³
Brixham Town Centre has been identified as an area where AQMA declaration may be necessary in the future.							

L6 – Pollutant Concentrations in Paignton Town Centre							
Base Data	**2004/5**	**2005/6**	**2006/7**	**2007/8**	**2008/9**	**2009/10**	**2010/11**
37.7 ug/m³ (2003/04)	41.5 ug/m³	40.3 ug/m³	39.2 ug/m³	37.2 ug/m³	36.6 ug/m³	35.2 ug/m³	33.9 ug/m³
Paignton Town Centre is an area where, based upon monitoring data, an AQMA may be declared in the future.							

Chapter 5
Congestion

5 REDUCING CONGESTION IN TORBAY

5.1 Congestion in Torbay

5.1.1 Definitions

In the local context, we have defined congestion as being:

'any area of the transportation network where the levels of flows, or the operation of the transportation network, are perceived to cause an impediment to the completion of a journey in a timely fashion, or a significant environmental impact'

Congestion in Torbay takes many forms. Examples include:

- Over-crowding on peak hour trains to and from Newton Abbot;
- Queues of traffic at Tweenaways Cross at peak times;
- The lack of bus services to Preston before 09:00 and after 17:00 forcing travellers to use car and taxi;
- The lack of a footway on Trumlands Road, Torquay, which forces pedestrians to use an alternative, longer route.

5.1.2 Policy Background

In addressing congestion for all users, the LTP makes reference to prevailing policy from the international, to the local level.

Of particular relevance are the provisions of the Traffic Management Act 2004, Planning Policy notes (particularly PPG13), Accessibility Planning Guidance, the Devon Structure Plan, the Adopted Torbay Local Plan and Torbay Council policies in respect of the impact and accessibility of new developments.

5.1.3 Aims and Objectives

The key objectives relating to congestion can be summarised as:

Encourage the use of non-car modes of transport through travel plans, restraint measures and improvements to these modes;

Relieve congestion at existing hot spots, improving conditions for all road users;

Minimise conflicts between modes of transport, having due regard to the hierarchy of modes, where appropriate.

The achievement of these objectives is likely to require a mix of measures.

5.2 Partners In The Process

5.2.1 Government

Tackling congestion is one of the four shared priorities set by Government for all local authorities to address. This is reflected in 'The Future of Transport', which has key elements involving the introduction of road user charging, improving the management of the road network and encouraging the use of non-car modes through travel plans and personalised travel planning.

As part of the 2005 Budget Statement, the Government announced its intention to bring forward legislation to implement a national road user charging system, initially for goods vehicles but later for all vehicles.

5.2.2 Railway Companies

Torbay's rail services already make a significant contribution to the reduction of congestion, particularly for longer distance movements to Newton Abbot, Exeter and beyond. Key markets served include:

- Schoolchildren and students travelling between Torbay and Newton Abbot;
- Commuters to Newton Abbot and Exeter;
- Long distance trips by Torbay residents; and
- Visitors to Torbay, particularly during summer months.

Rail services to Torbay are provided until 31st March 2006 by four operators:

- Wessex Trains, which provides local services to Newton Abbot and Exeter;
- First Great Western, which provides inter-city services to London;
- Virgin Cross-country Trains, which operates inter-city services to Bristol, Birmingham and beyond; and
- South West Trains, which operates an alternative service to London, via Salisbury.

From 1st April 2006 services currently operated by Wessex Trains will be transferred to First Great Western and from April 2007 services currently operated by South West Trains will become the responsibility of a new franchise. The franchise replacement is linked to the recently published Route Utilisation Strategy (RUS). This strategy aims to maximise the use of the existing lines by removing clashes between different operator's services, maximising integration between services and removing bottlenecks where possible.

Patronage on Torbay's rail services has increased substantially in recent years with all operators reporting growth. This has been the result of the introduction of a clockface timetable, introduction of new and refurbished trains, and improved service reliability.

Network Rail and the former SRA (now DfT Rail) have both confirmed the designation of the Torbay line as a main line. It is double track throughout its length, which has recently been renewed and relatively high density modern signalling means that there could be considerable capacity for increased development of services, if constraints elsewhere were removed.

5.2.3 Local Authorities in the South West

Torbay Council is represented on a number of regional groups, of which two – TravelWise and Travel Plans – were formed specifically to help tackle congestion.

From the TravelWise group, Torbay has joined forces with Devon County Council and Plymouth City Council to set up and promote www.carsharedevon.com and more recently, www.schoolrun.org, aimed at helping parents driving to the same schools find a car share match.

The Travel Plan group has joined together to promote a region-wide scheme, Jam Busting June, based on a scheme run by Bristol City Council in 2005. It is hoped that joint promotion and competition between authorities will be the stepping stone to a regional promotion group for sustainable transport.

5.2.4 Schools

Many of Torbay's schools are in the forefront of efforts to tackle congestion. The School Run is a key contributor to congestion, as can be seen by eased traffic conditions when schools are on holiday.

Key to reducing the impact of the school run is the development of school travel plans. School Travel Plans set out a package of measures to encourage the use of non-car modes. To date, 19 schools have active travel plans with a further 15 under development or review, which will be in place by April 2006, as shown in Table 5.1.

Future work by the School Travel Advisors (funded jointly by DfES and DfT) will be on assisting delivery of Travel Plans and implementing long term programmes and campaigns to increase walking and cycling to school, such as Walking Buses, cycle training and car-free days.

STPs Being Implemented	STPs Under Development or Review
Brixham C of E Infants (124)	Barton Primary (609)
Brixham Community College (904)	Chestnut Primary (150)
Churston Ferrers Grammar School (871)	Cockington Primary (421)
Collaton St Mary Primary (206)	Eden Park Primary (584)
Combe Pafford Special School (185)	Foxhole Infants (231)
Cuthbert Mayne Secondary (998)	Foxhole Juniors (239)
Furzeham Primary (283)	Galmpton Primary (209)
Homelands Primary (252)	Priory RC Primary (193)
Ilsham C of E Primary (174)	Queensway RC Primary (196)
Mayfield Special School (101)	Roselands Primary (272)
Oldway Primary (693)	Sacred Heart Primary (232)
Paignton Community College (2,070)	Sherwell Valley Primary (532)
Preston Primary (324)	St Margaret Clitherow RC Primary (160)
Shiphay Primary (409)	St Margaret's Primary (367)
Torquay Community College (1,113)	Warberry Primary (381)
Torquay Grammar School for Girls (856)	
Torre C of E Primary (244)	
Watcombe Primary (258)	
White Rock Primary (429)	

Table 5.1 Schools Implementing School Travel Plans

5.2.5 Major Employers

Whilst most trip making in Torbay is related to leisure and personal business trips, the majority of peak period trip making is related to commuting. As this is the busiest time of day, the emphasis for travel planning is on reducing the amount of commuting by car.

One of the ways this can be done is by encouraging employers to set up travel plans. These are a package of measures aimed at reducing car borne commuting and encouraging the use of other modes, such as public transport, walking and cycling. These travel plans are not 'anti-car' and include car sharing, in addition to encouraging the use of non-car modes.

The two biggest employers in Torbay, the Council and Torbay Hospital are voluntarily implementing travel plans, with a number of smaller employers also having chosen to produce travel plans.

Travel Plans are also a standard requirement for new developments within Torbay. These include a robust set of measures similar to those outlined above, but tied either to Planning Conditions or S106 legal agreements. This reassures the Council as to their enforceability, should the occupier fail to implement the plan, and that remedial measures will be taken if the plan is not meeting its targets. The Council is in the process of taking action under these powers in respect of a small number of travel plans which have not been satisfactorily implemented.

Those employers with travel plans are shown in Table 5.2.

Name of Organisation	Date of Adoption	No of Employees	Basis	Status
Bookham Technologies (Nortel)	2000	1,000	Voluntary	Implemented
South Devon Healthcare Trust	2000	5,500	Voluntary	Implemented - under review
McDonalds	2001	40	Planning	Implemented
Occombe Farm	2001	10	Voluntary	Implemented
South Devon College	2001	500	Voluntary	Implemented - under review
Torbay Council	2002	5,000	Voluntary	Implemented - under review
KFC	2002	40	Planning	Pursuing non-compliance
Sainsburys	2002	500	Planning	Implemented
Nippers Childcare	2002	9	Planning	Implemented
Town Parks Farm	2003	10	Voluntary	Implemented
SPAR, Paignton	2004	5	Planning	Implemented
Riviera Centre	2004	300	Voluntary	Implemented
Torre Abbey	2004	20	Voluntary	Implemented
Torbay Leisure Hotels Ltd	2004	330	Voluntary	Implemented
South Devon Healthcare Trust Newton Road	2004	30	Planning	Implemented
Torbay Coast and Countryside Trust	2004	150	Voluntary	Implemented
Riviera Way	2004	100	Planning	Implemented – under review
Carlton Road Nursery	2004	30	Planning	Implemented
Plainmoor Sure Start	2005	30	Planning	Implemented - under review
Living Coasts	2005	70	Voluntary	Implemented

Table 5.2 Employers with Travel Plans

At the time of writing around 32% of employees in Torbay are covered by travel plans. Although the majority of these travel plans have been set up as conditions upon planning consents, efforts are being made to encourage other employers to develop travel plans on a voluntary basis.

5.2.6 Bus Operators

Torbay's bus operators have made major strides in recent years to recover from a difficult position of falling patronage, brought about by minimal investment, unreliable services and poor planning.

As a result of the implementation of the Torbay Bus Strategy (see Annex D), today, Torbay has a modern fleet of vehicles, generally reliable services, increasing bus service patronage, reducing subsidy requirements, and pro-active operators. This has led to a position of expanding services, which are improving accessibility at all times of the day, by providing links to where people want to go, when they want to go.

'Stagecoach welcomes the measures included in the Torbay LTP and is looking forward to entering into a (Statutory) Quality Partnership Agreement as soon as possible. The progress made in recent years and the measures targeted at bus transport in the LTP, show a real commitment by Torbay Council. We believe that this LTP represents a major opportunity to boost the fortunes of bus services in the area and will provide Torbay with a modern, attractive network of bus services which are well used.'

Stagecoach Devon, 2005

The major operator in Torbay is Stagecoach Devon, there are currently 4 other operators offering public bus services in the area. Table 5.3 summarises Torbay's bus operators in terms of fleet size, number of services and market share.

