Strategy Summaries

- Reduce the number of road casualties;
- Improve road safety for the most vulnerable users and sections of the community;
- Improve air quality in the Air Quality Management Areas;
- Ensure air quality in other areas remains better than the UK and EU standards;
- Encourage and facilitate more physically active travel;
- Improve personal security on the transport network.

With an area as diverse as the West of England we recognise our JLTP3 will have a different impact according to where you live. The box below highlights the varying impact of measures for better safety, health and security.

Indicators and Targets

Indicators and targets will be added following a review of funding and resources.

8.1 Road Safety

Background and evidence

8.1.1 Between 1994 and 1998 an average of 472 people were killed or seriously injured (KSI) on the West of England's roads every year. By 2009 this number had fallen to 253 (see Figure 8.1). Child KSI casualties have also fallen (1994-98 average of 57 per year down to 18 in 2009). These reductions are in line with current national casualty reduction targets. The number of people with slight injuries also declined (down from a 1994-98 average of 3944 to 3230 in 2009). About 40% of our KSI casualties in 2008 were on rural roads.

8.1.2 Casualty reductions have been greatest amongst car drivers and passengers. Pedestrian numbers have also seen a welcome decrease as have the number of Powered Two Wheeler (PTW) rider casualties. In common with many parts of the country we have experienced an increase in injury accidents involving cyclists (see Figure 8.2). This has to be viewed in the context of the 52% growth in cycling in the West of England between 2003/04 to 2009/10.

Where people live	Contribution to Goal	Impact
Major Urban Areas	Significant	Reducing pedestrian and cyclist casualties, Air Quality Management Areas, community safety, walking and cycling for health
Towns	Significant	Reducing road casualties, local air quality problems, walking and cycling for health
Rural	Significant	Reducing speed related road casualties

Figure 8.1: People killed or seriously injured on West of England roads

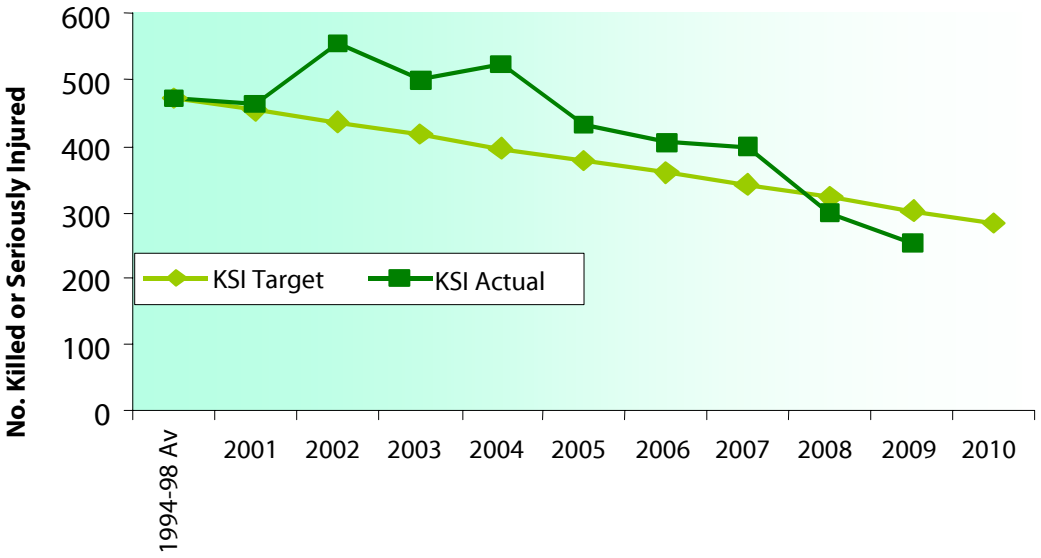
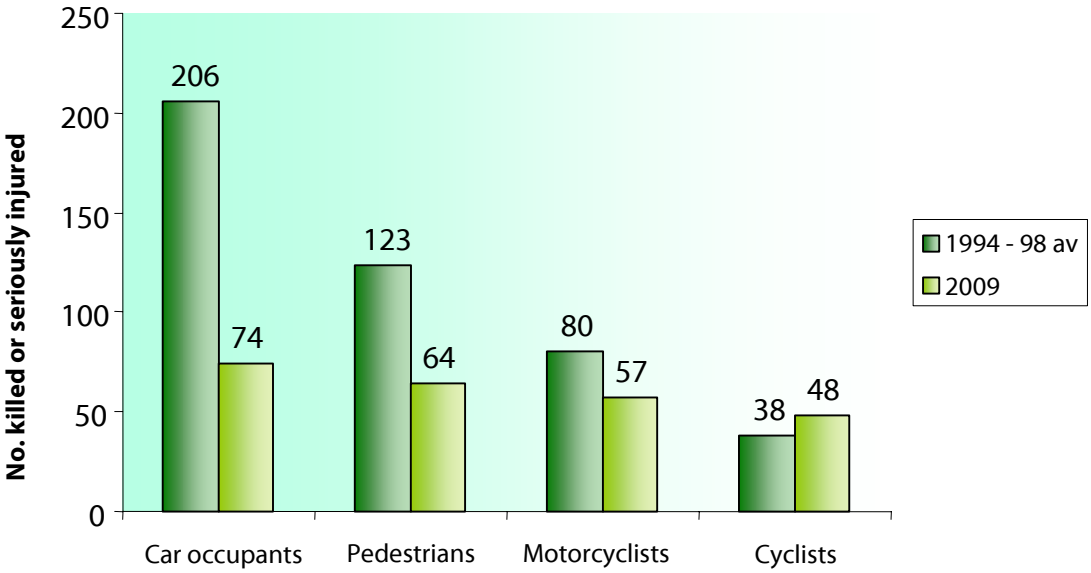


