Local Transport Plan

for Greater Nottingham



Full Plan 2001/02- 2005/06

Nottingham City Council and Nottinghamshire County Council

Greater Nottingham Local Transport Plan

Full Plan for 2001/02 to 2005/06

Joint Plan by

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List of Abbreviations

Executive Summary:

Greater Nottingham Local Transport Plan

The Greater Nottingham Local Transport Plan (the Plan) has been jointly produced by Nottingham City Council (the City Council) and Nottinghamshire County Council (the County Council). This has enabled the authorities to develop a strategy for the future of the Plan area on a rational basis rather than one dictated by administrative boundaries, and maintains the successful record of joint working by the two authorities in the transportation field in recent years.

The Plan, which covers the five-year period from April 2001 to the end of March 2006, performs the following functions:

- forms a strategic planning document setting out the objectives, comprehensive strategy, policies and detailed programme for achieving more sustainable and integrated transport within Greater Nottingham,
- seeks integration with land use planning, and policies for education, health and the environment, and
- forms the bid for transport capital funding from central government for improving transport within the Plan area.

The area included in this Plan comprises the conurbation created by the City of Nottingham and the urban parts of the surrounding districts of Broxtowe, Gedling and Rushcliffe together with the Hucknall area of Ashfield. It also includes a rural hinterland comprising the remainder of Broxtowe, Gedling and Rushcliffe districts which has some dependency on the conurbation for many services and facilities.

The latest population estimate for the Plan area is 644,000 (mid 1998). The composition of this population is:

- City of Nottingham 287,000
- surrounding County suburbs 219,000
- surrounding County settlements and rural area 138,000

According to the Nottinghamshire Structure Plan, the total population is projected to rise to about 655,000 by 2011, an increase of approximately 2%.

The proportion of journeys to work by car rose between 1981 and 1991. In 1991, 61% of people living in the Plan area travelled to work by car, compared with 48% in 1981. Conversely, the percentage travelling by bus fell from 26% in 1981 to 17% in 1991.

In the same period, the distances travelled to work have increased: 47% of people working in Nottingham City in 1991 also lived there, compared with 53% in 1981. Reducing the need to travel will be a key task to reverse this trend.

Like most of the UK, significant growth in the use of the private car has taken place in Greater Nottingham over the past decade. A high reliance on the bus network, however, still remains. The Plan area in general, and the conurbation in particular, has a comprehensive network of bus services. The local rail network is comparatively underdeveloped. Significant levels of walking and cycling in parts of the area are also evident.

Other problems identified are:

- climate change,
- pollution,
- social exclusion,
- inadequate accessibility for disabled people,
- rural isolation,
- a shortage of land available for development that is easily accessible by public transport, and
- poor health.

The authorities' approach to strategy formulation has been based upon a review of its earlier strategy and how it meets the government's national transport objectives as set out in its Integrated Transport White Paper. The views of District Councils, other partner organisations, and the public have been crucial to this process. Various seminars and participation exercises were undertaken to seek views on the issues and proposals which combine to make up the updated strategy.

Responses to these exercises confirmed that an incremental, balanced approach, introducing restraint-based measures coupled with investment in making the alternatives to the car more attractive, was the best means of securing public and business support whilst making progress towards achieving the objectives. This 'menu-based' approach also allows the authorities to tailor implementation of the proposals to local circumstances and needs. The general public endorsement for the authorities' transportation policies provides a good basis upon which to build the new Local Transport Plan strategy.

Vision

The authorities' vision for Greater Nottingham to accommodate the rising demand for travel in a sustainable way comprises of the following elements:

a) Sustainable communities

Sustainable communities are central to our strategy, aiming to make the area a safe, healthy and attractive place to live, and supporting existing communities. The problems of social exclusion, poverty and other forms of disadvantage require the broadening of opportunities and our priorities are to continue to develop attractive alternatives to the car for everyone.

b) Access for all

The authorities aim for a top quality integrated public transport system with comprehensive coverage, frequent services with seamless and safe interchange between modes. Public transport users will receive priority over car drivers and public transport will be made an attractive alternative rather than the last resort. Appropriate alternatives will specifically address the needs of people with disabilities including accessible buses. In the rural parts of the Plan area particular attention will be given to improving local pedestrian links and community transport schemes will be encouraged. The public transport system will be an integrated network of high quality buses, trams and trains with supporting park and ride infrastructure, promoted with extensive and effective publicity, marketing and public awareness measures.

c) A conurbation which works

The authorities seek to maintain and enhance the economic well being of the conurbation, promoting it as a competitive and attractive place to work and to invest in. This includes being responsive to the needs of businesses and maintaining sensible and sustainable access for cars and freight. Appropriate programmes of infrastructure investment and revenue support will be implemented, funded from a range of sources. In the City area this will include a work place parking levy with revenues invested in public transport and other sustainable alternatives to the car, and in improved maintenance of the highway, pedestrian and cycle networks with associated improvements for community safety. Thoughout the Plan area, developers will be expected to contribute to off-site integrated transport measures to address the impact of traffic generated by their developments

d) Establishing awareness

There is a growing awareness of the impacts of individual travel decisions on congestion and pollution. By highlighting these issues and making people more aware of alternatives to the private car through improved information, it will encourage more sustainable travel behaviour. One way of combining these activities is by encouraging businesses, schools and the major traffic generators to develop their own travel plans.

e) Fully integrated transport and land use planning framework for the conurbation

The planning framework to action this is already in place as a result of the Nottinghamshire Structure Plan, City Council Local Plan and District Local Plans. This LTP has been prepared to be totally integrated with the above development Plans.

The Vision will be delivered through four inter-related activities.

Better linking the use of land with transport planning

This means:

- reducing the need to travel and minimising use of green field land,
- ensuring new development is well linked to public transport, and
- ensuring that good transport links are provided for all sections of the community.

Managing travel demand

This means tackling the growth in traffic through:

- parking strategy including a workplace parking levy in the City Council part of the Plan area,
- re-allocating road space to favour buses, pedestrians and cyclists,
- regulating the flow of traffic using computerised traffic signals,
- encouraging organisations to put Travel Plans into practice, and
- working with freight operators to reduce the impact of freight traffic.

Better transport facilities and services

This means:

- investing in better public transport,
- providing better facilities for pedestrians and cyclists,
- better maintenance of roads, footways, lighting and bridges, and
- measures to improve road safety.

Travel education and awareness

This means:

- raising awareness on key transport issues,
- promoting more healthy ways to travel,
- promoting road safety awareness and training,
- working in partnership with transport operators and the public, and
- providing much more accessible travel information for all.

Progress on which the Plan will build includes:

- commencement of the construction of Line One of Nottingham Express Transit tram system, to be completed by 2003,
- the successful Robin Hood Line rail project,
- over 13 km of bus lanes, 600 new bus shelters and 100 raised kerb boarding points, linked to the purchase of modern low floor buses, in place which have improved the quality of bus travel on many routes,
- four permanent park & ride sites provide 4,000 car parking spaces each day and used by over 500,000 motorists per year,
- attractive and vibrant City Centre and district centres,

- an extensive cycle route network including part of the National Cycle Route network,
- over 40 local employers participating in Travel Plans influencing the travel of over 50,000 staff,
- innovative "TravelWise" traffic and travel information centre launched,
- road safety measures which have cut traffic speeds and reduced the number of accidents in many residential areas, and
- an advanced computer traffic signal control system regulates traffic flow and oversees the safe operation of crossings for pedestrians and cyclists.