Operator	Status	Fleet Size	No of Services	Market Share
Chelston Leisure	Local operator	4	3	1%
Countrybus	Local operator	2	2	0.5%
Dart Pleasure Craft	Local operator	4	3	0.5%
First Devon and Cornwall	National group	21	5	3%
Stagecoach Devon	National group	89	21	95%

Table 5.3 Torbay's Bus Operators

5.3 Making Better Use of Torbay's Transport Network

5.3.1 Background

An important element of the second LTP process is the emphasis on making the best use of existing infrastructure. There are a number of ways this can be achieved, for example by removing pinch points, improving the efficiency of road usage, eliminating unnecessary traffic, and reducing the effect of the peak. These are key elements of the transport strategy for Torbay, following on from the first LTP programme which has seen substantial extension of the area's Urban Traffic Control system, improved signing and the introduction of new variable message signing.

5.3.2 Congestion for Sustainable Transport Users

Congestion is a key issue affecting the ease of travel by sustainable modes, although this is not so common in the public arena as is motor vehicle congestion. For pedestrians, footway capacity, conflicts with other users, severance caused by high traffic volumes, delays at poorly-prioritised signals and personal safety issues can all delay trips and influence route choice.

Cyclists are affected by many of the same congestion issues as motor vehicle drivers and buses. Capacity must be maintained for cycles at junctions, particularly those where motor vehicle congestion is a problem and cycle safety must be a paramount consideration in highway design. The needs of all cyclists, including those of lower confidence, must be accounted for in the mix and standard of provision on, and off-road, for both leisure and commuter routes.

Bus users are delayed by motor vehicle congestion, whatever its cause, by bus capacity, service frequency and by poor access to stop infrastructure. All of the considerations affecting pedestrians are relevant for bus passengers.

Rail passengers are similarly affected, not only in terms of train capacity, but also in their trip to rail stations in Torbay. Improved provision for carriage and storage of cycles is also an important issue if joined trips are to remain a realistic possibility and grow in significance in future years.

Blocked routes, crossings of busy roads, and excessive motor vehicle speeds forcing horse riders onto back routes are all congestion issues affecting equestrians.

5.3.3 Vehicle Congestion Now and In 2011

5.3.3.1 Where Is Vehicle Congestion Now?

A key part of the initial consultation for this LTP was to understand the varying views perceptions of congestion in Torbay. Whilst congestion in Torbay does not generally reach the levels experienced nationally, or even in the larger towns in Devon, there exists a perception that traffic in certain parts of Torbay does not run freely and that this has an impact upon the operation of other transport services. The key areas include:

- Tweenaways Cross, Paignton;
- Windy Corner, Paignton;
- Preston town centre;
- Bolton Cross, Brixham;

- Paignton town centre;
- Kerswell Gardens, Torquay;
- Hele Road, Torquay; and
- Lawes Bridge, Torquay.

These locations have also been identified through other areas of work. For example:

- Tweenaways Cross, Preston district centre and Windy Corner have been highlighted by Stagecoach Devon as having a major impact upon bus service reliability; and
- Hele Road has been designated as an Air Quality Management Area, with Bolton Cross likely to be similarly designated.

5.3.3.2 Background to the Torbay SATURN Model

A detailed analysis has been undertaken of existing and future traffic flows and likely areas of congestion. This work has been based on the Torbay Traffic Model, which has been updated and used to predict likely congestion in 2011. This builds on the work undertaken for the Road Traffic Reduction Act 1999.

The Torbay Traffic Model makes use of the transport modelling software SATURN, developed by Atkins and ITS, Leeds. The study area for this assessment stretches from the A380, north of Kerswell Gardens roundabout, to Hillhead, south of Brixham and from Collaton St Mary in the west to the coast in the east. This area incorporates all of Torquay, Paignton and Brixham.

This study required a model with a detailed network and zone system of Torquay, Paignton and Brixham town centres, together with broad detail of the remainder of the study area. The existing traffic model, developed during the 1990s, provided a good foundation to which a series of minor modifications were made to produce a model more suited to the study area and the purpose of the project.

The existing model was based on AM peak flows. As this is one of the busiest periods of the day, it produced flows above the average and therefore gave close to a worst-case scenario for the network.

Initially, the Torbay Traffic Model was used to confirm existing congestion hotspots, based on 2004 data. These areas are shown in Figure 5.1 below.

The full methodology used to assess traffic growth and the detailed conclusions of the study are contained in Annex H, and are also available on the Torbay Council Transportation Website[1] .

1. www.torbay.gov.uk/torbay_saturn_model_-_final_draft_210605.pdf

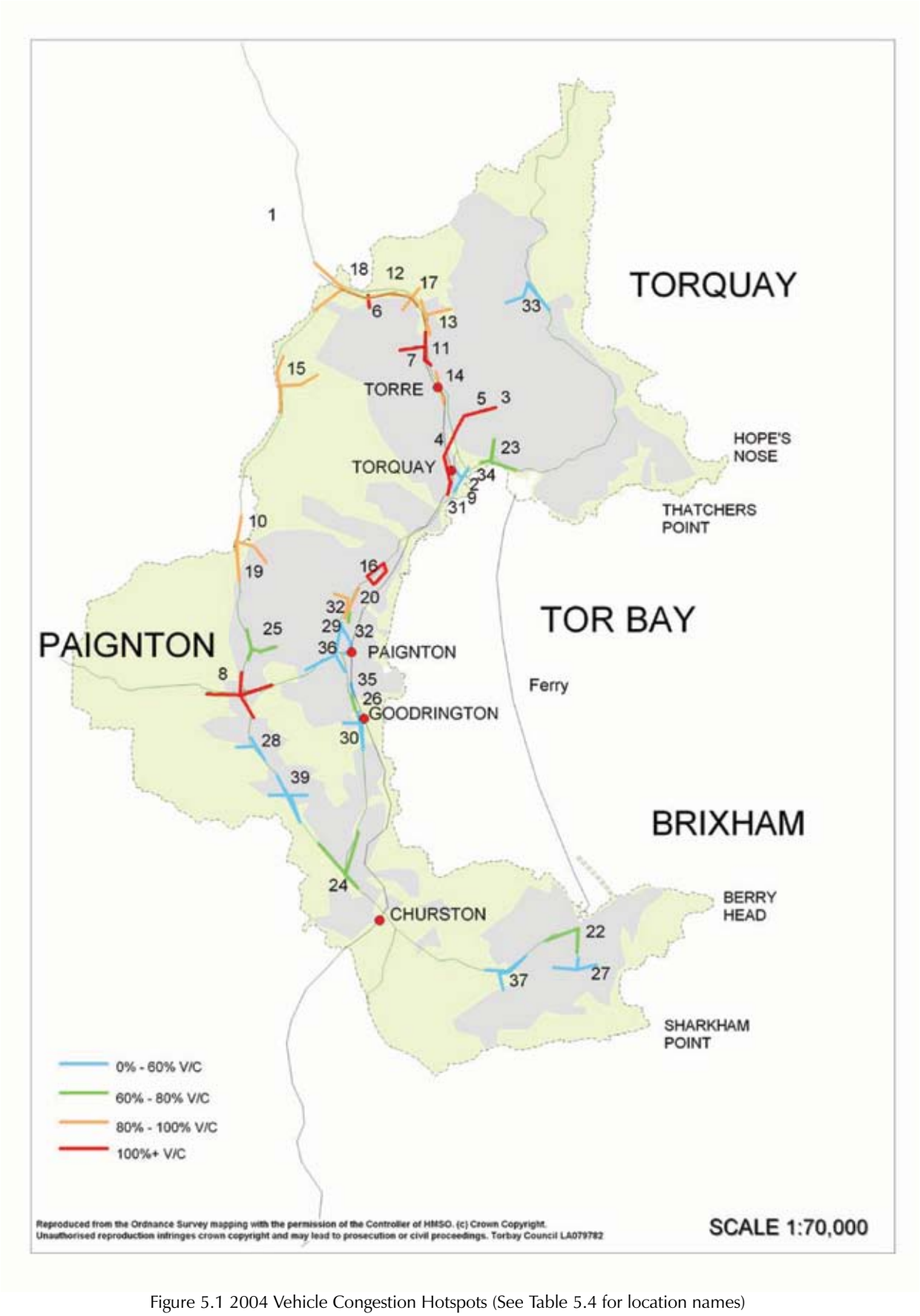


Figure 5.1 2004 Vehicle Congestion Hotspots (See Table 5.4 for location names)

5.3.3.3 Traffic Growth

The model and trip matrix were updated with respect to the development proposals outlined in the 'Adopted Torbay Local Plan 1995-2011'. On top of the LTP updates, data for the forecasting assessment has been obtained from the following sources:

- TEMPRO v4.2.3[2] – Dataset: South Western Region, Version 14, May 2002
- TRICS[3] – a database of trip rates for different land uses
- Torbay Council traffic databases

Over the period 2004 to 2011, total traffic growth in Torbay is expected to be around 11% or 1.5% per annum. This compares with growth of around 10% between 1999 and 2004 or 2% per annum.

5.3.3.4 Where do we expect future congestion?

The Traffic Model demonstrates that a general worsening of conditions on Torbay's road network is probable. Were the predicted level of traffic growth to occur, effects would include a fall in average speeds from 24.5 kph to 23.2 kph, and a 16% rise in fuel consumption across the network.

As can be seen from Table 5.4 below a number of major junctions in Torbay will be operating at or above capacity by 2011 in this scenario. Whilst some junctions are already at or above capacity, it should be noted that two junctions move from the lowest category to the middle category, two junctions move from the middle category to overcapacity, and seven junctions move from the lowest category to the overcapacity category.

It should be further noted that there is a 20% margin of error built into the model, so that some junctions in the middle category may actually operate overcapacity in peak periods.

