

**THE COUNTY COUNCIL
OF THE CITY AND
COUNTY OF CARDIFF**

**CYNGOR SIR A DINAS
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**LOCAL
TRANSPORT PLAN**

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PREFACE

Cardiff County Council is pleased to introduce you to the Capital City's first Local Transport Plan.

The Plan sets out a Strategy, providing a policy framework for movement, together with a programmed Action Plan. It seeks to deliver a range of objectives for promoting sustainable and integrated transport, including integration with land use planning, policies for health and the environment.

The Plan covers a five year period in detail, which is consistent with the National Assembly's guidance on preparing Local Transport Plans, and a further ten year period in outline to provide a longer-term context, and assist integration with other strategies, such as the forthcoming Unitary Development Plan.

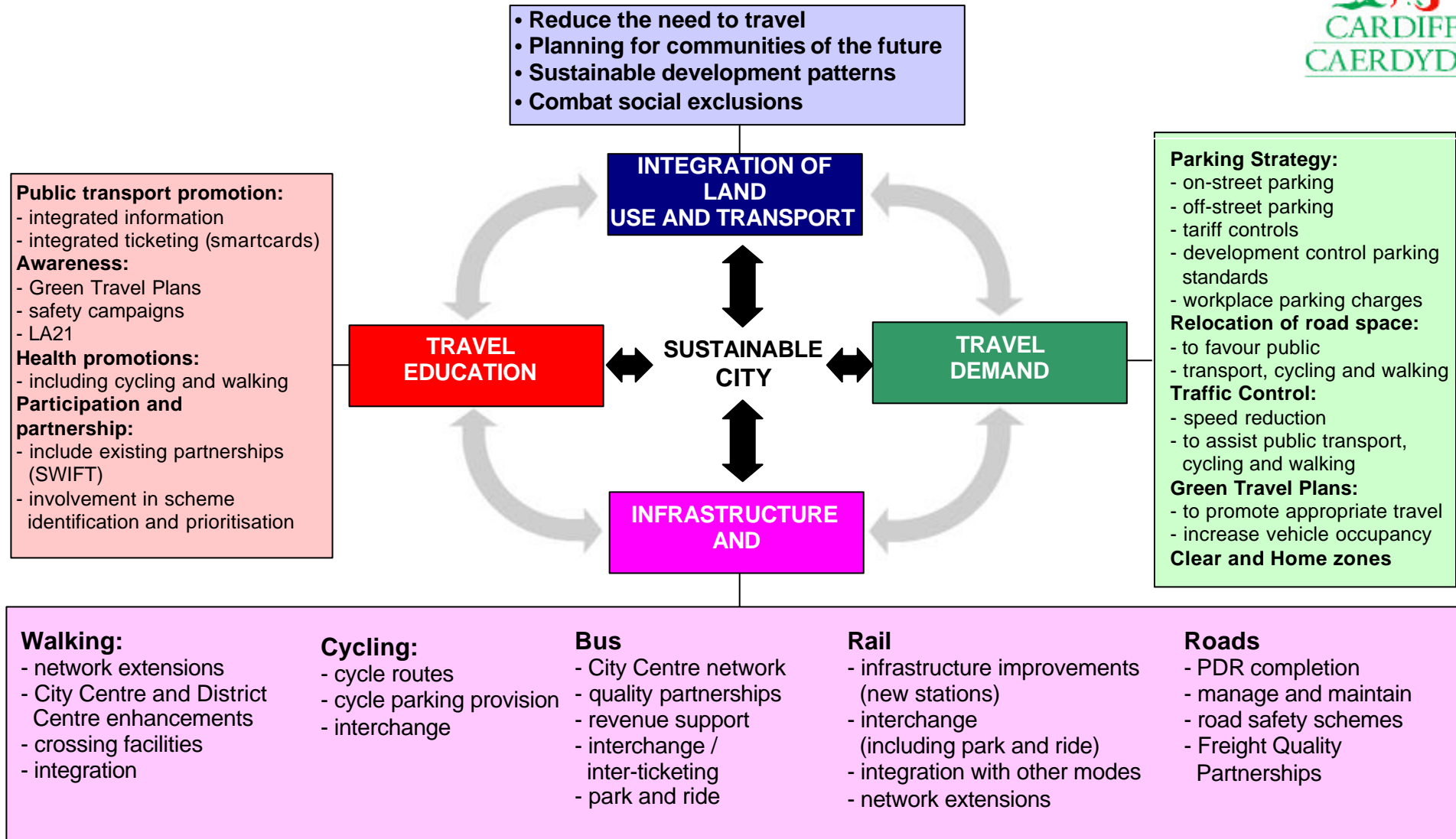
The key elements of the Local Transport Plan form a policy framework which focuses on:

- integration with other policy areas, particularly transport and land use planning;
- transport demand management;
- management, maintenance and improvement of infrastructure; and
- travel education and awareness to promote safe and sustainable travel behaviour.

The overall Transport Strategy is perhaps best summarised and explained in the diagram overleaf.

The Local Transport Plan responds to the requirement of the Welsh Assembly's document "Transporting Wales into the Future", by including a major new strand integrating land use and transport. It also seeks to focus the implementation of the various strategy components on the overall aim of achieving and maintaining a sustainable city. Considerable emphasis is placed upon partnership, participation, enhancing interchange and integration across all modes. The Council is developing a range of topic-based strategies, area-based movement plans, and implementation mechanisms to ensure that the delivery of the overall Transport Strategy is focused and targeted on appropriate areas problems and issues.

CITY AND COUNTY OF CARDIFF LOCAL TRANSPORT PLAN



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LIST OF APPENDICES (See separate volume)

There are many aspects of the LTP that need to be expanded beyond the main text of the document. The appendices are part of a modular approach to the LTP. The following appendices have been prepared to-date:

- Appendix 1: Relationships between the LTP and Government Objectives.**
The Government guidance requires these to be shown.
- Appendix 2: Relationships between LTP and proposed UDP Objectives.**
The Government guidance requires the Council to show how these two plans interlink.
- Appendix 3: Relationships with other Council strategies and plans.**
The Government guidance requires the LTP to be placed within a wider context. This section emphasises the corporate nature of the LTP and the extent of it's linkages.
- Appendix 4: The proposed Objectives of the South East Wales Transport Strategy.**
The Government guidance requires local authorities to work with their neighbours, particularly on cross-border issues, in preparing their LTPs. The South East Wales Transport (SEWT) Strategy provides the common context for the region.
- Appendix 5: South Glamorgan (Cardiff Area) Replacement Structure Plan (adopted April 1997).**
This appendix contains adopted transport and transport-related policies of the Council.
- Appendix 6: City of Cardiff Local Plan (adopted January 1996).**
This appendix contains adopted transport and transport-related policies of the Council.
- Appendix 7: Proposed Local Transport Plan Secondary Objectives.**
A set of proposed secondary objectives is included for public consultation during late 2000 / early 2001. Following this process, they will be amended and incorporated into the 2001 LTP.
- Appendix 8: Strategies.**
This contains detailed summaries of existing strategies, those being prepared and proposed strategies.
- Appendix 9: Road Traffic Reduction Report.**
This is the report required by legislation and incorporated into the requirements of producing an LTP. The report sets out what the Council intends to do to reduce the rate of growth in traffic, reduce the rate of growth of traffic to zero, and absolute reductions in traffic.

Appendix 10: Summary of Responses to Public Engagement.

A summary of all responses received as a result of discussions, responses and the questionnaires as part of the public engagement process. Several groups have been set up, as part of this process, which will continue to meet into the foreseeable future. They will provide a valuable means of dialogue with interested parties on the content and evolution of the LTP. Analysis of responses will continue after the deadline for submitting this LTP to the Assembly.

Appendix 11: Child Road Safety Audit.

The National Assembly for Wales has asked that LTPs include an audit of child road safety. This is complementary to the Council's existing Road Safety Plan, which will be reviewed as the Local Road Safety Strategy for Cardiff.

Appendix 12: Summary of Studies Undertaken for the LTP.

Consultants have been employed to undertake a number of studies, together with work carried out within the Council, to better inform preparation of the LTP.

LOCAL TRANSPORT PLAN FOR CARDIFF

1. INTRODUCTION

Cardiff is rapidly developing as a thriving, vibrant European capital city. As it grows in stature, the role of the County Council and its partners is to ensure that its reputation develops as both a major location for business and also as a place where people wish to live and visit.

Ever since 1974 the former South Glamorgan County Council decided that a balanced approach to movement in Cardiff would be adopted. This involved restricting major highway projects to the perimeter of the urban areas mainly in the form of the Peripheral Distributor Road (PDR). This ambitious movement strategy was conceived to provide each sector of the City with its own access onto the primary road network in an attempt to reduce extraneous through traffic in sensitive residential areas.

This strategy has been successful and justified. It has opened up areas of Cardiff to new investment and has enabled structural and economic change. The demand for trips through the City Centre has been reduced and allowed public transport and environmental improvements to be implemented as well as creating much improved conditions for commuters.

The Local Transport Plan (LTP) re-assesses and re-focuses the transport strategy building upon and developing on past success. This re-assessment comes at a very important time in the evolution of movement policy and is based upon a number of key premises.

KEY PREMISES

- The supply of road space can no longer be matched to demand.
- To encourage a shift to public transport and tackle increasing environmental challenges facing modern urban society.
- Economic and social regeneration require increased accessibility, an integrated framework is needed to spread increases in trips over all modes of transport.
- There is increasing concern over environmental and health issues, particularly emissions arising from vehicle sources.
- There is a need to provide up-to-date movement policy advice for Cardiff.

The Local Transport Plan (LTP) intends to take forward these key premises as follows:

INTENTIONS

- To present an overview of the existing situation, including problems and opportunities.
- To set out the authority's objectives.
- To prepare a strategy that can be implemented, together with funding proposals.
- To set measurable targets.

The LTP proposes a movement framework that will be developed in parallel with the Cardiff Unitary Development Plan (UDP). The LTP will be a self-standing document and also provide the "transport strategy" element of the UDP.

Government guidance on the preparation of LTPs makes it clear that they should be integrated with a wide range of other policy areas, both within and outside the Council. The relationships with other Council strategies and plans is set out in the first 6 appendices.

INTEGRATION

- Relationships with Government transport objectives (*appendix 1*).
- Relationships with the Council's forthcoming UDP objectives (*appendix 2*).
- Relationships with other Council Plans and Strategies (*appendix 3*).
- The Transport Strategy for South East Wales (*appendix 4*).
- South Glamorgan (Cardiff Area) Replacement Structure Plan transport-related policies (*appendix 5*).
- City of Cardiff Local Plan transport-related policies (*appendix 6*).

2. OVERVIEW OF EXISTING SITUATION

2.1 EXISTING TRAVEL PATTERNS, SERVICE PROVISION AND PROBLEMS

Like most other UK cities, significant growth in the use of the private car has taken place in Cardiff. However, a high reliance on the bus and rail network still remains. The Plan area has a comprehensive network of bus and rail services and significant levels of walking and cycling are also evident in parts of the area.

2.1.1 Bus

Cardiff has a comprehensive network of local bus services which has been largely maintained since deregulation. However, there have been a number of network modifications in the last few years which have left some areas with poorer accessibility by bus, particularly during evening and weekend periods. In addition, the rural areas of Cardiff do not share the same level of public transport service provision.

Cardiff Bus continues to be the major operator and provides a comprehensive commercial network of services in Cardiff. Supported services under the 1985 Transport Act are provided by a number of operators with the majority of contracts operated by Cardiff Bus. Other operators, including Stagecoach, First Cymru, and Shamrock, provide services into Cardiff from outside the County boundary.

There exists a core network of radial services which in recent years has been converting to low floor buses with more efficient and cleaner power units. These operate at least every 15 minutes during the daytime. This is reinforced by a network of midi (smaller) bus services which gives greater penetration of residential areas, many of which operate on a half-hourly basis.

The County Council is working with operators to provide bus boarders for level deck entry and Real Time Information systems (RTI) have been fitted in both buses and new shelters within the City. Progress is also being made in the use of Selective Vehicle Detection (SVD) and more advanced bus priority technological infrastructure to improve journey times and reliability on the Northern sector into the City.

Key problems identified for buses are:

- bus users want continued improvements in the quality of bus services, better interchange facilities, more flexible ticketing and easier access to information;
- bus operators identify traffic congestion as the primary cause of bus service unreliability and want better enforcement of bus priority measures and parking restrictions;
- employers want services which meet their needs;
- people living in outlying areas of the city want more regular services, particularly during the evening and at weekends;
- mobility impaired want easier access to bus services and information presented in appropriate formats.

2.1.2 Rail

Cardiff County Council has been actively involved in the promotion and monitoring of local rail services in Cardiff and its region through the SWIFT (South Wales Integrated Fast Transit) consortium of local authorities. This role is likely to become even more important with the latest round of re-franchising. Passenger volume on the Valley Lines, for financial year 1999 / 2000, showed substantial growth (11.2%) over 1998 / 1999, and growth is continuing in 2000 / 2001. Annualised passenger flows originating from stations on the various lines into Cardiff, for the year 1999 / 2000, were:

Taff Vale	3 021 000
Rhymney Valley	1 698 000
Barry line	1 150 000
Coryton branch	352 000
Penarth branch	306 000
City Line (West Cardiff)	109 000
Cardiff Bay branch	108 000

Between 1983 and 1990, the former County Council helped fund the opening of 8 new stations, 4 of these being on the City Line, which serves the west of Cardiff.

Park and Ride forms an important part of the County Council's Movement Strategy and is a key asset in persuading motorists to complete their journeys to Cardiff City Centre by rail. The former County Council helped fund provision of additional car parking at Radyr, Llandaff, Lisvane and Thornhill and Llanishen stations. Patronage at these rail park-and-ride sites has been uneven, but overall revealed a decline in usage, principally due to perceived security problems. Cardiff Railway Company is committed to improving the security at stations and Park and Ride car parks, and CCTV and Customer Help Points have been installed at 34 stations on the Valley Lines network as a whole.

Turning to freight, approval was given in 1996 to construct a Eurofreight Terminal at Wentloog, now being built and due to open in the Spring of 2001. This will provide a much improved facility and will take over the role of the existing Freightliner Terminal at Pengam providing good road / rail trans-shipment into Europe via the Channel Tunnel.

The key problems identified for Rail are:

- rail users within the area want better reliability of train services and higher frequencies;
- cycle groups want better secure cycle parking facilities at stations and more provision for cycles on trains;
- train operators are concerned about accessibility to stations;
- residents living in areas poorly served by nearby rail want new stations and rail services introduced;
- local business is concerned about access to inter-urban and European services; and
- mobility impaired want better accessibility to rail services and information.

2.1.3 Coach Parking

In 1996 consultants were commissioned to examine coach parking in Cardiff. The study concluded that the then provision for coach parking was unsatisfactory, both for special events and day-to-day tourism.

Much has changed since that report, not least the construction of the Millennium Stadium, and in general the changes have served to increase the attractiveness of Cardiff as a venue and destination. This increase in the visitor potential has not been matched by a similar improvement in coach parking facilities.

Currently Millennium Stadium event coach parking is accommodated in the Civic Centre, but with the imminent completion of Lloyd George Way (Bute Avenue), space for event-related coach parking could be extended. The tourist market is served by a 9 space coach park in Sophia Gardens. In the Waterfront area, spaces currently available adjacent to Techniquet will be displaced by development. Contingency arrangements are currently being explored.

Cardiff is not in general seen as a coach-friendly destination. In order to improve this image the level of facilities needs to be improved. At the time of writing this LTP, a private-sector development proposal exists with outline planning permission for a 45 space coach park as part of a new multi-storey car park (MSCP) near to Central Railway Station.

2.1.4 Car Parking

The Adopted Local Plan for Cardiff includes the 1993 Parking Guidelines produced by the South Wales Consortium of Local Authorities, with amendments to reflect circumstances in the area south of the City Centre. Planning Guidance and other documents issued by the National Assembly for Wales in recent years expected local authorities to adopt maximum parking standards instead of minimum standards which reflect public transport accessibility.

The key problems identified for car parking are that:

- the Council's parking standards no longer coincide with Government guidance and policy;
- parking is an increasingly problematic issue in the development and planning process;
- local businesses are concerned about the achievement of improved public transport in relation to the need for less parking provision;
- the growth in car ownership and parking for residents;
- the role of parking in achieving a sustainable City; and
- parking for people with impaired mobility.

2.1.5 Highway Network

The development of the major highway network has been a primary objective of the former South Glamorgan County Council and Cardiff County Council.

It aims to:

- aid economic regeneration;
- facilitate internal movements;
- improve access to regional transport networks;
- improve the environment; and
- improve road safety.

The Peripheral Distributor Road (PDR) is the key element of the Highway Strategy. This major road has been constructed around the built up area of the City of Cardiff and links to the M4 motorway in the east and west of the City. There are currently 13 interchanges with the existing radial road system and this ensures ready access from most areas of the City to the regional and national highway system.

The PDR has been built in stages around Cardiff. To date 22.09 km, including ancillary links, are open to traffic and plans for a further 5.53km are proposed.

The majority of PDR construction has taken place to the west and south of Cardiff. The Ely Link was opened in 1982 which helped relieve Ely of through traffic. This was followed in 1985 by the Capel Llanillterne (M4) to Culverhouse Cross section providing a by-pass for traffic from the M4 to the Vale of Glamorgan. The Grangetown Link opened in 1988, together with the Cogan Spur. This was extended over Cardiff Bay and under Butetown, as the Buteown Link, to Roath Basin in 1995. Together with the Central Link, opened 1989, the PDR connects the City Centre with the M4. The missing Eastern Bay Link would connect Roath Basin to Southern Way and Eastern Avenue completing the PDR to the east.

Key problems identified for the Highway network are:

- road users are concerned about the delays and frustration caused by traffic congestion. They are also concerned about the deteriorating condition of many roads and bridges;
- local business wants better links to the national road network particularly the M4 via the Eastern Bay Link to complete the A4232; and
- community groups are concerned about the speed and volume of through traffic in residential areas;
- the green agenda calls for no more road building;
- air pollution from road traffic.

2.1.6 Walking

Walking continues to be an important mode of travel particularly for short journeys to work, school, shops and other local community facilities. Walking is also important as a leisure and recreation activity, including rambling. It also has a part to play in health promotion and recovery from some illnesses.

Pedestrian activity levels are high within Cardiff City Centre and district and local centres. The main thrust of Central Area pedestrianisation took place in the early 1970's and included the whole of Queen Street, The Hayes and many of the side streets, significantly increasing the number of paved streets. In 1995 a scheme to create a "Café Quarter" in Mill Lane was completed. A further scheme has been progressed in Womanby Street and a scheme is planned for St. John Street. There is also a need to refurbish Queen Street to bring it up to the standards expected of a regional centre.

Pedestrians need direct, connected, safe and secure routes. Major routes between attractions (like public transport and the City Centre or district retail centres) should be identified for study and any necessary treatment.

As nearly half the child road casualties are pedestrians, there are important gains from pedestrian road safety to meet the Government target to halve the number of children killed or seriously injured on roads by 2010

Key problems identified for walking include:

- pedestrians want better quality direct routes;
- introduction of more traffic free zones;
- safer crossing points and more time to cross at traffic signals;
- footway maintenance;
- personal safety, lighting, reduced traffic speed; and
- conflicts with cyclists, particularly on pavements / footpaths.

2.1.7 Cycling

The Cardiff Cycle network now totals almost 48 kilometres which have been completed over the last fifteen to twenty years. Existing cycle usage in Cardiff is about the national average with some 2% of trips. There is, however, considerable potential for increasing the amount of cycling given the compact nature of the City, its generally flat topography and the presence of the University.

Cycle parking provision is generally concentrated in the City Centre and district centres, and at other large travel generators. As part of Green Travel Plans a number of employers have improved cycle parking and changing facilities available for staff.

Key problems identified for cycling include:

- Cycle groups want better cycle routes, especially east – west across the City;
- Cycle parking facilities;
- Concern about conflicts with traffic;
- Maintenance issues; and
- Cycle lanes are regularly disjointed and incomplete and the lack of a comprehensive approach discourages cycling.

2.1.8 Powered Two-Wheelers

Parking facilities have been provided for powered two wheelers in Cardiff City Centre, including The Hayes, Charles Street, Churchill Way, Windsor Place and Park Street.

Key problems identified for powered two-wheelers include:

- motorcycle groups identify a need for better motorcycle parking facilities, more priority in traffic management and are concerned about road safety issues.

2.1.9 Water Transport

Cardiff Waterfront

Following completion of the Barrage, providing a 200 hectare (500 acre) area of water and extension to navigable access on the Rivers Taff and Ely, there is considerable scope for water based transport links and traffic free links on the waters' edge for cycling and walkways. Work is currently underway to prepare a Cardiff Waterways Strategy covering a wide range of topics, including transport. The City Centre Strategy identifies the Taff Corridor as one of several Area Priorities and the Environment Agency, in its Local Environmental Agency Plan (LEAP), identifies the lack of a strategic framework for water recreation.

Key problems identified for waterways include:

- water quality and management of facilities to ensure a high quality environment and a balanced programme of use;
- the lack of a strategic framework for water recreation.

2.1.10 Port

The port of Cardiff is still busy and served by road and rail links. Air access is now available via the heliport. Large areas of land are potentially available for development. Significant areas around Roath Basin have already been taken out of operational use and are in the process of being redeveloped for business, leisure and residential purposes:

Key problems of the Port area are:

- maintaining a competitive position; and
- maximising development opportunities.

2.1.11 Air Travel

Located nearby is Cardiff International Airport operated by TBI. A wide range of domestic and international scheduled flights are available to an increasing range of short and long haul leisure destinations. The Airport has seen significant levels of passenger growth in recent years.

In 1999, Cardiff Heliport was relocated to enable construction of the Eastern Bay Link. The facility is managed on behalf of the County Council by local operator – Veritair Limited, based in offices at the Heliport. The Heliport is regularly used by operators from all over the country and movements have increased to almost 800 per annum.

Key problems identified for Air travel:

- airport users want better public transport links; and
- the Airport operator is also concerned about road access arrangements.

2.1.12 Freight

The supply of goods and services is fundamental to the economy and the well-being of Cardiff. The distribution of freight needs to be efficient, using a cost effective system, in order to compete in the international market. Most freight arrives and departs by road requiring access to all businesses and facilities in the County. As congestion increases, it will become more important to provide priority for freight servicing businesses and other facilities. The greatest difficulties often occur in the City Centre, for example the pedestrianised areas where time for access is strictly limited and the approach radials. The increasing weight of HGV's is also of concern.

The Government is calling for more freight travel by rail and water (e.g. coastal shipping), particularly sites with access to the rail network and the port. Rail freight, particularly from ASW and the port, is growing. Improvements to increase rail freight capacity between the two ASW complexes, and with the port, are to be undertaken in the coming year.

2.2. OTHER TRANSPORT RELATED PROBLEMS

Other problems identified are:-

Climate Change

Transport emissions have been identified as a major contributor to global warming.

High Levels of Pollution

Monitoring of air quality standards indicates that Cardiff experiences some air quality problems. Consequently, air quality objectives will not be met in some parts of Cardiff and that the elevated levels of pollution are due to road traffic.