Delivering change

In addition to bidding for money through the Local Transport Plan the Government is encouraging local authorities to raise funds locally to further improve transport provision. In Nottingham, the City Council intends to introduce on-street parking charges in the City centre and implement a workplace parking levy on employer commuter car parking. This will significantly increase both the quality and quantity of transport improvements that can be achieved.

Bid

Five year funding bids

Income	01/02	02/03	03/04	04/05	05/06
LTP Bid: Integrated Transport	10.5	11.5	12.3	12.8	13.4
Maintenance	5.3	5.35	5.45	5.5	5.6
Total LTP	15.8	16.85	17.75	18.3	19.0
Workplace parking levy bid-capital and revenue (City)	2.65	4.00	3.75	-	-
Major schemes	2.61	0.85	2.01	7	7
Workplace parking Levy Revenue (City)	-	-	-	7	7
On Street Parking Charges (City)	0.7	0.8	0.9	1	1
Grand Total	**21.76**	**22.15**	**24.41**	**33.3**	**34.0**

In addition to those identified in the above table, income is anticipated from a number of other sources including developer contributions and from the Rail Passenger Partnership (RPP). More details of these are contained in the main report.

Proposed local transport plan programme

The development of the programme has been undertaken following a review of the objectives, an assessment of problems and opportunities and extensive participation. Subject to securing the above resources and confirming revenue streams, the authorities aim to deliver a fully integrated transport system for the plan area, including:

Major schemes:

- Coventry Lane Improvement A6002/A6007 (already accepted as part of provisional LTP),
- a scheme to reduce congestion and improve facilities for public transport users and pedestrians in the City Centre linked to the introduction of Line One of the Nottingham Express Transit tram system,
- junction improvements, better public transport provision and high quality interchange facilities on the Nottingham Ring Road

Integrated Transport Measures and maintenance:

- work towards securing extensions of the proposed tram network,
- expansion of the bus lanes network providing a bus priority system with London Underground-style "real-time" timetable information on key routes. This includes developments from Gamston to Trent Bridge and on the A60 between the ring road and Woodthorpe Drive along with other associated bus improvements including junction priority, development of smart cards, integrated ticketing and raised kerbs with supporting enforcement improvements,
- a Clear Zone for the City Centre which will limit access to streets immediately around the Old Market Square to buses, taxis, cycles and orange badge holders during the main part of the day,
- new public transport interchanges at key locations such as district centres, universities and hospitals and new bus, coach and tram interchange at Broad Marsh,
- major review of transport facilities at Hucknall, Beeston, Arnold and other local centres,
- improvements to Nottingham Station and further development of the local rail network, including a new station a Ilkeston,
- more park and ride sites, including proposed development at Gamston,
- local road safety schemes to reduce accidents,
- safer walking and cycling routes to schools,
- development of more Home Zones and other similar schemes,
- One Stop Shops and internet based transport information and advice,
- motorcycle parking facilities,
- working in partnership with freight operators, and
- improved maintenance of roads, footways and bridges.

1 Introduction

1.1 Introduction to the process

The Greater Nottingham Local Transport Plan (the Plan) has been jointly produced by Nottingham City Council (the City Council) and Nottinghamshire County Council (the County Council). Its publication follows the submission in July 1999 of the Provisional Plan, submitted in accordance with Government guidelines.

The Plan performs the following functions:

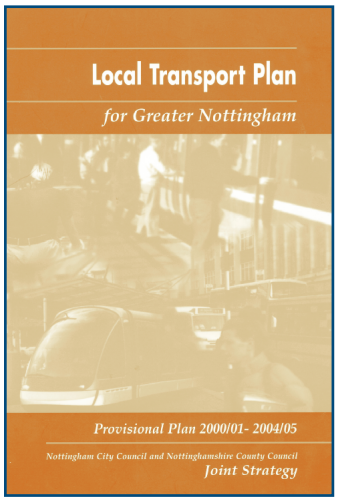
- forms a strategic planning document setting out the objectives, comprehensive strategy, policies and detailed programme for achieving more sustainable and integrated transport within Greater Nottingham,
- seeks integration with land use planning and policies for education, health and the environment, and
- forms the bid for transport capital funding from central government for improving transport within the plan area.

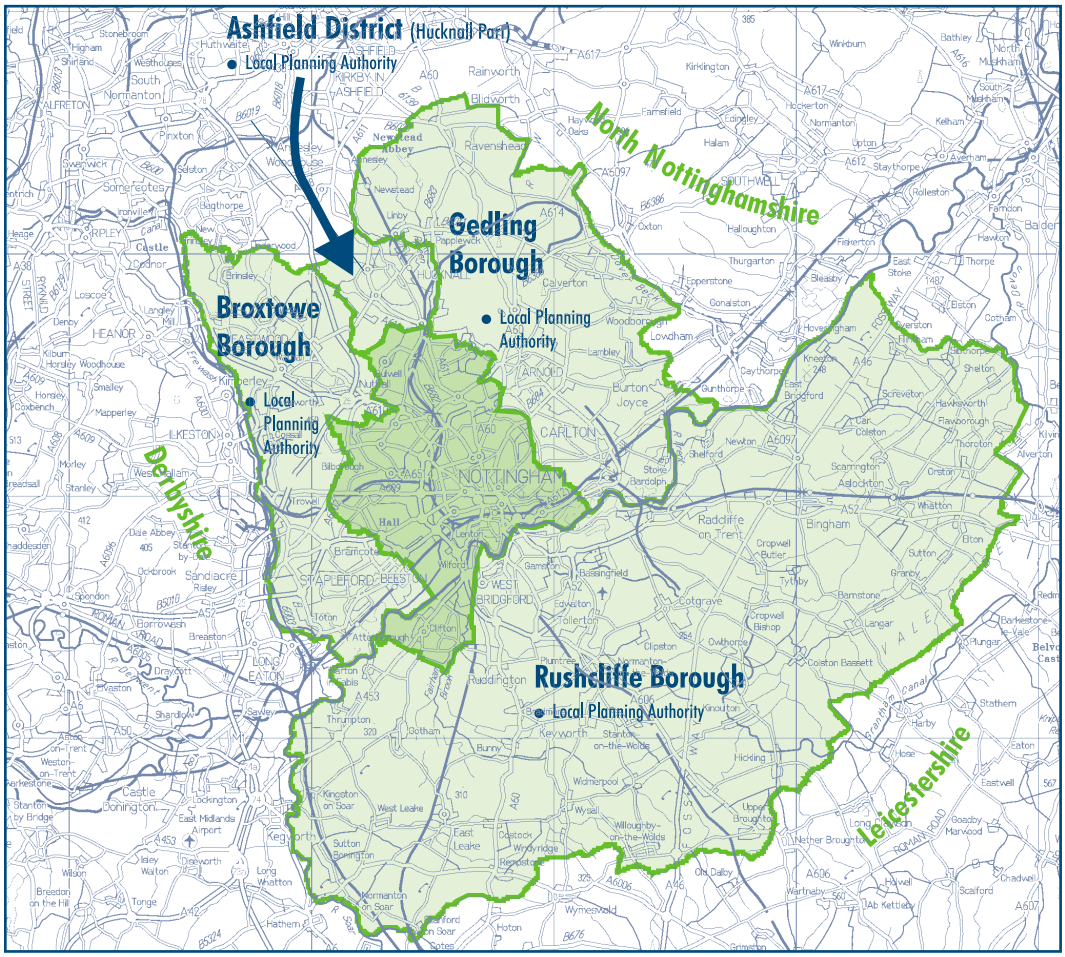
The Plan covers the five year period starting in April 2001 running through to the end of March 2006.