0 – 80% V/C Ratio	80% - 100% V/C Ratio	Overcapacity
14) Avenue Road/Newton Road	9) Seaway Lane/Torbay Road	1) South of Kingskerswell
22) Bolton Cross	10) Five Lanes	2) Rathmore Road/Torbay Road
23) Belgrave Road/Torbay Road	11) Barton Road/Cricketfield Road	3) Abbey Road/Tor Church Road
25) Colley End Road/Kings Ash Hill	13) Lawes Bridge	4) Abbey Gates
29) Totnes Road/Dartmouth Road	15) Gallows Gate	5) Falkland Road/Lucius Street
30) Dartmouth Road/Penwill Way	16) Torquay Road/Manor Road	6) Riviera Way/Newton Road
33) Manor Road/Babbacombe Road	17) Browns Bridge	7) Shiphay Road/Newton Road
34) Kings Drive/Torbay Road	18) Kerswell Gardens	8) Tweenaways Cross
36) Totnes Road/Fisher Street	19) Churscombe Cross	12) Scotts Bridge
37) New Road/Monksbridge Road	20) Torquay Road/Cecil Road	21) Barton Hill/Kingskerswell Road
38) Great Western Road/Dartmouth Road	27) Burton Street/Rea Barn Road	24) Windy Corner
	31) Cockington Lane/Torbay Road	26) Fisher Street/Dartmouth Road
		28) Yalberton Road/Brixham Road
		32) Hyde Road/Torquay Road
		35) Whitstone Road/Dartmouth Road
		39) Long Road/Brixham Road

Table 5.4 Summary of Predicted Congestion in 2011 at Major Junctions

2. http://www.tempro.org.uk
3. http://www.trics.org

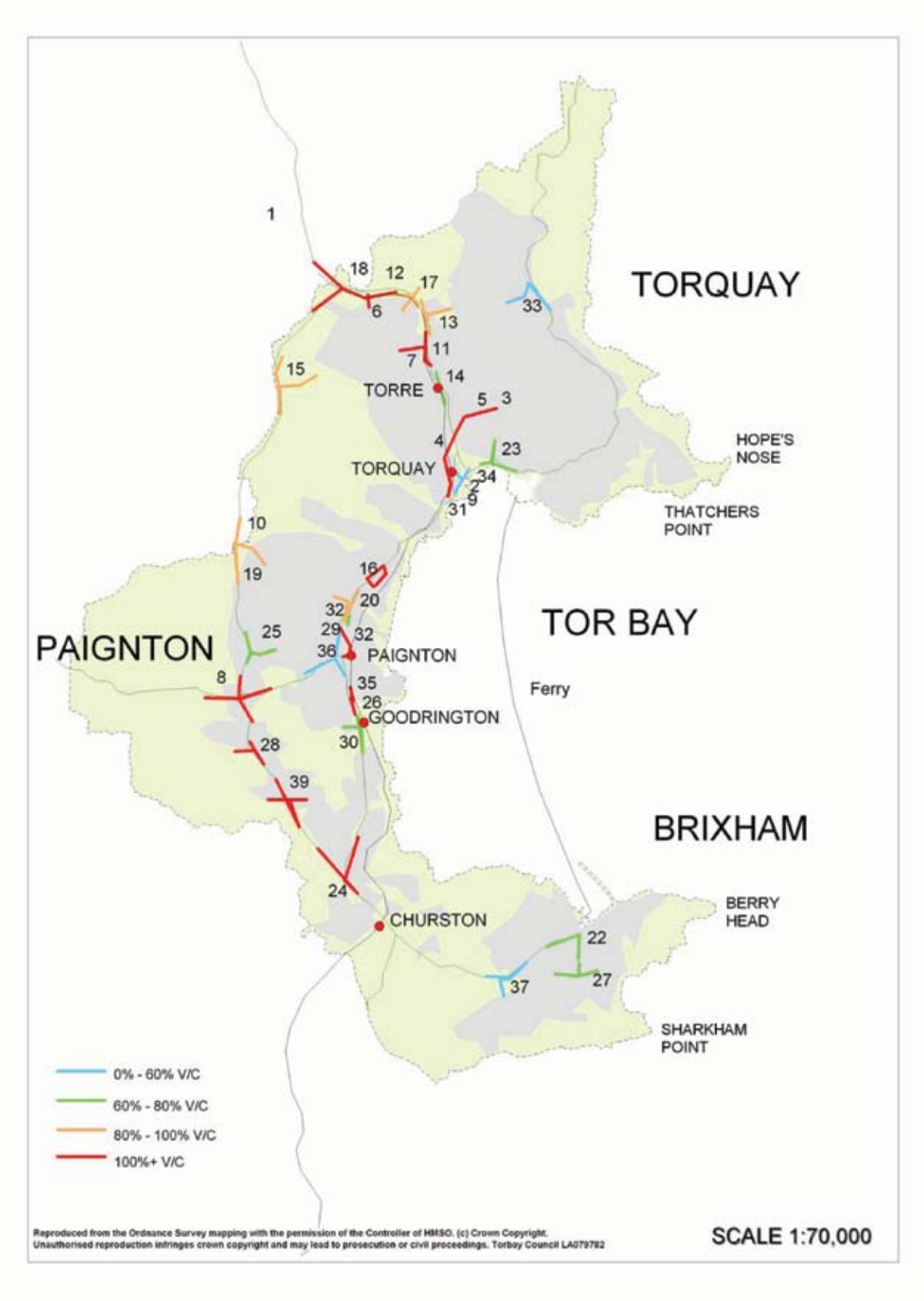


Figure 5.2 2011 Forecast Vehicle Congestion (See Table 5.4 for location names)

Congested areas were identified based on high queue lengths, long delays or large volume/capacity ratio values, as shown in Figure 5.2.

The analysis identifies that during neutral months, Brixham is the least congested part of the study area in the base and remains so in the forecast model; where the operation of major junctions within Brixham remain at a satisfactory levels.

The base model flags up existing problems along the A380 Ring Road at Tweenaways Cross, Five Lanes, Churscombe Cross and Windy Corner. These increase in the forecast model. The increase in congestion in these areas corresponds to areas along the ring road being identified as areas for development in the Local Plan. This effect is particularly noticeable at the Yalberton Road and Long Road junctions with Brixham Road where significant development is proposed.

Junctions along the main Dartmouth Road / Torquay Road route through central Paignton become an issue in the forecast model with three of the junctions reaching a worst volume/capacity of over 100%. This is consistent with the development in the area and the general trend of traffic growth.

Torquay is the most congested area in the base model with the junctions of Riviera Way / Newton Road, Shiphay Road / Newton Road, Rathmore Road / Torbay Road, Abbey Gates and some of central Torquay having a worst volume/capacity greater than 100% during the AM peak period. This trend continues in the forecast model with volume/capacities worsening around Kerswell Gardens but improving for junctions around the old South Devon College site where 394 new houses are planned.

The model shows that the residential development contributes to an increase in congestion in the area, causing some trips from Riviera Way and the north to re-route using alternative routes to the east of Torquay town centre to access the town, in preference to Riviera Way. The overall impact of this is that in some locations on Riviera Way, closer to the town centre, traffic flows decrease slightly in the future year scenarios.

Congestion problems at these links and junctions are addressed throughout the LTP, through measures to enhance the attractiveness and operation of sustainable modes, and through limited highway capacity improvements at locations where congestion is most severe.

5.3.4 What Is the Effect of Vehicle Congestion?

Congestion in Torbay has wide ranging and often unseen impacts; including:

- deterring businesses from investing and tourists from visiting;
- increased levels of pollution and environmental degradation;
- reducing accessibility to key services by increasing journey times;
- increasing severance within communities;
- causing bus services to become unreliable or excessively slow; and
- increasing the costs of transport by all modes.

5.3.4.1 Pollution and the Effect on the Environment

In Torbay, traffic is the only significant source of air pollution. Areas of Torbay with air quality problems are heavily congested with slow moving traffic. Slow moving or queuing traffic emits more air pollution than traffic moving at a steady speed, and therefore has a direct impact upon air quality.

The environmental impacts of congestion are much wider than just air quality. Congestion affects all aspects of the environment, from streetscape to severance. Congestion makes shopping streets unattractive; makes it difficult to get from a car park to the beach; affects conservation of historic town centres; increases production of greenhouse gases and noise pollution; and causes overcrowding on public transport.

5.3.4.2 Effect on the Economy

Much of Torbay's economy relies upon visitors, whether they are long or short stay tourists or day-trippers. The position of Torbay as one of the leading UK destinations for such trips relies upon the perception of its environment. Reductions in the quality of Torbay's environment, whether perceived or actual, will therefore have a significant effect on Torbay's economy.

In a situation where the number of visitors to Torbay continues to fall, year on year, improvements to Torbay's environment and diversification into areas including recreational walking and cycling must be a priority. Congestion is possibly the main cause of environmental degradation in Torbay and tackling it is key to Torbay's economic wellbeing.

Recent developments in Torbay's economy have led to a belief that congestion, particularly in relation to accessing the new development sites to the west of Paignton, is a key factor in the decision of new employers to locate elsewhere. Access to these areas is constrained by congestion in a number of key areas, including Kingskerswell, Tweenaways Cross and Preston district centre. It is considered that the removal of this congestion is important in attracting new employers to Torbay.

5.3.4.3 Transport Impacts

The Traffic Management Act 2004 highlights that it is the movement of people, rather than private vehicles, which is critical. Examples of congestion affecting other modes include:

- the inability of pedestrians to easily cross a busy road or at a junction where signals favour motor vehicles over pedestrian demand;
- delays to bus services as a result of queues of traffic at junctions; and
- inadequate space and storage facilities for cycles on trains due to overcrowding or a lack of provision by operators.

There is a need to make best use of the available roadspace and infrastructure in order to obtain the most favourable balance of benefits for all users – e.g. ensuring that pedestrian crossings use the latest technology in order to favour pedestrians whilst delaying motor traffic to the most minimal extent.

In achieving this balance, full consideration will be given to the hierarchy of users specified in the Adopted Torbay Local Plan. Safety and accessibility for users of sustainable modes will not be compromised.

5.4 Options and Schemes

5.4.1 Walking

Walking is the most frequently used way of making a trip. By promoting walking in Torbay, it will increase sustainable travel, reduce congestion and improve health of those living and working in the Bay. This is particularly relevant where 40% of the population live and work in the same ward.

The Council has a Walking Strategy designed to ensure that needs of walkers are considered during the implementation of any transport scheme. Additionally, links have been made with other Council departments, such as Education, Development Control and the Torbay Development Agency, to ensure that walking requirements are integrated into Bay-wide decision making.