Social exclusions

Disadvantaged groups currently have less access to private cars and are therefore more dependent on public transport for access to jobs, education and training

opportunities, health facilities and to other services. They are therefore denied opportunities when services are not sufficiently frequent or reliable.

Inadequate accessibility for mobility impaired people

Accessibility for mobility impaired people must be significantly improved to the level that is generally enjoyed by others in society. This includes physical disabilities, people carrying luggage, mothers with young children, and people on low incomes unable to easily and affordably travel to facilities and jobs.

Land available for development which is easily accessible by public transport

There is a need to identify development sites that are most readily capable of being integrated into the public transport, cycling and walking networks. This will inevitably involve significant investment in infrastructure and public transport services.

Poor Health

The link between air quality and poor health is well established especially in respect to those with existing respiratory conditions who are particularly susceptible. The chronic effects of longer term exposure to poor air quality have not been accurately quantified. However, the government has developed Air Quality Standards that acknowledge both the short and long-term effects of air pollution on health.

Access to the Countryside

Access to the countryside is a sensitive issue, in particular, developing links between the urban area and the wider countryside, improving access to the countryside, and making special provision for disadvantaged groups. The Council's Countryside Strategy includes a number of "Joint Vision Statements" highlighting the importance of developing links between the urban area and the wider countryside, improving access to the countryside, and making special provision for disadvantaged groups. See *appendix 3* which lists the 7 "Joint Vision Statements".

Safety

The design of transport systems is of paramount importance, both in designing new infrastructure and improving existing infrastructure. The concern about safety applies to vehicles of all types, whether they be road, rail or other forms. The Council's direct responsibility lies with highway design and maintenance.

Security

Security is an important issue, particularly for sectors of society such as the elderly or young, and those with a nervous disposition. This concern also applies to time of day and day of week, such as evenings / late night, and geographic areas – for example, poorly overlooked space.

Fear of actual and perceived personal harm or threat is an important consideration for users of public transport in particular. This is heightened with age, gender, disability and time of day and year. Women, minority groups, and the elderly have a greater perception of crime and fear of crime. Public transport staff and

passengers can be subjected to real and perceived insecurity. In the case of passengers, this can stop them using public transport. Delays or cancellations in services can also contribute to insecurity, because this leaves individuals vulnerable for longer periods of time. Other aspects involve security of property, such as cars parked at park-and-ride facilities.

2.3 OPPORTUNITIES

Cardiff considers itself to be well placed to move forward on the advancement of integrated transport.

Established Partnership Working / Participation Networks

A number of key partnerships have already been established and it is intended to build on this progress. Significant progress is also being made on partnership work with local communities and other organisations.

Opportunities to capitalise on new revenue streams

Within Cardiff significant new revenue streams are emerging which it is intended to increasingly ring fence for integrated movement measures.

Now available:

- revenue from bus shelter advertising;
- developer contributions on an adhoc basis.

Under investigation:

- developer contributions formalised through Supplementary Planning Guidance;
- extension of on-street car parking charges in the City Centre and Waterfront;
- workplace parking/congestion charges;
- reinvestment of car parking fines through decriminalisation and camera fines subject to legislation;
- business rate modifications; and
- partnerships.

High Level of Development Activity

Cardiff is currently experiencing a boom in development activity. Much of this is taking place in and around the City Centre and Waterfront area. New development provides the opportunity to introduce new integrated movement measures.

Regional Working

Cardiff County Council will continue to develop the SWIFT partnership with other South Wales authorities, Train Operating Company and Railtrack. This is currently focused on developing and implementing a Regional Public Transport Strategy. It is intended to demonstrate progress through the implementation of a wide range of shared transportation initiatives with whom positive and productive working

relationships already exist in order to share expertise and disseminate best practice. The Council also works with other organisations concerning regional issues, such as the South East Wales Transport Forum comprising 10 local authorities, and the South Wales Transportation Co-ordination Group.

Stable Public Transport Network

Whilst many areas have suffered from long periods of instability due to adverse effects of deregulation of public transport services, Cardiff has been fortunate to retain a relatively stable network with minimal on road competition from other bus companies.

Bus Quality Partnerships

In conjunction with Cardiff Bus the County Council is working towards creating "Quality Bus Partnerships".

Freight Quality Partnerships

In conjunction with the freight distribution industry, the County Council is working towards creating "Quality Freight Partnerships", working with distributors and businesses to provide better conditions for servicing and the use of alternatives to the heavy goods vehicle.

Green Travel Plans (formerly Green Transport Plans)

It is intended to work towards the implementation of Green Travel plans (GTP's) commencing in the Waterfront area of the City with Grosvenor Waterside/National Assembly for Wales. This will provide a useful template for other developments.

3. AIMS AND OBJECTIVES

Following an overview of the current situation, and identifying problems and opportunities, a set of aims and objectives has been established reflecting the needs of Cardiff which are compatible with the Government's own objectives.

The Local Transport Plan (LTP) must cater for a wide variety of needs of the people who live, work and visit Cardiff.

AIMS

The key Aims of the LTP are:

- A1.** To support Cardiff's development as a thriving and attractive Capital City and regional centre.
- A2.** To improve the quality of life and opportunities for people who live in, work in and visit the City.
- A3.** To develop an integrated and sustainable transport network.
- A4.** To address the needs of those people who are most disadvantaged.
- A5.** To protect and, where possible, enhance the environment of Cardiff.
- A6.** To minimise harmful effects on the environment when addressing economic and social requirements.
- A7.** To reduce air pollution from road traffic.
- A8.** To provide services focusing on user safety, employee / driver safety and personal security, when addressing the services.

These key aims embody the overall policy priorities of the County Council that the LTP must help address. Achieving these aims will involve pursuing and balancing a wide range of objectives based on the requirements of Government Guidance on Local Transport Plans in Wales, and those for the Council's Unitary Development Plan (and Economic Strategy).

When seeking views of the community, there is a need to pay particular attention to real and perceived safety issues. It may be necessary to target groups of people who are isolated (e.g. individuals from minority groups) or those who are more vulnerable (e.g. young people), or feel more vulnerable (e.g. women and the elderly).

Appendix 1 shows how the Local Transport Plan objectives relate to the Government's transport objectives established in, for example, the White Paper on Transport and the Government's guidance on Local Transport Plans. Appendix 2 shows how the proposed Unitary Development Plan objectives relate to the Local Transport Plan objectives.

OBJECTIVES

The LTP Objectives are:

- Ob1.** To ensure the views and needs of the community are part of the LTP.
- Ob2.** To maintain and improve movement infrastructure.
- Ob3.** To minimise harmful effects on the environment and people's health.
- Ob4.** To develop and implement a balanced and integrated movement system.
- Ob5.** To maximise use of the movement system by using incentive and restraint measures.
- Ob6.** To integrate movement with land use, the environment and sustainability.
- Ob7.** To improve and enhance movement facilities.
- Ob8.** To provide more and better opportunities for all social groups, taking account of the needs of the community and visitors.
- Ob9.** To sustain and enhance the economy.
- Ob10.** To achieve greater use of public transport, walking and cycling, and less use of the car and truck.
- Ob11.** To maintain and improve the safety of people involved in travel and their perception of travel.
- Ob12.** To seek, where appropriate, joint working arrangements and partnerships to implement LTP proposals.
- Ob13.** To co-ordinate assembly of resources to enable implementation of LTP proposals.

4. TRANSPORT STRATEGY FOR CARDIFF

In order to set out the components of the strategy in a coherent way this section follows the headings laid down in the Government's guidance with descriptions of the way forward.

4.1 WIDENING TRAVEL CHOICES

4.1.1 Buses

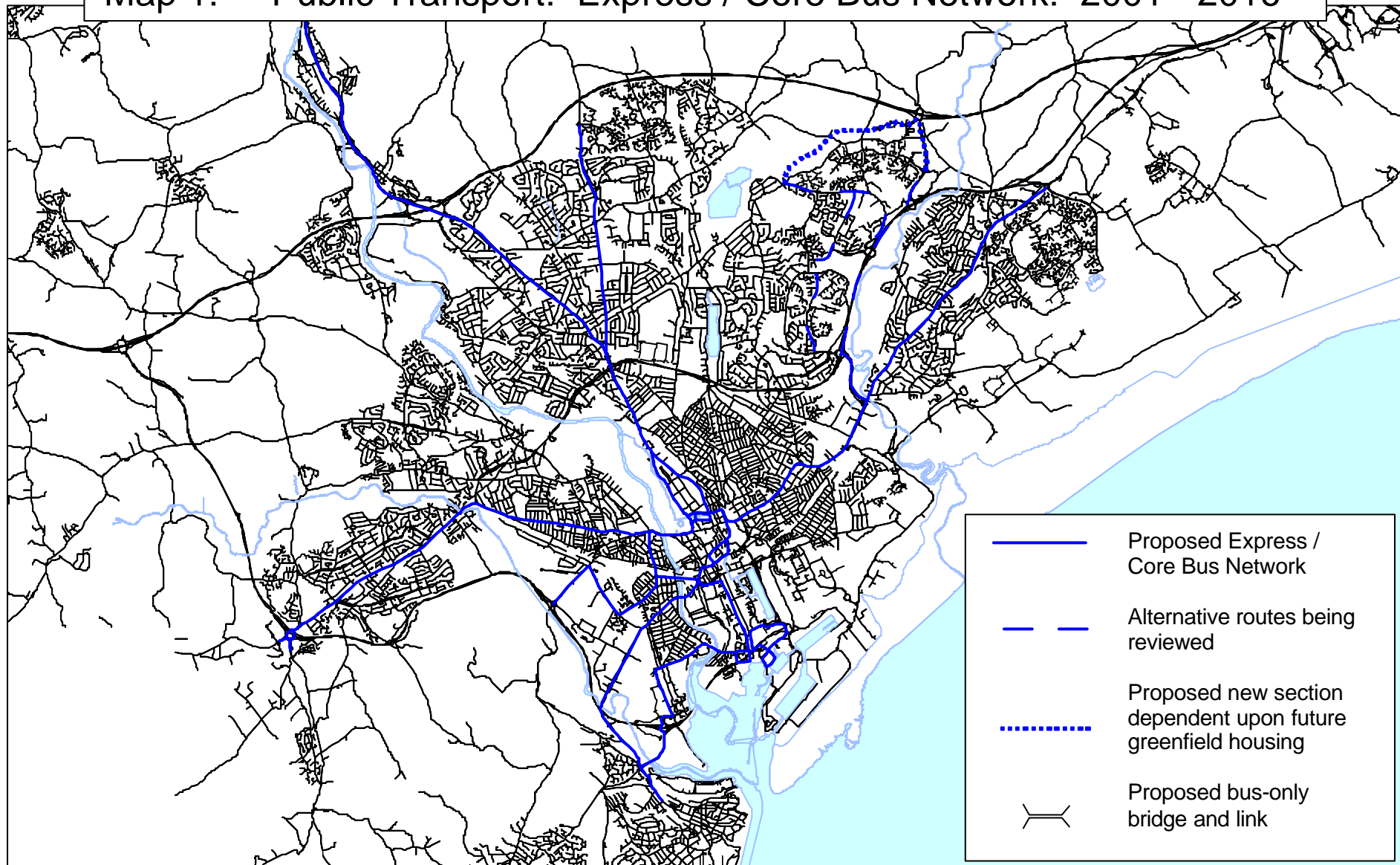
The most widespread improvements in public transport use in Cardiff over the LTP period are likely to result from improved bus services. There is already a relatively dense and high frequency bus network linking the City Centre to nearly all parts of the urban area. Significant improvement in services, in the short term, will be dependent on the creation of an Express / Core Bus Network (see *Map 1*). This will focus on the City Centre and involve priority measures (e.g. reallocation of road space to buses / High Occupancy Vehicle (HOV) lanes or Selected Vehicle Lanes (SVL) and traffic signal priorities) along the key radial corridors of Cowbridge Road, Newport Road, North Road, Manor Way, Caerphilly Road, Penarth Road and also examining the possibility of including Eastern Avenue / Pentwyn Link. The network will also incorporate through services to the Waterfront.

This Core Network will be supplemented by a Feeder Core Network (see *Map 2*) and improvements in bus infrastructure and services in general, including traffic priority measures and improved interchange facilities, as well as investment in vehicles, improved information, ticketing and service co-ordination. The network will also complement further development of the local heavy rail network in addition to proposed park and ride sites. Work is progressing on the detail of a better bus network with special attention to the main radials, the City Centre and Waterfront. This includes the future of the Central Bus Station and the development of public transport nodes and interchanges. These developments will help travel to and from rural areas.

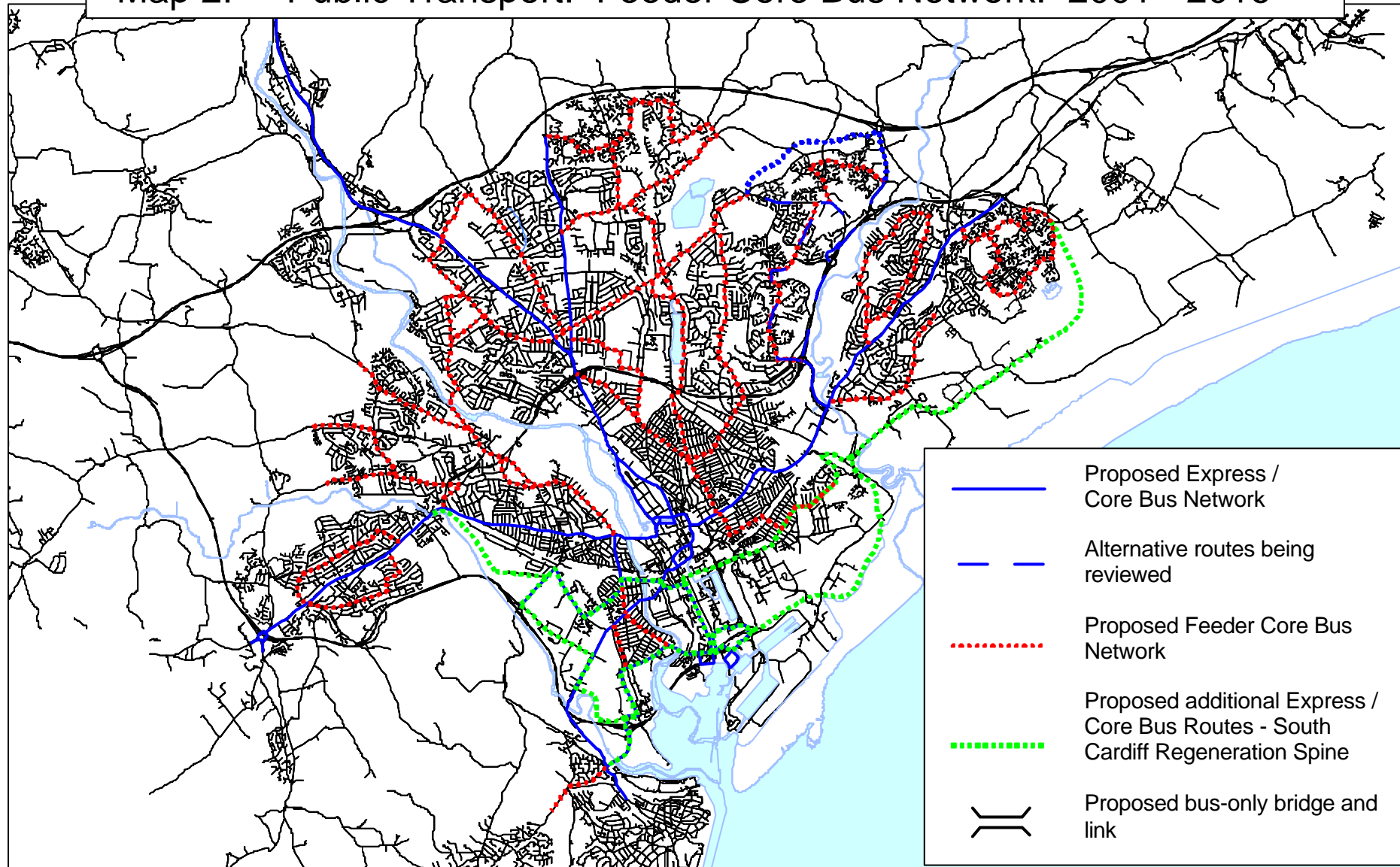
Identification of the Core Bus Network, as a priority, does not diminish the importance of other bus services. The Council has and will continue to explore improvements to services in other parts of the City, including the development of circular and cross-city services. This is an integral part of widening travel choices, enabling better access to areas poorly or not served by public transport. Such exploration will seek to combine cross-city movements with short-distance feeder trips into railheads.

The Council will continue to work in conjunction with the bus industry to develop Bus Quality Partnerships.

Map 1: Public Transport: Express / Core Bus Network: 2001 - 2016



Map 2: Public Transport: Feeder Core Bus Network: 2001 - 2016



4.1.2 Rail

For most of the plan period improvements in passenger rail services in Cardiff will rely on enhancing heavy rail services on the Valley and City Lines (see *Map 3*). In the longer term (i.e. towards the end of the plan period) it is possible that the City Line from Coryton to Radyr could be converted to Diesel Light Rail (see *Maps 4 and 5*). Because of restricted highway capacity, further large-scale urban expansion to the immediate west of the City is likely to be dependent on the provision of a new branch from the City Line using this technology. Also in the long-term, a City Circle rail loop could be created by joining Coryton to Radyr. These new lines would include new stations, including one close to junction 33 on the M4. There are also opportunities for new stations on existing lines, such as North Radyr / Morganstown and Gabalfa. This would also provide a valuable link between west and north Cardiff, but would involve reclaiming part of an old railway alignment, which is now a Local Nature Reserve.

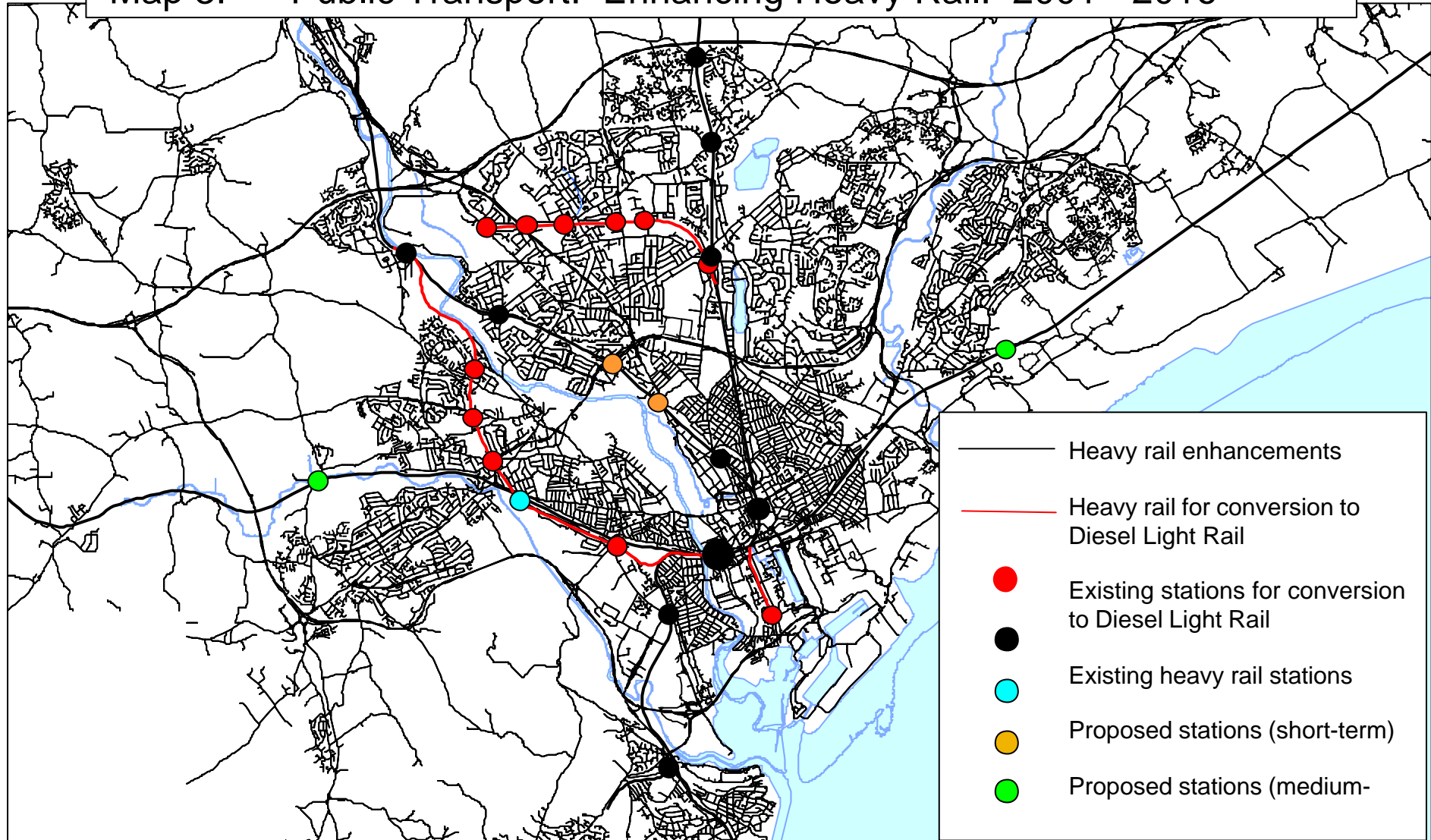
Service aspirations agreed between Cardiff Railway Company and SWIFT provide for a radical increase in service frequencies with the following targets (trains per hour in each direction):

Taff Vale line, via Llandaff	8
Rhymney line	8
Barry line (including re-opening of the Vale of Glamorgan line	6
Coryton branch	2 (as at present)
Penarth branch	4
City Line (West Cardiff)	2
Cardiff Bay branch	8

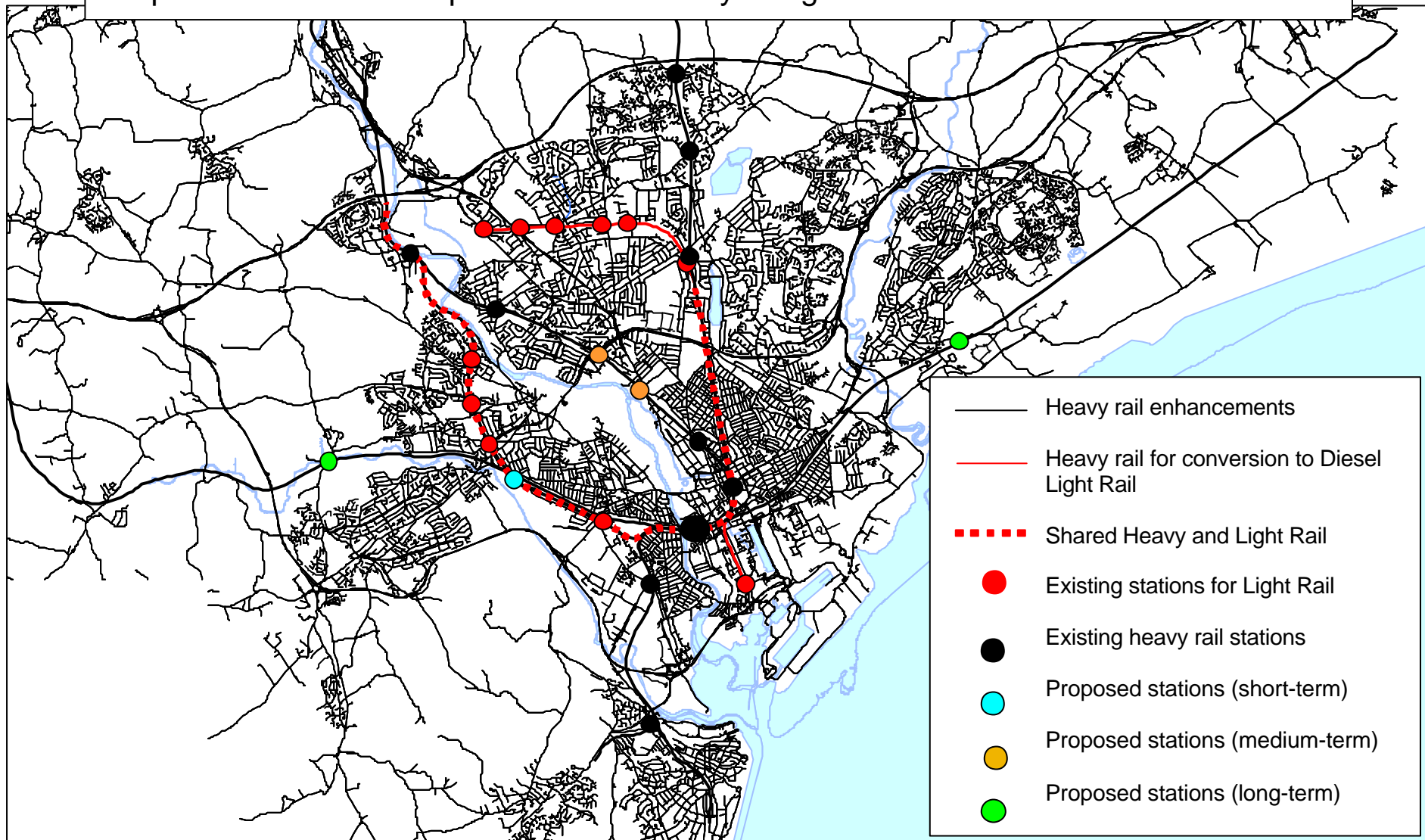
Railtrack Plc is currently examining the implications in terms of the infrastructure enhancements necessary to facilitate the proposed pattern of services. Additional platforms and re-signalling at Cardiff Queen Street station are necessary, as well as replacement of old mechanical signalling on the Rhymney line, and re-doubling of sections of single track, will be key enablers. Funding opportunities are expected to arise from re-franchising, via LTPs and from European Objective 1 (certain SWIFT authorities) sources.