The area covered is shown on figure 1 and comprises the conurbation created by the City of Nottingham and urban parts of the surrounding districts of Broxtowe, Gedling and Rushcliffe together with the Hucknall area of Ashfield. It also includes a large rural hinterland comprising the remainder of Broxtowe, Gedling and Rushcliffe which is dependent on the conurbation for many services and facilities.

The four key elements of the Plan which form the basis of the authorities' submission are:

- policy and strategy formulation, particularly in respect of integrating transport and land use planning,
- transport demand management,
- management, maintenance and improvement of infrastructure with supporting revenue programmes, and
- travel education and awareness to promote safe and sustainable travel behaviour.





City of Nottingham, Unitary Authority
- Strategic and Local Planning Authority
- Highway Authority

Nottinghamshire County Council
- Strategic Planning Authority
- Highway Authority

Figure 1

Greater Nottingham Local Transport Plan Area authority responsibilities and administrative boundaries

1.2 The form of the Plan

The submission comprises this main Plan and a range of supporting documents which are referenced more fully at Chapter 8 at the back of the plan, together with some useful contact details at each authority who can help you find out more.

The overall bid is set out in chapter 6; each authority has also indicated priorities for further transport funding which may be forthcoming as a result of the Government's Ten Year Plan for Transport Investment currently being developed. In the case of the City Council this will need to be reviewed in the context of its workplace parking levy proposals which detail a Ten Year Vision including potential revenue streams to support the development of this fundamental policy commitment to radically transform transport provision in Nottingham.

This Plan follows a similar format to the Provisional Plan submitted in July 1999 except that as a development of the joint approach a combined integrated programme for the two authorities has been included within this Plan. The content of the Plan has been updated and modified in accordance with the Guidance on Full Local Transport Plans published by the DETR in March 2000.

The structure of the Plan is that Chapter 2 presents a long term vision for transport in Greater Nottingham, describes the national, regional and local policy framework for transport and sets out key objectives and targets. Chapter 3 examines the local network and its inherent problems together with a strengths, weaknesses, opportunities and threats analysis. The bulk of the content of the Plan appears in Chapter 4. This sets out how problems are to be addressed, strategies to widen travel choices, achieve more integrated and sustainable transport and how the transport network is to be managed and maintained. Chapter 5 describes the authorities' approach to partnership and participation. Chapter 6 details the authorities' joint bid for capital funds over the five year plan period. Chapter 7 outlines the ongoing monitoring programme. Chapter 8 lists other documents in support of the plan and useful contacts for further information. Three appendices are attached:

Appendix A - Greater Nottingham Road Traffic Reduction Act report

Appendix B - District Council submissions

Appendix C - Bid for Centre of Excellence status

Finance forms and Appraisal Summary tables are submitted separately

1.3 Joint Working

To develop a strategy for the future of the Plan area on a rational basis rather than one dictated by administrative boundaries, the two authorities remain committed to producing a joint plan. This maintains the successful record of joint working by the two authorities in the transportation field in recent years.

Table 1 Joint working: Track record of innovation and delivery of integrated transport strategy for Greater Nottingham.

Pre 1990:	Feasibility work on reopening the heavy rail line to Worksop and potential for Light Rapid Transit system. Greater Nottingham Cycle Route Network established.
1990:	Strategic Transport Study for Greater Nottingham established an integrated transport strategy.

1990: City Centre review of planning and transport strategy: established demand management approach and a joint car parking strategy including park and ride.

1992: Bus priority programme re-established "green routes" concept.

1993: Stage 1 of the Robin Hood Line opened.
Greater Nottingham Area Rail Development Strategy established.

1994: Opening of Queen's Drive park and ride site, new generation, high quality infrastructure and service.
Greater Nottingham Light Rapid Transit Bill received Royal Assent.
Real time bus information pilot project implemented.

1995: Greater Nottingham Package accepted.
Pedestrianisation of Smithy Row and associated bus priority in Nottingham City Centre.
First UK commuter plan established at County Council headquarters.

1996: 3 year European research project "MOSAIC" commenced to demonstrate and assess the delivery of green commuter plans in Nottingham.
Nottinghamshire Structure Plan Review adopted based upon principles of sustainable development and public transport corridor approach.

1997: Launch of Bus Quality Partnership Strategy.
Nottingham City Local Plan adopted including transport strategy, objectives and targets.
Nottingham Commuter Planners Club set up to promote commuter plans among local employers and currently representing over 50,000 employees.
Completion of the third and final stage of the Robin Hood Line, the first new passenger railway line to be opened outside a metropolitan area.

1998: Greater Nottingham Joint Committee for Strategic Planning and Transport established.
£167m Private Finance Initiative approval secured for Nottingham Express Transit.
Market research on attitudes to transport issues undertaken across the area.

1999: Bid to promote Greater Nottingham as a Centre of Excellence for Integrated Transport launched.
Launch of School Travel Plan initiative.
Submission of Joint Provisional Local Transport Plan.

2000: Contracts signed to commence construction on Nottingham Express Transit Line 1.
Joint approach to data collection and travel assessment monitoring to inform development of the full Plan and Government Multi Modal Studies in the region

2 Objectives

2.1 Setting the context: a vision for Greater Nottingham

To establish a context for the Greater Nottingham Local Transport Plan and other cross-cutting corporate policies a shared vision has been developed which looks forward 15 to 20 years and sets the scene for the authorities' adopted strategy and supporting programmes. This overarches the process of reviewing and setting specific objectives and targets. The process was commenced to respond to the Government White Paper "In Touch With The People", to ensure transport policies are developed to meet the needs of the people who live and work in the Plan area.

Nottingham is the regional capital of the East Midlands and is recognised as one of the most important retail and commercial centres in the country. It is also an important centre for leisure and tourism. The City is the principal employment centre with a high proportion of its labour force living in the Greater Nottingham conurbation. Hence, there are significant inter-relationships between economic and transport matters between the City and adjacent built-up areas of Arnold, Beeston, Carlton, Eastwood/Kimberley, Hucknall, Stapleford and West Bridgford.

In recent years investment in retail, office and residential development, particularly in the City Centre has given a significant boost to the economy of the region, although patterns of disadvantage, social exclusion and poverty provide a stark contrast in some areas. Whilst jobs in the City grew at nearly three times the national average between 1991 and 1997 (Annual Employment Survey), the City area currently ranks as the 16th most deprived local authority in England (DETR 1998 Index of Local Deprivation). If the findings in the proposed new Index are confirmed, Nottingham's ranking will slip to 12th. The challenge to meet the diverse travel needs of residents, businesses and visitors needs to be addressed by this Local Transport Plan.

The demand for travel is rising and needs to be accommodated in a sustainable way. The authorities have a good record of innovation and partnership working and have developed a successful Integrated Transport Strategy which was accepted and supported by the Government as the Greater Nottingham Package in 1995.

Our Vision comprises:

a) Sustainable communities

Sustainable communities are central to our strategy, aiming to make the area a safe, healthy and attractive place to live, and supporting existing communities. Strengthening local economies with less dependence on external supplies will help to minimise the need to travel and help to meet the Government's aspirations as set out in "Planning for the Communities of the Future."

Existing urban areas have the best developed options for travel choice and to be served by alternatives to the car. The problems of social exclusion, poverty and other forms of disadvantage require the broadening of opportunities and our priorities are to continue to develop attractive alternatives to the car for everyone.