5.4.1.1 Walking Improvements

Clearly, by encouraging children to walk to school, there will be a significant reduction on the amount of cars on the highway network. There are clear health benefits to both children and parents if more walked to school. The Council has engaged all but two of the 43 schools in Torbay to commit to a travel plan, and it is expected that around 34 (79%) will have plans in place by April 2006.

It is anticipated that part of the future work by the School Travel Advisors (funded jointly by DfES and DfT) will be implementing long term programmes and campaigns to increase walking to school, such as Walking Buses and car-free days. Other work done by the Council includes mapping all walking routes around every school in the Bay to identifying areas that need improvement.

The Council takes part in Walk to School Week twice a year, using the local radio station to broadcast the message to parents driving their children to school. Fluorescent tabards, armbands and bags are provided to all children and adults involved in walk to school schemes.

Existing workplace travel plans in Torbay are strongly supportive of encouraging walking to work, and can help identify areas where there may be missing links in the network. Similarly, new developments in Torbay are expected to make provision for walkers to their sites through S106 or S278 agreements. Local Plan Transport policies, particularly Policy TS, are geared towards supporting these improvements to walking routes in Torbay. There is a clear need to ensure that the Council works with developers to ensure walking routes are complete and this is already undertaken as a matter of course.

The Baywalks scheme, previously funded by the Countryside Agency, is run by Torbay Coast and Countryside Trust, with support from the Torbay PCT and Torbay Council. This aims to increase the number of residents walking to improve their health. Participants are often referred by GPs. The Council has installed three 'Measured Miles', to encourage those on leisure walks to monitor how far they have walked. Fluorescent tabards, armbands and bags are provided to anyone involved in these walking schemes.

Clearly, the South West Coastal Path and other Public Rights of Way in Torbay are vital to providing a network of off-road walking routes in Torbay. The Torbay ROWIMP commits to maintaining existing routes and creating new footpaths, particularly circular and those suitable for people with disabilities.

Given the reliance on the tourist industry to maintain and improve the local economy, hoteliers are encouraged to promote walking to both staff and visitors to the Bay. This is done by implementing travel plans, promoting green credentials of a hotel and providing literature that shows walking routes to and around each hotel involved. The Council's guidance A Guide to Leisure Travel Plans has been produced to assist in this delivery

The Council has been proactive in encouraging walking as part of its own travel plan. Free pedometers and fluorescent items are given to anyone who walks to work and lockers are being installed in each Council building in a phased approach. Since November 2004, staff walking to work has increased by 1.7% to 9.2%. Given this increase, the Council will continue to provide incentives to increase the amount of staff walking to work.

In short, the Council will implement the following schemes to ensure that walking is increased over the course of the LTP:

- Continued improvement of walking routes to school.
- Promote the benefits of walking to school through travel plans and local and national walking campaigns.
- Developer contributions to ensure walking routes are robust and complete.
- Developer travel plans to monitor the rates of walking in Torbay.
- Complete the walking map of Torbay, feeding in the existing mapping work undertaken around school sites.
- Improvements to footpaths and walkways, particularly concentrating on filling missing links.
- Further pedestrianisation of shopping streets.
- Continue to provide existing and new incentives to encourage staff to walk to work.

Walking routes, such as the Baywalks 'Measured Miles' have been installed in the three main towns of Torbay and take advantage of the environmental assets, such as Paignton Seafront, as shown in Photograph 5.1.

5.4.2 Cycling

Historically, measures to support cycling within Torbay had been delivered on a largely piecemeal basis, the majority through planning gain. However, despite its topography, Torbay has the national average mode share for trips by bike.

In 2003, the English Regions Cycling Development Team (ERCDT) highlighted the failings in terms of provision and promotion of cycling in the bay. Over the following year, all of the key recommendations within ERCDT's report were addressed.

These varied from the employment and training of appropriate staff and the formation of a Cycle Forum to undertake consultation and promotion, to implementation of the National Cycle Network (NCN) route through the Bay and enhancement of cycle training in schools.

The 2004 ERCDT assessment saw a 46% improvement in Torbay's score, with the Council being awarded 'Most Improved South West Authority'.

During 2005, there was a major step forward in terms of facilities. New cycle lanes were provided in a variety of locations, as were 14 new advanced stop lines and 80 new cycle stands. There has been a drive towards linking up previously-existing provision into meaningful routes and working with Sustrans to deliver the NCN. Figure 5.3 shows the current cycle provision in Torbay.

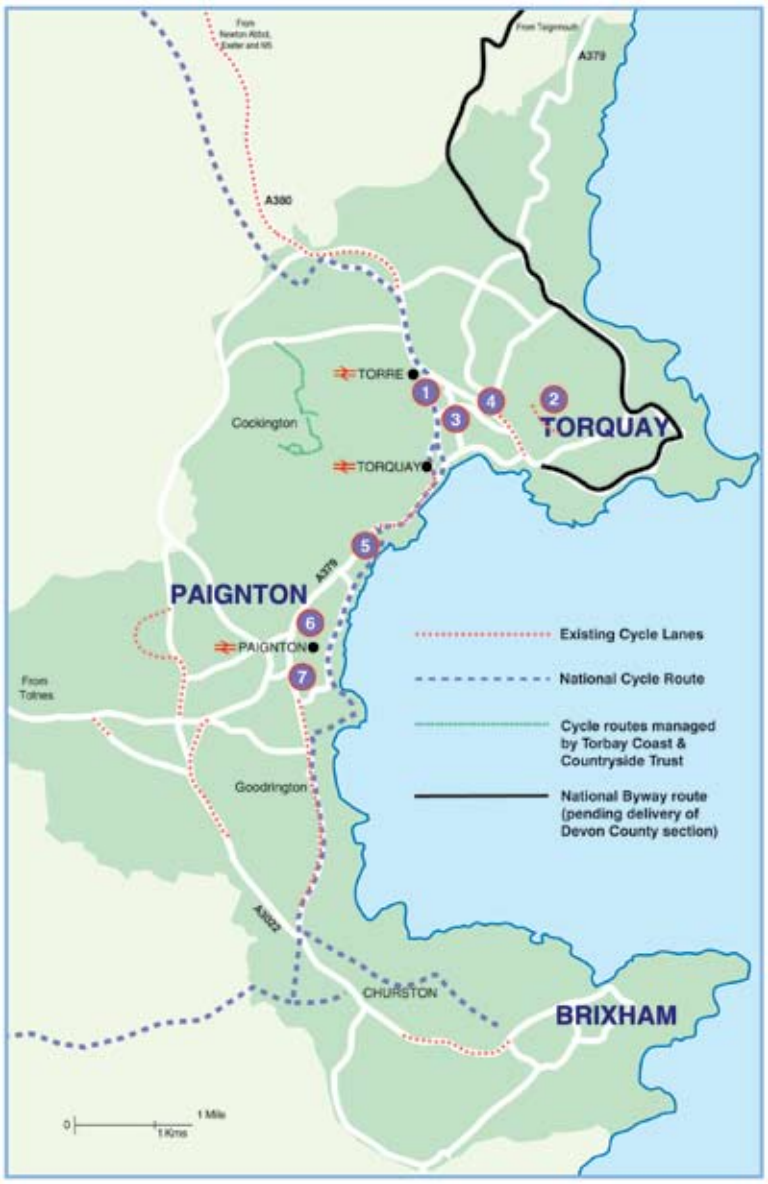


Figure 5.3 Map of current cycling routes in Torbay

Alongside this, there has been a significant promotional effort, with National Bike Week supported through public and school events. The authority has cycling response forms at libraries, bike shops, doctors' surgeries and online. School training has been improved and a cycling-on-referral health scheme is operating successfully in partnership with the PCT.

In the period of the first LTP there had been a gradual but slight increase in cycling from year to year. As a result of the Council's efforts over the past two years, we have seen an annual increase in cycling of 11% and the number of extra cyclists on the roads is noticeable.

The increasing rates of cycling in Torbay are encouraging and the Council's programme of works will seek to build on this success. There will be a focus on the extension of physical facilities and improved promotion.

The Council will continue to work with the Cycle Forum, local cycling organisations, retailers and also with neighbouring authorities. Devon County Council will be a key partner in delivering the National

Cycle Network and National Byway routes regionally, although both of these can be implemented within Torbay in a timescale independent of the County's, as they provide arterial cycling routes within the Bay in their own right.

Measures to support cycling will include:

- Continued delivery of cycle facilities and routes to aid commuter and utility cycling
- Delivery of the National Cycle Network through Torbay, on a route already agreed with Sustrans
- Delivery of other recreational and tourist route opportunities, including the National Byway
- Working with tourism representatives to promote the opportunities for cycling to tourists and also demonstrate the significant economic, diversification and regeneration benefits of recreational cycling to the tourist industry
- Promotion of National Bike Week, other national and international initiatives, including the very successful Schools Cycling Festival held annually
- Continued work in support of provision of cycling in schools both as part of the physical education curriculum and also through cycle training
- A requirement through the planning process that new developments provide appropriate cycle parking facilities:

- Commercial developments: cycle parking stands (preferably covered) in a secure and convenient location and at a rate consistent with or better than that specified in the Torbay Local Plan; showers; lockers; drying areas; promotion through Travel Plans; payment of mileage allowances for cycling.
- Residential developments: secure cycle parking to be provided indoors and in a secure and convenient location (unless this can be demonstrated to undermine the viability of the development) at not less than one space per unit.

- A requirement through the planning process that proposals for new developments incorporate an assessment of the realistic conditions for cyclists within the ride-to-site area and address any problem areas.
- A formal Cycle Audit will be undertaken for all development proposals with junctions onto the main and distributor road network, or where significant problems are apparent.
- Provision of advance stop lines (ASLs) will be the default position for junctions in Torbay which are either serving new development, or are undergoing redesign, remodelling, surfacing or other improvements.
- Measures to support cycling will continue to be delivered as part of the overall package of sustainable transport contributions to be provided by developments. Contributions will be in line with the rates for Public Transport Obligations in S106 Agreements specified in the 2005 Local Transport Plan Annual Progress Report approved by Members, or any subsequent revision.
- Completion of the Torbay Cycle Map will occur during 2006-07 and subsequent updates will be issued as appropriate.
- Cycle training will be made available to Council staff wishing to increase their confidence and ability on a bike, or to get back into cycling.