At the time of preparing this LTP, a new round of re-franchising of rail passenger services is underway. A number of comprehensive proposals have been submitted by franchise bidders (e.g. National Express – Cardiff Railway Company; and GB Railways) to the Shadow Strategic Rail Authority. These include some innovative proposals in addition to those contained within the LTP. The Council will monitor the re-franchising process to enable the next LTP to incorporate the outcome of the aforementioned process.

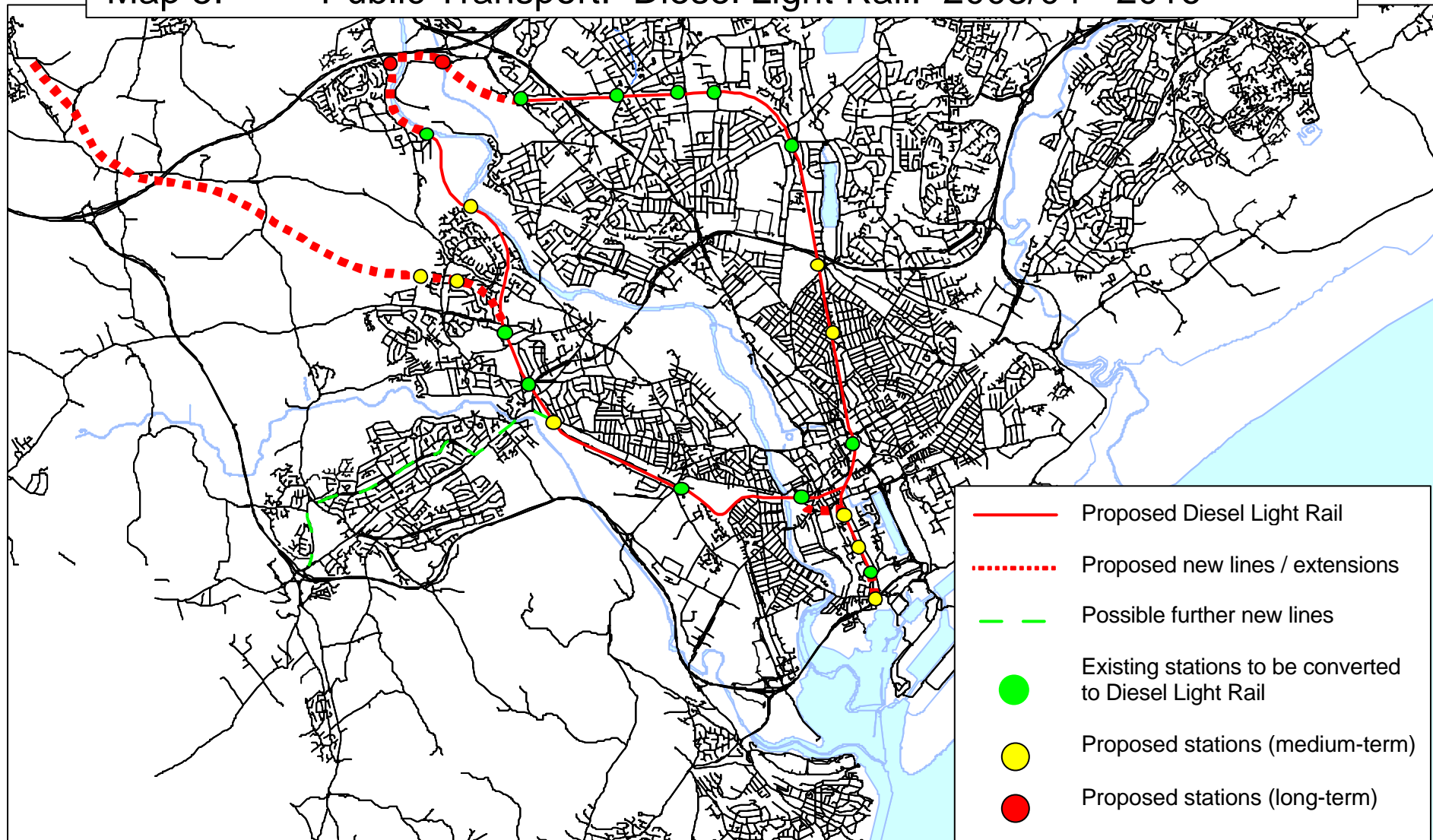
Map 3: Public Transport: Enhancing Heavy Rail: 2001 - 2016



Map 4: Public Transport: Shared Heavy & Light Rail Sections: 2001 - 2016



Map 5: Public Transport: Diesel Light Rail: 2003/04 - 2016



4.1.3 Taxis and Private Hire Vehicles

Taxis and private hire vehicles have an important role to play in the overall provision of transport in Cardiff and the surrounding rural areas, particularly for those without access to a private car for times when public transport is not available and to locations poorly served by public transport.

Through regular consultation meetings with representatives of the trade, the number, location and hours of operation of taxi ranks and access to restricted areas/movements is reviewed and requests for amendments to the existing arrangements are considered.

Whilst Hackney Carriages (taxis) are allowed access to bus lanes, Private Hire Vehicle operators are not and have requested that they be given the same treatment as hackney carriages (taxis). In order to assess the role of Hackney Carriage and Private Hire in Cardiff, as part of a sustainable transport strategy, it will be necessary to undertake a fundamental review of service provision. This will enable the council to develop a better understanding of the operation and role of Hackney Carriage and Private Hire, identify demand for the service and assess its contribution to the overall movement profile of the County. An action plan can then be developed to improve Hackney Carriage and Private Hire provision in both the short and medium term.

4.1.4 Voluntary and Community Transport

Cardiff has a good record of supporting community transport initiatives which are viewed as a safety net to assist those whose needs, whether through location or disability cannot be met by conventional services.

VEST Dial-a-bus offers shopping services to Cardiff City Centre for residents who have difficulty using ordinary public transport. VEST also serves people living in the Vale of Glamorgan. In addition, the Western half of the City benefits from VEST Ring and Ride door to door services which are being considered for expansion to the whole of the City. The Council is seeking to expand the VEST ring-and-ride bus services.

4.1.5 Cycling

Cardiff places great importance on developing the role of cycling within an integrated transport system. The Strategy for cycling designed to build on recent achievements have been produced by the Council in close consultation with integrated groups and individuals.

The strategy aims to reorder priorities, promoting cycling through better integration of engineering measures with those of education, encouragement and enforcement. The strategy includes objectives and budgets with systems to monitor progress and will enable Cardiff to effectively contribute towards the National Cycling Strategy's vision.

There is now almost 48km of cycle routes in Cardiff. These have improved cyclist's safety and encouraged greater use of cycling. Further routes have been identified,

including radial routes into the City Centre and Waterfront. It is expected that 100km of cycle routes will be in place by 2002, with a further 100 km beyond this date.

Cycling currently accounts for about 2% of movements around Cardiff. The Council aims to double the number of cycle trips by 2002 and to increase that share to 10%. This will be achieved by measures that encourage increases in the number of cycling trips and by reducing the number of trips made by less sustainable travel.

In terms of everyday Council activities relating to the provision of cycling, advanced stop areas are provided at junctions, and cycle parking is a requirement for new development. The Adopted Local Plan includes cycle parking standards. In addition, several studies have been, or are being, undertaken as follows:

- City Road, Crwys Road and Whitchurch Road Bus and Cycle Study identified detailed proposals for this corridor. Detailed designs are being prepared, consulted on with local residents and business interests, altered in light of discussions, and a programme of implementation is being followed.
- A study has been undertaken to complete identification of the strategic cycle network for Cardiff. It is intended that the full network be included in the forthcoming Unitary Development Plan, in line with Government planning policy guidance.
- A detailed study is underway to design cycle measures for the A469 (Caerphilly Road / Thornhill Road) corridor. This will form the second main corridor for cycle priority provision. This work will be undertaken in conjunction with similar work to design one of the Express / Core Bus Network corridors.

4.1.6 Walking and Pedestrianisation

Cardiff is seeking to encourage more people to make trips on foot, particularly for those journeys over shorter distances including links to public transport. Additionally, the Council will seek to capitalise on the significant potential to enhance the role of walking with other sustainable transport modes:

- measures to improve conditions for pedestrians;
- identification of schemes;
- prioritisation of schemes;
- City Centre and Waterfront issues;
- leisure and recreation walking routes;
- walking for health schemes with local doctors and area health authority;
- provision of connected walking networks;
- weather protection.

The Council will seek to develop connected walking networks which are designed for all communities, including the elderly, young families and mobility impaired people. The attraction of these networks will contribute to them being well-used and safe through increased use. Furthermore, their quality should be of the

highest standard with the purpose of encouraging more people to walk for health and access reasons.

4.1.7 Home Zones

Traditionally transport problems in residential areas have been approached from either a strategic planning level or from a more site-specific level with a focus on traffic calming and engineering solutions. The White Paper has highlighted the importance of an integrated approach which tackles transport issues by linking the engineering and traffic calming to areas which have regeneration needs:

- regeneration of existing residential / community areas;
- new residential developments;
- prioritisation and selection of Home Zone schemes;
- improving existing residential areas;
- community safety and security.

4.1.8 Water Transport

Cardiff's waterways, including the Inner Harbour, provide valuable traffic free links for pedestrians and cyclists in and between urban areas and the Council will continue to work in partnership to promote their use. The Council will provide a framework for water based transport development and supporting infrastructure. The Cardiff Waterways Strategy will help provide a strategic framework for the water areas, including integration with transport matters.

The Port area provides opportunities for further brown field developments, taking advantage of the road, rail and developing public transport to the area.

4.1.9 Freight

Developing a sustainable strategy involves all modes of freight – road, sea and air. This is a vital part of the economy and social well-being. This is more than just moving goods from A to B, it encompasses the whole supply chain, which often involves more than one mode (e.g. road feeding into rail and vice versa). There is a need to improve the efficiency of distribution, minimise delays, make better use of transport infrastructure, minimise air pollution and greenhouse gases, reduce noise and disturbance and improve safety. Opportunities exist to increase the amount of freight sent by rail and sea. Both intermodal (e.g. road – rail) and rail served industrial / warehousing sites need to be protected, as there are few such locations. The current growth in rail freight needs to be encouraged and, wherever possible, measures taken to protect and facilitate this trend.

Through the Transport Strategy, the Council will work with the Freight Transport Association (FTA) to assist their needs, including investigation of innovative ideas, such as local distribution centres, the implications of e-commerce and home delivery.

The Council will continue to work in conjunction with the Freight Industry to develop Freight Quality Partnerships.

4.1.10 Powered Two-Wheelers

Mopeds and motorcycles can provide a viable alternative mode of transport to the private car for many trips, particularly where public transport is limited and either walking or cycling is unrealistic and can have a positive role to play within an integrated transport strategy.

The strategy for powered two-wheelers will consist of three strands:

1. An investigation into the provision of secure parking facilities both on and off-street where a clear demand can be demonstrated and the inclusion of requirements for two-wheeled parking in development control parking standards.
2. Evaluate opportunities for increasing the priority for powered two-wheelers in traffic management.
3. Continuing education and engineering to improve road safety for powered two-wheelers.

4.1.11 ULTRA (Urban Light Transport)

This new system consists of small automated electric vehicles circulating on a segregated track network. It is promoted as an automatically controlled personal taxi system running on its own guideway. The network would consist of frequent stops at which people would request a vehicle and select a destination using a smart-card. The vehicle would then take the quickest non-stop route to the destination.

An 18 month study is currently underway, investigating the feasibility of ULTra and its application to Cardiff. It is assessing the practicalities of such a system in an area of Cardiff, in particular, the link between Cardiff Central Station and the Waterfront area and the National Assembly for Wales. A key issue for consideration is the role of ULTra and the various forms of public transport. The aim is to achieve compatibility with the public transport proposals in the Local Transport Plan, including those of SWIFT.

4.1.12 Accessibility for Mobility Impaired

This strategy will take into account the needs of mobility impaired people with a view to assisting independent living, particularly of disabled people, and to help secure the necessary resources to achieve it.

4.2 TRAFFIC MANAGEMENT AND DEMAND RESTRAINT.

Travel Demand Management is a major element of the Cardiff Movement Strategy. In order to encourage people to use more sustainable modes and to reduce reliance on the car, a range of policies, secondary objectives and proposals have been developed to maximise efficient use of the network.

The Council proposals require redirecting the priorities for use of the highway network in terms of the impact upon public transport, pedestrians and cyclists. Traffic Regulation Orders, such as parking and loading restrictions, need to be introduced in parallel to bus priority schemes, to maximise the benefits for buses.

4.2.1 Intelligent Transport Systems

Transport Telematics is the term used to describe the ability to combine Information Technology and Telecommunications in systems which enable on-line information to be passed to travellers, vehicles and road infrastructure. Such systems are called 'Intelligent Transport Systems' and these are used to make better use of the road network with an emphasis on the pro-active strategic management of traffic at the network level. This will allow the management of the road network to benefit all users and in particular:

- Improve safety.
- Reduce Pollution.
- Manage demand and congestion.
- Encourage modal shift to more sustainable forms.
- Provide information to travellers so that they may make informed decisions about when and how they travel.

Cardiff has an extensive Intelligent Transport Systems infrastructure which is controlled from a state of the art Control Centre located at County Hall. The Urban Traffic Control system centrally co-ordinates traffic signals using a fully adaptive real time traffic control strategy called SCOOT (Split, Cycle and Offset Optimisation Technique). This system is integrated with sophisticated signing systems, closed circuit television, environmental control and monitoring systems.

Recently a new bus priority and Real-Time Information system has been installed on the Northern Sector of Cardiff (between the River Taff and the Rhymney Railway Line) which aims to adjust road space in favour of sustainable transport strategies. The system provides priority for nearly 200 buses at 46 signalised junctions enabling quicker and more consistent journey times. Real-time information about the predicted arrival times of buses is provided at over 120 bus shelters in both textual and audible formats. The system uses the latest satellite technology and is the largest and most advanced GPS based system in the UK. It is planned that the system should be further extended to include additional routes and be enhanced by the provision of new and well integrated incident management and comprehensive dynamic signing systems. The further deployment of advanced Intelligent Transport Systems is currently being considered as part of the A470 corridor sustainable movement strategy study.

4.2.2. Capacity Reallocation

The proposals for Cardiff will inevitably involve significant changes to access restrictions on the main radial routes into the City Centre, which will significantly reduce traffic at peak times to benefit public transport, pedestrians and cyclists through priority, parking, and enforcement measures.

The positive and proactive approach to promoting developments has recently involved a more integrated approach to assessing the transportation impacts of significant developments.

Developers are being encouraged to identify measures, both on site and in the vicinity of the site, which will contribute to greater use of public transport and encourage more cycling and walking, as evidenced in the Waterfront area. It is not acceptable for developers to assume high levels of modal change without demonstrating how it can be achieved and even assisting in the process.

4.2.3. Other measures to address congestion and pollution.

The Council is seeking to develop and promote the wider benefits of Green Travel Plans and sustainable working practices.

The County has and continues to promote School Travel Plans.

Air Quality Management Areas are proposed at the following locations:

- The junction of Manor Way with Merthyr Road and Birchgrove Road ;
- Newport Road, at Roath Court;
- Cardiff Road, Western Avenue and Cowbridge Road West.

Clear Zones are areas restricted to the operation of low or non-polluting transport. The Council is also considering using existing powers to introduce Clear Zones in the City to help reduce traffic and pollution levels which will help meet a number of objectives of the LTP.

Consideration is also being given to introduce the Clear Zone(s) in phases:

- Phase 1: the restriction of access to essential vehicles at specific times of the day only and the introduction of digital enforcement technology.
- Phase 2: the establishment of emission and quality standards to be applied to all vehicles permitted to enter the zone, and
- Phase 3: a review of the technological advancements in vehicle propulsion and possible introduction of zero emission vehicles.

4.2.4. Road user and workplace parking charges

The opportunities for new revenue generation via road user and/or workplace parking charges are currently being considered. Major demand management opportunities presented by the White Paper will play an important role in securing the objectives of the Government and the Council and it is important that a consistent and coherent approach within the region is adopted to reduce the potential for dispersal or competition between urban areas for foot loose development.

Road User Charging

The Council has no plan to make use of road user charging powers once enacted at this time. It is proposed to monitor the progress of other authorities with particular emphasis on the various economic, social and physical impacts and consequences of the scheme's implementation.

Workplace Parking Charges

The Council will have the opportunity to introduce workplace parking charges as part of an integrated policy involving parking standards, public transport accessibility and the location of development. The prospective legislative powers would enable charges to vary within an area (e.g. within Cardiff as a whole) and enable a mixture of incentives and penalties to help protect the vitality and viability of the City Centre and at other centres within Cardiff, and change the choices of people in businesses.

4.2.5. Parking

Cardiff recognises that an integrated approach to controlling parking provision and its use in the context of land use and transport planning is essential. It is intended to prepare a parking strategy which seeks to balance demands for parking in a way which maintains the economic viability and attractiveness of the City and district and local centres, yet reduces congestion and promotes sustainable travel patterns. This strategy will be integrated with public transport and will set the context for an integrated demand management approach to controlling parking in Cardiff.

The demand for on-street parking can arise from many sources, related to commercial, residential, commuter and tourist needs. Clearly, the availability of on-street parking space is limited and as the LTP will restrict the amount of parking within future developments, the pressure for on-street parking will continue to rise if no compensating measures are undertaken. The County Council will continue to review the stock of kerbside parking and will control its use, given the competing demands in particular areas, for example by providing short stay parking near shopping areas, or resident only parking where residential streets are subject to high levels of intrusive parking. Long stay voucher parking is currently used in the City Centre to provide commuter parking, and in short stay locations to ensure a regular availability of parking space.

Enforcement of parking restrictions will continue to be of vital importance in ensuring safe and efficient movement along the highway. Consideration is currently being given to the decriminalisation of parking offences, which would allow the County Council to assume the responsibility for the enforcement officers, and this, in turn, could be important in supporting the authorities transportation initiatives.

Orange badge spaces within the area play an important role in maintaining access to the City Centre and taxi ranks are also provided where possible.

Cardiff will continue to review on-street parking demands and where appropriate pursue Traffic Regulation Orders to support sustainable transport objectives as well as the more traditional road safety and traffic management justifications.

Off-street parking provision comprises:

- public off street parking (multi storey and surface car parks);
- park and ride (bus based and rail based); and
- private (non-residential) parking (PNR).

The parking strategy seeks to draw together all elements of parking charges including Park and Ride, to enable a comprehensive overview to be taken. This is important when influencing the levels of charging and how the parking is used (e.g. short / visitor stay instead of commuters / long stay).

New provision: Planning standards and development control.

- Parking standards for new developments have an important long-term role to play. This is reflected in planning guidance which requires a more restrained approach to parking provision which has a major influence in determining modal split. Traditionally more spaces have been allowed in the less sustainable out of town locations. This has encouraged car dependent businesses to disperse from more car restrictive central locations, even though they are more accessible by public transport.
- To redress this balance, Cardiff commissioned a Public Transport and Parking Strategic Study to allow an informed review of car parking provision and standards.
- The 1993 Parking Guidelines for South Wales have been under review for some time. This work needs to be progressed in order to review and revise the current parking standards in Cardiff, to bring them in line with current Government policy and guidance. This work needs to be linked to public transport accessibility, location policy, development issues and the potential for workplace charging.

4.2.6 Road Safety Casualty Reduction Strategy and Road User Education

The County Council road safety improvements are sought through traffic management engineering, education and enforcement. It continues to seek to reduce road casualties and raise the profile of road safety. The Council's Road Safety Unit seeks to involve all road users through its various education, training and publicity initiatives. Particular priority is given to traffic education programmes involving young road users and an excellent working relationship has been established with the many schools and colleges throughout Cardiff. Nearly 100 school crossing patrols ensure the safety of children on many of the busiest routes to and from school.

The Council is also working closely with the police on a wide range of road safety activities. Police speed enforcement is targeted on lengths of road which have

been identified from reported injury accidents involving speed as a contributory factor.

Cardiff County Council is a member of the South Wales Speed Reduction Partnership piloting a two year DETR trial of hypothecation of fines from enforcement cameras. The partnership includes all the South Wales Local Authorities, the National Assembly for Wales, Magistrates Courts Committee, Crown Prosecution Service, Health Authority and the South Wales Police. New camera equipment is being paid for by fine revenue with the specific aim of reducing casualties. This aspect of enforcement is seen as critical to the management of vehicle speeds and safety in the plan area and is fully supported by the Council.