Figure 8.2: People killed or seriously injured in West of England by road user group



8.1.3 The challenge is to meet the national casualty reduction targets put forward in 'A Safer Way' (consultation draft, DfT 2009). The success in reducing casualties to-date (apart from cyclists) means that further reductions will be a challenge because most of the big accident clusters have already been addressed. More innovative approaches will be needed.

8.1.4 Joint working between the four councils and partners in the West of England Road Safety Partnership is now well established and will continue to be a key factor in casualty reduction. By working jointly there is the opportunity

to target resources and schemes in cost effective ways to tackle road safety on an area-wide basis.

8.1.5 Education, training and publicity programmes will be needed with children and other vulnerable groups a priority. Through the West of England Road Safety Partnership this work can be broadened alongside danger reduction and other engineering measures.

8.1.6 Successful interventions will be dependent on both capital and revenue funding.

8.2 Road Safety Strategy

8.2.1 The road safety objectives of the JLTP3 are to:

- Reduce the number of people killed or seriously injured in road traffic accidents;
- Reduce the number of children killed or seriously injured in road traffic accidents;
- Improve safety for all road users, particularly the most vulnerable members of the community;
- Ensure that deprived urban wards do not suffer from road casualty rates which are significantly above average; and
- Improve road safety for vulnerable road users, chiefly cyclists and PTW riders.

8.2.2 The main themes of the Strategy focus on:

- Working with partners to optimise the use of the resources available for road safety and ensure best value;
- Extensive, innovative and challenging education, training and publicity programmes, capturing hearts and minds of road users across all age groups;
- Schemes targeted at improving road safety for children, motorcyclists, cyclists and disadvantaged areas and addressing specific problems in rural and urban areas;
- Speed management and effective enforcement measures to reduce casualties and improve quality of life where there is evidence of vehicles travelling at inappropriate speeds, for example introduction of 20 mph speed limits in Bristol;
- Improving quality of life by linking road safety initiatives to neighbourhood renewal and town centre enhancement programmes and promoting 'liveability' by good design and maintenance.

8.3 Air Quality and Health

Background and evidence

8.3.1 Emissions from transport can have a serious effect on people's health. Exposure to poor air quality seriously affects the most vulnerable such as the

very young, very old and people with cardio-respiratory problems. A key traffic pollutant is Nitrogen Dioxide (NO_2) which is produced both from vehicle tailpipes and from Nitrogen Oxides (NO_x) emissions from vehicles that react in the air and turn into NO_2.