5.4.3 Horse Riding

Despite being predominantly urban in its character, Torbay has a number of areas where horses are kept and ridden. It is important that the needs of equestrian users are taken into consideration when developing the LTP. The main areas where horses are kept are the Daccombe/Barton area, Cockington, Blagdon and the Galmpton/Churston area.

The issues linked to road safety with regard to horse riding are road surfacing and driver awareness. The development and use of surface mastic asphalt (SMA) has caused problems for users nationally. It has been reported that where SMA has been used, horses have found it difficult to grip and this causes them to slip on the road. Obviously, this creates the potential for serious accidents for riders and motorists alike.

The issue of driver awareness to the unpredictability of horses is important in terms of road safety. Many of the areas used by horse riders are local 'rat runs' used by drivers to avoid congested routes. Traffic can travel quickly along these routes and many drivers, who are more used to urban traffic, are inexperienced in driving near horses. In addition, there are only three bridleways currently in Torbay, meaning demand for these routes is high and forcing horse riders onto the roads..

Torbay Council is currently drafting an Equestrian Strategy to take into account the issues raised during consultation with horse riders in Torbay. In particular, this strategy will:

- Produce, through rider consultation, a map of roads used by horse riders in Torbay, which will be know as the Torbay Equestrian Map.
- Ensure that roads on the Torbay Equestrian Map are resurfaced, wherever possible, using materials that will not cause horses to slip as referred to in Section 8.3.6..
- Review the horse warning signs on these routes and ensure that they are suitably located.
- Upgrade and create new bridleways and/or byways to increase off road links for horses as referred to in Section 3.5.4.6.
- Undertake driver awareness campaigns relating to horses and their unpredictability as referred to in Section 6.3.2.2.
- Ensure communication between the Council and equestrian users is useful and available.
- Engage Devon County Council, as the neighbouring highway authority, to ensure links to Devon bridleways from Torbay are maintained, and where possible, improved.

5.4.4 Public Transport Measures

5.4.4.1 Increased bus service patronage

The most obvious alternatives to car use for travel to work are bus services. It is therefore important that bus services meet a number of requirements, including:

- Linking residential and employment areas;
- Providing services at the time when people want to travel;
- Offering a sufficiently high quality product in terms of vehicle quality, reliability and accessibility; and
- Being available at reasonable cost.

Recent developments in bus services in Torbay mean that many of these requirements can now be met. In particular, operational improvements have led to greater levels of reliability, and new vehicles have improved the image of many services. In addition, upcoming service extensions will bring new links between Torquay, Paignton and Brixham and the important employment areas along the western corridor.

Torbay Council has developed a close working relationship with local bus operators, which is expected to culminate in a (Statutory) Quality Partnership Agreement (QPA) in the next 12 months. This has led to an agreement between the Council and operators whereby match funding will be provided for new buses in Torbay. This has already led to the purchase of 8 new double deck buses to supplement Service 12, with a further 4 double deck and 2 single deck to be ordered shortly. Torbay Council is also investing in changes to road layouts to accommodate larger buses, in line with these developments.

One key area of importance for the (Statutory) Quality Partnership Agreement (QPA) will be the issue of red routes. Red routes signify an innovative way of increasing reliability of journey times of public transport as well as by private car. Since many of the problems associated with interrupted flow are due to unnecessary delays, such as inappropriate and illegal parking, red routes would greatly complement parking measures already in place through Decriminalised Parking Enforcement (DPE). Since a key element of the QPA centres on bus punctuality, it is most likely that the delivery of red routes in Torbay would contribute greatly to a successful QPA. Torbay Council will pursue this option through the implementation of the emerging Bus Strategy and the QPA.

5.4.4.2 Controlling the public transport impact of congestion caused by flooding

The effects of localised flooding in Torbay, particularly along Torquay seafront, have led to severe congestion and the closure of the heavily used 12/12A bus route. It has therefore been necessary to implement a flood diversion route to helps reduce the amount of congestion occurring during these times. In addition, the Council implemented a number of Traffic Regulation Orders along this route to ensure that vehicles, including diverted buses, would not be further congested by parked vehicles.

5.4.4.3 Road User Charging

Implementing road user charging in Torbay is generally seen as being difficult. The combination of three town centres, with numerous entry points and widespread journey destinations, makes adoption of existing technologies impractical. Identifying well defined screenlines across which charging points could be placed is not practical, as even for Paignton this would comprise up to 10 roads in a small area. In addition any charging points would need to be located in the middle of residential areas.

For these reasons road user charging will not form part of the Torbay LTP 2006-2011 submission. However, Torbay Council is supportive of national initiatives to introduce road user charging and welcomes Government announcements on progress in its development.

5.4.4.4 Greater Use of Rail

Rail services from Torbay could have a significant role in reducing peak hour congestion, particularly between Torquay and Newton Abbot. However, it is clear from the Route Utilisation Strategy and the Greater Western franchise that improved services to Torbay are not a priority for the franchise.

The Torbay Rail Summit in March 2005 identified a number of further initiatives aimed at increasing rail patronage. These schemes include:

- Improvements to Torquay, Torre and Paignton Stations;
- Improved integration between rail and bus services; and
- Increased frequency of longer distance trains.

As it is clear that substantial investment in new or improved rail facilities is not going to be available, this LTP concentrates upon more minor measures aimed at improving integration between rail services and other modes. These schemes will include working with bus operators to improve routing, improving signing, implementing a cross-ticketing scheme and improving bus stops, cycle parking, cycle links and pedestrian routes to the 3 stations.

In the longer term, Torbay Council will continue to work with key stakeholders to develop a partnership scheme for the refurbishment of Torquay and Torre Stations and the reconstruction of Paignton Bus and Rail Stations. These schemes will be pursued with the Strategic Rail Authority, with a view to bringing forward a scheme towards the end of the LTP period. However, without substantial rail industry investment it will be impossible to bring these schemes to fruition.

The Council will continue to lobby for greater provision for cycle carriage on trains, particularly at peak hours. There is a significant demand for cycle-rail-cycle commuting, particularly between Exeter, Newton Abbot and Torbay. At stations on this route, there is an easy cycle ride to facilities and amenities.

The increasing potential for rail-cycle tourism is another avenue that will be investigated during the period of the LTP. Discussions are already underway with tourism representatives in respect of leisure cycling in Torbay. Rail is a very sustainable way for cyclists to reach the Bay with their bikes.

5.4.5 Travel Plan / TravelWise initiatives

Torbay Council is a member of the National TravelWise Association and uses the TravelWise logo in most promotions. TravelWise promotions include the ongoing carsharedevon scheme, Highway Code campaigns, focussing on issues including parking restrictions and braking distances and, most recently, the 'Stick It Out' campaign, designed to help people catch the bus easier and delivered in partnership with the main local bus operator. In 2005, Torbay Council won Highly Commended at the TravelWise Awards for 'Local Authority in the Field of Sustainable Transport'.


TRAVELWISE TORBAY

Keep Torbay Working

The Keep Torbay Working initiative is a helping hand from Torbay Council for companies who are considering developing a travel plan or have a developed travel plan. A financial contribution of up to 100% is awarded to companies in order to help fund travel plan measures and initiatives. Grants can range from between £50 and £1,000 depending on the quality of the travel plan and the size of the business.

Who can apply?

All companies who are considering developing or have developed a voluntary travel plan are invited to apply. Companies who are developing or have developed travel plans as part of a planning application are not eligible.

A one-off payment is provided for a specific green travel scheme as part of the company's travel plan. Each scheme is reviewed on the basis of :-

- How it fits within the developing or developed company travel plan
- How it aims to influence staff travel
- How it aims to reduce single occupancy car use

How do companies apply?

The company's Green Travel Coordinator fills out a paper form and submits it to the Torbay Council Travel Plan Officer, Torbay Council, 3rd Floor, Roebuck House, Abbey Road, Torquay TQ2 5TF.

The application will be reviewed and the applicant will be notified of the financial contribution from Torbay Council within 28 days of receipt of the application. The amount authorised will be at the discretion of Torbay Council. Torbay Council may wish to visit the premises to view the proposed scheme.

Before funding is released, the applicant is required to submit a completed travel plan (as approved by Torbay Council) and commit to the implementation of the scheme within the stated timescale. All funding must be claimed by 28th February of the current financial year. Once the scheme is implemented, the applicant will be required to measure its success. Should your project not be completed after Grant has been paid, the Grant must be refunded in part or in full at the discretion of Torbay Council.

Examples of schemes include:

- Cycle parking, changing facilities and lockers
- Promotional initiatives and maps

5.4.5.1 Keep Torbay Working

The 'Keep Torbay Working' initiative has been set up by Torbay Council to facilitate the implementation of voluntary travel plans, by employers in Torbay. All companies who are developing or implementing travel plans in Torbay can apply for up to £1,000

funding towards sustainable travel initiatives. This funding can be put towards 100% funding of schemes such as cycle parking, changing facilities, promotional information and maps, and purchase of pool bikes.

The scheme was launched in June 2005, with the first application being received during July. This initiative has an annual budget of £5,000 although this will be increased if demand increases.

5.4.6 Torbay Council Staff Travel Plan

As the second largest employer in Torbay, the Council's efforts to encourage sustainable travel to work are a key part of the strategy for reducing congestion. Torbay Council adopted its Staff Travel Plan in 2002 and has been implementing many of the actions since. There is however an increased emphasis on delivering many of the more radical proposals contained in the travel plan, including introducing staff parking charges, reducing the prevalence of essential car user status and completing the provision of cycle parking, showers and locker facilities. Table 5.5 summarises the programme for delivering the Staff Travel Plan.

Action	Date Implemented/Planned
Staff Travel Plan adopted	June 2002
Bus timetable racks installed	Autumn 2002
Staff Travel Plan website launched	Autumn 2002
CarShareDevon launched	May 2003
LPG purchase scheme introduced	Spring 2004
Cycle mileage allowance introduced	Autumn 2004
Pool bike scheme introduced	April 2005
Bus ticket purchase scheme introduced	Autumn 2005
Staff car parking charges introduced	Autumn 2006
Shower facilities at main Council offices completed	Autumn 2007
Cycle parking at offices completed	Autumn 2007

Table 5.5 Torbay Council Staff Travel Plan Progress

5.4.7 Network Management Measures

5.4.7.1 Demand Management

It has been widely accepted since the late 1980s that the restraint of traffic growth is key to tackling congestion. Although the short-term effects may be limited, demand restraint will be a major part of the longer-term strategy for reducing future traffic growth.