Casualty reduction is also achieved by the provision of engineering measures, such as traffic calming, pedestrian and cycle facilities, and junction modifications. Additionally, Urban Safety Management studies are being systematically carried out across the County, providing an area approach to the objectives of safety improvement and accident reduction.

The Council is mindful of issues relating to pedestrians, partially sighted, and the blind, in terms of unobstructed and safe movement, particularly on footways and footpaths. Such matters will be taken into account when considering the needs of pedestrians, including those with mobility impairment.

4.2.7 Safer Routes to Schools

About 20% of all peak time traffic is escort trips, principally taking children to school. The Government is targeting this type of travel to reduce traffic congestion and to encourage children to walk and cycle more for their own health. The Council is involved with a number of schools to progress this important issue.

4.2.8 Safer Routes to Stations

The Government is supporting the creation of safer routes to stations. Cardiff Railway Company is sponsoring a research project to examine public perceptions of personal safety on access routes to stations as part of its commitment to improving accessibility and promoting greater use of rail. The project will be managed by The Suzy Lamplugh Trust Research Institute at the University of Glamorgan.

The Council is interested in auditing and improving safety and accessibility to railway stations in Cardiff. This is essential for creating universal accessibility.

Investigating, identifying and implementing safe routes to stations is wholly compatible with proposals to develop strategies and actions for walking and cycling. Maximising the station catchment corresponds with making the routes safe and secure.

The principal of safe routes to stations is not exclusive to rail travel. Studies have identified a number of nodes / interchanges to be enhanced and created within the bus and rail network. A number of these are served by both forms of public transport.

Inclusion of networks of safe routes is at the heart of zones which:

- are well-served by public transport;
- have limited parking provision for businesses and other land uses activities.

These may, in turn, be linked with future workplace charging, as part of a comprehensive policy to achieve greater use of public transport, cycling and walking.

4.2.9 Rural Aspects

Cardiff has rural and rural fringe areas within its boundaries. Many of the problems and solutions are common with urban areas, whilst others are more specialised. A number of aspects need to be addressed:

- Increases in traffic volume, speed and size of vehicles on rural roads; their impact on safety and quality of life; damage to roads; and pressures for road improvements.
- Growth in car use, with related problems, such as traffic congestion around schools in villages.
- Conserving and enhancing the environment, using speed reduction and traffic management measures.
- There are opportunities for highway network management to conserve and enhance biodiversity and the landscape.

4.3 INTEGRATED TRANSPORT

4.3.1 Interchange

To provide an attractive alternative to car travel the development of a comprehensive, efficient public transport network is vital. This requires easy transfer between services and with different modes.

This will be assisted through the development of better interchange facilities including:

- joint working with train operators and Railtrack to upgrade Queen Street Station and other existing stations within Cardiff;
- a review of the bus network with special attention to the City Centre;
- investigating the potential for transport links in district and local centres, hospitals, universities and major employment sites to encourage easy transfer between radial and orbital bus services;
- develop new rail and bus interchange facilities, including those which form part of the SWIFT initiative;

- determination of the efficient location of interchange facilities, particularly in the Central Area, including provision of bus priority measures, pedestrian / passenger facilities, and development of interchange facilities at several locations (e.g. Cardiff Central Station, Cardiff Queen Street Station and Greyfriars Road);
- continue to support the SWIFT integrated ticketing initiative.

Development of more flexible ticketing – Smartcard technology is currently being considered by the Council and SWIFT. This technology offers a flexible, cashless option for travel and can facilitate journeys involving different operators or different modes. It gives bus operators a greater range of ticketing options and more detailed passenger information.

Cardiff is in the process of introducing Smartcards for concessionary travel, with cards that can be used for other purposes. Cardiff will actively encourage the use of this technology to provide multi-operator and multi-modal ticketing.

The Council is committed to retaining a bus / rail interchange in the Central Area provided to the highest standards, both in terms of passenger accommodation, safety and efficiency. In advance of any large-scale refurbishment, the Council will make every effort to ensure that the current facility is user-friendly, safe and efficient.

The Council is currently investigating consultants proposals for improved bus access to and within the City Centre, including a new bus interchange immediately south of the Cardiff Central Station. This requires provision of a new bus-only bridge across the River Taff. The Council is in the process of initiating discussions with relevant parties.

4.3.2 Park and Ride

Park and Ride is a developing feature of Cardiff's movement network. Seasonal and event park and ride operations at Ocean Way and Leckwith have improved the accessibility of the City Centre, helping to maintain Cardiff's position as a leading retail and events centre. These park and ride operations contribute to reducing traffic on congested radial routes. Although initially introduced as a shoppers service, park and ride has been developed for events and has been extended to attract weekday commuters.

The emerging park and ride strategy is largely bus-based, and suggests an outer ring of locations close to the A4232 / M4 (see *Map 6*). Leckwith is the principal outer ring site serving the west which has already been used to provide event and seasonal park and ride and is shortly to commence weekday operations all year round. In addition, sites at Coryton and Cardiff Gate / Pontprennau have also been suggested. The latter has potential to be linked to new housing developments as well as intercepting strategic car movements from the east.

The development of outer ring park and ride sites requires the release of land which is co-ordinated with the preparation of the Unitary Development Plan. More

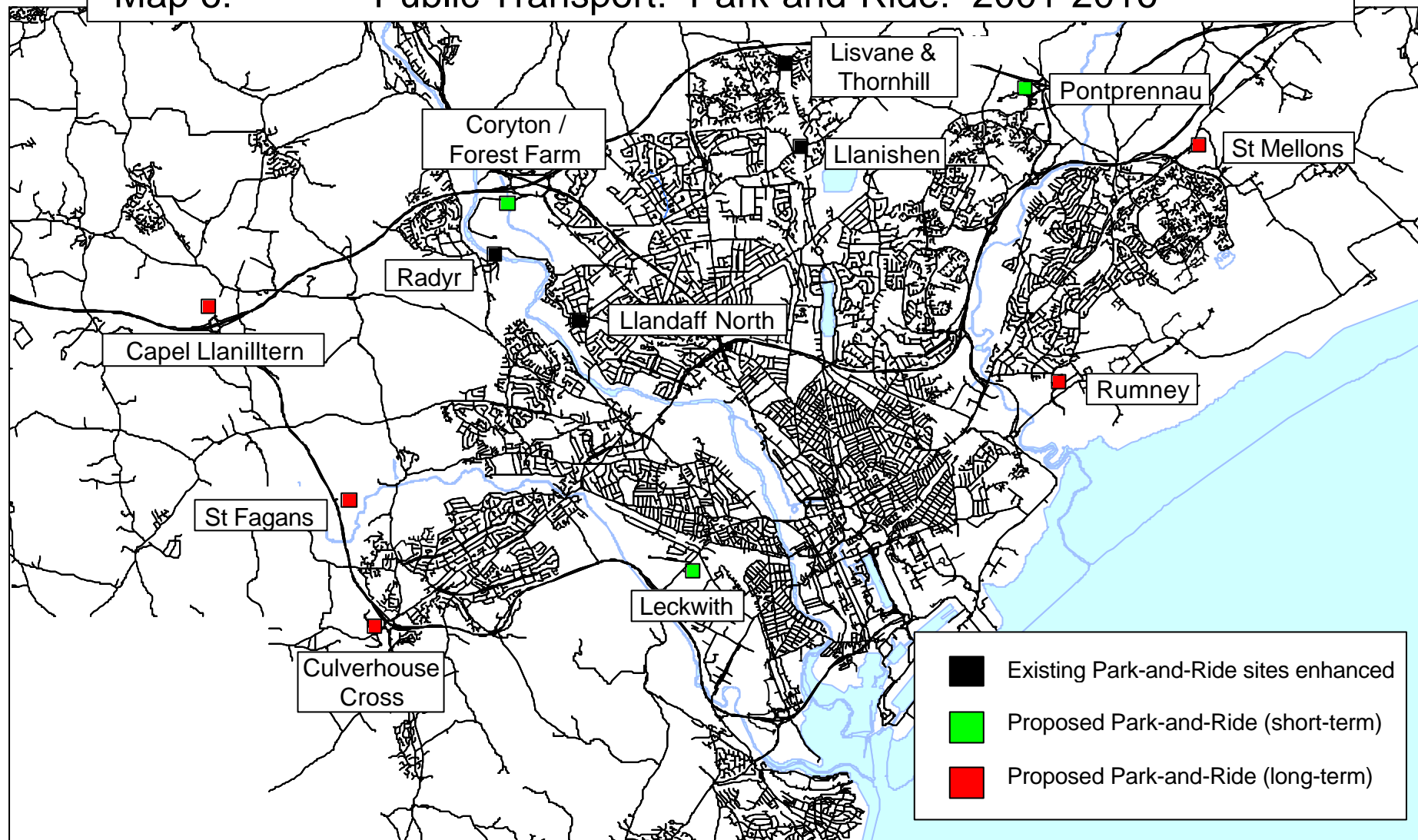
significantly the costs of operating bus services to peripheral sites is high and reliability dependent on extensive bus priority being in place.

In addition to bus-based park and ride, four rail-based sites are currently available at Radyr, Llandaff North, Llanishen and Lisvane / Thornhill providing spaces, but are in need of improvement.

Potential rail-based park and ride is also being investigated as part of future rail service links to new housing locations in the north western sector of the City (east of junction 33) together with new stations at St. Fagans and Rumney.

Peripheral Park-and-Ride provides an interchange between rural and urban travel for those living in areas outside the main Cardiff urban area that are not well-served by public transport.

Map 6: Public Transport: Park-and-Ride: 2001-2016



4.3.3 Public Transport Information

It is recognised that the provision of accurate, relevant and time information can enhance travel awareness and support a modal change to public transport. The establishment of Public Transport Information Cymru (PTI Cymru) to provide a call centre for all-Wales bus information is a major advance.

4.3.4 Travel Awareness and Changing Travel Behaviour

It is now recognised that there will need to be a major change in attitude towards car use if the targets of modal change are to be achieved.

The Council's Strategy for Travel Awareness is proposed on two inter-related elements:

- i) an enabling role to advise and guide other organisations and individuals to adapt their travel behaviour; and
- ii) the need to ensure that the strong links between transport and other issues such as health, education and energy are recognised and incorporated into transport policies and programmes.

Green Travel Plans (GTP)

The Government is encouraging the preparation of GTPs, in particular, it's own departments are being told to prepare such documents.

GTP's are largely voluntary in nature, being aimed at organisations making changes from within to increase use of alternative means of travel to the car. The Council has an important role to play, by encouraging their preparation which are complementary to the LTP.

Urban and Rural Aspects

Travel awareness and behavioural change needs to take into account the differing circumstances of urban and rural communities. For example, the need to reduce travel is inter-linked with rural communities trying to retain, maintain and encourage local shops and facilities, development of home delivery and e-commerce.

4.3.5 Air Travel Strategy

The Council, in conjunction with other relevant organisations, will seek to improve links to the Airport. Significantly better public transport links are needed from the Central Station to the Airport as part of an integrated public transport network. This is an essential part of the aspiration for Cardiff to become a major European Capital. The Council, as a partner in SWIFT, supports re-opening the Vale of Glamorgan rail line to passenger services. The Council also supports the aspirations to increase the number of scheduled flights to and from Cardiff International Airport.

4.3.6 Signage

There is a need to review and revise signage for all travel purposes in Cardiff. This needs to cover:

- visitors to Cardiff, either as tourists, shoppers or for business purpose;
- events, particularly major events at venues such as the Millennium Stadium;
- information for pedestrians and cyclists;
- public transport information;
- coach drivers, including coach parking facilities and visitor destinations;
- car parking, particularly information on the availability of spaces at sufficient distance from the car park to allow alternatives to be displayed and drivers to make early choices, including use of park-and-ride sites as an alternative;
- road freight, including suitable routes for HGVs and abnormal loads;
- rural roads need particular attention to suitability for large and long vehicles where there may be problems negotiating bends, road width and lack of turning facilities.

4.3.7 Movement Hierarchy

The Council will investigate the appropriateness and detail of applying the principles of a hierarchy following feedback from public consultation referring to the York example.

4.4 PLANNING AND MANAGING THE HIGHWAY NETWORK

4.4.1 Structural Maintenance of principal roads

Maintaining the structural integrity of the Principal Road Network is at the core of delivering the objectives of the Plan, underpinning many elements of the overall proposed Movement Strategy.

The key points of focus will be to identify major weaknesses in the network and to devise a comprehensive programme of works to arrest and reverse its structural deterioration.

4.4.2 Bridge Assessment Maintenance and Strengthening

The Council fully supports the Government's proposals to increase the amount of freight transported by rail. However, this policy will not be achieved by allowing deterioration of the bridge stock on the highway network, and the imposition of weight limits because of weak bridges. For many local businesses unrestricted access by heavy goods vehicles is essential to maintain viability. Without

expenditure on the existing bridge stock it will be difficult to deliver one of the primary long-term aims of the plan.

Strategy

The Council's strategy will:

- Compile and maintain a register of all Public and Private structures affecting the County Borough's Highway Network.
- Inspect and record the condition of these structures and identify maintenance works necessary. Structures requiring extensive maintenance will be included in the 5 year Capital Programme for Bridgework Replacement or Refurbishment.
- Assess all road carrying bridges for 40 tonne vehicles in line with European legislation.
- Strengthen bridges, which fail the 40 tonne assessment, by 2005 or implement weight restrictions dependent upon the strategic importance of the route.

The Council's bridge structure register contains 375 structures. Of these the Council is fully responsible for 345 bridges and culverts and has some responsibility for 30 other road carrying bridges owned by Railtrack, Rail Property Limited (formerly British Rail Property Board) and others.

Bridge Assessment

European legislation permitted the use of 40 tonne vehicles on UK roads from the 1st January, 1999. In its standard for assessing bridges for the increases in loading, the DETR (Department of the Environment, Transport and Regions) set out 3 separate stages:

- Stage 1: Older short span bridge (bridges more than 30 years old).
Stage 2: Modern short span bridges (about 20 to 30 years old).
Stage 3: All long span bridges.

The Council has identified a total of 240 bridges and retaining walls requiring assessment. The majority of these fall into stages 1 and 2 with only a small number falling into stage 3.

Bridge Strengthening Programme

Of the 240 assessments completed, 20 bridges have been identified to be included on the County Bridge Strengthening Programme. The ideal solution is to strengthen them immediately. However, owing to lack of finances, temporary measures have been adopted i.e. weight restrictions or other traffic measures.

All such structures are being regularly monitored to check for further deterioration.

Maintenance

As the number of weak bridges on the highway network is reduced over the next five years, the emphasis will need to switch from bridge strengthening to bridge maintenance. Maintenance expenditure will be targeted to bridges on primary or

principal routes aimed at defects which, if unattended, would in future reduce the strength of the bridge.

4.4.3 Major Improvement Schemes

Eastern Bay Link

The Eastern Bay Link is the final section of the PDR, 5.25km in length (see *Map 7*). It will connect the Butetown Link and Southern Way. Its primary function is to bring traffic to the Waterfront and Central Cardiff from the east. It will also serve the employment areas at East Moors and Pengam Green via Ocean Way and Seawalls Road Interchanges.

Completion of the PDR will help bring considerable relief to Newport Road and assist reallocation of road space to public transport, cycling and walking in line with the overall strategy.

A New Approach To Appraisal (NATA) assessment is underway concerning the Eastern Bay Link as required by the National Assembly for Wales. This section of the PDR has possible implications for several environmental designations – Severn Estuary Wetland of International Importance (RAMSAR), Special Protection Area (SPA), possible Special Area of Conservation (pSAC).

Ely Spur

The Ely Spur is an ancillary section of the PDR (1.19km) which would connect the Ely Link (at a new junction) with the Ely Bridge (A48) roundabout to improve access to the PDR from Western Avenue (see *Map 7*). Together with construction of the Eastern Bay Link, the Ely Spur would enable completion of an Inner Box, consisting of Western Avenue, Eastern Avenue, Southern Way and the section of the Eastern Bay Link between the connection points. This will assist measures to reduce through traffic and car commuting in the Inner Area of Cardiff. This will help remove commercial vehicles generated from the Ely Bridge and Sanatorium Road Industrial areas further reducing through traffic in Ely and Canton. The link will also reduce traffic along Cowbridge Road West which could assist bus priority measures and cycle facilities to be incorporated as part of the overall strategy. The link will, however, affect the open space in the area. A study involving the Common Appraisal Framework (CAF) assessment methodology concluded that the Ely Spur is an important link in the highway network as part of a package approach involving bus priority measures along Cowbridge Road East and West. This would allow relocation of traffic from Ely and Canton which enables spare capacity to be used for bus priority measures. The latter will also benefit cyclists. Further work is needed on an area-wide basis to investigate in detail the multi-modal movement needs for the surrounding area.

A470 Relief Road

This was originally a Welsh Office proposal. The former Mid Glamorgan County Council and Taff Ely Borough Council included an alignment in their respective Development Plans. Following decisions by the former Welsh Office to no longer pursue this scheme, and the Planning Inspector to remove it from the MGCC

Replacement Structure Plan, Rhondda-Cynon-Taff Borough Council resolved to delete the scheme from their Development Plan. It is not proposed to retain the southern section and, therefore, it does not form part of the Local Transport Plan for Cardiff. This will need to be reflected in the forthcoming Unitary Development Plan.

4.4.4 Minor Improvement Schemes

Wentloog / St Mellons Link, Phase 2

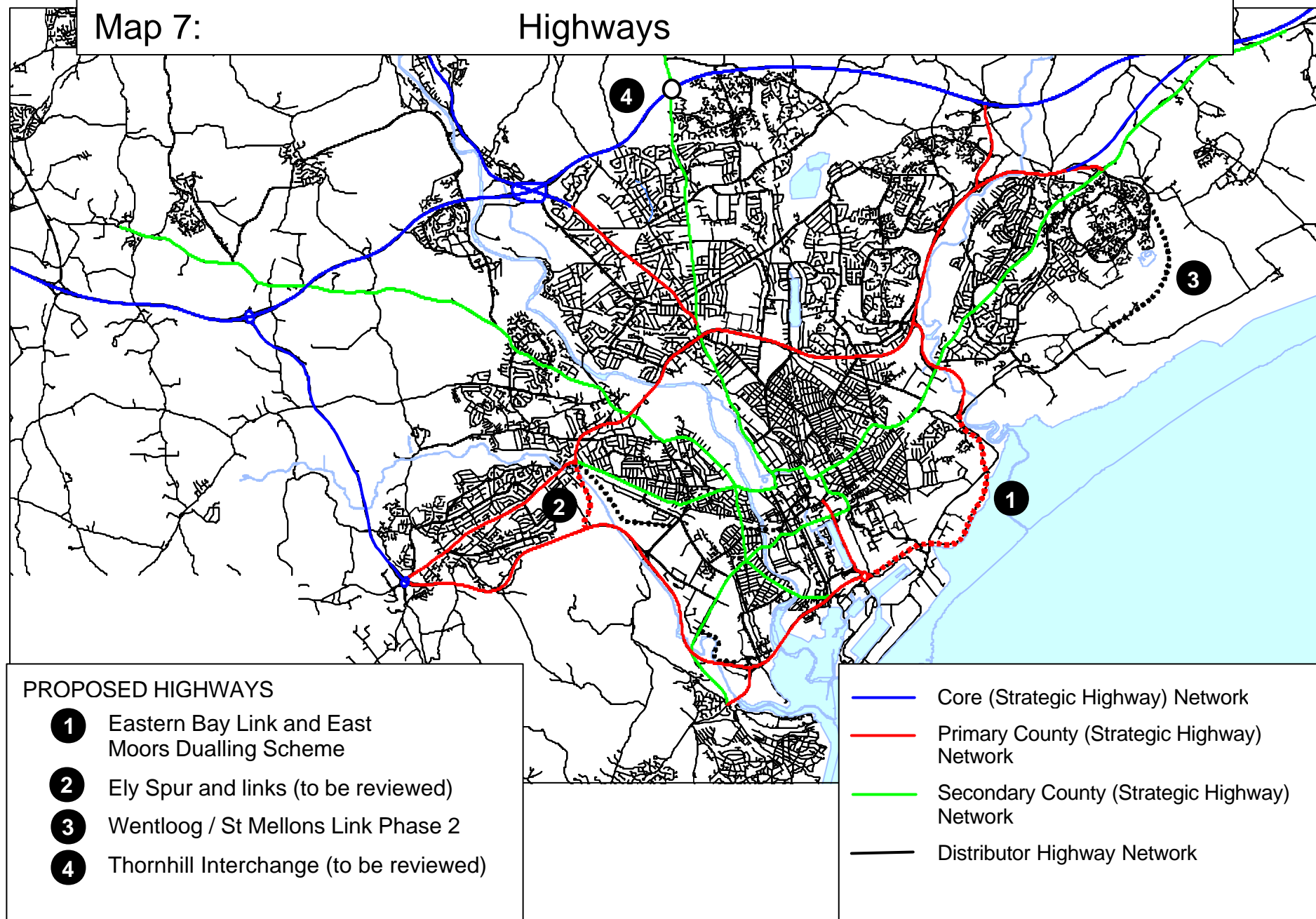
The Wentloog / St. Mellons Link is another essential industrial access road to provide improved road freight access to the national road network and link the Strategic Highway Network with the new intermodal Euro-Freight Terminal at Wentloog (see *Map 7*). The road will also enhance local access between the major employment area of Wentloog and the residential areas of St. Mellons, Rumney and Llanrumney. It also provides new opportunities for developing public transport, cycling and walking networks in eastern Cardiff.

Thornhill Interchange

The Thornhill Interchange was also the subject of a study involving the Common Appraisal Framework assessment methodology. Further work is needed to assess in detail the impact of a new interchange on North Central Cardiff, including how changes in traffic flows as a result of an interchange, would affect all modes of travel and access (see *Map 7*).

Map 7:

Highways



4.5 SUSTAINABLE DISTRIBUTION

Importance of freight transport.

In order to compete successfully within the international market, it is essential that an efficient, cost effective system of freight distribution – the logistics chain – is maintained and improved. Distribution is critical to securing the supply of a diverse range of products which affect quality of life and consumer choice. The system needs to be integrated and operational not only nationally, but also at the regional and local levels.

In developing policies relating to distribution, the Council will consider the wider implications of the logistics supply chain, rather than dealing with local transport or freight movement issues on an ad hoc basis, as and when they arise. The trade-offs and interactions between transport and other supply chain elements, such as stock levels, production flexibility, packaging and handling technologies and labour costs through the supply chain, including warehousing, are complex and will influence the effectiveness of the distribution system and processes.

The nature of rural communities is that they are almost entirely dependent upon road freight deliveries and likely to remain so. This means balancing protection of the environment with the needs of freight hauliers making deliveries, picking up goods and the agricultural industry going about its day-to-day business.

4.6 INTEGRATION WITH WIDER POLICIES

4.6.1 Promoting social inclusion

A number of issues relate to social inclusion:

- Transport disadvantage contributes to social exclusion. People who do not have access to cars have less choice in how they conduct their lives. This is particularly true in rural areas where isolation is more keenly felt.
- The design of development layouts often provide a hostile environment for access, except by car. This usually takes the form of circuitous routes for walking and cycling, particularly to public transport stops and stations. At worst, design can fail to provide or cut existing routes.
- Work, training and other facilities need to be easily available for everyone, either located close-by or with good non-car dependent transport links. Lack of public transport, to get access to job opportunities, facilities, sport and leisure (including the countryside) activities in locations which are only accessible by car. Wentloog, Cardiff Gate and St Mellons have been specifically identified in public consultations as areas where employers have difficulties recruiting staff and employees have difficulties travelling to and from work.
- Social and leisure destinations are as important as work and training.