8.3.2 In some locations the concentrations of NO_2 are above the 'objective' (target) set in the National Air Quality Strategy. Air quality assessments have resulted in parts of Bristol and Bath being declared as Air Quality Management Areas (AQMAs) focusing on city centres and main traffic routes. Levels of NO_2 in these AQMAs fluctuate but, in common with all other UK cities, are above the national target.

8.3.3 An Air Quality Action Plan (AQAP) was produced for the Bristol AQMA in 2004 that sets out specific measures to tackle air quality problems. A similar AQAP was published in 2010 for the Bath AQMA which was enlarged in 2008 to include the city's major road network. The AQAP takes into account the measures in the Bath Transportation Package major scheme and CIVITAS RENAISSANCE initiative including measures to manage and reduce HGV movements in the Bath City Centre. It provides preliminary technical work on a Low Emission Zone (LEZ) and identifies a number of additional measures such as a LEZ feasibility study, ECO Stars scheme and low emission vehicle infrastructure and services. See Box 8a for more on what else is happening to improve air quality.

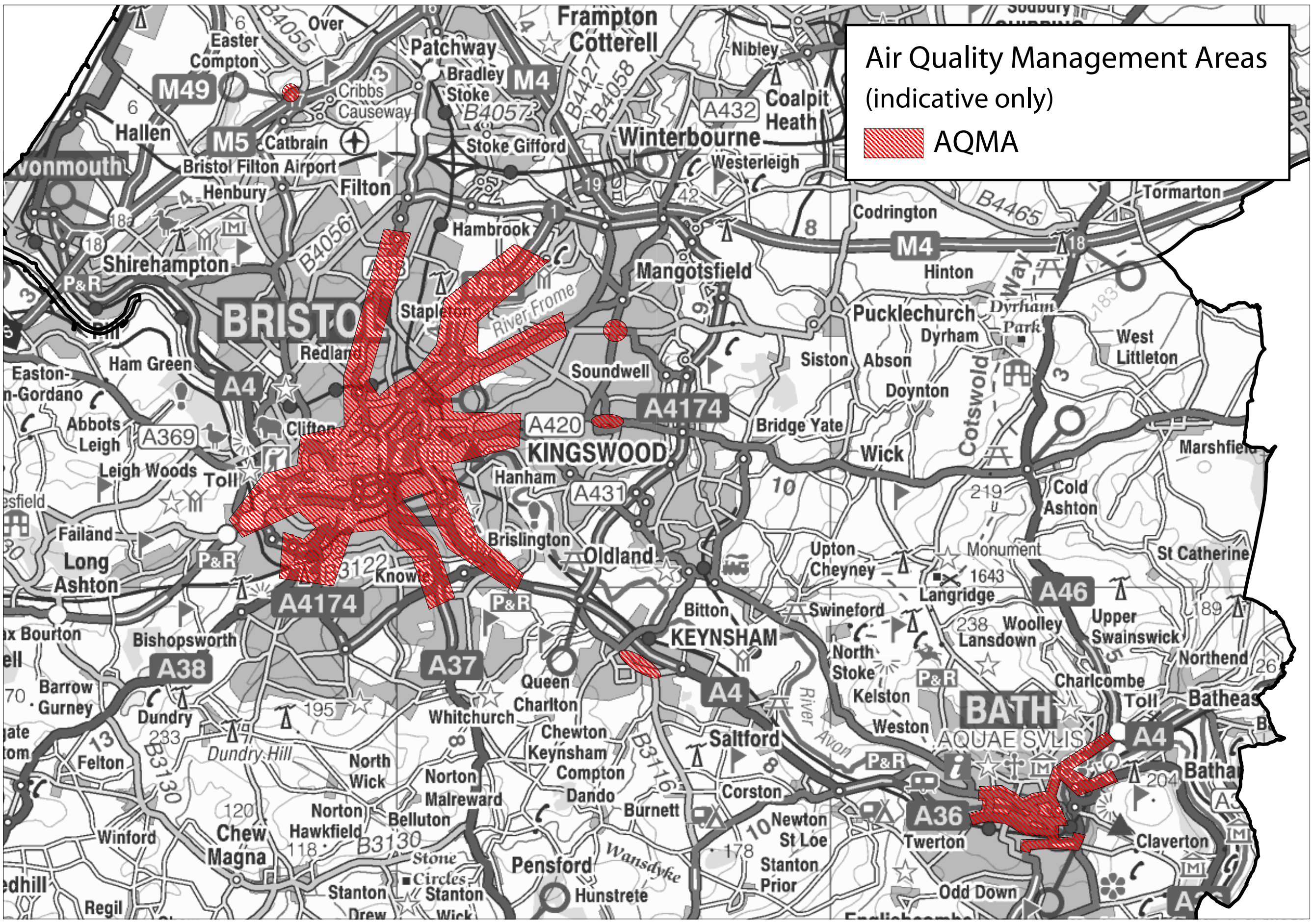
8.3.4 Monitoring has shown that NO_2 levels in four other locations (centres of Keynsham, Kingswood and Staple Hill and near Junction 17 of the M5 at Cribbs Causeway) are above the national objective. All four have now been declared as AQMAs (see Figure 8.3) and have emerging AQAPs and targets. The Bristol and Bath AQMAs are under review and are likely to be extended.