There are a number of strategic actions that can be introduced, including parking restraint, workplace parking charges, travel plans, taxation and road pricing. In this regard, Government deferral of fuel duty rises in the absence of widespread road pricing initiatives, continues to lead to reducing costs of car use, which makes demand management more difficult.

Around 32% of employees in Torbay are covered by travel plans. These plans are mostly the result of planning applications and set out a range of initiatives on a site by site basis, aimed at encouraging the use of non-car modes of travel. Stringent mode split targets tied to S106 legal agreements or planning conditions also accompany many of the travel plans. Torbay Council will continue to work with employers to develop travel plans and apply increasingly challenging targets.

Torbay Council has already had significant success in the adoption of school travel plans (STPs). As shown in Section 5.2.4, around 60% of students in Torbay are covered by STPs, with a further 26% planned to come on stream during 2005/6. The Council intends to have all students covered by an active STP by 2010.

Although reducing car borne travel demand is a key aim of this LTP; it is recognised that some trips can only be made by car. Torbay Council will continue to promote car sharing through CarShareDevon.com. This multi-agency initiative has been successful in providing a travel alternative for many regular and one off trips. The success of car sharing in Torbay is clearly shown by the results of this and other schemes, with car-sharing having 12% of the mode split for travel to some locations.

Other measures which can have positive effects on congestion include provision of Park & Ride, with an appropriate balance of town-centre parking provision and charges, and a commitment to make best use of available capacity to maximise the throughput of people on the transport network.

5.4.7.2 Using Parking Control to Restrain Demand

Torbay Council is committed to strong enforcement of parking restrictions, for both off-street and on-street car parking. The introduction of decriminalised parking enforcement in Torbay, is already reducing violation of on-street parking restrictions. Initially, decriminalised parking enforcement has been adopted as a means of reducing levels of illegal parking and underpinning existing Traffic Regulation Orders.

However, this system also gives Torbay Council a major tool that can be used in a targeted way to restrain car borne travel demand. In the run up to decriminalised parking enforcement, Torbay Council operated a moratorium on new parking regulations, given the lack of an enforcement mechanism. However, Torbay Council will now review its parking strategy, with a view to strengthening control of on street parking.

In particular, the existing objective of reducing the availability of long stay on street spaces will be strengthened and a programme of on street parking restrictions implemented. This will be targeted at those areas which currently suffer congestion, particularly close to the town centres.

This will initially be carried forward through a programme of Residents' Parking Zones (RPZ). Torbay Council has recently adopted a strategy aimed at delivering RPZs where consultation has identified a desire for these from residents. Initially seven areas have been identified, with 3 having been prioritised for 2005/6. The adopted programme for RPZs is as follows:

- Torquay Harbour – 2005/6
- Mount Pleasant, Brixham – 2005/6
- Paignton Town Centre – 2005/6
- Torquay Town Centre – 2006/7
- Furzeham, Brixham – 2006/7
- Lower Preston – 2007/8
- Shiphay, Torquay – 2007/8

5.4.7.3 Torbay UTC / VMS System

The second LTP programme continues the implementation of these programmes, allowing the delivery of the entirety of the VMS strategy for Torbay, the completion of the review of vehicle and pedestrian signing, and the further extension of the UTC system. This will provide a modern system of traffic management with the result that:

- Drivers will be shown the most direct route to their destination;
- The operation of junctions will be optimised to minimise delays;
- In the event of unexpected events, a rapid response through the use of Variable Message Signs can be put in place;
- The seafront diversion strategy can be completed, minimising delays due to bad weather;
- Drivers will be directed to the most appropriate car park for their destination without unnecessary travel through shopping areas; and
- With more junctions equipped with CCTV cameras and induction loops, the real-time management of traffic can be extended to more areas of Torbay.

5.4.7.4 Relief of Congestion Hotspots

'We support improvements to the traffic flows in the Preston area and Tweenaways Cross as these areas greatly affect flows in Paignton town centre.'

Paignton Chamber of Trade, 2005

The only viable short-medium term approach to relieving existing congestion hotspots in Torbay is by limited congestion relief schemes. These are likely to take a variety of forms, including:

- Simplifying the road layout in congested areas and reducing conflicts;
- Providing additional capacity for all modes at certain junctions; and
- Re-directing traffic away from congested areas, through signing or traffic restraint.

The traffic modelling work undertaken as part of the LTP development process has identified a number of areas where congestion already exists and a number where congestion is likely to occur in the future. These include Tweenaways Cross, Preston District Centre, Windy Corner, junctions on the main routes into Torquay, Paignton town centre and Bolton Cross, Brixham.

Congestion in these areas currently leads to increased journey times, bus service unreliability, poor conditions for pedestrians and cyclists and restricted accessibility to certain key services. It is essential that some relief is provided over the next five years as a measure to aid business development, the economy and visitor confidence.

This LTP includes schemes to deal with the congestion problems in these areas:

- Tweenaways Cross (part of the Torbay Integrated Package) – this scheme to expand the junction will reduce congestion by increasing stop line and exit capacities. This will ease traffic flow across the junction, particularly at peak times and during the summer;
- Preston district centre – this scheme will simplify the road network, removing the existing one-way system, reducing the number of conflicting movements and provide space for cycle lanes, bus priority measures and improved pedestrian facilities;
- Windy Corner (part of the Torbay Integrated Package) – located at the junction of the Torbay Ring Road and the main Brixham – Paignton road, this scheme will provide additional northbound capacity to reduce conflicts between queuing straight on and left turning traffic;
- Brixham Bolton Cross – this scheme primarily aims to reduce pollution in the town centre, whilst improving traffic flows and reducing conflicts between pedestrians and car traffic. This is a major element of the wider Brixham Regeneration Scheme, involving redevelopment and environmental enhancement of the town centre, fish quay and Oxen Cove.

In addition, improvements to a number of other junctions will be provided through developer funding. These junctions include a number of those identified as suffering congestion by 2011. In particular, junctions at Scott's Bridge, Riviera Way/Newton Road, Yalberton Road/Brixham Road and Long Road/ Brixham Road, will be improved as part of section 106 agreements with major developers.

New junctions are not permitted on major routes unless they have been subjected to robust testing, ensuring that they provide appropriate capacity for all users and will operate safely. This relates directly to existing policies T18, T19, T20, T21 and T22 of the Adopted Torbay Local Plan 1995-2011 as well as modelling work informing this LTP and prevailing best practice in relation to capacity assessment and Road Safety Audit.

The co-ordination of street works, planned events and road traffic accidents helps to provide the road user with the necessary information to avoid congested routes and the Council to set up diversions if required. There is a need to ensure that the respective Council Officers with responsibility for discharging New Roads and Streetworks Act (1991) obligations and the Police share information to hand available. Procedures and protocols will be put in place to ensure the sharing of, and action upon, available information.

Torbay Council is also working with Devon County Council and the Highways Agency to identify an emergency procedure for the closure of the A380 Newton Road, which is the main route into Torbay. The Council proposes to expand this procedure to cover all the major routes within the Torbay highway network so that diversionary routes for the most critical parts of the network are planned well in advance.

5.4.7.5 Transport Innovation Fund (TIF)

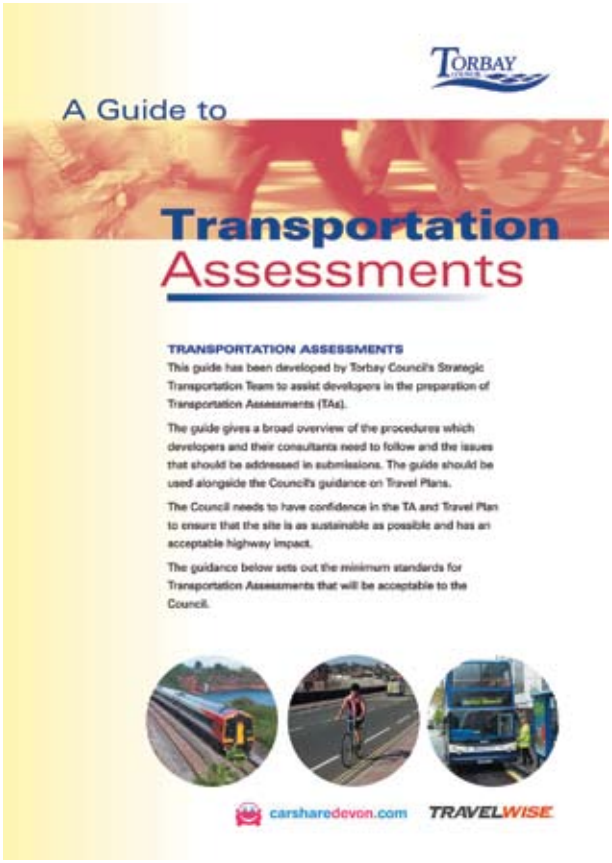
The Transport Innovation Fund (TIF) was introduced by the Development for Transport (DfT) in 2004. It is an initiative geared at producing capital funded schemes specifically designed to tackle congestion, centred around the theme of congestion charging and other access restrictions such as workplace parking. Torbay Council submitted a TIF bid for the Brixham Park and Ride Scheme during 2005, but this failed due to a combination of strong national competition and a lack of real and robust measures to reduce and restrict car use. Having met with the DfT in February 2006 to discuss the options, the scheme now forms part of the Torbay Integrated Transport Package. It is unlikely that Torbay will qualify for TIF funding during the period of this LTP.

5.4.8 Development Control and Planning Gain

5.4.8.1 Torbay Council Assistance

In recent years there have been a wide range of planning applications and pressure for major developments in Torbay. These range from relocating South Devon College to Paignton, employment generation at Edginswell, residential development at Dolphin Park in Brixham, and development of key worker accommodation in Torquay. To assist the planning process, Torbay Council takes a pro-active stance to encourage such developments, through the production of planning briefs, assistance with transport assessments and early Section 106 negotiations. To this end, Torbay Council was one of the first authorities in England to produce specific guidance for developers on the Council's requirements for transport assessments[4] and travel plans[5]. These documents are now used by a number of Councils as representing best practice.

In addition to ensuring that planning delivery targets are met, this approach allows the Council to guide developers in designing applications. This has resulted in the ability to build in good levels of accessibility to all developments, through good junction design, stringent Section 106 agreements and realistic and challenging travel plans.