- Transport inequality is increasing, both in real terms and in people's perceptions, a process of relegation which ignores non-car users and owners. This also affects night-time and shift workers travelling at times when there is little or no public transport.
- The Local Transport Plan provides a key mechanism to help tackle these issues.

The car should not be the sole means of judging mobility and accessibility to different locations and facilities. Sustainable movement involves all modes of travel. This means that a range of solutions are needed to minimise social exclusion, including measures to promote non-car use (e.g. influencing public transport fares).

The Council recognises issues relating to providing school bus travel more economically and that the opening hours of schools are related. The Council will work towards seeking solutions which will promote flexibility for travel to school, including possible benefits to employers and employees from staggered working hours.

4.6.2 Action on Air Quality

Part IV of the Environment Act 1995 gives Local Authorities responsibilities in respect of Local Air Quality Management. Local Authorities are required to carry out a phased review and assessment of air quality within their areas. The purpose of this review and assessment is to consider whether local air quality is likely to exceed prescribed air quality objectives. The Air Quality Regulations set out the objectives for a range of pollutants and indicate target pollution concentrations and dates by which they should be achieved. The objectives are framed on the basis of recommended health based standards with due regard to the cost, benefits, and practicalities of moving towards those standards.

This process has recently been completed in Cardiff and the concluded that the Air Quality Objective for nitrogen dioxide will be exceeded in three areas:

- The junction of Manor Way with Merthyr Road and Birchgrove Road;
- Newport Road, at Roath Court;
- Cardiff Road, Western Avenue and Cowbridge Road West.

It is proposed that an Order to designate Air Quality Management Areas will be declared at those locations later this year. The Act goes on to require the Council to undertake a further review and assessment of air quality within those areas and to produce an Air Quality Action Plan stating what measures the Council will take to improve air quality within those Areas. Clearly, since the source of the excess levels of nitrogen dioxide is road traffic, it is essential that the Local Transport Plan reflects the need for transport measures to achieve Air Quality Objectives in those areas.

Local highway authorities have a number of existing powers with which to help address air quality to encourage different trip making behaviour and control traffic

movements, the Council will take measures to protect local air quality to a greater or lesser degree.

The Road Traffic (Vehicle Emissions) (Fixed Penalty) Regulations 1997 enabled only 7 pilot Authorities to undertake roadside vehicle testing. The legislation has not been commenced to permit this activity in Cardiff, to-date.

In the short-term it may be possible to reduce peak period emissions by encouraging variance in school and working hours. This approach will require further investigation.

4.6.3 Action on Noise

Noise from road traffic can have a major impact on peoples' quality of life, contributing to stress and sleep disturbance. In many cases the measures taken by local authorities to address local air quality issues also have the potential to deliver improvements in the general environment, including reduced noise levels and similarly many noise abatement measures have complementary effects on air quality. Whilst it is anticipated that the strategy in the Plan will reduce the overall level of road traffic and its associated noise impacts, the need exists to undertake noise assessments before and after the implementation of demand management schemes to evaluate their effects.

Further research and trials are needed in order to understand more fully the relationship between noise generation and aspects of traffic management and infrastructure provision these include:

- achievement of smoothly flowing traffic;
- reducing stop/start driving;
- reducing speeds; and
- quieter road surfaces.

The first three issues also have air quality implications and will be linked to the Air Quality Strategy for Cardiff.

4.6.4 Links to Health

Transport is having an increasingly significant impact on the environment and health, not only in terms of pollution from exhausts and the effects of road construction, but in terms of energy use, accidents and levels of personal fitness.

Children are driven to school and not allowed to play on the street due to traffic levels and concerns about safety, giving rise to a generation of inactive children who stay at home and watch television, rather than getting exercise and developing social skills obtained from interaction with their peers.

Historically there have been concerns about the lack of interaction between transport and land use planning. Land use and transport need to be planned together in ways which enable people to carry out their every day activities with less need to travel, particularly reliance on the motor car. This would lead to a healthier population, as walking / cycling to the shops, schools etc becomes a viable option.

There are also concerns that people without access to a car, and therefore without access to large out of town supermarkets, are having nutritionally reduced diets as corner shops do not necessarily offer the daily supply of fresh fruit and vegetables that are offered at larger outlets. These issues have made the health community want to become involved in the Local Transport Plan process, to ensure that the strategy will take full account of the initiatives being introduced by the Local Health Authority. The Council will seek closer working relationships with the Bro Taf Health Authority concerning health issues which are inextricably linked to movement.

4.6.5 Economic Vitality and Viability

It is important that travel choices are available to protect and improve the vibrancy of the City Centre, the Waterfront, District and Local Centres.

4.6.6 Events

The extraordinary arrangements made for major events in the City Centre must become part of the everyday arrangements, requiring little or no change throughout the year. Whilst signage is a major issue this is dealt with in 4.3.6.

4.6.7 Barrage

There is a need to investigate further, access arrangements to and across the barrage, with particular attention to visitor needs.

5. CARDIFF MOVEMENT AND TRANSPORT PROVISION PARTNERSHIPS

Cardiff County Council are seeking expression of interest from Consultants who are interested in advising and assisting the Council in the preparation of a business case to implement extensive transport infrastructure and service improvements in Cardiff.

The Council's intention is to thoroughly investigate the business case and opportunities for establishing major development partnerships to implement the policy objectives set out in the Local Transport Plan and to bring about a significant shift in favour of sustainable transport modes.

The successful consultant would be expected to advise on how Partnering may be best approached and how appropriate funding may be best sought. In particular, the potential for:

- (i) public funding, and;
- (ii) all forms of Public / Private Partnership, including private finance initiatives.

The main objectives for the successful Consultant would be to advise on the establishment of public/private partnerships to implement a package programme of multi-modal infrastructure and service provision.

Main Partnership Objectives

This package programme needs to be identified and appropriate advice given to the Council on the following:

- The establishment of a funding mechanism to implement the full programme of transport improvements.
- The establishment of organisational arrangements.
- The determination of an appropriate monitoring regime for reviewing the progress of the partnership programme.
- The review of available studies and other sources of information to achieve a good understanding of the scale and content of desired outcomes.
- The review of proposals for the development of land in Cardiff, their timing and phasing.
- The understanding of the land market in Cardiff.
- The understanding of the operation and financing of public transport provision and user expectations.

The final version of the Local Transport Plan (LTP), following widespread consultations is due for completion on 31st August, 2000 and will set out in detail the Council's proposals for achieving an integrated movement system which will support the economic development of the County, safeguard and improve the environment, improve safety, ensure accessibility for all sectors of the community and provide a co-ordinated approach for all movement/transport related issues. All proposals will need to be assessed against the LTP and Unitary Development Plan (UDP) objectives. Current Government White Papers and Guidance notes (including LTP, Road Traffic Reduction Acts, Environment Act), together with the Adopted Local Plan and Replacement Structure Plan will have to be taken into account in any advice provided and development land opportunities should be linked to transport infrastructure and service provision where possible.

A number of studies have been undertaken by the County Council, both in its own right and as part of the South Wales Integrated Fast Transit (SWIFT) Initiative. The studies have considered a wide range of movement/transport improvements together with highway and parking management and show that improved public transport, telematics and traffic management, parking management, car sharing and new highways all have a role to play in an integrated approach.

Partnership Proposals

The proposals submitted by the successful consultant will necessitate detailed assessments of demand management and the application of a complex parking policy regime. Transportation Infrastructure Projects which have been identified by the Council for possible future partnership arrangements could include:

- Completion of the Peripheral Distributor Road (PDR) - Eastern Bay Link; Ely Spur; Wentloog to St Mellons Link Road and Thornhill Interchange;
- Provision of a Bus Core Network, consisting of express/core and feeder elements, for faster and better quality services;
- Development of the rail network, including provision of Diesel Light Rail on a City Circle and several branches (new and existing);
- Introducing tighter parking restrictions;
- Introducing congestion and/or workplace charging;
- Completion of a County-wide cycle network;
- Providing better facilities and environment for pedestrians;
- Developing multi-modal packages for funding bids;
- Introducing Innovative Transport Solutions.

Implementation Options

The successful consultant will identify options for the implementation of a total package or series of packages of measures consistent with:

- Achieving a public:private modal split of 50:50 for the City Centre and Cardiff Bay (Core) / Waterfront area.
- A balance between highway capacity, public transport provision and parking provision.

Implementation of the foregoing together with the range of proposals associated with the LTP, UDP and SWIFT Initiative will require substantial investment in transport infrastructure and services. Two overriding issues for consideration in respect of any proposals will be widespread consultation to achieve public support and the identification of options to maximise funding opportunities for both highway and public transport schemes. In the context of scarce funding for such initiatives it will be essential to assemble agreements with the private sector and attract private sector funding.

Funding Package

The funding package will seek, where appropriate, contributions from land development, including private developers, the Council's own assets, and other organisations. Funding resources may be available by thorough investigation and analysis of:

- European funding and the best way of realising this source;
- The levels of funding achievable, if necessary, through a series of scenario options to allow for different eventualities;
- Private Finance Initiatives (PFI) or Public/Private Partnering arrangements;
- Revenue sharing schemes with car parking operators, public transport operators, Railtrack, Strategic Rail Authority, National Assembly for Wales, developers, park and ride operations, etc;
- Decriminalised Parking Enforcement regimes, including the establishment of a Special Parking Area (SPA) for Cardiff (incorporate existing study work);
- Utilisation of Transport Grant funding mechanisms;
- Workplace/ Congestion Charging;
- Business Rate modifications;
- Introduction of Bond arrangements;
- Any other options of funding, management and organisation to implement a package of measures.

It is the intention that a report or a series of individual reports will be required from the successful consultant following the investigation and analysis process which will contain the proposals for securing funding and establishing public / private partnerships, in line with current Government and Council policy.

Recommendations

The report / reports will provide advice and recommendations and include the following:

- Identification of potential partners;
- Identification of sources of funding;
- The setting out of funding mechanisms;
- The setting out of the means of asset assembly and realisation of funding for the package;
- The setting out of the costs involved in establishing, running and implementing the package;
- The setting out of the organisational arrangements and management processes;
- The phased implementation timetable (short-term to 2005/06, medium term to 2010/11 and long term to 2015/16);

It is the intention that the report and its findings will be available in a form which may be used to support/promote the LTP and UDP. It may be used in association with involving the public in further consultations and, subject to Best Value, the future appointment of partner(s) in the implementation of the full package or part packages of the programme of multi-modal infrastructure and service provision.

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1. Not to proceed with the contract at any stage in the procurement process, and;
2. Not to accept the lowest or any tender received.

This document is not intended to form part of the contract documentation. This document is not intended to give an exhaustive explanation of the services to be provided. A specification setting out the services to be provided will be issued to those persons selected to tender. This document shall not be deemed to limit, restrict or in any other way affect the Construction of the Specification to be issued.

6. THE LOCAL TRANSPORT PLAN: ACTION PLAN FOR MOVEMENT: TARGETS AND MILESTONES

The Action Plan contains two parts:

- Targets and Milestones (*this chapter – 6*);
- Action Programme (*chapter 7*).

These reflect the Council's aspirations for a realistic timetable to implement the elements of the Local Transport Plan, in line with the Council's decisions and plans for resource allocations and priorities.

The main features are concerned with both a reduction in the need to travel or movement of goods and a shift in the means of transport used, together with strategies for education, encouragement and enforcement. The timescale extends in five-year periods to 2016.

The following table shows potential targets and milestones arranged in six themes:

Themes	Page
● Widening Travel Choices	61
● Traffic Management and Demand Restraint	68
● Integrated Transport	70
● Planning and Managing the Highway Network	71
● Sustainable Distribution	72
● Integration with Wider Policies	73

The Council cannot guarantee that the targets and timetables contained within the Local Transport Plan will be met. This Action Plan reflects the Council's aspirations, the achievement of which are dependent upon many factors, including the securing of funding.

TARGETS AND MILESTONES

The following table indicates the levels of progress required if the objectives of the Local Transport Plan are to be achieved. ¹

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
Widening Travel Choices	Public Transport, Parking and Highways	Public Transport, Parking and Highways Strategy	Strategy completed.	Monitor, 5-year reviews and up-date.		
	Buses	Quality Partnerships	Format and first partnership proposal established.	Agreements reached and made operational		
		Quality Contracts	Format established following the enactment of new legislation.	Agreements reached and made operational		
		Bus Infrastructure: Stops	Additional new boarders identified and implemented countywide.	New bus stops provided and improved bus stops, through appropriate use of bus boarders and buildouts, implemented.	All stops equipped where physically possible	Monitor, review and up- grade.
		Bus Infrastructure: Shelters	Additional new shelters identified and implemented countywide.	New bus shelters fitted with RTI.	All shelters equipped where physically possible	Monitor, review and up- grade.
		Bus Infrastructure: Nodes and Interchanges	New and improved nodes and interchanges identified and implementation started.	Implementation of new and improved nodes and interchanges in the network continued.	All nodes and interchanges provided where physically possible.	Monitor, review and up- grade.
		Selected Vehicle Detection (SVD) and SCOOT traffic control	Provision in Northern Sector in place	Bus Priority System for Express / Core Bus Network in operation county wide	Monitor, review and up-grade.	
		High Occupancy Vehicle (HOV) lanes and / or Selective Vehicle Lanes (SVL)	Provision in Northern Sector in place	HOV / SVL in operation county wide	Monitor, review and up-grade.	

¹ The different elements within the table represent possible actions forming part of the LTP.

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
Widening Travel Choices	Buses	Express / Core Bus Network: Cowbridge Road, Newport Road, North Road, Manor Way, Caerphilly Road, Penarth Road, a route to Pontprennau, City Centre and Waterfront	Appropriate priority measures designed to outline scheme stage. Detailed designs for some sections of highway prepared.	The remaining sections of highway and continue implementation designed in detail.	Remaining sections of highway implemented.	Monitor, review and up-grade.
					Monitor, review and up-date.	
			Decision made on bus only bridge and link, plus south side bus station / satellite, and design commenced.	If approved, complete design and implement.	Monitor, review and up-date.	
			Decision made on Bay Core Movement Study recommendations	If approved, implement findings of Study.	Monitor, review and up-date.	
			Further investigation on east – west spine routes through South Cardiff Regeneration Area undertaken, decision made and outline design completed.	If approved, design detailed routes and implement sections.	If approved, implement remaining sections.	Monitor, review and up-grade.
		Feeder Core Bus Network	Network finalised and designed to outline scheme stage.	Detailed design of infrastructure and implementation of some sections completed.	Implementation of some sections completed.	Monitor, review and up-grade.
		Core Bus Network: Express and Feeder	Review and redesign bus service network completed. Branding and marketing strategy with operators prepared.	Implementation of bus service network changes commenced. Branding and marketing strategy introduced.	Implementation of bus service network changes completed. Monitor, review and up-grade.	Monitor, review and up-grade.

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
Widening Travel Choices	Buses	Bus Journey times	Bus journey time targets established and initial service changes commenced in agreement with operators.	Implementation continued.	Monitor, review and up-date.	
		Patronage	Targets established.	Target increase achieved.		
		Bus P&R	Initial permanent P&R identified, designed and implemented.	Further P&R identified, designed, facilitated and implemented.		Monitor, review and up-grade.
		Remainder of Bus Network	Investigate cross-city, circular and local rail feeder services.			
				Try and implement services and influence Franchise process.		
	Bus / Rail	Bus / Rail Infrastructure: Nodes and Interchanges	New and improved nodes and interchanges identified and implementation started.	Continue implementation of new and improved nodes and interchanges in the network.	All nodes and interchanges provided where physically possible.	Monitor, review and up-grade.
	Heavy Rail	System / Network Improvements	Rail Franchise Bid expected to be decided and in place.	New franchise in place: monitor, review and up-grade.		
				Initial phase of improvements implemented.	Remaining improvements system completed.	Extensions investigated and implemented where appropriate
				Cardiff Bay line embankment removed.		
		Reliability and Frequencies	Queen Street / Central Corridor remodelling started	Queen Street / Central Corridor remodelling completed.	Reliability better and frequencies higher	
Number of Services		Number of services through Franchising process established.	Further increase services through Franchise process.	Monitor, review and up-grade.		
Use of existing rail P&R		Monitor, review and up-grade.				
New rail P&R		Initial P&R identified, designed and implemented.	Identify, design, facilitate and implement further P&R.		Monitor, review and up-grade.	

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
Widening Travel Choices		Bike-Rail	Desired extent and initiate implementation established.	Monitor, review and up-grade.		
		Universal Accessibility	Requirements established and legislation incorporated.	Level of universal accessibility improved		
		Universal Information	Requirements established.	Level of universal information improved		
		New stations	Requirements established.	New station(s) built.	Further new stations built	
		EuroFreight Terminal	EuroFreight Terminal opened and operational.	Monitor, review and up-grade.		
	Heavy Rail	Other freight facilities	Industrial / warehousing / retail sites identified, assessed and protected, which are or can be rail served.	Facilitate implementation and continue to identify, assess and protect sites which are or can be rail served.		
		Patronage (passenger trips)	Targets established for increased patronage.	Monitor, review and up-date.		
	Diesel Light Rail	New system	Rail Franchise Bid expected to be decided and in place.	New franchise in place: monitor, review and up-grade.		
				Initial phase of DLR implemented.	Remaining DLR system completed.	DLR extensions investigated and implemented where appropriate
				Cardiff Bay line embankment removed.		
	Taxis and Private Hire Vehicles	Taxis and Private Hire Vehicles Strategy	Strategy prepared and an action plan started.	Action plan completed and implement started.		Implementation completed, monitor, review and up-date.
		Ranks	Rank Strategy and Review procedure created and agreed.	Ranks allocated, monitor, review and up-grade.		

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
Widening Travel Choices	Voluntary and Community Transport	Needs and Patronage	Levels of patronage and needs established.	Monitor, review and up-date.		
			Ring & Ride extended.	Ring & Ride capacity increased to meet demand throughout County.	Level of service maintained in line with demand	Meets needs
		Marketing and Information	Information needs and marketing reviewed.	Findings implemented.	Monitor, review and up-date.	
	Cycling	Cycling Strategy	Existing approved strategy reviewed and up-dated.	Monitor, review and up-date.		
		Audits of new schemes	Audit procedures devised and agreed.	Audit procedures made operational, monitor and regularly review.		
		Review of network and facilities	Plan for strategic 5 year cycling review of existing highway network developed.	Review completed.	Monitor, periodically review and up-date.	
			'Mechanism' developed for development control process.	Implemented, monitor, review and up-date.		
		Engineering	Future work on the strategic cycle network identified, including design.	100 km completed	200km of strategic cycle network completed	
		Stands	Programme designed.	Cycle parking installed at all public transport interchanges, shopping centres, public buildings and schools	Install new stands	Adequate cycle parking stands throughout the County
			Sites identified.	Implemented.	Monitor, review and up-grade.	
			Cycle parking standards implemented at all new developments.	Sites identified.	Development of staffed cycle parking, with repair facilities, left luggage and other services in city centre location	
		Journeys to School	Requirements and targets established.	Monitor, review and up-date.		
		Accidents	Study of cycling casualty rates undertaken.	Rate of accidents per 100 million km cycled reduced compared to 1994		

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
Widening Travel Choices			Accident reduction strategy developed.	Implement, and monitor, review and up-date..		
		Theft	Partnerships created and anti-theft strategy developed.	Anti-theft strategy implemented and thefts reduced		
		Workplaces	Bike User Group (BUG) at Council sites and targets established.	BUGs and cycle-friendly employers initiatives established.		
			Provision of cycle parking and showers started at Council sites	Provision of cycle parking and showers completed at Council sites.	Implemented, and monitor, review and up-grade.	
			Cycle-friendly employers initiative started.	Implementation continued, and monitor, review and up-date.		
		Monitoring and Usage	Cycle usage monitored by autumn and spring survey and by questionnaire, and targets set.	Implemented, and monitor, review and up-date.		
	Safer Routes To School		2 Safe Routes To School projects progressed	Implemented.	Monitor, review and up-date.	
			Programme of projects identified.	Implemented, and monitor, review and up-date.		
	Safer Routes to Stations		Programme of projects identified.	Implemented, and monitor, review and up-date.		
	Walking and Pedestrianisation	Walking Strategy	Strategy completed.	Implemented, and monitor, review and up-date.		
		Network	Network identified.	Implemented, and monitor, review and up-date.		
		Maintenance	Programme and costs established.	Implemented, and monitor, review and up-grade to appropriate standard..		
		Safety and Security	Issues to be addressed identified and action programme prepared.	Implemented, and monitor, review and up-grade.		

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
Widening Travel Choices	Areas and Sectors	Home Zones	Areas Identified for designation as Home Zones.	Number of Home Zones reviewed and added as appropriate.		
				Implemented, and monitor, review and up-grade.		
		Urban Safety Management	USMs and programme identified.	Number of Urban Safety Management areas reviewed and added as appropriate.		
				Implemented, and monitor, review and up-grade.		
	Water Transport	Programme of water use	Programme of water use established.	Scheduled Water Transport Service in operation throughout the year from limited stops complete with shelters / facilities.	Network expanded and enhanced, and monitor, review and up-grade.	
	Freight	Freight Strategy	Strategy completed.	Monitor, 5-year reviews and up-date.		
		Freight Quality Partnerships	Format established and first partnership proposal.	Agreements reached and made operational		
	Powered Two-Wheelers	Parking	Extent of needs established.	Programme of projects, implementation identified, and monitor, review and up-grade.		
		New Development	Extent of needs established.	Changes and provision of development standards identified, implemented, and monitor, review and up-grade.		
		Priority	Opportunities investigated.	Programme of projects identified, implemented, and monitor, review and up-grade.		
		Education and engineering	Opportunities investigated.	Programme of projects identified, implemented, and monitor, review and up-grade.		
	ULTra	Appraisal	Feasibility Study of ULTra undertaken.			
	Mobility Impairment	Taking account of mobility impairment needs.	Continue work to incorporate the needs of mobility impaired people into policy and implementation.			

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
Traffic Management and Demand Restraint	Intelligent Transport Systems	Intelligent Transport Systems Strategy	Strategy developed.	Implemented, and monitor, review and up-date.		
	Area-based Management	Area-based Strategies	Areas identified and priorities set, implemented, and monitor, review and up-grade.			
	Capacity Reallocation	Main Radials into City Centre and Waterfront	Capacity re-allocation identified.	Implemented, and monitor, review and up-grade.		
		New Developments	Assessment of development impacts undertaken on all new applications			
	Other measures to counter congestion and pollution	Traffic Growth	Extent of road traffic reduction sought established.	Implemented action plan to reduce traffic growth, monitor, review and up-date.		
		Green Travel Plans (GTP)	Template GTP, processes and targets established.	Implemented, and monitor, review and up-date.		
			Scale of establishing GTPs identified, implemented, and monitor, review and up-date.			
		School Travel Plans	Template STP, processes and targets established.	Implemented, and monitor, review and up-date.		
	Other measures to counter congestion and pollution	Air Quality	Air Quality Management Areas declared and a further Review and Assessment of air quality carried out within them, and Action Plans finalised.	Action Plans implemented and further reviews and assessments of air quality in Cardiff carried out.	Further AQMA identified, implemented, and monitor, review and up-date.	
		Noise	Extent established of action required.	Implemented, and monitor, review and up-date.		
		Clear Zones	Need established for Clear Zones and location identified.	Implemented, and monitor, review and up-date.		