A safe and healthy environment means safe streets which are well managed and maintained and are attractive places to live, particularly for vulnerable groups, and not dominated by the needs of the car. Pedestrians will be put first, with reduced traffic dominance the key. "Civilised Streets" will enhance community focus and prioritise local links.

b) Access for all

We aim for a top quality integrated public transport system with comprehensive coverage, frequen services with seamless and safe interchange between modes. Public transport users will receive priority over car drivers and public transport will be made an attractive alternative rather than the last resort. The authorities have launched a bid to become a "Centre of Excellence for Integrated Transport" and are committed to achieving the highest standards of alternatives to the car. Appropriate alternatives will specifically address the needs of people with disabilities including accessible buses, improvements to the pedestrian environment, a wheelchair accessible tram system together with audits and action plans to tackle barriers which exclude people from work, leisure and residential opportunities. In the rural parts of the Plan area community transport schemes will be encouraged.

The public transport system will be an integrated network of high quality buses, trams, and trains with supporting park and ride infrastructure, promoted with extensive and effective publicity, marketing and public awareness measures.

The sustainable alternatives to the car will serve people's need to travel to work, to school, to shop and for leisure effectively, both during peak periods and at an appropriate level at off peak times.

Accessibility for necessary car journeys will be maintained and remain as a key element of the transport strategy. Travel demand management will be employed to make the costs and benefits of travel choice more explicit.

c) A conurbation which works

We seek to maintain and enhance the economic well being of the conurbation, promoting it as a competitive and attractive place to work and to invest in. We will be responsive to the needs of businesses and will maintain sensible and sustainable access for cars and freight. The City and district centres will remain at the heart of the Plan area's economic framework. Appropriate programmes of infrastructure investment and revenue support will be implemented, funded by a range of mechanisms. In the City area this will include a workplace parking levy with revenues invested in public transport and other sustainable alternatives to the car, and in improved maintenance of the highway, pedestrian and cycle networks with associated improvements for community safety.

We see the strengths of well developed and sustainable alternatives to the car as key to attracting inward investment; awareness of the direction of European and national legislation should signpost the informed investor to the Greater Nottingham area as being an attractive and sustainable location to invest in.

d) Establishing awareness

The costs associated with the need to travel and impact of the transport choices made by individuals and organisations will be made more apparent by a combination of national and local awareness raising actions.

We aim to develop an informed population, which supports the priorities established because they are aware of the relative environmental, health, economic and social consequences of choice and alternative modes of travel. Travel education and awareness will therefore be a major theme.

e) Fully integrated transport and land use planning framework for the conurbation

The new context of emerging legislation envisages that planning for our communities' needs will become much better integrated; our vision is that the Greater Nottingham Local Transport Plan will form the basis for a comprehensive approach which flows both to and from the Regional Spatial Development Strategy, the Regional Transport Strategy and Structure and Local Plan reviews to provide a comprehensive framework for sustainable development which balances the environmental, economic and social demands of the population.

2.2 Setting the context: Current strategy for the development of the conurbation and regeneration of communities

The objectives of the Plan were established in the development of the Provisional Plan, commanding a broad consensus of support locally. It is necessary to ensure that there are positive linkages between the various initiatives and programmes within the Plan area and the continually evolving national policy agenda. The key task is regeneration, and both authorities have made a commitment to pursue opportunities for Greater Nottingham in the following context.

2.2.1 Spotlight on Regeneration

In 1998 the process to develop a common vision for the regeneration of Greater Nottingham was established, resulting in the Greater Nottingham Partnership's successful New Commitment to Regeneration Pathfinder bid 'Spotlight on Regeneration'.

The strategy sets out the importance of a comprehensive, long term vision and programme and stresses the need to link key programmes and capture local partnerships to address social, economic and environmental issues. Particular emphasis is placed on partnership, social inclusion, sustainability and competitiveness and there is a key resonance between the approach set out in 'Spotlight on Regeneration' and the authorities' approach to the Greater Nottingham Local Transport Plan.

Work on initiatives such as the Single Regeneration Budget, New Deal for Communities, Health Action Zone, Education Action Zone and Urban Management Areas will have extensive linkages with the strategy and programmes contained within this Plan.

The Spotlight sets down a vision for the conurbation in 2010:

A well balanced, inclusive and integrated community in which people want to live, work invest and socialise and which offers wide ranging opportunities for people to develop their skills, potential, creativity, prosperity, wealth and interests in a safe, healthy, attractive and sustainable environment.

In short, a vision for Greater Nottingham as:

- dynamic, competitive and cosmopolitan,
- clean and green,
- safe, welcoming and inclusive,
- a driving force for information technology and communications,
- the premier regional, commercial and retail centre,
- a centre of learning,
- a major tourist and visitor destination, and
- a centre of culture, sport, leisure and the arts.



The Spotlight identifies 12 key challenges for the conurbation over the next decade which are the major barriers to prosperity and balanced development. Two key barriers are particularly relevant to the Local Transport Plan:

- reversing outward migration to the suburbs, and
- combating traffic congestion and pollution.

The Greater Nottingham Partnership identifies nine Strategic Objectives around which mainstream work programmes such as the Local Transport Plan will be developed. Of particular importance to the shaping of the Plan is Strategic Objective 7:

"To provide quality housing, develop and implement an integrated transport strategy and develop a healthy, safe and sustainable environment".

The identified key priorities are:

1. Halt and reverse the migration to the suburbs and make inner city living a desirable option.
2. Reduce levels of sub-standard housing throughout the conurbation.
3. Bringing brown-field, derelict sites and redundant buildings into use.
4. An integrated transport strategy across the conurbation.
5. Extend and improve public transport and the tram system, promoting a shift from private to public transport.

6. To explore new mechanisms to generate sufficient funding to enable real transport improvements to be made.
7. An overall reduction in air pollution levels generally and in particular at designated 'hot-spots'.
8. Promote energy conservation.
9. Reduce waste and promote recycling.
10. Promote and enhance wildlife and open space.
11. Improve the quality of design and safety of the built environment.
12. Reduce pressure on the Green Belt.
13. Support the work of the Nottingham Regeneration Ltd as Greater Nottingham's urban regeneration company.

Identified provisional key indicators include:

- % travel to work by public transport and by car,
- overall energy consumption levels,
- days when air pollution is moderate to high, and
- % houses built on brown field sites.

The development and implementation of the strategies in the Local Transport Plan will help to deliver impetus to these objectives and complement the action plans of the partner authorities and agencies.

2.2.2 East Midlands Development Agency: Draft Urban Action Plan for the East Midlands

In May 2000, the East Midlands Development Agency published its complementary action plans for the urban and rural areas and the five key drivers identified in the Urban Action Plan and set out below are consistent with the approach of the Greater Nottingham Partnership's New Commitment to Regeneration:

- learning and skills,
- enterprise and innovation,
- information and communications technology revolution,
- climate for investment, and
- sustainable communities.

The development and implementation of the strategies in the Local Transport Plan will help deliver impetus to these drivers.

2.3 Setting the context: Government's thinking on transport

The Government's initial response to the need for change in transport policy was set out in the Transport White Paper "A new deal for transport : Better for everyone" (the White Paper) published in July 1998. It established a national policy framework for integrated transport, supported by a range of "daughter " documents and formed the basis of the Transport Bill currently being considered by Parliament. Together with a revised consultation draft of Planning Policy Guidance Note (PPG) 13: Transport and the forthcoming Ten Year Investment Plan for modernising transport, the context for local transport planning is changing significantly.