Travel Plans and Mode Split Targets

Torbay Council has recently taken the lead in using the planning process to deliver higher levels of accessibility and to reduce the impact of developments on the road network. This has led to a situation where more than 30% of Torbay's employees are covered by travel plans, either voluntary or imposed through the planning process. This includes all of Torbay's major employers.

4. www.torbay.gov.uk/3284-transportassess.pdf
5. www.torbay.gov.uk/3193travelplans.pdf

5.4.8.2 Section 106 and 278 Agreements

Torbay Council has developed Supplementary Planning Guidance (SPG) for Torbay relating to transport within Section 106 and 278 agreements.

The SPG sets out a new approach to sustainable transport provision. Recent experience has shown the attractiveness of a capital based approach to Section 106 agreements, rather than longer term revenue based approach. In Torbay this has been converted into a formula for capital contributions towards sustainable transport development.

In line with the adopted Hierarchy of Users, contributions towards sustainable transport provide for measures supporting walking, cycling and public transport access to developments.

Walking and cycling infrastructure is provided either through S106 or directly by the developer under S278, in which case a deduction equivalent to the value of the works is generally made. For public transport, an agreement with Torbay's two main bus operators secures new buses with match funding by the Council, as a one off contribution. The relevant operator then guarantees to operate an agreed service for 7 years.

Since the implementation of this system in February 2005, a variety of infrastructure measures have been funded; and orders have been placed for 11 double deck buses and 4 single deck buses, for use on a range of services in Torbay. This has ensured pedestrian access, supported the ongoing increase in cycling within the Bay and allowed the expansion of bus service 12 with a new route and increased frequency, the return of peak hour services on service 66, and provision of low floor buses on services 64 and 65.

The sustainable transport contributions are based on the rates specified in Annex D of the Torbay Local Transport Plan Annual Progress Report 2005 and agreed by Members. As previously noted, these sums serve not only to facilitate bus service improvements, but also provide funding for walking and cycling in line with prevailing policy and best practice.

There are situations where the level of contribution may need to be greater than that specified above. This would include, for example, those sites that could not be reasonably accessed by sustainable means solely on the basis of the limited funding provided by the Sustainable Transport Contribution.

Prevailing policy and best practice will be the key criteria for the assessment of exceptional sites. Payment of a contribution will not secure planning approval where access would remain unacceptably poor. The critical link between land use planning and transportation provision will not be broken.

The contribution is not intended to take into account amendments which need to be made to existing highway infrastructure as part of the overall application, in order to provide a reasonable access to the site – e.g. junction and signals improvements, capacity upgrades and the like. These will be provided by the developer in the usual manner and identified in the Transportation Assessment for the site.

5.5 A Five Year Plan For Reducing Congestion

5.5.1 Programme of Investments

Variable Message Signing (£640,000) – This scheme would enable Torbay Council to deliver its VMS strategy for the whole of Torbay. This involves the implementation of car park monitoring, diversion signing, tourist directions and emergency management schemes. This would directly contribute to reducing the total vehicle mileage on the network, reducing traffic levels in sensitive or congested areas reducing the likelihood of AQMA declaration, and reducing the effect of congestion on bus services thereby contributing to a 30% improvement in reliability *(Indicators LTP2, LTP5 and LTP8).*

Urban Traffic Control System Expansion (£500,000) – During the first LTP period, Torbay Council undertook a major overhaul of its UTC system, with significant expansion and renewal. This scheme would allow the Council to complete the job of renewal and expand further the coverage of the system. Linked to this it is planned to introduce bus priority at key junctions and improve pedestrian safety. These improvements will contribute to reducing total vehicle kilometres on the network, assist in delivering a 30% improvement in bus service reliability, and help to meet Torbay's casualty reduction targets *(Indicators LTP2, LTP5, BVPI99x, BVPI99y and BVPI99z).*

Demand Management Initiatives (£514,000) – As part of the implementation of decriminalised parking enforcement, Torbay Council has put in place a number of residents' parking zones. This scheme would allow the Council to continue this work. In addition the scheme would enable the Council to respond to requests for increased parking restrictions as part of its network management duty. These initiatives will assist in delivering a reduction in total vehicle kilometres, a 5% reduction in the number of children being driven to school, a 30% improvement in the reliability of bus services, an increase in footfall in shopping streets, and a 5% reduction in the number of people driving to work *(Indicators LTP2, LTP4, LTP5, L1 and L7).*

Preston Congestion Relief (£1 m) – The relief of congestion in Preston is a major priority for Torbay Council. The area has been identified by bus operators as being a significant impediment to bus service reliability and the congestion in the area is causing air quality problems. The scheme will simplify the road network in the area and provide space for bus and cycle priority measures. This scheme will help to deliver a 23% increase in bus service patronage, a doubling of cycling trips, a 30% improvement in bus service reliability, and improvements in air quality so avoiding further AQMA declaration *(Indicators BVPI102, LTP3, LTP5 and LTP8).*

Minor Cycling and Walking Schemes (£250,000) – This scheme is aimed at providing funding for a wide range of minor schemes, including footway improvement and installation, minor cycling infrastructure to facilitate safer and easier movement in problem areas, and promotional schemes. These measures will assist in the delivery of a 10% improvement in footway condition, a doubling of cycling trips, a 5% reduction in the number of children being driven to school, and a 5% reduction in the number of people driving to work *(Indicators BVPI187, LTP3, LTP4 and L7).*

School Travel Plans (£50,000) – Torbay Council has been successful in implementing school travel plans which account for more than 50% of students. Although the Council is on target to meet its target of all students being covered by 2010, there is a need to support the implementation of plans through provision of funding for specific items. This scheme would enable the Council to provide contributions where appropriate. This would assist in the delivery of the Council's child casualty targets, a 5% reduction in the number of children being driven to school, and full coverage of school travel plans in all schools in Torbay *(Indicators BVPI99y, LTP4 and L8).*

Travel Plans (£50,000) – Travel plans are a key element in the Council's demand management strategy. Although the Council has been successful in encouraging the implementation of travel plans for around 30% of Torbay's workforce, there is a need to support these and other plans. This scheme will provide funding for minor schemes and management to support travel plans. Improving the coverage of travel plans will assist in the delivery of a 23% increase in bus service patronage, improvements in accessibility, a reduction in total vehicle kilometres, a doubling of cycling trips, and a 5% reduction in the number of people driving to work *(Indicator BVPI102, LTP1, LTP2 and L7)*.

Public Rights of Way (£100,000) – As part of its Public Rights of Way (PROW) Improvement Plan, Torbay Council has identified a shortlist of schemes for action. This scheme would provide funding for these improvements to support the PROW. These schemes will help to deliver a 10% improvement in the condition of footways, and an increase in footfall in shopping streets *(Indicator BVPI187 and L1)*.

5.5.2 Value For Money Assessment

In assessing the value for money offered by the LTP programme, two analyses have been undertaken, a qualitative analysis based upon the NATA Appraisal Summary table, and a quantitative analysis based upon the modelled outcomes of the LTP in terms of reduced congestion and journey times.

5.5.2.1 NATA AST Qualitative Analysis

The benefits of reducing congestion fall into a number of categories within the NATA appraisal framework. Key aspects include journey ambience, transport economic efficiency, and reliability. These sub-objectives deal with different aspects of congestion and are therefore dealt with separately below.

Journey Ambience – congestion is one of the major causes of poor journey ambience, whether it is caused by overcrowding on trains, queuing traffic or difficulties in crossing the road. Many of Torbay's residents suffer the effects of congestion regularly, particularly those who travel during peak period. The proposed programme would have the affect of removing much of this congestion, by reducing traffic levels, increasing the capacity of bus services and improving crossings. These actions will have the affect of improving journey ambience for many of Torbay's travellers. It is estimated that around 40,000 people travel during peak periods in Torbay and that many of these people would have an improved journey ambience.

Transport Economic Efficiency – many of the benefits in this area relate to reduced transport operating costs resulting from reduced congestion, and improvements in vehicle scheduling due to improved reliability and shorter journey times. These benefits will lead to an improved economic position for transport services in Torbay, particularly those which are provided on a commercial basis. Whilst the benefits to operators in terms of reduced vehicle operating costs have been estimated and are included in the analysis below, the other benefits are difficult to assess without detailed operating models of public and freight transport.

Reliability – improving the reliability of services will have a number of benefits. These include improved efficiency in service provision as the need for back up vehicles is reduced, improved attractiveness of public transport as passengers are more able to rely on timetables, and as a result a better financial position for services, giving greater long term viability. These benefits would benefit all of Torbay's transport operators, although benefits will accrue more to the larger operators, who are better able to exploit this kind of economies of scale.

5.5.2.2 Quantitative Analysis of Effects of Reducing Congestion

This analysis has been undertaken utilising the results of detailed traffic modelling work commissioned for this LTP. As discussed in the consultants' report a series of scenarios were tested based upon varying forecast scenarios and LTP packages. For the purposes of this analysis it was assumed that the core scenario, representing the outcome of the LTP programme, would be one which included a 20% reduction in development generated trips and included all of the congestion relief schemes included in the core LTP programme, plus the Tweenaways Cross scheme.

The modelling work undertaken has allowed the comparison of a variety of statistics. However, for the purposes of this analysis it is considered that the most important are the total vehicle kilometres on the network and the total travel time on the network, during the modelled peak hour. The analysis undertaken is detailed in Annex I. Table 5.6 below summarises the analysis of the benefits of reducing congestion in Torbay.

	2004	2006	2007	2008	2009	2010	2011
							Base Forecast
Total Vehicle Kilometres	92,368	95,160	96,587	98,036	99,507	100,999	102,538
Total Time (Hours)	3,776	3,951	4,042	4,134	4,229	4,326	4,426
							Forecast with Full LTP Programme
Total Vehicle Kilometres	92,368	94,823	96,074	97,343	98,627	99,929	101,257
Total Time (Hours)	3,776	3,903	3,967	4,033	4,100	4,168	4,235
							Savings
Total Vehicle Kilometres		337	513	694	879	1,070	1,281
Total Time (Hours)		49	74	101	129	157	191
Monetised value of vehicle kilometres saved		26	40	54	68	83	99
Monetised value of travel time saved		451	690	939	1,196	1,464	1,773
Total discounted benefits		477	730	992	1,265	1,547	1,872
Annual discounted benefits		2,153,499	3,296,947	4,481,606	5,710,989	6,986,532	8,454,332
Total discounted cost benefit over five years							31,083,906
Total discounted cost over five years							6,026,775
Total Benefit to Cost ratio							**1:5**

Table 5.6 Congestion Benefits Assessment'.