TARGETS AND MILESTONES			TIMESCALE				
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016	
Traffic Management and Demand Restraint	Workplace parking charges	Legislation	Legislation available.				
		Application	Potential and extent of workplace charging established, determined as part of the integrated LTP.	'Mechanisms' and processes established, implemented, and monitor, review and up-date..	Monitor, review and up-date.		
	Road user charges	Legislation	Legislation available.	Potential established and extent of road pricing determined, if required.			
	Parking	Public Transport, Parking and Highways Strategy	Strategy completed.	Monitor, 5-year reviews and up-date.			
			County assessed against parking standards and public transport accessibility	Links with workplace charging established.	Monitor, review and up-date.		
				Monitor, review and up-date.			
			Link to developer contributions and 'mechanisms' for implementation established.	'Mechanisms' developed, implemented, monitor, review and up-date.			
			Special Parking Area (SPA) and enforcement issues resolved.	SPA developed, implemented, monitor, 5-year reviews and up-date.			
	Casualty reduction and user education	Local Road Safety Strategy	Existing Road Safety Plan reviewed and revised as Local Road Safety Strategy.	Implemented, monitor, 5-year reviews and up-date.			
		Speeds and Flows	Existing situation reviewed and speeds and flows for areas established.	Implemented, monitor, review and up-date.			

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
Traffic Management and Demand Restraint		Crossing Points	Existing situation reviewed and the number of safe crossing points identified, particularly for school students.	Implemented, monitor, review and up-date.		
		Marketing and training	Existing situation reviewed and marketing and training needs established, and programme created.	Implemented, monitor, review and up-date.		
		Enforcement	Existing situation reviewed and enforcement process established.	Implemented, monitor, review and up-date.		
Integrated Transport	Travel Choices	Smartcard	Cardiff and SWIFT system in operation	Smartcard functions expanded and enhanced		
		Ticketing	Local initiatives introduced by bus and rail operators	Integrated ticketing introduced		
		Station Upgrades	Extent of up-grading with rail industry established.	Implemented, monitor, review and up-date.		
	Nodes and Interchanges	Up-grade existing nodes and interchanges	Existing nodes and interchanges in the public transport network identified and programme up-graded.	Implemented, monitor, review and up-date.		
		New Nodes / Interchanges	New nodes and interchanges in the public transport network identified and established programme.	Implemented, monitor, review and up-date.		
	Park and Ride	Existing rail-based sites	Extent of required up-grading established.	Implemented, monitor, review and up-date.		
		New sites	New sites identified with specific consideration of Coryton, Cardiff Gate / Pontprennau.	Implemented, monitor, review and up-date previously identified sites.	Monitor, review and up-grade.	
				Further P&R sites identified.	Implemented, monitor, review and up-grade.	
					Leckwith in operation.	Monitor, review and up-grade.

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
Integrated Transport	Public Transport Information	PTI (Cymru)	Call centre fully operational	On-line provision operational and PTI (Cymru) provides appropriate service.		
		Real-Time Information (RTI)	Requirements for further RTI established.	Implemented, monitor, review and up-date.		
	Travel awareness and changing travel behaviour	Monitoring attitudes and behaviour	Extent of existing and future monitoring established.	Implemented and enhanced monitoring, review and up-date.		
		Enabling Activities	Extent established.	Implemented, monitor, review and up-date.		
		Community Engagement	Review of how public engagement is undertaken for all aspects of LTP and links with UDP completed.	Changes implemented, monitor, review and up-date.		
	National and International Communications	National and International Communications Strategy	National and International Communications Strategy prepared.	Implemented, monitor, review and up-date.		
		Air Travel	Nature of future links with Cardiff International Airport established.	Elements identified, regional discussions established, implementation underway, monitor, review and up-grade.	Monitor, review and up-grade.	
		Heliport	London Scheduled Heli-service Study completed.	Heli-service trial in operation.	Helicopter service operational	
Planning and Managing the Highway Network	Structural maintenance of principal roads	State of Repair	Maintenance targets to maintain integrity of the infrastructure reviewed.	Implemented, monitor, review and up-date.		
	Bridge assessment, maintenance and strengthening	Register	Compile, review, maintain and up-date register.			
		Inspection	Structures inspected and recorded.			

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
		Council property	Condition reviewed.	Structures refurbished or replaced.		
		Railtrack and others	Relationships and practices involving Railtrack reviewed.	Work in partnership with Railtrack to monitor, refurbish and replace structures.		
	Major Improvement Schemes	Eastern Bay Link	Options reviewed.	Under construction.	Eastern Bay Link completed	Monitor, review and up-grade.
		Ely Spur	Options reviewed, outline scheme designed and need for scheme decided.	If required, design detailed scheme.	If approved, Ely Spur completed.	Monitor, review and up-grade.
	Minor Improvement Schemes	Wentloog / St Mellons	Options reviewed.	Wentloog / St Mellons Link completed.	Monitor, review and up-grade.	
		Thornhill Interchanges	Options reviewed and need for scheme decided.	Further action depends on outcome of review.		
	Movement Hierarchy	Investigate hierarchy	Investigate hierarchy	Further action depends on outcome of review.		
	Sustainable Distribution	Freight	Freight Strategy	Freight Strategy prepared.	Implemented, monitor, review and up-date.	
Supply Chain improvements		Journey times	Journey time savings established.	Implemented, monitor, review and up-date.		
		Intermodal	Mode shift from road freight established.	Implemented, monitor, review and up-date.		
		Sites	Sites that are and can be rail served identified.	Sites protected for rail freight access.		
		The Port area	The future rail access requirements and opportunities for the Port established.	Access Arrangements Protected.		Opportunities inside the Port recognised and taken.

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
Integration with Wider Policies	National Assembly for Wales and the UK Government	Synchronisation	LTP reviewed and synchronised with the latest Government guidance, public engagement and other inputs.			
		Funding	Extent of Public / Private Partnerships arrangements established.	PPP established, implement, monitor, review and up-date.		
			Public / Private Partnership proposals assessed against LTP and UDP objectives.			
	Regional Partnerships and Co-operation	SWIFT Strategy (South Wales Integrated Fast Transit)	Implementation of bus and rail strategies started.		Strategy implementation completed	SWIFT schemes implemented
		SEWTAG (South East Wales Transport Advisory Group)	Continuing working partnership.			
		SWCOLA (South Wales Consortium of Local Authorities)	Continuing working arrangements for undetermined time period.			
	Regional Partnerships and Co-operation	Rail Forum	Co-ordinated input maintained to (Shadow) Strategic Rail Authority, Railtrack and other involved organisations			
	External Revenue streams	Funding identification	Funding requirements and revenue streams identified.	Monitor and review revenue streams.		
	Public transport	Network stability	Requirements for maintaining network stability established.	Implemented, monitor, review and up-date.		

TARGETS AND MILESTONES			TIMESCALE				
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016	
Integration with Wider Policies	Partnership working	Partnerships	Extent of partnership arrangements established.	Monitor, review and up-date.			
		Bay Core Movement Study.	Continuing working arrangements with Grosvenor Waterside to implement Study findings, and monitor, review and up-date.				Monitor, review and up- date.
		Cycling Development and Liaison Working Party		Continue working arrangements, monitor, review and up-date.			
		Bus	The scope for Bus Quality Partnerships established.	Implemented, monitor, review and up-date.			
			Legislation for Bus Quality Contracts enacted.	The extent of Bus Quality Contracts established and implemented, monitor, review and up-date.			
		Public Transport and Cycling	Start discussions with all public transport operators about integrating cycling and public transport.	Partnership working arrangements maintained			
		Freight	The extent of Freight Quality Partnership(s) established.	Implemented, monitor, review and up-date.			
		Green Travel Plans (GTP)	The extent of GTP preparation with other organisations established.	Implemented, and monitor, review and up-date, and incorporate into LTP..			
		Events Movement Management Strategy	Events Movement Management Strategy completed.	Implemented, monitor, 5-year review and up-date.			
		City Centre Strategy	Continue participation.				
		Cardiff Waterways Strategy	In preparation (Strategic Planning lead service area)	Continue participation.			
		Economic Development Plan	Continue participation.				
		Cardiff Strategic Tourism Plan	Continue participation..				

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
Integration with Wider Policies		Cardiff Countryside Strategy	Continue participation.			
		Cardiff Local Bio-diversity Action Plan	Continue participation.			
		Cardiff Local Environment Health Action Plan	Continue participation.			
		Cardiff Crime and Disorder Strategy	Continue participation.			
		Social Inclusion Strategy	Continue participation.			
		Local Sustainability (Local Agenda 21) Strategy	Continue participation.			
		Butetown / Grangetown Regeneration Strategy	Continue participation.			
		Llanrumney Regeneration Strategy	Continue participation.			
	Promoting Social Inclusion	Alternative choices	Current situation reviewed and targets set for improvement.	Continuing improvement of accessibility and mobility for socially excluded people and areas.		
	Action on air quality and noise quality	Improvements	Current situation reviewed and improvements needed established in partnership with appropriate organisations.	Implemented, monitor, review and up-date.		

TARGETS AND MILESTONES			TIMESCALE			
THEME	SUBJECT	TOPIC	By August 2001	SHORT By 2006	MEDIUM By 2011	LONG By 2016
	Linking to Health Strategy	Activity Levels	Current situation reviewed and required activity levels and targets established.	Implemented, monitor, review and up-date.		
	Linking to Economic Development Strategy	Integration with Economic Development Strategy	Current situation and integration reviewed and strategic targets established.	Monitor, review and up-date.		
	Linking Land Use and Movement	LTP Provides "Transport Strategy" for UDP	Input to Pre-Deposit Issues UDP document and process completed.			
			Input to Deposit UDP.	UDP Adopted, including "Transport Strategy" within UDP.	Monitor, review and up-date.	
				Review LTP and UDP every 5 years at least	Monitor, review and up-date.	

7. THE LOCAL TRANSPORT PLAN: ACTION PLAN FOR MOVEMENT: ACTION PROGRAMME

The Action Plan reflects the Council's aspirations for a realistic timetable to implement the elements of the Local Transport Plan, in line with the Council's decisions and plans for resource allocations and priorities.

The main features are concerned with both a reduction in the need to travel or movement of goods and a shift in the means of transport used, together with strategies for education, encouragement and enforcement. The timescale extends in five-year periods to 2016. The Action Programme further divides the short-term into individual years providing a link with the Transport Grant submissions.

The following table shows proposed actions arranged in six themes:

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● Planning and Managing the Highway Network	94
● Sustainable Distribution	95
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The Council cannot guarantee that the targets and timetables contained within the Local Transport Plan will be met. This Action Plan reflects the Council's aspirations, the achievement of which are dependent upon many factors, including the securing of funding.

The following table indicates the specific actions proposed to achieve the objectives of the Local Transport Plan.

ACTION PROGRAMME: Widening Travel Choices									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
Public Transport, Parking and Highways Strategy.	Prepare the strategy.	Interim statement	Final Strategy	Monitor, review and up-date.					
	Revise and up-date Multi-Modal Model.	Revise and up-date Multi-Modal Model and roll-forward forecast years.		Monitor, review and up-date.		Revise and up-date Multi-Modal Model and roll forward forecast years.		Revise and up-date Multi-Modal Model for 2010 / 11 and roll forward forecast years.	Revise and up-date Multi-Modal Model for 2015 / 16 and roll forward forecast years..
BUS									
Bus Quality Partnership(s)	Establish format and first partnership proposal with Cardiff Bus.	Establish format and first Bus Quality Partnership	Develop further Bus Quality Partnerships, monitor, review and up-date.						
Bus Quality Contract(s)	Following legislation, establish format of contract.	Await legislation							
	Prepare contract proposals from LTP.	Await legislation.							
Bus Infrastructure: stops / shelters	Northern Sector: Global Positioning Satellite (GPS) (computer hardware, GPS-equipped buses, RTI in shelters, SVD at signals).	1 160 000	314 400	Monitor, review and up-date.					
	Northern Sector: Additional / refurbishment of CCTV cameras	267 000	314 400	322 200	Monitor, review and up-date.				
	Northern Sector: Bus shelter modifications / new bus shelters.	50 000	52 400	53 700	55 050	56 450	57 850	Possible further costs.	
	Northern Sector: Bus boarders for RTI equipped shelters.	200 000	293 440	Monitor, review and up-date.					
	Northern Sector: Cardiff Bay (Core) / Waterfront new shelters and boarders.	100 000	209 600	Monitor, review and up-date.					

ACTION PROGRAMME: Widening Travel Choices									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
Bus Infrastructure: stops / shelters	Western Sector: Global Positioning Satellite (GPS) (computer hardware, RTI in shelters, SVD at signals).	0	487 163	341 210	Monitor, review and up-date.				
	Western Sector: Additional / refurbishment of CCTV cameras	0	216 517	227 473	238 917	251 118	Monitor, review and up-date.		
	Western Sector: Bus shelter modifications / new bus shelters.	0	54 129	56 868	59 729	62 779	Monitor, review and up-date.		
	Western Sector: Bus boarders for RTI equipped shelters.	0	0	0	477 834	Monitor, review and up-date.			
	Western Sector: Remaining shelters with RTI	0	0	0	836 210	Monitor, review and up-date.			
	Eastern Sector: Global Positioning Satellite (GPS) (computer hardware, RTI in shelters, SVD at signals).	0	487 163	314 210	Monitor, review and up-date.				
	Eastern Sector: Additional / refurbishment of CCTV cameras	0	216 517	227 473	238 917	251 118	257 346	Monitor, review and up-date.	
	Eastern Sector: Bus shelter modifications / new bus shelters.	0	54 129	56 868	59 729	62 779	65 944	Possible further costs.	
	Eastern Sector: Bus boarders for RTI equipped shelters.	0	0	545 936	Monitor, review and up-date.				
	Eastern Sector: Remaining shelters with RTI	0	0	0	668 968	Monitor, review and up-date.			
Bus Infrastructure: Nodes and Interchanges	Outline scheme preparation of nodes and interchanges outside City Centre.	See Express / Core Bus Network Scheme Preparation.							
	Outline scheme preparation of nodes and interchanges in City Centre.	See Express / Core Bus Network Scheme Preparation.							
	Detailed scheme preparation of nodes and interchanges outside City Centre.	See Express / Core Bus Network Scheme Preparation.							
	Northern Sector: Detailed scheme preparation / design and implementation of nodes and interchanges in City Centre.		262 000	268 500	275 250	282 250	Monitor, review and up-date.		

ACTION PROGRAMME: Widening Travel Choices									
Scheme	Details	SHORT-TERM						MEDIUM-TERM	LONG-TERM
		2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
Selected Vehicle Detection (SVD) and SCOOT traffic control.	Global Positioning Satellite (GPS) (computer hardware, GPS-equipped buses, RTI in shelters, SVD at signals).	See Global Positioning Satellite (GPS) (computer hardware, GPS-equipped buses, RTI in shelters, SVD at signals).							
	Northern Sector: GPS equipment on buses.	See Global Positioning Satellite (GPS) (computer hardware, GPS-equipped buses, RTI in shelters, SVD at signals).							
	Western Sector: GPS equipment on buses.	0	649 550	227 473	0	0	0		
	Eastern Sector: GPS equipment on buses.	0	649 550	227 473	0	0	0		
High Occupancy Vehicle (HOV) lanes and / or Selective Vehicle Lanes SVL).	Global Positioning Satellite (GPS) (computer hardware, GPS-equipped buses, RTI in shelters, SVD at signals).	See Global Positioning Satellite (GPS) (computer hardware, GPS-equipped buses, RTI in shelters, SVD at signals).							
Express / Core Bus Network	Outline scheme preparation of network.	155 000							
Express / Core Bus Network: Northern Sector	Northern Sector: Study and Design for A469.	60 000							
	Northern Sector: Detailed scheme preparation / implementation for A469.	0	524 000	537 000	Monitor, review and up-date.				
	Northern Sector: Study and Design for A470 (Coryton – City Centre).	80 000							
	Northern Sector: Detailed scheme preparation / implementation for A470 (Coryton – City Centre).	0	0	2 330 580	1 651 500	1 100 000	Monitor, review and up-date.		
	Northern Sector: Design and supervision	45 000	524 000						
	Western Sector: Detailed design for Cowbridge Road East and West Safety and Bus Priority	0	398 240						
Express / Core Bus Network: Western Sector	Western Sector: Implementation of Cowbridge Road East and West Safety and Bus Priority.	0	0	4 081 200	Monitor, review and up-date.				

ACTION PROGRAMME: Widening Travel Choices									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
Express / Core Bus Network: Eastern Sector	Eastern Sector: Detailed design for Newport Road Safety and Bus Priority	0	366 800						
	Eastern Sector: Implementation of Newport Road Safety and Bus Priority.	0	262 000	322 200	330 300	338 700	347 100	Monitor, review and up-date.	
	Eastern Sector: Detailed design for Route to Pontprennau Safety and Bus Priority	0	0	56 868					
	Eastern Sector: Implementation of Route to Pontprennau Safety and Bus Priority.	0	0	0	597 293	Monitor, review and up-date.			
	Eastern Sector: Design and supervision								
Feeder Bus Core Network.	Outline scheme preparation of network.	Bid for funds in 2001 / 02 TG.	Undertake work.						
Express and Feeder Core Bus Network.	Review and redesign bus network in partnership with operators.	Task Group Established.	Task Group meets as and when necessary.						
	Prepare branding and marketing strategy for Core Bus Network.	Initiate work.	Implementation		Monitor, review and up-date.				
		See also Bus Quality Partnerships.							
Improve bus journey times.	Establish targets and seek agreement(s) with operators.	Current Outline Schemes	Monitor, review and up-date.						
Increase bus patronage.	Establish targets and such agreement with operators.	See Outline and Detailed Schemes.		Monitor, review and up-date.					
Ring-and-Ride	Western Sector: Services Established.	Monitor, review and up-date.							
	Northern Sector: Up-grading and expansion of Ring-and-Ride Scheme: vehicles	34 000							
		Monitor, review and up-date.							
	Eastern Sector: Extension of ring-and-ride scheme: vehicles	0	37 728	21 480	22 020	0	0		
		Monitor, review and up-date.							
Bus P&R	See PARK-AND-RIDE in INTEGRATED TRANSPORT section								

ACTION PROGRAMME: Widening Travel Choices									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
BUS / RAIL									
Bus / Rail Infrastructure: Nodes and Interchanges	Outline scheme preparation of nodes and interchanges outside the City Centre	See Express / Core Bus Network Outline Scheme Preparation.							
	Outline scheme preparation of nodes and interchanges in the City Centre	See Express / Core Bus Network Outline Scheme Preparation.							
	Detailed scheme preparation of nodes and interchanges outside the City Centre	See Express / Core Bus Network Detailed Scheme Preparation.							
	Detailed scheme preparation of nodes and interchanges in the City Centre	See Express / Core Bus Network Detailed Scheme Preparation.							
RAIL									
Heavy rail reliability and service frequency	SWIFT scheme of line speed improvements, new rolling stock and track renewal.	Pre-qualified submission to SSRA for Rail Passenger Partnership funding. Decision 2000 / 01.							
	Cardiff Central / Queen Street corridor remodelling: Design costs and preparatory works	800 000	629 000	215 000					
	Cardiff Central / Queen Street corridor remodelling: Implementation			Anticipated construction period.					
	Queen Street Rail System Capacity Increase								
	Continue working in partnership with other members of SEWT Forum and SEWTAG.	Ongoing.							
	South Wales resignalling (Railtrack)							Railtrack programme: 2007 – 2009 (£105m)	
Number of services	Influence franchise replacement programme								
Use of existing rail P&R	Monitor, review and up-grade								

ACTION PROGRAMME: Widening Travel Choices									
Scheme	Details	SHORT-TERM						MEDIUM-TERM	LONG-TERM
		2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
New rail P&R	See PARK-AND-RIDE in INTEGRATED TRANSPORT section								
Bike – Rail Initiatives	Review of all stations.	Start selection.	Audit	Start implementation programme.		Monitor, review and up-date.			
Universal accessibility by rail	Review of all stations.	Start selection.	Audit	Start implementation programme.		Monitor, review and up-date.			
New railway stations	Feasibility study for Gabalfa station.	Undertaken.							
	Outline scheme preparation of Gabalfa Station.		Dependent on outcome of feasibility study and further work.						
	Detailed scheme preparation of Gabalfa Station.								
	Feasibility study for Maindy station.								
	Outline scheme preparation of Maindy Station.								
	Detailed scheme preparation of Maindy Station								
	Feasibility study for Radyr / Morganstown station.								
	Outline scheme preparation of Radyr / Morganstown Station.								
	Detailed scheme preparation of Radyr / Morganstown Station								
	Feasibility study for Rumney station.								
	Outline scheme preparation of Rumney Station.								
	Detailed scheme preparation of Rumney Station								
	Feasibility study for St Fagans station.								
	Outline scheme preparation of St Fagans Station.								
	Detailed scheme preparation of St Fagans Station								
EuroFreight Terminal	Construction, opening and operational	Open Spring 2001.	Monitor, review and up-date.						
Other freight facilities	Identify, assess and protect industrial / warehousing / retail sites which are or can be rail served.	Identify and assess as part of UDP process.							
		See also Freight Strategy and Freight Quality Partnership sections.							

ACTION PROGRAMME: Widening Travel Choices									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
Patronage (passenger trips)	Establish targets for increased patronage.	Monitor, review and up-date.							
Establish a Diesel Light Rail system	Influence the Franchise Bid process	New franchise.	Monitor.						
	Remove Bute Road embankment and established new alignment from Cardiff Queen Street and Central Stations	National Assembly for Wales to review all options							
	Establish 'rocker line' section.		Further investigations needed.						
	Investigate City Circle completion		Further investigations needed.						
	Construct City Circle link		Further investigations needed.						
Investigate new western line	Outline scheme preparation and economic assessment								
TAXIS AND PRIVATE HIRE									
Taxis and Private Hire Vehicles Strategy	Study	30 000	10 480	0	0	0	0		
	Implement findings		0	10 000	10 000	10 000	10 000		
	Prepare Strategy, including review of procedures and devise and agree rank strategy.		Prepare Strategy		Monitor, review and up-date.				
VOLUNTARY / COMMUNITY TRANSPORT									
Voluntary and Community Transport	Establish levels of patronage and needs	Levels of patronage established.	Monitor, review and up-date.						
	Review information needs and marketing	Monitor, review and up-date.							
CYCLING									
Cycling Strategy	Review and up-date existing approved strategy.	Monitor, review and up-date.							
	Devise and agree audit procedure	Devise and agree audit procedure.		Monitor, review and up-date.					
Northern Sector: Strategic Cycle Network	Phase 1 area (Cathays, etc).	155 000	Monitor, review and up-date.						
	Phase 2 area (Heath / Rhiwbina).	140 000	Monitor, review and up-date.						
	Rest of Northern Sector.	207 000	524 000	537 000	550 500	564 500	578 500	Monitor, review and up-date.	
	Eastern Avenue access bridge to include cyclists	517 000	Monitor, review and up-date.						
	Implementation				238 917	200 872	205 853	Monitor, review and up-date.	