8.3.5 In the JLTP 2006 to 2011 we underlined the need to integrate AQAPs into West of England transport planning because of the close link between air quality and traffic. As outlined above, preparation of the AQAPs is at different stages and we will continue to ensure that the policies and measures they put forward are integrated with those in JLTP3 (see Table 8.1) in line with Local Air Quality Management (Defra policy guidance PG09, Feb 2009).

Box 8a: Air Quality Key Facts and Case Studies

- Vehicles travelling at 50mph produce 25% less NO_x than those travelling at 70mph.
- Trial project in Bristol has upgraded 16 buses from Euro 4 to Euro 5 standard saving up to 2 tonnes of NO_x per year.
- Bristol City Council's fleet now contains over 100 LPG and hybrid vehicles.
- 10% reduction in car trips among participating households through promotional work such as Personalised Travel Planning.
- Highways Agency Managed Motorway initiatives on parts of the M4 and M5 plan to achieve more reliable peak period journey times, smooth traffic flow and improve air quality.
- 10% vehicle fuel savings through driver efficiency training in Bath and North East Somerset (see Box 5b),

Figure 8.3: Air Quality Management Areas



8.4 Air Quality Strategy

8.4.1 Our strategy focuses on:

Information, promotion, awareness and alternatives

- Raising awareness of air quality issues;
- Providing information about air quality for residents and visitors, including those sensitive to high levels of pollution such as elderly people or asthma sufferers;
- Reducing vehicle use by promoting more sustainable modes of transport;
- Encouraging use of lower emission vehicles;
- Promotion of 'eco driving' training with focus on high mileage business users to encourage more fuel efficient driving;
- Encouraging behavioural change.

Network management

- Urban Traffic Management and Control (UTMC) to help reduce emissions associated with stop-start driving and prioritise more efficient modes of transport such as buses;
- Relocating traffic queues away from areas where the air quality impact is likely to be detrimental;

- Work with the Highways Agency through our Memorandum of Understanding on potential air quality improvements on the motorway and trunk road network;
- Targeted parking enforcement on key radial routes to reduce delays and congestion during peak periods;
- Using real time information to provide early warning of road works and other incidents to enable drivers to find alternative routes and help avoid local air pollution hot spots.