The analysis undertaken clearly demonstrates that the LTP programme, in relation to the Congestion Relief, represents the highest category of value money. The total Annual discounted benefits over the 5 – year period of the second LTP amounts to £31,083,906 which when compared to the total Discounted Costs of the money invested i.e. £6,026,775, as referred to in Annex I, gives a Benefit to Cost ratio of over 5.

This is a clear indication that the beneficial return from the measures programmed, to combat the excesses of congestion over the plan period, i.e. VMS, Walking, cycling, demand management, will give a good return for the money expended.

5.5.2.3 Analysis of the Benefits of Demand Management and Non-car Schemes

The congestion relief plan, set out in this LTP can be broken down into three general elements, those relating to demand management and encouragement of non-car modes, those related to junction improvements, and the Tweenaways Cross Congestion Relief Scheme. Two of these elements have been analysed separately to assess the value for money presented by each. As the Tweenaways Cross Scheme is the subject of an Exceptional Scheme bid, this is discussed in Chapter 10.

It is important to recognise the value for money offered by the demand management and non-car schemes in the LTP. Measures such as travel plans, UTC expansion, and walking and cycling infrastructure schemes typically offer very high rates of return. Work undertaken to identify the benefits of these measures in Torbay, shows generally extremely high value for money, with a benefit:cost ratio in excess of 10 being identified.

5.5.3 Revenue Funding

Torbay Council funds, through its highway maintenance programme, an ongoing programme of replacement and upgrading of its basic highways infrastructure. Due to the lack of investment by the previous highway authority, the back-log of repairs to the stock of unclassified roads, footways and small structures etc., will take many years to redress under the Governments current funding process of the financing of Local Authorities through Formula Spending Share (FSS).

The opportunity to seek additional sources of funding is actively pursued by the Council to ensure that the maximum benefit can be gained in delivering a sustainable transportation network for Torbay. Such sources available to Torbay Council, come in the form of Exceptional Scheme capital funding through the Regional Funding Allocation (RFA) route, for individual schemes of less than £5million, Transport Innovation Funding (TIF) (see Executive Summary) and Developer Funding through Section 106 & Section 278 (see Section 5.4.8.2). This source of developer funding has yielded substantial benefits to Torbay's transportation infrastructure both in improvements to the highway network and to service provisions for the travelling public (see Section 10.14).

5.6 Congestion Targets

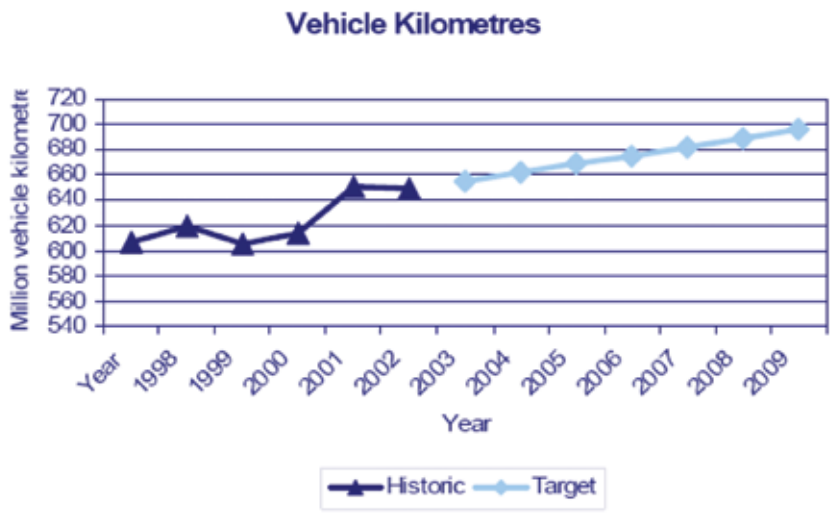
5.6.1 Key Outcome Indicators

The indicators presented below are those which are key outcome based and directly measure the achievement of the objectives of this LTP. The key outcome indicators for congestion are:

- LTP2 – Change in Area Wide Vehicle Kilometres
- LTP3 – Annualised Index of Cycling Trips
- LTP4 – Mode Share of Journeys to School
- L17 – Journey Time Data

The full list of the baseline targets and trajectories, developed from the DfT Pro-Forma issued in December 2005, can be found in Annex B.

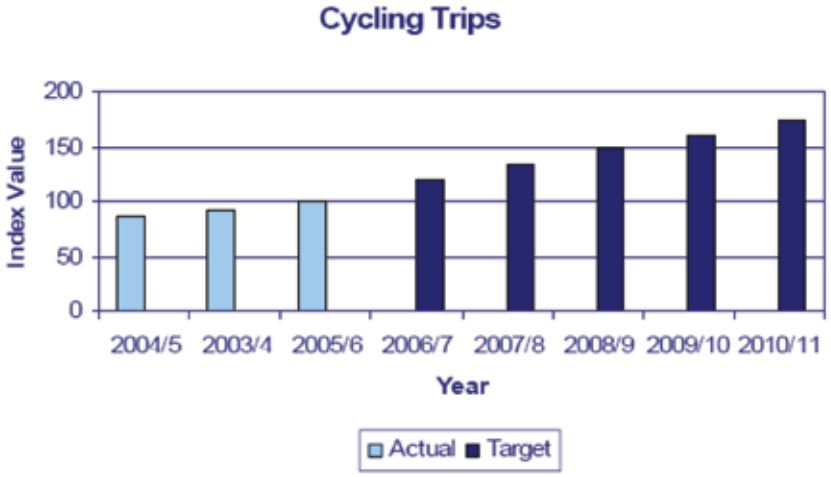
LTP2 – Change in Area Wide Vehicle Kilometres



Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
649 Million vehicle kms (2003/04)	655 Million	662 Million	669 Million	675 Million	682 Million	696 Million	696 Million

This new indicator will be used to assess the success in reducing the demand for car borne travel in Torbay. The indicator is based upon data collected by the Department for Transport as part of its annual monitoring programme. As shown, the target for traffic growth is to restrict growth in Torbay to 1% per annum.

LTP3 – Annualised Index of Cycling Trips



Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
87 Annualised Index Value (2003/04)	91	100	120	135	150	160	174

This indicator was adopted in 2004 to measure Torbay Council's success in encouraging cycling. This is based upon tri-annual counts at 5 locations throughout Torbay. The target for increasing cycling is for a doubling of the number of cyclists counted by 2011.

LTP4 – Mode Share of Journeys to School

Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
24% By car (single occupancy) (2004/05)	24%	23%	22%	21%	19%	17%	15%

An interim target has been set by Torbay Council until official figures from DfES are released. This is measured through an annual 'hands up' survey. As shown the target is for a further reduction by 35% by 2010. For full break down, refer to Annex B.

L17 – Journey Time Data

Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
17.4mph (2004/05)	17.4mph	18.5mph	20mph	21mph	22mph	23mph	24mph

Following on from the Journey Time Data target set in the first LTP, this target has been stretched to reach 24mph by 2010/11 following on from the encouraging results so far with 18.5mph in 2005/06. Journey Time Data measures speeds on all of Torbay's principal roads. The average speed of the entire journey is then calculated from the Journey Time Data, as this was deemed a more measurable target.

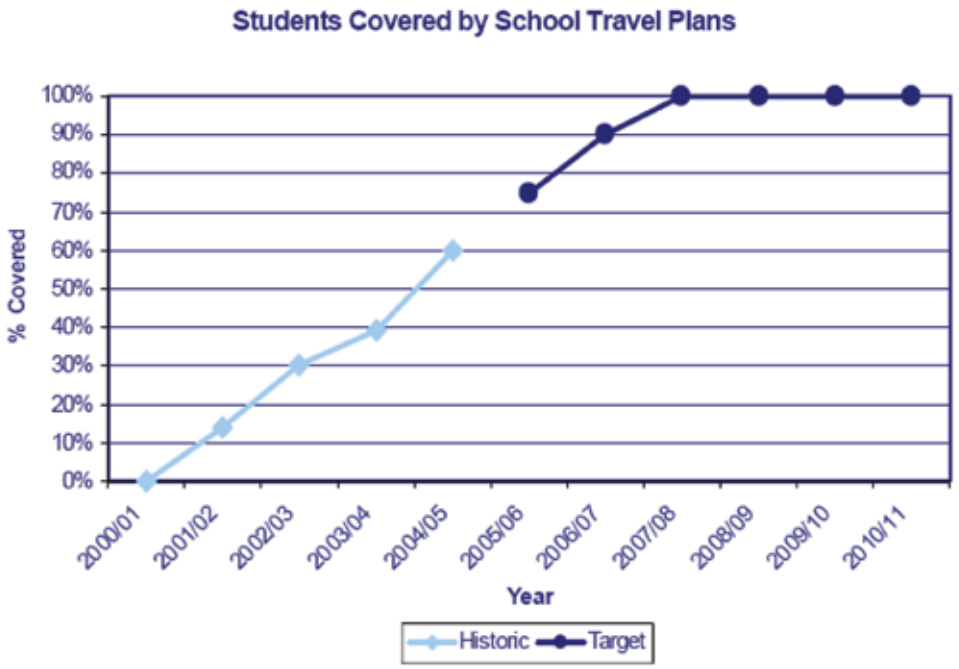
5.6.2 Contributory Output Indicators

The indicators presented below are those which provide contributory outputs and measure the deliverability of schemes, policies or initiatives, which will contribute towards the delivery of outcome indicators presented above. The contributory output indicator for congestion is:

- L8 – Proportion of Students Covered by School Travel Plans

The full list of the baseline targets and trajectories, by further developing the DfT Pro-Forma issued in December 2005, can be found in Annex B.

L8 – Proportion of Students Covered by School Travel Plans



Base Data	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11
0% Covered (1999)	60%	75%	90%	100%	100%	100%	100%

Torbay Council has had major success in encouraging schools to adopt school travel plans. To date the proportion of students covered by an STP is 60%. As shown the target is to have all students covered by 2007/8.