The impact of these changes will be felt at three levels, nationally, regionally and locally.

2.3.1 National framework

The developing agenda for transport nationally is forming the first comprehensive review of transport policy, funding mechanisms and investment priorities in over thirty years. The over-arching transport objectives of the Government are:

(i) to protect and enhance the built and natural environment,

(ii) to improve safety for all travellers,

(iii) to contribute to an efficient economy, and to support sustainable economic growth in appropriate locations,

(iv) to promote accessibility to everyday facilities for all, especially those without a car, and

(v) to promote the integration of all forms of transport and land use planning, leading to a better, more efficient transport system.

Key guidance notes, advice and new legislation relating to transport which set out the current national framework and which have informed the preparation of the Provisional and Full Plans include:

1994 Planning Policy Guidance (PPG) 13 (Transport)

1996 Planning Policy Guidance (PPG) 6 (Town Centres and Retail Development)

1996 National Cycling Strategy

1997 Road Traffic Reduction Act

1998 Road Traffic Reduction (National Targets) Act

1998 Modern Local Government: In Touch With The People

1998 A new deal for Transport: Better for Everyone

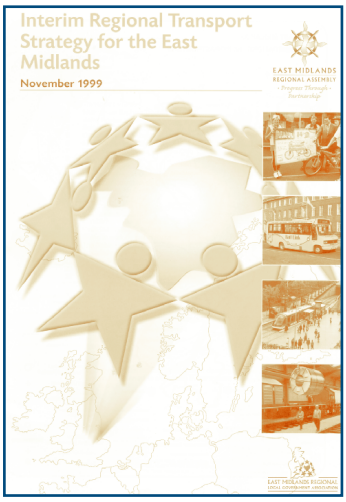
1998	A new deal for Trunk Roads in England
1998	Breaking the LogJam: ... Road User and Workplace Parking Charges
1999	The benefits of Green Transport Plans
1999	Saving Lives - Our Healthier Nation
1999	School Travel Plans: A best practice guide for local authorities
1999	Planning Policy Guidance (PPG) 12 (Development Plans)
1999	Sustainable Development Strategy - A Better Quality of Life
1999	From Workhorse to Thoroughbred: a Better Role for Bus Travel
1999	Planning Policy Guidance (PPG) 13 (Transport) - consultation draft
2000	Encouraging Walking: Advice to Local Authorities
2000	The Air Quality Strategy for England - Working Together for Clean Air
2000	Draft UK Programme: climate change
2000	Planning Policy Guidance (PPG) 3 Housing

The authorities have responded to the new agenda set by this policy context in further developing the work put into the Provisional Plan to form a Full Local Transport Plan which seeks to provide a local delivery mechanism for inclusive and integrated transport planning.

2.3.2 Regional dimension

The Transport White paper recognised that one vital element of an integrated transport policy is that transport policies and proposals are fully integrated with land-use planning at national, regional and local levels. A Regional Transport Strategy is crucial to achieving this integration.

A draft Interim Regional Transport Strategy has been developed as part of the Draft Regional Planning Guidance for the East Midlands which is currently at the Public Examination Stage. It will not be possible, however, to finalise the strategy until the first tranche of the multi-modal studies affecting the area have been undertaken during the next two years.



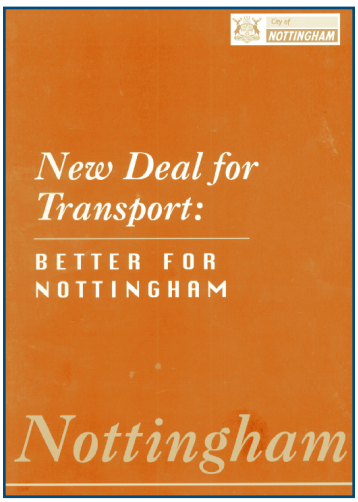
The overall aim of the draft Regional Transport Strategy is "to ensure that land-use planning and transport planning are fully integrated in order to steer new development to more sustainable locations, reducing the need to travel and enabling journeys to be made by more sustainable modes of transport". The framework of the draft strategy is as follows:

- An integrated approach - between transport and land-use planning and other social and environmental policy objectives including improved safety for all aspects of travel.
- Travel demand management - managing the demand for travel in the most sustainable manner.

- Travel education - providing better travel information and raising awareness to change travel behaviour and improve levels of public transport service.
- Freight transport - to ensure the efficient movement of goods and reducing the reliance on roads based transport.
- Air transport - managing growth at East Midlands Airport.
- Communications technology - promoting access of information for residents.

It is important that the strategy complements other regional strategies and, in this respect, account has been taken of the East Midlands Developments Agency's Economic Development Strategy so that compatibility is achieved with vision, objectives and themes of the Regional Assembly's emerging Integrated Regional Strategy.

2.3.3 Local dimension, including integration with development plans



The Government's new agenda requires a fundamental review of transport and land-use planning, with a holistic and integrated approach. The opportunity for a step change in meeting travel demand now exists and both authorities are committed to capturing the benefits offered by the new approach. For example the City Council demonstrated its commitment and support for the White Paper by publishing 'A New Deal for Transport : Better for Nottingham' as its direct response to the White Paper. The development of the Full Plan continues this commitment.

Delivery of national transport policy depends, to a large extent, on action at a local level and Local Transport Plans are a core tool to help secure sustainable local communities.

It will be essential to integrate the Local Transport Plan with emerging and existing Local Plans to effectively tie land-use and transport planning together. At a local level, the main areas of influence will be through:

- the Local Transport Plan,
- the Nottingham Local Plan (and the review about to be commenced),
- the Local Plans of the surrounding Districts (and reviews currently in progress), and
- forthcoming review of the Joint Structure Plan.

The Government's key requirements in terms of integration of transport and land-use planning are set out in revised Planning Policy Guidance Note (PPG) 12 which aims to improve arrangements for the delivery of development plans. It advises how the hierarchy of new transport strategies and plans (Regional Transport Strategy and Local Transport Plans) should be integrated with that of development plans (Regional Planning Guidance, Structure Plans and Local Plans) to ensure that the two aspects of planning are complementary. The County Council has welcomed the new arrangements but expressed concern about the ability to