Table 8.1: Integration of Air Quality Action Plans and JLTP3 Measures

AQAP Measure	JLTP3 Measure (Chapter)	Benefits/ Impact
Information and promotion - Initiatives encouraging behavioural change	Smarter choices (Ch 6) Road Safety Supplementary Document (and Ch 8)	Reduced car use and more moderate driving, reduced traffic noise and emissions (CO_2, NOx and PM10), improved road safety and active travel health benefits.
Promotion and provision of alternatives - Travel plans - Walking and cycling facilities - Car Clubs	Smarter choices (Ch 6) Walking and cycling, Rapid Transit, Bus and rail (Ch 6) Major transport schemes (Ch 11)	Reduced congestion and emissions (CO_2, NOx and PM10). Improved travel choices and accessibility and active travel health benefits.
Managing the road network - Bus priority measures - UTMC - Speed management - Parking enforcement - Freight transhipment	Network Management and Freight Supplementary Documents (and Ch 6) Demand management (Ch 6) Road Safety Supplementary Document (and Ch 8)	Reduced congestion and emissions (CO_2, NOx, PM10), improved traffic flows and city centre environment. Improve travel choice, road safety and noise.
Emissions management - Poorly driven vehicles - More efficient vehicles - Alternative vehicles and fuels - Congestion charging/ workplace parking levy - Low Emission Zones	Bus and rail (Ch 6) Network Management and Freight Supplementary Documents (and Ch 6) Green transport (Ch 5) Demand management (Ch 6)	Reduced noise and emissions (CO_2, NOx, PM10), improved city centre environment.

Signing

- Better signing to direct traffic, predominately Heavy Goods Vehicles, onto the most appropriate routes and away from sensitive areas;
- Use of variable message and other enhanced signing for parking to reduce congestion caused by circulating traffic searching for parking spaces.

Partnership working

- Partnership working with operators to achieve further upgrading of the bus fleet in the West of England;
- Increase the proportion of vehicles meeting the latest Euro standards;
- Use developer contributions where appropriate and other sources of funding to implement elements of Air Quality Action Plans.

Freight

- Work with the freight industry on ways and means of addressing the problem of Heavy Goods Vehicle emissions;
- Extend freight consolidation from Bristol to Bath to reduce the number of city centre deliveries
- Work with the health sector on possible expansion of the consolidation centre for health deliveries;
- Undertake a Low Emission Zone feasibility study for the Bath AQMA linked to freight consolidation;
- Reduce emissions from council vehicle fleets.

Major transport schemes

- Rapid transit and enhanced bus and rail services, accompanied by improvements for pedestrians and cyclists will provide attractive alternatives to the car helping reduce AQMA traffic levels.

Monitoring

- Continue to monitor local air quality across the whole West of England area, principally where pollutants are close to exceeding the national target.

8.5 Health and Physical Activity

Background and Evidence

8.5.1 Walking and cycling as part of our daily lives can increase physical activity and have large health benefits. The link between transport, physical activity and health is recognised nationally (see Box 8b) and reflected in programmes such as 'Be Active, Be Healthy', 'Change4Life' and 'Healthy Weight, Healthy Lives'. Preparation of the JLTP3 has been aided by comprehensive inputs from the West of England's four Public Health Directors.

8.5.2 Wider issues of obesity and public health are set out in our Local Area Agreements (LAA). Increasing walking and cycling has a key role in increasing physical activity. For example research

Box 8b: Link between Transport and Health

- Measures to improve health are linked with those aimed at reducing carbon emissions, reducing congestion, improving air quality and quality of life, increasing accessibility and reducing risk of injury;
- Heavy reliance on car use can lead to inactive/ sedentary lifestyles and contribute to higher levels of heart disease, stroke, cancers, diabetes and other illnesses including those resulting from obesity;
- 67% of adults in Bristol are at an increasing risk of ill health due to low levels of physical activity; physically active people reduce their risk of developing chronic diseases- such as coronary heart disease, stroke and type 2 diabetes—by up to 50%, and the risk of premature death by about 20-30% (National Active Travel Strategy 2010);
- At school age, active travel contributes to the 1 hour per day of physical activity recommended to control body weight against weight gain;
- Walking and cycling are the easiest ways that most people can increase their physical activity levels;
- Recommended level of activity for adults can be achieved by 30 minutes walking or cycling five times a week;
- Each additional kilometre walked per day is associated with a 4.8% reduction in the likelihood of obesity. Each additional hour spent in a car per day is associated with a 6% increase;
- Greater walking and cycling can produce savings to the local economy through lower levels of workforce absenteeism and help reduce congestion and improve air quality;
- Poor links within neighbourhoods and to public spaces can discourage walking and cycling and thereby discourage physical activity;
- Health benefits of walking and cycling schemes contribute to their good value for money;
- Increased public transport use contributes to increased physical activity.

in Bristol has demonstrated that children who walk to school are significantly more active than those carried in cars.