ACTION PROGRAMME: Widening Travel Choices									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
Western Sector: Strategic Cycle Network	Design			45 495					
Eastern Sector: Strategic Cycle Network	Design			0	47 783				
	Implementation					451 600	462 800	Monitor, review and up-date.	
Renew cycling network facilities	Develop a plan for a 5 year strategic cycling review of existing highway network	Study complete.	Monitor, review and up-date.						
	Develop 'mechanisms' for development control process	Investigate		Monitor, review and up-date.					
Engineering features on Cycle Network	Identify future work on cycle network	Identify		Monitor, review and up-date.					
	Prepare outline scheme		Start preparation		Monitor, review and up-date.				
Cycle stands design programme	Identify sites and design features	Identify	Ongoing work						
	Install at public transport nodes / interchanges, shopping centres, public buildings and schools	Identify	Ongoing work						
	Revise and implement cycle parking standards for all new developments	Revision		Monitor, review and up-date.					
Journeys to school by bike	Establish requirements and targets	Establish requirements							
Cycle accidents	Carry out study of cycle accidents / casualty rates	Monitor and review.							
	Develop an accident / casualty strategy	Develop Strategy		Monitor, review and up-date.					
Encouraging cycling in the Council	Establish a Bike Users Group (BUG) at Council sites and targets	At least one established.							
	Start providing cycle parking and shower facilities at Council sites	Some facilities exist.							
Encouraging cycling in the Council	Monitor cycle usage through surveys during the Autumn and Spring each year, supported by a questionnaire and set targets	Monitor, review and up-date.							

ACTION PROGRAMME: Widening Travel Choices									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
SAFER ROUTES TO SCHOOLS									
Safer Routes to Schools	Identify targeted schools.	Continuing process.							
	Establish a Safer Routes to School programme of projects	Process started.							
	Creigau Primary School SRTS Initiative	70 000	Monitor, review and up-date.						
SAFER ROUTES TO STATIONS									
Safer Routes to Stations	Establish a partnership with Railtrack and Sustrans	Establish partnership		Ongoing / Monitor, review and up-date.					
	Prepare outline schemes			Initiate outline schemes					
	Prepare detailed schemes				Initiate detailed schemes				
CRIME									
Develop Cycle Anti-Theft Partnership and Strategy	Prepare Strategy.	Prepare strategy							
WALKING									
Walking Strategy	Complete Walking Strategy.	Prepare Strategy		Monitor, review and up-date.					
	Identify walking networks	Identify networks.		Monitor, review and up-date.					
	Review maintenance and establish a new programme and costs	Ongoing.							
	Identify safety and security issues and prepare an action programme	Ongoing.							
SAFETY									
Home Zones	Identify areas to be designated as Home Zones	Underway	Further projects to be identified.						
Urban Safety Management	Identify USMs and establish a programme of implementation	In progress	Further USMs to be identified.						
		Monitor, review and up-date.							
	Beulah Road Junction Improvements.	135 000	Monitor, review and up-date.						
	Outstanding Schemes in Heath / Rhiwbina / Whitchurch.	600 000	Monitor, review and up-date.						
	Rest of Northern Sector: studies	26 000	27 248	27 924	28 626	29 354	Monitor, review and up-date.		
	Rest of Northern Sector	0	1 467 200	1 503 600	1 541 400	200 000	100 000	Monitor, review and up-date.	

ACTION PROGRAMME: Widening Travel Choices									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
Urban Safety Management	Western Sector: Riverside USM: Design		37 890						
	Western Sector: Riverside USM: Implementation			398 078	Monitor, review and up-date.				
	Western Sector: Canton USM: Design		10 826	58 006					
	Western Sector: Canton USM: Implementation.				320 149	251 090	257 317	Monitor, review and up-date.	
	Western Sector: Ely USM: Design		10 826	34 121					
	Western Sector: Ely USM: Implentation				203 079	125 545	128 658	Monitor, review and up-date.	
	Rest of Western Sector: Study / Design		70 368	142 171	149 323	156 931	160 823		
	Rest of Western Sector: Implentation				716 751	753 269	771 950	Monitor, review and up-date.	
	Eastern Sector: Rumney USM: Design		37 890	39 808	11 946	0	0		
	Eastern Sector: Rumney USM: Implementation			398 078	418 105	112 900	115 700	Monitor, review and up-date.	
	Rest of Eastern Sector: Study / Design		70 368	142 171	149 323	141 125	144 625		
	Rest of Eastern Sector: Implementation				716 751	677 400	694 200	Monitor, review and up-date.	
WATER									
Water Transport	Establish a programme of water use	Strategy							
FREIGHT									
Freight Quality Partnerships.	Develop Freight Quality Partnerships.	Develop initial Freight Quality Partnership.		Develop further Freight Quality Partnerships and monitor, review and up-date.					
POWERED TWO WHEELERS									
Powered Two Wheels	Establish the extent of existing parking needs.	Parking Review		Monitor, review and up-date.					
	Establish extent of need within new development.	Parking Review		Monitor, review and up-date.					
	Investigate opportunities for priority measures.			Initiate investigation.					
	Investigate education and engineering opportunities.			Initiate investigation.					
LTP System Audit and Monitoring Strategy	Prepare strategy.	Prepare Strategy.		Monitor, review and up-date.					
	Monitoring	Ongoing.							
	Auditing	Periodic.							
ULTRA									
ULTra	Complete a feasibility study investigating its potential	50 000	175 000	Dependent on outcome of studies.					

ACTION PROGRAMME: Traffic Management and Demand Restraint									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
OTHER MEASURES									
Telematics									
Intelligent Transport Systems Strategy	Prepare an ITS Strategy.	In preparation		Monitor, review and up-date.					
Northern Sector: Transport Telematics	Route Guidance (included in A470 Study)	0	0						
	Driver information (included in A470 Study)	0	524 000	1 074 000	Monitor, review and up-date.				
	Car Park Guidance included in A470 Study)	0	0	0					
	Incident Management		209 600	214 860	Monitor, review and up-date.				
	New traffic signals / refurbished controllers		110 983	116 529	Monitor, review and up-date.				
	Enforcement at junctions and bus lanes.	To be established.							
	Cameras on buses.		108 258	113 737	119 459	125 558	Monitor, review and up-date.		
	Emergency services vehicle priority.		0	161 100	Monitor, review and up-date.				
	In bus information: visual and audio		866 067	Monitor, review and up-date.					
Western Sector: Transport Telematics	Route Guidance								
	Driver information		1 082 584	1 137 366	Monitor, review and up-date.				
	Car Park Guidance								
	Incident Management		216 517	Monitor, review and up-date.					
	New traffic signals / refurbished controllers			113 737	119 459	Monitor, review and up-date.			
	Refurbish elements of CCTV system			170 605	179 188	Monitor, review and up-date.			
	Enforcement at junctions and bus lanes.		108 258	113 737	Monitor, review and up-date.				
	Cameras on buses.								
	Emergency services vehicle priority.		0	170 605	179 188	Monitor, review and up-date.			
	In bus information: visual and audio				955 668	Monitor, review and up-date.			
	System for the classification and presentation of traffic information.								

ACTION PROGRAMME: Traffic Management and Demand Restraint									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
Eastern Sector: Transport Telematics	Route Guidance								
	Driver information	0	1 082 584	1 137 366	Monitor, review and up-date.				
	Car Park Guidance	0	0						
	Incident Management		216 517	Monitor, review and up-date.					
	New traffic signals / refurbished controllers			113 737	119 459	Monitor, review and up-date.			
	Refurbish elements of CCTV system			170 605	179 188	Monitor, review and up-date.			
	Enforcement at junctions and bus lanes.								
	Cameras on buses.		108 258	113 737	119 459	Monitor, review and up-date.			
	Emergency services vehicle priority.			170 605	179 188	Monitor, review and up-date.			
	In bus information: visual and audio			909 893	Monitor, review and up-date.				
	System for the classification and presentation of traffic information.	0	0	113 737	119 459	Monitor, review and up-date.			
Area-Based Management									
Area-based management	Identify the number and extent of Area-Based Strategies	Identification							
A469 / B4261									
Northern Sector: Newport Road / Gabalfa Interchange Corridor (A469 / B4261)	Phase 1: Newport Road – Richards Street.	960 000	Monitor, review and up-date.						
	Phase 2: Richards Street – Crown Way.	0	200 600	644 400	Monitor, review and up-date.				
	Phase 3: Crown Way – Gabalfa Interchange.		0	214 800	660 600	Monitor, review and up-date.			
	Phase 4: Miscellaneous.		0	0	275 250	Monitor, review and up-date.			
	Community Engagements.		10 480	10 740	11 010	5645	Monitor, review and up-date.		

ACTION PROGRAMME: Traffic Management and Demand Restraint									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
Capacity Reallocation									
Capacity Reallocation	Investigate extent of capacity reallocation in conjunction with bus priority and other measures on the main radials and with the City Centre and Waterfront.	See Outline and Detailed Scheme Preparation of Core Bus Network.							
	Produce information on new development and achieve capacity reallocation.	Dependent on the UDP and development processes.							
Congestion and Poll									
Other measures to counter congestion and pollution	Establish extent of road traffic reduction sought	In conjunction with CCC Regulatory Services (Environment).							
		Investigation underway.							
	Develop Road Traffic Reduction Report	In preparation with CCC Regulatory Services (Environment).							
	Establish a template GTP, processes and targets.	Started.	Monitor, review and up-date.						
	Prepare a GTP for the Council.	In preparation.		Monitor, review and up-date.					
	Identify the scale of establishing GTPs, implement and monitor, review and up-date.	Underway.		Monitor, review and up-date.					
School Travel Plans									
School Travel Plans	Establish template GTP processes and targets	Establish		Monitor, review and up-date.					
	Identify schools to establish STPs	Underway.							
	Establish extent of action required in partnership with the parties	Underway.							
Air Quality and Noise									
Air Quality and Noise	Identify initial Air Quality Management Areas	Underway [CCC Regulatory Services(Environment)]							
Clear Zones	Establish need for Clear Zones and identify locations	Establish.		Monitor, review and up-date.					

ACTION PROGRAMME: Traffic Management and Demand Restraint									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
CHARGING									
Workplace parking charges	Await legislation	Await legislation.							
	Establish potential and extent of workplace charging, determined as part of the integrated LTP	Await legislation.							
Workplace parking charges	Establish 'mechanisms' and processes, implementation, monitoring, reviews and up-dates.	Await legislation.							
Road User Charges	Await legislation	Await legislation.							
	Establish potential and determine extent of road pricing, if required.	Await legislation.							
PARKING									
Parking	Complete Public Transport, Parking and Highways Strategy	Strategy		Monitor, review and up-date.					
	Assess County against parking standards and public transport accessibility		Undertake	Monitor, review and up-date.					
	Link developer contributions and establish 'mechanisms' for implementation	Part of Strategy.		Monitor, review and up-date.					
CASUALTY REDUCTION									
Casualty reduction and user education	Review the Road Safety Plan and complete as the Local Road Safety Strategy.		Review	Monitor, review and up-date.					
	Review existing situation and establish speeds and flows for areas		Review		Monitor, review and up-date.				
Casualty reduction and user education	Review existing situation and identify the number of safe crossing points, particularly for school students	Ongoing.							
	Review existing situation and establish marketing and training needs, and programme	Ongoing.							
	Review existing situation and establish enforcement process.	Ongoing.							

ACTION PROGRAMME: Integrated Transport									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
TRAVEL CHOICES									
Travel Choices	Northern Sector: Provision of Smartcard facility to new ticketing machines (Cardiff Bus committed to new machinery).	42 000	52 400	32 220	Monitor, review and up-date.				
	Smartcards printing equipment.	36 000	20 980	21 480	22 020	22 580	23 140	Ongoing costs.	
	Facilitate local initiatives by bus and rail operators.	Discussions underway.							
	Establish extent of up-grading with rail industry.	Franchise process	Implementation of strategies.						
Nodes and Interchanges	Identify existing nodes and interchanges in the public transport network and up-grade programme.	See Outline and Detailed Scheme Preparation of Core Bus Network.		Additional work as necessary.					
	Identify new nodes and interchanges in the public transport network and programme established.	Part of monitoring, review and up-date of strategies.							
PARK-AND-RIDE									
Park-and-Ride	Establish extent of up-grading existing rail-based sites.	Franchise process and strategy implementation.							
	Identify new sites with specific consideration of Coryton, Cardiff Gate / Pontprennau.	Investigate further.		Investigate design and land acquisition.					
	Identify further P&R sites	Investigate further.		Investigate design and land acquisition.					
	Leckwith P&R in operation: Design	Undertaken.							
	Leckwith P&R in operation: Implementation	Contract to be let.	155 868	497 293	0	0	0		
	Northern Sector: Study		100 000						
	Northern Sector: Implementation			Implementation.		Monitor, review and up-date.			
	Eastern Sector: Study		64 955						
	Eastern Sector: Implementation			600 000	Monitor, review and up-date.				

ACTION PROGRAMME: Integrated Transport									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
New rail P&R	Site investigation								
	Outline scheme preparation of new rail P&R sites								
INFORMATION									
Public Transport Information	Make PTI(Cymru) call centre fully operational.	Make fully operational.		Seek further funding to extend operation.					
	Establish requirements for further Real-Time Information.	See Traffic Management and Demand Restraint and Telematics sections.							
Travel awareness and changing travel behaviour.	Establishing extent of exisiting and future monitoring attitudes and behaviour.	Establish		Monitor, review and up-date.					
	Establish extent of enabling activities.	Establish		Monitor, review and up-date.					
	Review how public engagement is undertaken for all aspects of LTP and links with UDP	Monitor, review and up-date.							
COMMUNICATONS									
National and International Communications	Prepare National and International Communications Strategy.	Prepare Strategy.		Monitor, review and up-date.					
	Establish nature of future links with Cardiff International Airport.	Establish Strategy.		Monitor, review and up-date.					
National and International Communications	Complete London Scheduled Heli-service Study.	Complete.		Monitor, review and up-date.					

ACTION PROGRAMME: Planning and Managing the Highway Network										
		SHORT-TERM						MEDIUM-TERM	LONG-TERM	
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	To 2010 / 11	to 2015 / 16	
MAINTENANCE										
Structure maintenance of principal roads	Review maintenance targets to maintain integrity of the infrastructure.	Review.		Monitor, review and up-date.						
Bridge assessment, maintenance and strengthening	Compile, review, maintain and up-date a register of bridge assessment, maintenance and strengthening.	Review.		Monitor, review and up-date.						
	Inspect and record structures.	Ongoing.								
	Review condition of Council property.	Review.		Monitor, review and up-date.						
	Review relationships and practices involving Railtrack and others.	Ongoing.								
HIGHWAYS										
Major improvement schemes	Review options for the Eastern Bay Link.	358 000	1 590 100	1 277 000	2 779 600	3 921 200	5 533 600	Monitor, review and up-date.		
	Review options, design outline scheme and decide need for scheme for the Ely Spur.		Review.		Future depends on outcome of review process.					
	Butetown Link: Land costs	750 000								
Minor improvement schemes.	Review options for Wentloog / St Mellons Link Phase 2.	300 000	4 428 000	6 672 000	1 268 000	4 284 000	711 000	Monitor, review and up-date.		
	Review options for the Thornhill Interchange and decide need for scheme.		Review.		Future depends on outcome of review process.					

ACTION PROGRAMME: Sustainable Distribution									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
FREIGHT									
Freight	Prepare a Freight Strategy.	Prepare Strategy.		Monitor, review and up-date.					
Supply chain improvements	Establish journey time savings.	Part of Strategy preparation.		Monitor, review and up-date.					
	Establish mode shift from road freight.	Part of Strategy preparation.		Monitor, review and up-date.					
	Identify sites that are and can be rail served.	Part of Strategy preparation.		Monitor, review and up-date.					
	Establish the future rail access requirements and opportunities for the Port / Port area.	Part of Strategy preparation.		Monitor, review and up-date.					

ACTION PROGRAMME: Integration with Wider Policies									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
SYNCHRONISATION									
Synchronisation with UK Government and National Assembly for Wales.	Review LTP and synchronise with the latest Government guidance, public engagement and other inputs.	Ongoing and linked to reviews of the Local Transport Plan.							
FUNDING									
External revenue streams.	Identify funding requirements and revenue streams.	Identify							
PARTNERSHIPS									
Funding	Establish extent of Public / Private Partnership arrangements, seeking specialist advice on movement and transport provision.	Expressions of interest requested seeking financial advice.		Dependent on outcome of advice.					
			300 000						
	Assess Public / Private Partnership proposals against LTP and UDP objectives.		Dependent upon the outcome of advice and the Unitary Development Plan process.						
			Assess against LTP.		Dependent upon outcome.				
Regional Partnerships and Co-operation / SWIFT Corporate bid.	Start implementation of bus and rail elements of the SWIFT Strategy.	See other elements.							
	Strategy and Image Development	180 000	200 000	Seek continuing funding.					
	PFI Consultancy Advice								
Regional Partnerships and Co-operation	Continue work through the south Wales Transport Co-ordination Group.	Ongoing.							
	Continue reviewing and revising the South Wales parking Guidelines; Parking Policy and Standards.	Review.		Design costs and preparatory works					
	Continue work of the Rail Forum.	Ongoing.							

ACTION PROGRAMME: Integration with Wider Policies									
		SHORT-TERM						MEDIUM-TERM	LONG-TERM
Scheme	Details	2000 / 01	2001 / 02	2002 / 03	2003 / 04	2004 / 05	2005 / 06	to 2010 / 11	to 2015 / 16
Public Transport	Establish requirements for maintaining network stability.	See Cardiff Public Transport and Parking Strategic Study							
Partnership working	Establish extent of partnership arrangements	Establish.							
Partnership working	Continue working arrangements with Grosvenor Waterside to implement Study findings, and implement, monitor, review and up-date Bay Core Movement Study.	Ongoing.	Design costs and preparatory works						
	Continue working arrangements with the Cycle Development and Liaison Working Party.	Ongoing.							
	Establish the scope for Bus Quality Partnerships.	See Bus Quality Partnership							
Partnership working	Prepare for Bus Quality Contracts following enactment of legislation.	Await legislation.							
	Hold discussions with all public transport operators about integrating cycling and public transport.	Ongoing.							
	Establish the extent of GTP preparation with other organisations.	See Green Travel Plans.							
	Complete an Events Movement Management Strategy for Cardiff.	Complete.		Design costs and preparatory works					
Promoting Social Inclusion	Review the current situation and set targets for improvement.	Review.		Design costs and preparatory works					
Action on air quality and noise quality.	Review the current situation and establish improvements needed in partnership with appropriate organisations.	Review.		Design costs and preparatory works					
		See Air Quality Management (CCC Regulatory Services).							
Linking to Health a Strategy	Review the current situation and establish integration and establish integration and establish strategic targets.	Work with relevant bodies.							
Linking Land Use and Movement	Input "transport strategy" from LTP into Deposit UDP.	Ongoing and dependent upon Unitary Development Plan process.							

7.1 FINANCIAL SOURCES

7.7.1 Transport Grant

- (i) Capital Funding
- (ii) Revenue Funding
- (iii) SWIFT Allocation.

7.7.2 Basic Credit Approval

- (i) Internal allocation of block grant (capital and revenue).

7.7.3 Private Finance Initiatives

- (i) Bute Square / Lloyd George Way (Bute Avenue) (nearing completion).

7.7.4 National Assembly for Wales (other funding)

- (i) Removal of Cardiff Bay branch line and replacement with Diesel Light Rail line.

7.7.5 Railtrack

- (i) South East Wales resignalling scheme, programmed to be completed by 2007 / 08.

7.7.6 (Shadow) Strategic Rail Authority

- (i) Franchising process (New 20 year Wales & Borders Franchise to be announced in 2001).
- (ii) Grants.

7.7.7 Cardiff Transport Infrastructure Partnership

- (i) Land assets:
 - Cardiff County Council
 - WDA
 - ABP
 - ASW
 - Railtrack
 - Rail Property Limited.
 - Other land owners, including house builder interests.
 - UHW
 - Government land, including MoD Property.
- (ii) Operators:
 - Freight companies (rail and road)
 - Bus companies.

- Car park owners / operators.
- (iii) (Shadow) Strategic Rail Authority:
 - Franchises
 - Grants
- (iv) Investors:
 - Insurance companies.
 - Pensions companies.
 - Other sources, including developers.
- (v) Government sources:
 - Grants.
 - European Union
 - Tax incentives
 - Business rate
 - Council Tax
- (vi) Other sources:
 - Workplace charging.
 - Development funding.

8. MONITORING OF TARGETS

8.1 BACKGROUND TO MONITORING

Cardiff has secured £30m of National Assembly for Wales funding over the past 5 years in addition to monies received for local safety schemes, bridges and highway maintenance. In order to demonstrate that this money and future resources have been invested effectively, in accordance with the over-arching principles of the Integrated Transport White Paper, it is essential that comprehensive monitoring is undertaken.

Monitoring provides the link between the implementation of the proposed strategy and the stated objectives by measuring performance indicators which enable progress towards the set targets to be checked.

Future capital allocations will be based upon outputs and progress towards targets. The monitoring of performance indicators is essential to demonstrate this. The introduction and implementation of policies, schemes and groups of schemes will result in a variety of individual, cumulative and global impacts. Monitoring provides the information needed to identify these impacts and will enable methodology for forecasting the effects of future schemes to be developed which will provide useful tools for analysis.

Monitoring will include:

Traditional road traffic monitoring:

- traffic flows and composition;
- traffic growth;
- journey times; and
- road safety statistics.

Baseline monitoring provides a snapshot against which travel behavioural changes can be assessed.

Quantitative monitoring includes:

- modal share;
- use of cycle network;
- car park usage;
- car occupancy;
- travel time and congestion;
- foot / road way condition; and
- origin destination.

Qualitative monitoring includes:

- attitudinal surveys;
- citizens panels; and
- local workshops

Scheme monitoring includes:

- before and after studies

Complementary monitoring includes:

- air quality;
- commuter planning data;
- travel to school data; and
- provision for disabled people.

8.2 MONITORING RESULTS

8.2.1 Traffic Flow and Congestion Monitoring

Cardiff undertakes monitoring of traffic volumes and growth, radial route journey times and delays.

In Cardiff there has been an increase in Annual Average Daily Traffic of 21% over the last ten years (1989-1999). This compares with the national increase of 10% over the same period. Whilst traffic growth is clearly a cause for concern, it does reflect a corresponding increase in economic development in the Plan area.

The key effect of increased vehicular activity is congestion, and the environmental, economic and social impacts that it brings. The extent of congestion is illustrated for example between central link and Coryton where total journey times have increased by 10% in the last 3 years with junction delays on this major radial route increasing by 27% i.e. an extra 2 minutes on the journey time.

One response to congestion has been peak spreading. Motorists alter their journey times, either earlier or later, in an attempt to avoid peak hour congestion.