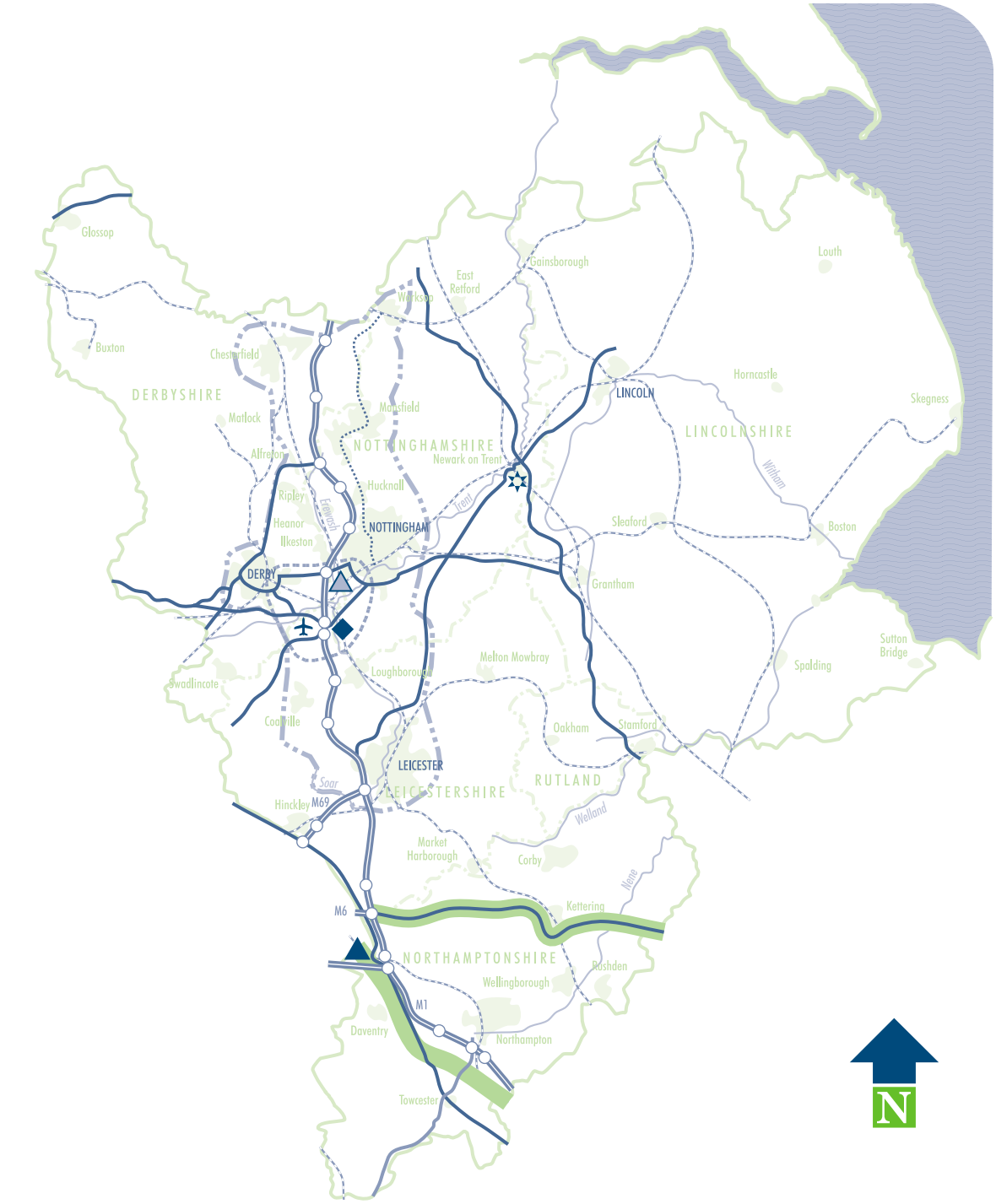


Figure 2

The East Midlands communications and infrastructure

achieve consistency amongst the range of plans in the short term, particularly as District Council Local Plans are at very different stages of preparation. It recognises how vital it is that those District Councils that do not have approved Local Plans in place before the submission of the full Local Transport Plan in July 2000 should be able to demonstrate their support for the policies and measures in the Plan. Advice in PPG12 (Development Plans)is also reflected in Draft PPG 13 (Transport).

The table below outlines the current status and progress of District Council Local Plans within the Plan area.

Table 2 Status of Local Plans within Plan area

Local Plan	Status
Ashfield	Second Deposit Draft May 2000
Broxtowe	Deposit Draft January 2000
Gedling	Deposit Draft February 2000
Nottingham	Adopted, October 1997, end date 2011, Review to commence 2000
Rushcliffe	Deposit Draft February 2000

Table 3 Summary of transportation policies in City of Nottingham Local Plan and relationship to Local Transport Plan objectives

Local Plan Policy (summarised)		Related LTP Objectives
T1	Location of development in appropriate sustainable locations	a , b , c , g
T2	Need for supporting agreements for off-site improvements	e , f
T3, T4	Bus priority measures and provision	b , d , e , i
T5, T6	Rail services and LRT safeguarding	a , b , d , e , f , i , k
T7	Park and ride safeguarding	a , b , d , f
T8	Waterways	d , f , h
T9	Traffic management	a , b , h , i , l
T10, T11 T27, T28	Car parking standards	a , b , c , e
T12	Cycle route safeguarding	b , c , k , l
T13	Public rights of way safeguarding	b , c , k , l

T14	Pedestrian priority/provision	b , c , k , l
T15, T16 T17, T18	Highway safeguarding	f , i
T19	Safeguarding of disused linear routes	a , b
T20, T21	City Centre traffic management/environmental improvement	a , b , c , d , e , g , k , l
T21	City Centre pedestrianisation	b , c , k , l
T23	Public open spaces	c , k , l
T24	Pedestrian routes	b , c, k , l
T25	Improvement to public transport facilities	a , b , d , e , f , g
T26	New public car parking limited to short stay/medium use	a , b
T29	City Centre cycle routes	a , b , c , k , l
T30	City Centre traffic management	a , b , c , d , e , g , k , l
T31, T32	Reduce dominance of Inner Ring Road and increase pedestrian priority	a , b , c , d , e , g , k , l
T33	City Centre highway improvement schemes	a , b , f

Note: Similar tables will be produced for each District Local Plan once adopted.

The City Council is well placed to build on the Nottingham Local Plan which was adopted in 1997 and includes a Transport Strategy and targets which are broadly consistent with the Local Transport Plan objectives. It is proposed to review transport policies and where necessary update them via Supplementary Planning Guidance and/or Interim Transport Planning Statements, on a joint basis with the County Council where appropriate. A start has already been made in respect of developer contributions to integrated transport measures and maximum levels of parking provision. The latter have now also been formulated for new employment uses in the whole of the East Midlands region, in draft Regional Planning Guidance.

The process of integrating the Local Transport Plan with the Local Plan will therefore evolve through the review procedures, taking into account PPG12, draft PPG13, the emerging Regional Planning Guidance and Regional Transport Strategy, and the forthcoming Structure Plan Review. In summer 2000 a comprehensive review of the City Centre's performance and potential will be published, to feed into this process.

2.3.4 Using the Local Transport Plan to support and inform development control

In the City Council's administrative area it is intended to use the Local Transport Plan as a pro-active tool to support and inform the development control process. As stated above the Local Plan review process will update and tie together the land use and transport planning policies of the City Council, but in the interim the impact of development needs to be viewed in the context of this statutory Local Transport Plan and Road Traffic Reduction Report.

In particular the following elements of the Local Transport Plan will be of particular relevance when determining the impact and acceptability of new development and changes of use:

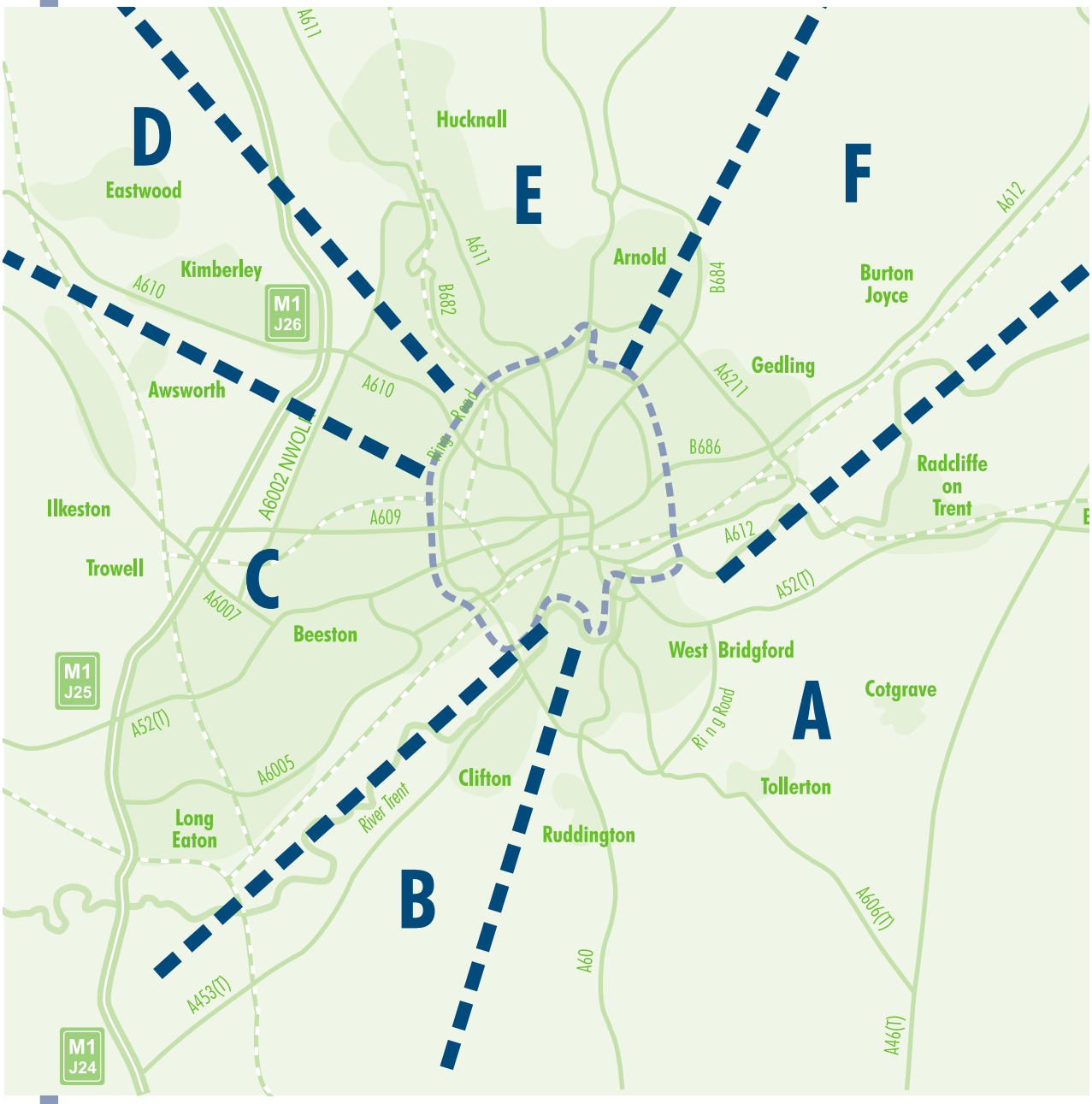
- whether development of the nature proposed would assist or could compromise the delivery of the Plan targets, in the short, medium or long term,
- whether development of the nature proposed would be in accordance with the Plan objectives,
- whether development of the nature proposed could undermine progress towards meeting the City's Road Traffic Reduction, particularly in the Inner Traffic Area,
- whether development is considered to be complementary or contrary to the Plan strategies set out in Chapter 4, with particular emphasis on policies covering:
  - City and district centres, and in particular promoting development in sustainable locations,
  - Demand Restraint: Parking policies, green travel plans and implementation of workplace parking levy,
  - Walking and cycling strategies,
  - Home zones and the incorporation of such principles in the layout of new residential developments.

A similar approach will be taken by the County Council, whereby the Local Transport Plan will be used as a guide to making observations on planning applications.

For significant schemes, integrated transport impact assessment will be required to determine whether the travel demands associated with the development could be adequately served by a range of travel mode choices. If not, the impact of proposals will need to be effectively mitigated by measures to promote use of alternatives to the car for access.

Greater Nottingham Transport Sectors

Figure 3 shows the six identified transport sectors and the Inner Traffic Area used to define the key corridors within the Plan area. These sectors will be used when determining appropriate developer contributions related to significant development sites in line with the adopted Structure Plan.



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A: A52(E), A606, A60(S)

B: A453

C: A52(W), A6005, A609

D: A610

E: B682, A611, A60(N)

F: B684, B686, A612

Rail lines

Inner traffic area

N

Figure 3

Greater Nottingham transport sectors

2.4 Review of objectives

The Greater Nottingham Package enjoyed five years of success, attracting a total of £8.5M of Government funding since its initial acceptance and support in 1994. The package strategy was focused around the delivery of nine core objectives. As part of the participation process for the Provisional Plan, views were sought on the package objectives, particularly about how they should be ranked.

It was found that the objectives were supported by the vast majority of consultees.

The following table indicates the objectives and their priority order based on the participation exercise. Also shown are indicators of how the objectives align with the five key Government objectives for transport which underline the New Approach To Appraisal (NATA). These objectives are:

- to protect and enhance the built and natural environment (e),
- to improve safety for all travellers (s),
- to contribute to an efficient economy and to support sustainable economic growth in appropriate locations (ec),
- to promote accessibility to everyday facilities for all, especially those without a car, (a) and
- to promote the integration of all forms of transport and land use planning, leading to a better, more efficient transport system (i).

This exercise confirmed a broad consistency and adequate coverage of the Government's new priorities. However in order to more specifically address particular areas which it was considered would benefit from increased emphasis, and to highlight areas which were raised as issues during the participation process, a revised set of objectives were developed. In addition, account was taken of the problems and opportunities associated with local travel patterns which were reviewed as part of the development of the strategy in the Provisional Plan.

The main areas of change are to give more priority to:

- integration and interchange between modes,
- improving health and reducing social exclusion,
- maintaining the structural integrity of the highway network and other transportation infrastructure, and
- to increase transport choice in rural areas.

The revised objectives have been further evaluated and reviewed during the preparation of the full Plan and it is not proposed to amend them further at this stage.

Table 4 Greater Nottingham transport objectives

Objectives		NATA
a)	To increase sustainable accessibility to the City Centre and district centres in ways which enhance economic activity, encourage development in and reduce social exclusion from these centres.	e, ec, a, i
b)	To reduce traffic growth and to encourage modal change away from the private car particularly for work journeys to the City Centre.	e, a, i
c)	To encourage safe walking and cycling for short journeys including travel to schools, shops and other local facilities.	s, a, e
d)	To improve integration and interchange between modes.	i, a
e)	To integrate land-use and transport planning by ensuring all new major development is well connected to the public transport system and accessible on foot and by cycle.	a, i, e
f)	To maintain and enhance Greater Nottingham's accessibility to regional, national and international markets, particularly by modes other than the car.	ec
g)	To reduce social exclusion and to improve the accessibility to transport for disadvantaged groups, particularly disabled people.	a
h)	To relieve communities from the adverse effects of through traffic, particularly heavy goods vehicles.	e, s
i)	To maximise the efficiency and maintain the structural integrity of existing transport networks.	a, ec, e
j)	To increase transport choice in rural areas.	a
k)	To improve air quality within the Plan area and to alleviate other transport impacts upon health.	e
l)	To improve road safety, particularly for vulnerable road users.	s

The objectives are not presented in a priority order; all the objectives are considered to require long term commitment, although short term progress towards meeting a number of them is demonstrable, for example in promoting safer walking and cycling. Close monitoring of the impact of measures proposed in the local transport plan and progress towards the targets set out in the next section will be used to inform decisions on resource allocation. The effective priorities given to elements of the strategy to deliver the objectives will therefore evolve rather than establishing a formal prioritisation. This will also enable the authorities to respond to any changes in projected resources or revenue.