8.5.3 Efforts to increase walking and cycling through School Travel Plans, Bike It, Bikeability (Cycle Training) and walk to school campaigns can lead to health improvements including lower risk of unhealthy weight gain (see Box 8c).

8.5.4 Other partnership-working initiatives with local communities have helped to encourage active lifestyles via promotion of the local Rights of Way networks. Walking and cycling can be encouraged in new development through good design.

8.5.5 At a higher level the four Local Strategic Partnerships (see Figure 2.2) are committed to improving health, helping people and above all children to choose healthier lifestyles and plan for health needs as an integral part of new communities. A Memorandum of Understanding has been signed between the four councils and the NHS Primary Care Trusts committing the partners to work together to improve linkages between transport and health.

Box 8c: Improving Health

Walking to Health

South Gloucestershire Council's Walking to Health scheme has supported over 1,800 people to become more physically active through walking more. It is part of a national initiative supported by Natural England and the British Heart Foundation.

With the help of volunteers the scheme arranges walks for people of all ages and abilities. There are walks suitable for people who use wheelchairs or mobility aids and others aimed at parents/ carers of young children (buggy walks).

As people's fitness has increased so has their confidence, resulting in walkers exploring a lot more of the district and walking independently of the group.

Active Bristol

The 5-year 'Active Bristol' programme is a good example of partnership working between the local authority and local Primary Care Trust. It includes a focus on 20mph limits for residential streets, Bike It and social marketing work to promote walking.

Bike It has involved working with 24 schools per year, including areas of deprivation, to promote sustainable transport. The programme includes a 0.4 placement of a public health and transport specialist within the City Development Department.

Go4Life in North Somerset

Go4life is a North Somerset Partnership Initiative to promote healthy and active lifestyles across local communities. The initiative is aimed at encouraging people of all ages to get involved in physical activity.

Measures include training courses for volunteer health walk leaders, walking routes regularly published in the North Somerset Life magazine and Healthy Lifestyles Training Courses run at local leisure centres to tease adults back into physical activity. For the younger age range (5-19 year olds) Sports Unlimited initiative runs courses to enable youngsters to re-engage in sport whilst Weston Cycle Club has been formed for the over 50's leisure cycling.

Active for Life in South Gloucestershire

'Active for Life' is a brand in which has helped achieve Local Area Agreement targets for promoting physical activity in South Gloucestershire: getting 600 new participants of all ages in priority neighbourhoods and over 6,000 in other parts of the authority's area.

Strong partnership working has led to the success of physical activity schemes. For example 1,000 people took part in two 'Bike Week' events in 2009: the Big Bike Breakfast and the Family Cycle Treasure Hunt.

Get Active Bath and North East Somerset

The Get Active Strategy supports people to achieve the recommended levels of physical activity required to benefit their health. It encourages them to become members of clubs or through more regular recreational activities with family and friends.

As part of this strategy a mass cycle 'Skyride' event was held in Bath in July 2010. Around 6,000 cyclists took part and many of the city's streets were closed along the route of the 8km (5 mile) ride. The aim of the event was to give families the experience of cycling in a safe environment.

8.6 Active Health Strategy

8.6.1 Our strategy for improving health and wellbeing focuses on:

- Increasing levels of physical activity through more walking and cycling especially for short journeys;
- Measures to encourage more sustainable patterns of travel behaviour;
- Providing safer, more attractive environments including better access to green spaces, parks and sports facilities;
- Working with the health sector via the Memorandum of Understanding to promote and protect good health;
- Working with public transport operators to ensure it has a key role to play in supporting people to lead physically active lives;
- Working with schools on travel plans, provision of safer routes and further Walk to School campaigns;
- Consider ways of helping parents understand the relative risks of children's independent travel in relation to road accidents compared with the risks associated with lack of exercise;
- Work with employers on workplace travel plans embracing public and private sector employers;
- Rights of Way Improvement Plans and working with communities, interest groups to promote walking, cycling and horse riding;

- Publicise the benefits for pedestrians and cyclists from 20mph limits;
- Complementing initiatives on green spaces, public realm and promotion of active play;
- Primary Care Trust action plans in disadvantaged areas to reduce health inequalities.