8.2.2 Modal Share

One of the key indicators will always be modal share. Until recently this was comprehensively monitored only once per decade through the National Census and this only for journeys to work (current latest information is based on the 1991 census – next census due 2001 with results not anticipated before 2003). Clearly this timescale is too long to enable short-term trends and impacts of the Plan Strategy to be identified.

As a result an annual multi-modal cordon survey is now planned on the major radial routes in Cardiff's City Centre.

8.2.3 Road Accident Casualties

A geographic information system allows the rapid access of accident records by area, road length or specific location. Database enquiries facilitate the production of statistical information and an analysis of accident trends including the

identification of accident clusters. This information is used to produce lists of problem sites on a yearly basis i.e. sites with four or more injury accidents per year forming the basis for specific scheme consideration.

The accident information is used to inform and direct all road safety activity in the Plan area and provides a framework

- to identify and prioritise local safety schemes;
- to target road safety resources effectively; and
- for Police enforcement procedures aimed at casualty reduction.

The data is made available to local authorities and the National Assembly for Wales to enable the monitoring of casualty reduction targets and the outcome of schemes.

The following table gives the road casualty data for the Plan area for 1998 and relates it to the new target.

Casualties in Cardiff	1994-1998 Baseline	1998 Figure	2010 Target
Killed and seriously injured	127	117	76
Slight	1,391	1,358	1,252
Children (16 and under) killed and seriously injured	37	21	18

8.2.4 Green Travel Plans

The Council has been actively supporting and promoting the development and introduction of modern travel planning methods for all types of organisations. These are being tailored to the needs of individual sites and aimed at promoting greener, cleaner travel choices and reducing reliance on the car.

Particular work is being carried out within the Council itself, together with similar developments in many of the major workplaces around the City. These include the National Assembly for Wales, University of Wales Cardiff, University of Wales Hospital (Heath), BBC, Transco and several others.

The Council, Sustrans Business Links and other partners are preparing to introduce a Cycle Friendly Employers Award to reward those workplaces that achieve a quality standard of cycle provision for staff and visitors.

8.2.5 Travel to School

Surveys around the UK indicate that one in five car trips on the urban network at 8 : 50 in the morning are taking children to school. Several schools are working with Road Safety and other Council staff on safer routes to schools packages. These include Infant Schools (Llanishen Fach, Criegiau, Meadow Lane, Moorland, Coryton, Llanedeyrn Primaries) and High Schools (Llanrumney, Cardiff and Llanishen).

8.2.6 Air Quality

The Council is actively engaged in meeting the statutory requirements of Part IV of the Environment Act 1995 in respect of air quality. The Act introduced the concept of Local Air Quality Management (LAQM). Local authorities are under a statutory obligation to review and assess air quality in their area according to the Standards and Objectives contained in the Regulations. Where it appears that the Objectives will not be met, and exposure over the averaging period is likely (called relevant locations) then the local authority must declare an Air Quality Management Area (AQMA) and take action to rectify the breaches. For many urban areas the principal source of emission into the atmosphere will be road transport.

Guidance issued by Central Government recommends that local authorities review and assess their air quality in up to three stages. All local authorities are required to undertake a First Stage Review and Assessment and the results of this indicate whether or not a Second and / or Third Stage Review and Assessment is necessary. A principal part of a Second Stage Review and Assessment is the monitoring of local exceedences of the Objectives. The Council's First Stage Review and Assessment included a summary of the Council's extensive air quality monitoring archive; this indicated that exceedences of at least one of the Objectives was likely. Thus, the Council moved directly to this Stage 3 Review and Assessment. The eight pollutants for which Standards and Objectives have been set in the Air Quality (Wales) Regulations 2000 (the Regulations) are benzene, 1,3 butadiene, lead, ozone, sulphur dioxide, carbon monoxide, nitrogen dioxide and particulate matter (PM10).

Of the above listed pollutants, the Regulations provide that ozone is a "trans-boundary" pollutant for which local control measures are inappropriate. National measures are being taken to reduce levels of this pollutant. The Council's First Stage Review and Assessment of Air Quality, published in December 1998, concluded that the likelihood of the Objectives for lead, sulphur dioxide, carbon monoxide, benzene and 1,3 butadiene being exceeded was negligible and that further Review and Assessment of these pollutants against the Objectives was not necessary.

However, a short sampling programme for benzene was proposed in order to substantiate the conclusion reached by the Review and Assessment. It was also proposed to use these results to substantiate the conclusion in respect of 1,3 butadiene. The results from the sampling are published for the first time in this document and confirm the conclusions reached in the earlier document.

The First Stage Review and Assessment also concluded that the risk of exceeding the objectives in respect of nitrogen dioxide (NO₂) and particulate matter PM(10) was not negligible and that further assessment of these pollutants was necessary.

The Review and Assessment concludes that within the County of Cardiff:

1. When assessed against the PM(10) Objectives in the Air Quality (Wales) Regulations 2000, both the 24-hour and annual average Objectives are currently being achieved and that an AQMA is not necessary for this pollutant.

2. The NO₂ hourly average Objective of 105ppb with a maximum of 18 exceedences per annum is currently being achieved and that an AQMA for this pollutant based upon this Objective is not necessary.
3. The NO₂ annual mean Objective of 21ppb (to be achieved by 31st December 2005) is likely to be breached in a numbers of discrete areas and that AQMAs are necessary.

The report contains an assessment of the geographical extent of the exceedences of the NO₂ annual average Objective and makes a recommendation that three AQMAs be declared in the following localities:

1. Newport Road (in the vicinity of Roath Court).
2. The Philog (including parts of Manor Way, Merthyr Road Birchgrove Road and Caerphilly Road)
3. Cardiff West (including the Ely Bridge area, Western Avenue, Cardiff Road (Llandaff) and UWIC)

The Third Stage Review and Assessment is intended to be the backbone of a consultation process prior to the formal declaration of AQMAs. The Council invited comments on that document by the end of August 2000.

8.2.7 Cycling in Cardiff

Cycling in Cardiff is currently 1.5% of the Modal Split. A home interview survey undertaken in 1994 recorded that there were 52000 cycles owned in the City and over 36000 km were cycled each day. This amounts to about 14000 cycle trips per day.

Cycle surveys are undertaken in Cardiff, including the boundary and around the Central Area. In 1999, the figures show a decrease from 486 trips in 1998, over a 12 hour period, to 403 in 1999 for the City Area.

8.2.8 Provision for Disabled People

The provision of facilities to improve accessibility for people with disabilities in Cardiff will be monitored using the key indicators listed below:

Indicator	Summer 1999	Summer 2000
1. Percentage of crossings with facilities for those with disabilities	74%	81% (over 20 new proposed)
2. Signalised crossings with full impairment provision.	35 total	49 total (14 new)
3. Number of bus boarders and kerbs at bus stops.		
4. Buses – to DPTAC Standards	50 total	70 total (20 new)
5. Bilingual audible real time information signs in bus shelters to assist the visually impaired.	104 total	130 total (26 new)

DPTAC: Disabled Persons Transport Advisory Committee

8.2.9 City Centre Parking Provision

In total there are almost 17,000 parking spaces within the Parking Control Zone as shown below:

Cardiff City Centre Car Parking Provision

	Short Stay	Long Stay	Mixed	All
Off Street				
Multi Storey	4560	-	750	5310
Surface	430	380	400	1210
PNR (Private Non-Residential)	-	8200	-	8200
On Street				
Voucher	560	1270	-	1830
Residents				360
				16910

Source: Cardiff Public Transport and Parking Strategic Study (1999)

The amount of long stay commuter parking in the City Centre is a major factor in the levels of commuter traffic experienced in the City Centre. The introduction of the parking voucher scheme to all City Centre on-street spaces has improved the turnover of spaces and yielded an income which has been used to sponsor additional traffic wardens. This has had the effect of significantly improving the enforcement in and around the City Centre.

In 1999 parking charges on-street were increased to 80p per hour in short stay areas and 80p per 5 hours in long stay locations.

Turning to off-street parking charges, the regime introduced by the Council, who have control of charges by the private operators is to discourage long stay parking in the City Centre. Other options being considered by the Council include:-

- The imposition of a stricter office parking guideline;
- Not replacing temporary off-street spaces as they are removed through development; and
- Possibly reducing the number of long-stay on-street spaces.

A plan to manage movement and parking has been developed for the Waterfront area south of the City Centre. It identifies parking limits and necessary transport provision to ensure long term success for the area.

8.2.10 District Centre Parking Provision

In Cardiff's district centres, parking policies are being developed to discourage long stay commuter parking both on and off-street.

Key district centres with off-street parking spaces are:-

Canton	-	A total of 486 council controlled public off-street spaces.
Whitchurch	-	A total of 145 council controlled public off-street spaces.
Llanishen	-	A total of 39 council controlled public off-street spaces.
Llandaff	-	A total of 82 council controlled public off-street spaces.

Measures to improve the turnover of spaces in these car parks for short stay use is currently being considered including pay and display.

8.3 SCHEME MONITORING

8.3.1 Bus Quality Partnership Corridors

Cardiff is currently considering Bus Quality Partnerships for the Core Bus Network.

Preliminary before and after studies are planned to evaluate the success of future schemes in terms of bus journey times which will be reported in future editions of the Plan.

8.3.2 Park and Ride (Bus-Based)

Comprehensive user surveys of park and ride services are planned for two bus-based park and ride sites at Ocean Way and Leckwith to enable trends to be analysed.

8.3.3. Rail Network (Rail-Based)

Comprehensive user surveys of rail-based park and ride at Lisvane / Thornhill, Llanishen, Llandaff and Radyr are also planned over the next few years to monitor trends in rail based park and ride and customer satisfaction.

8.4 HIGHWAY CONDITION

The County Council has completed a survey of the principal road network over the last 2 years, although analysis is not yet complete. Depending on results, a third survey may be undertaken in the Autumn of 2000. This, along with a systematic programme of Coarse Visual Inspections, High Speed Road Monitoring, SCRIM, MARCH assessment and pavement management system monitoring will enable an accurate picture to be established of the condition of the Authority's roads. The output from these surveys will be analysed and used to prepare Capital and Revenue programmes for subsequent years.

8.4.1 Heavy Goods Vehicle (HGV) Flows

One of the main factors influencing the structural condition of carriageways is the volume of heavy goods vehicles they carry. Monitoring of the composition of Annual Average Daily Traffic Flows indicates that heavy goods vehicle movement represent 5% of the total traffic volumes on the principal road network.

8.4.2 Update on Streetlights and Footways

Performance indicators for footway and street lighting maintenance are:

- the percentage of street lights not working as planned, and
- the percentage of repairs to dangerous pavements carried out within 24 hours.

9. ENGAGING THE COMMUNITY

9.1 INTRODUCTION

The Local Transport Plan for Cardiff has been prepared following the Government's written guidance, published in April 1999. This makes clear the need for the LTP to be consulted upon widely. The guidance, however, is not prescriptive about the methods which should be used to achieve community engagement. The LTP reflects the local situation, and in particular, consultation arrangements which already exist. The guidance defines characteristics of good consultation – namely:

- early involvement;
- an interactive process;
- a continuous process;
- open;
- effective feedback to participants.

Since LTPs had to be submitted to the National Assembly for Wales by August 2000, local authorities in Wales needed to be realistic about the degree of public engagement that was achievable. Effective consultation over a complex and emotive issue, such as movement, must be based on inclusive and informed debate. This aims, as far as possible, to achieve consensus of views on the objectives, and the development and prioritisation of detailed programmes of measures. Experience has shown that this level of information and investment takes considerable time to achieve. For this reason, consultation undertaken in the preparation of this LTP should be seen as the start of an on-going process, rather than a self-contained and time-limited exercise.

9.2 APPROACH

The approach taken by Cardiff County Council in preparing the LTP has been to adopt a strategy for participation on a number of different levels. These are described as follows:

9.2.1 SEWTAG – South East Wales Transport Advisory Group

SEWTAG comprises 10 Unitary Authorities in South East Wales, including Cardiff. An LTP Working Group was set up in early 1999 to enable the local authorities to work together on common issues relating to the preparation of their LTPs. The local authorities exchanged their Draft LTPs with each other in order that comments could be made before being submitted to the National Assembly for Wales. The Working Group also undertook a questionnaire survey in 1999 of over 50 large organisations on broad strategic issues, to feed into the preparation of individual LTPs. SEWTAG is producing a Regional Transport Strategy to act as a framework for the 10 South East Wales Unitary Authorities.

9.2.2 SWIFT – South Wales Integrated Fast Transit

SWIFT comprises 6 Unitary Authorities in South East Wales, encompassing the Valley Lines rail network. These authorities work together to develop the SWIFT regional public transport strategy, including the submission of combined Transport Grant bids.

9.2.3 Bute Avenue (Lloyd George Way) Task Force

The National Assembly for Wales is chairing a group which is addressing the future of fixed public transport links between the City Centre and the Cardiff Bay Waterfront. The Group comprises members from Welsh Development Agency, Cardiff County Council, Railtrack, Valley Lines, Confederation of Passenger Transport, SWIFT, SSRA and the developers of Lloyd George Way (Bute Avenue). A major study is about to commence which will review previous work and examine all options for the links, including Diesel Light Rail. A report is expected in summer 2001.

9.2.4 Unitary Development Plan

The Council published a 'Cardiff 2011: Issues for the Unitary Development Plan' document in June 1997. The extensive response, many in great detail, have helped inform preparation of the LTP.

9.2.5 Consultation Arrangements

Existing arrangements have been used where possible to discuss movement issues with specific groups; the wider community, and develop area movement plans. As highway schemes are designed they are consulted upon in the community, often using exhibitions in caravans located in the vicinity of the scheme. This helps feed back more detailed issues.

9.2.6 Representative Transport Fora

The Council has established a Strategic Forum with a wide range of invitees, meeting once or twice a year. Also established, is a Local Transport Forum to deal with local implementations of the strategic approach, meeting quarterly. These represent a wide interest in movement issues and have been involved in discussions, mainly concerning the broad objectives of the LTP.

9.2.7 Representative Task Groups

A number of Task Groups were established which would report to the Strategic and Local Fora. The Task Groups have been established under the Strategic and Local Transport Consultative Fora structure, to discuss specific movement issues with a plethora of transport and general business organisations. Four Task groups have been identified:

- City Centre and Waterfront;
- Inner Areas;
- Outer Areas / Suburbs;
- Funding and Partnerships.

The first three have met and provided extensive feed back, which is summarised with other responses in appendix 10. The participants expressed the need for future meetings to discuss more specific issues, specifically:

- bus networks;
- linkages to the Waterfront;

- signage;
- pedestrianisation;
- car parking;
- charging.

9.2.8 Questionnaire

Cardiff has used its Capital Times to inform people of the LTP and included a questionnaire for everyone to complete. This asked a range of movement-related questions of the wider community inviting a response.

9.3 IDENTIFICATION AND INVOLVEMENT OF KEY PARTNERS

Government guidance makes it clear that LTPs should be developed in partnership with the community, particularly those organisations that have a role in delivering particular aspects of movement policy. Neighbouring authorities are key partners with a number of specific roles, including land use planning, and parking policy and provision. SEWTAG and SWIFT have been involved in the preparation of the LTP.

9.4 IDENTIFICATION AND INVOLVEMENT OF OTHER GROUPS AND INTEREST GROUPS

A much larger number of organisations with an interest in movement issues have participated in the process of developing the LTP through Cardiff's Strategic and Local Transport Consultative Fora. These organisations have been identified and invited to take part in shaping Cardiff's vision, including:

- transport associations and lobby groups, such as the cycle promotion groups and the Freight Transport Association;
- bus and rail operators, such as the Confederation of Passenger Transport;
- representatives of the taxi and private hire operators;
- environmental groups, such as Friends of the Earth;
- representatives of the business sector through the Cardiff Chamber of Commerce, Trade and Industry and Cardiff Initiative;
- representatives from the police services;
- health care providers, through Bro Taf Health Authority;
- the Pedestrians Association.

These organisations were engaged through a variety of arrangements. A number were invited in the early stages of the development of the LTP to take part in Task Groups designed to discuss the key strategic and local issues relating to the LTP. The comments made by the participants in the Task Groups helped shape the LTP and will continue to do so in future.

9.5 EXISTING CONSULTATION ARRANGEMENTS.

Over recent years, the Council has developed effective arrangements for discussing movement and other issues with the wider community and / or with specific interest groups. These have already demonstrated their worth, and have underpinned the consultation process associated with this Local Transport Plan. Indeed, the approach has been to use existing arrangements wherever possible, in order to avoid duplication and to reinforce the relevance and role of these structures in the decision-making process. The following is a list of these arrangements:

9.5.1 Cabinet Consultative Meetings.

Starting in July 2000, the Council has held roadshows in conjunction with a series of Cabinet Community meetings throughout Cardiff.

9.5.2 Cardiff Local Agenda 21 Forum

The Council launched a 'Local Agenda 21: Framework for Action' in July 1999, providing a background on Local Agenda 21 and sustainability, and listing existing policies and activities contributing to Local Agenda 21. Over 600 consultees were asked for comments, together with a questionnaire. Consultees were invited to Sustainability Workshops based on 13 themes. 50 organisations and 90 individuals were involved from the statutory, business, academic, public and voluntary sectors. A working group was established in January 2000 to refine indicators, of which 21 were identified for Cardiff in March 2000. A number of these related to movement issues. This is a continuing process.

9.5.3 Cardiff Unitary Development Plan Issues Document

This document was published in June 1997 and people's comments were sought. 162 responses were received from organisations, groups and individuals. A significant element concerned the allocation of land, particularly for housing, which has very important consequences for the transport system in Cardiff. This has resulted in a number of movement studies being undertaken primarily concerning public transport, parking and highway schemes.

9.6 SPECIFIC TOPIC GROUPS.

Certain issues have required specific topic groups, some of which already exist, others which have been established. These have consisted of invited organisations with specific responsibilities in their areas. The following groups have been set up:

9.6.1 SWIFT (South Wales Integrated Fast Transit)

This is a strategic body comprising local authorities, rail operators, Railtrack and local bus operators, to discuss bus and rail development issues in South East Wales. The SWIFT Strategy is the result of common working between the partners. This provides an important regional context for each of the partners.

9.6.2 South East Wales Transport Forum

This Forum was established for the 10 South East Wales Unitary Authorities after Local Government reorganisation. The Forum is advised by Council Officers who

meet as the South East Wales Transport Advisory Group (SEWTAG). This consists of several sub-groups:

- **SEWTAG: Local Transport Plan Sub-Group**
This allows the 10 local authorities to discuss common and strategic issues relating to Local Transport Plans, as expected by the National Assembly for Wales. This specifically allows discussion and resolution of technical matters, particularly cross-border issues. A questionnaire was sent to over 50 organisations in 1999, seeking views on broad strategic issues, to feed into the LTP process.
- **SEWTAG: Freight Sub-Group**
Following a meeting with representatives of the freight industry, it was agreed within SEWTAG, that there was a need for a specific group, particularly at a strategic level, to deal with freight issues. The freight industry has agreed that regular meetings would be of mutual benefit.
- **SEWTAG: Cycling Sub-Group**
Cycling issues have been pursued at a regional level, particularly relating to the work of Sustrans on the national cycle network, and the need to ensure individual authority's networks join each other. The work includes provision of infrastructure and the promotion of cycling, such as 'Bike-Rail' schemes.

9.6.3 South Wales Consortium of Local Authorities (COLA)

This grouping pre-dates Local Government Reorganisation and encompasses the areas now within SEWT Forum and the corresponding organisation for South West Wales. This organisation has not met recently and may cease to operate.

9.6.4 South Wales Transportation Co-ordination Group

Formerly the Greater Transportation Working Group (which reported to COLA), this is a group that covers both South West and South East Wales. It continues to provide the umbrella organisation for four sub-groups:

- **South Wales Parking Working Party**
A long established working party that has produced parking guidelines for South Wales over many years. Work is continuing on revisions to the 1993 Parking Guidelines, which has yet to be completed. The latest work is linking parking standards with public transport accessibility.
- **South Wales Rail Forum**
Another long established group, that enables all the various parties involved in rail transport in South Wales, to discuss related issues. It is particularly important for bringing the rail industry, local authorities and users groups together. It deals with both freight and passenger matters. This Forum is of strategic importance for the whole of South Wales and allows many common issues to be addressed.
- **Concessionary Fares Group**
This meets infrequently on an all-Wales basis to deal with issues concerning concessionary bus fares.

- **Public Transport Information Group**

This meets infrequently on an all-Wales basis to deal with issues concerning public transport information.

9.6.5 Cycle Liaison Development Working Party

Cardiff has an established working party dealing with cycling issues. It comprises cycling organisations, the National Assembly for Wales, health promotion and others with an interest in cycling issues. This working party provides continual input to various processes, including the LTP and the Development Plan.

9.6.6 Taxi Forum Group

There are on-going meetings to discuss taxi licensing issues.

9.6.7 National Organisations

A number of national organisations enable all-Wales and UK issues to be discussed. These include the Welsh Association of Technical Officers (WATO) and the Welsh Local Government Association (WLGA).

9.6.8 Safer Routes To Schools

The Council's Road Safety Unit works with the community on a day-to-day basis, providing the opportunity for feed back to the LTP process.

9.6.9 City Road: Street Environmental Improvements

The Council has identified this area for regeneration, part of which includes improvements to the street environment. This involves setting up a caravan to discuss detailed designs with the community so that feed back can influence the final scheme.

9.7 INFORMATION COLLECTION

The Council collects a variety of information relevant to movement.

9.7.1 Annual and Other Data Collection

An annual Transportation Survey is undertaken, which provides regular traffic counts and surveys of other matters, such as periodic public transport surveys. Other information is gathered on an as required basis, such as when people express concerns and complain about traffic management, for example, speeding or noisy vehicles. This helps provide informed responses and adds to the overall knowledge available for the LTP. Information also comes from less obvious sources, such as the periodic shoppers surveys.

9.7.2 Capital Times Transport Questionnaire

A questionnaire was enclosed with the Capital Times, sent to nearly all households in Cardiff, asking questions about transport and movement issues. This allows people to contribute from across the County. A summary of the findings of this survey is included in Appendix 10.

9.8 FUTURE CONSULTATION PROPOSALS.

As mentioned at the start of this chapter, the consultation undertaken to-date for the LTP, is seen as the start of an on-going process. This process builds on established working arrangements and links with the community. New arrangements and links will be opened where there is a need for better communications. The current arrangements and links will provide for an intensive period of consultation prior to the submission of the final LTP to the National Assembly for Wales in August 2000. Comments will continue to be received and analysed for inclusion into revisions of the LTP, including the annual review set out in the Government's guidance. These will ensure that interest groups and the wider community are involved in monitoring progress towards targets set in the LTP and evolving the Strategy in preparation for the next LTP.

For the year following August 2000, the same basic arrangements and links for consultation (i.e. dialogue with key partners, representative groups, existing consultation arrangements, specific topic groups and community events), will continue. However, there will be some differences:

- the LTP submitted in August 2000 will be used as a basis for discussion and consultation with various parties and individuals;
- the Task Groups will develop according to the wishes of the participants, who have already identified 6 themes for further discussion:
 - bus networks
 - Waterfront linkages
 - signage
 - pedestrianisation
 - car parking
 - charging.

The first three were given priority for early discussion in focused meetings.