8.7 Crime and fear of crime

Background and evidence

8.7.1 While people generally feel safe during the day, a significant proportion feel unsafe after dark. Promoting safer stronger communities is a key priority within the councils' Sustainable Community Strategies and multi-agency community safety partnerships (see Box 8d) lead on the preparation of crime reduction strategies for each authority area.

8.7.2 Surveys suggest passengers can feel insecure while waiting for public transport at some bus stops or railway stations. Some car parks can be perceived as dangerous whilst people also have concerns about using footpaths and cycle paths in some locations. Promoting more activity in these locations can help people to feel safer. Well maintained footways, footpaths and cycle paths with good surfaces and lighting can encourage more walking and cycling, especially where there is perceived or reported incidence of crime and anti-social behaviour.

8.8 Strategy for Crime and Fear of Crime

8.8.1 Our strategy is to:

- Ensure community safety is taken fully into account in the design and operation of our transport infrastructure;
- Recognise the personal security issues experienced by people from different ethnic minority groups;
- Tackle problems of anti-social behaviour through further investment in city, town centre and neighbourhood enhancements;
- Improve lighting, CCTV, local footpath and cycle networks and other measures;
- Encourage the use of good design principles at transport interchanges, bus stops, train stations and car parks, including the Park Mark® standard;

Box 8d : Taxi Marshals

The provision of Taxi Marshals, introduced through the Safer Bristol Partnership, has been considered successful in assisting people to travel more safely and reduce anti-social behaviour. Building on this success, the scheme has been extended to cover further areas in the centre of Bristol, focussing on traditionally busy times of year for the night time economy, such as the Christmas and New Year period.

Bath Nightwatch is a new scheme building customer trust and confidence in having a safe night out in Bath. The scheme brings together licensees, the Police, Taxi Marshals and Door Staff, working in partnership to ensure consumers enjoy a safe night out in Bath. This initiative has been instrumental in the Purple Flag accreditation given to Bath in 2010.

- Provide more secure car and cycle parking to reduce levels of acquisitive crime;
- Support the local train operator in seeking Secured Station Accreditation for local stations;
- Maintain strong links between our community safety partnerships and the British Transport Police, Network Rail, train, bus and taxi operators;
- Work with the police, emergency planning staff and others to identify measures for reducing the vulnerability of the transport network to vandalism and terrorist attacks and for ensuring that the network is adaptable to any impact.
- Consider the risk of terrorist attack when designing and implementing transport schemes.

8.9 Future ideas to 2026

8.9.1 In contributing to better safety, health and security we will need to keep our strategy responsive to new ideas over the life of the JLTP3. Box 8e outlines some possibilities.

Box 8e: Future Plan Ideas

- Local projects emerging from new Air Quality Action Plans, e.g. low emission zones;
- Following up CIVITAS and Green Bus Fund schemes in Bath;
- EcoStars approach to encouraging bus and HGV operators to use less polluting vehicles and operate their fleets in more environmentally efficient ways;
- Neighbourhood initiatives linking healthy living with road safety training, education and publicity and smarter choices;
- Further promotion of healthy exercise in Rights of Way Improvement Plan reviews;
- More work to address personal security issues at local level, reducing barriers to safe walking and cycling;
- Learning from best practice on reducing vulnerability to terrorist attacks.

Find out more

- Cycling, Road Safety, Smarter Choices and Walking draft JLTP3 Supplementary Documents, 2010
- Air Quality Action Plans for Bristol, Bath, Keynsham, Kingswood, Staple Hill and Cribbs Causeway
- National Active Travel Strategy, 2010
- A Safer Way, 2009