2.5 Multi modal studies

Following 'A New Deal for Trunk Roads in England' published in July 1998, the Government is undertaking a programme of road-based and multi-modal studies to address problems on the strategic trunk road network which were not addressed in the Targeted Programme of Improvements being taken forward over the next seven years. The first tranche of studies covers two corridors in the Plan area.

The studies of the M1 Motorway corridor between Junctions 21 and 30 and of the A453 between Nottingham and M1 Junction 24 are multi-modal studies, which were commenced in December 1999 and will have a major impact on the Plan area. The studies are critically examining a wide range of transport solutions affecting all modes of travel. The A453 study will include consideration of the travel movements in the Derby-Nottingham corridor including the rail service and the A52 trunk road. The movement of freight will also be an important consideration in both studies.

The studies are undertaking extensive surveys of existing travel patterns and public attitudes. The survey programme comprises roadside interview surveys, traffic counts and public transport, pedestrian and cycle user surveys. Both authorities are assisting in the provision and collection of data for these studies and with the sharing of existing data and information.

A Regional Steering Group has been set up to oversee progress and ensure consistency of approach between the two studies. Two separate Project Management Groups oversee the day to day work of the consultants. The County Council participates in both the M1 and A453 Project Management Groups. The City Council is a participant of the A453 Project Management Group. Representatives from a cross-section of organisations and interest groups have been invited to participate in what is known as the Wider Reference Groups. Extensive public consultation is also taking place including public meetings, exhibitions, regular newsletters and internet websites.

The findings of the A453 study are due by September 2001 and the M1 study by December 2001. The conclusions from each study are to be incorporated into a review of Regional Planning Guidance, to inform the Regional Transport Strategy and future Local Transport Plans. Although it will not be possible to detail schemes until the findings of the studies are published, allowance in the five year programme has been made for the development of complementary multi-modal study related schemes within the Plan area.

A further (Tranche 2) multi-modal study looking at the Birmingham to Nottingham corridor, which will also impact on the Plan area, is due to commence by the end of 2000. It is not expected that the findings from this study will be available until late 2002. The Regional Planning Guidance and Interim Regional Transport Strategy advocate the reinstatement of the A46 improvement between Widmerpool and Newark by means of an additional multi-modal study.

2.6 Targets

There is a far greater emphasis within the new Local Transport Plans on the setting of realistic, yet challenging targets. These targets will help to focus the general and local objectives of the Plan, and provide a baseline position against which travel and behavioural trends can be analysed. Targets can be of two main types - 'hard targets' or actual numerical trend data and 'soft targets' which can be more qualitative than quantitative. This process of developing targets will have to evolve over the next few years informed by the annual progress reports on performance and long term progress is dependent on increased data collection at a local level, to supplement the data collected at a national level.

Data collection on a large scale is a very expensive task and thus careful consideration must be given as to the best data to collect, as well as the best methods of collecting it. Data collection, as part of the monitoring programme, is imperative to understanding the factors influencing travel behaviour as well as being a means of monitoring the overall progress of the authorities' policies.

Thus to complement the Plan objectives a set of general area-wide and additional local targets have been developed. These targets cover not only the topics within the national targets, but a more extensive list to enable the Authorities to better understand the full effects of their policy initiatives. Thus, to date, targets have been developed to cover all modes of transport, certain trip purposes, safety and air quality, as shown in the following list:

- altering the balance of the modal share away from the car,
- promoting and increasing public transport use,
- promoting and increasing cycling use,
- promoting and increasing walking,
- reduced traffic growth,
- reduced emissions levels,
- parking supply and cost,
- accident statistics,
- effective travel plans, and
- effective school travel plans.

2.6.1 National targets

The following targets have been set at a national level. It is recognised that although these will not be met by all local areas, the Government is looking to meet them overall and expects realistic targets that will enable the overall targets to be met.

- air quality - National Air Quality Strategy, encompasses health based objectives for a range of air pollutants by 2003 or 2005,
- greenhouse gases - legally binding target to reduce emissions to 12.5% below 1990 levels by the period 2008 to 2012 and a domestic aim to reduce CO2 emissions by 20% by 2010,
- road safety - by 2010 achieve, compared to the average for 1994-98:
  - a 40% reduction in the number of people killed or seriously injured in road accidents;
  - a 50% reduction in the number of children killed or seriously injured; and
  - a 10% reduction in the slight casualty rate expressed as the number of people slightly injured per 100 million vehicle kilometres.
- cycling - from a 1996 base, double cycling by 2002 and double again by 2012, and
- European vehicle and fuel quality standards - to reduce toxic emissions and noise from new vehicles.

2.6.2 Plan area targets

The following table highlights both existing targets, eg from the Structure Plan, the authorities' Road Traffic Reduction Report and new targets specifically defined for monitoring purposes. It also relates them to the revised Plan objectives. More short term, year on year progress will be demonstrated by the performance indicators dealt with in detail at Chapter 7.

Table 5 Plan area targets

Target area	Change/ number	Year	Objectives
1 Public transport's 1991 share of motorised journeys to the Inner Traffic Area in the morning peak	+5%	2006	a, b
2 Public transport's 1991 share of motorised journeys to the Inner Traffic Area in the morning peak	+10%	2011	a, b
3 Non-motorised modes' share of journeys to work	+4%	2011	b, c, k
4 Cycling to work	+6.5%	2011	b, c, k
5 Cycling to work (for businesses adopting commuter plans)	to 20%	2011	b, c, k
6 Walking to work for short journeys (under 2 miles)	+20%	2006	b, c, k
7 Accidents (killed and seriously injured)	-33%	2010	l
8 Emissions (reduction in excedences of air quality standards)	-50%	2005	k

9 Traffic growth of cars	below 2.5%pa	2000	b
10 Car occupancy rate	+10%	2011	b
11 The number of park and ride spaces	+ 20%	2006	b, d
12 The number of bus quality partnership routes	+ 1 pa	2011	b
13 The number of stops with real time information	by 10%	2001	b
14 The number of shelters at bus stops	all main stops	2001	b, e
15 Increase bus speeds on the identified corridors	by 10%	2006	b
16 Improve the public perception of public transport by survey	measured	2011	b, d
17 Increase the cost in real terms of parking in urban areas	ongoing increases	2011	a
18 Increase the number of organisations actively implementing green transport plans	by 10%	2006	b, c, e
19 Implement a school travel plan programme to reduce car use for school trips	establish programme	ongoing	c, l

2001 Census and short term indication of progress

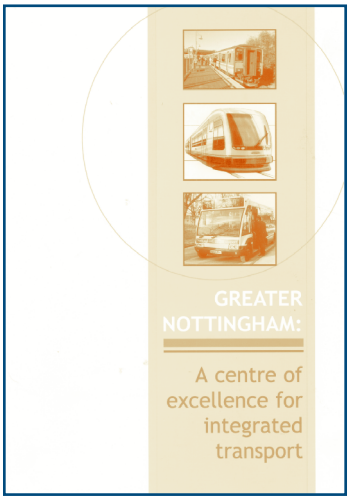
The forthcoming National Census provides an opportunity to comprehensively measure progress in respect of key indicators such as mode choice for journeys to work and car ownership. Since 1991 many changes will have taken place, driven by the already apparent increases in car use and ownership and declining public transport patronage. The Plan's objectives and targets aspire to reverse the negative aspects of these trends and the results of the census will indicate the changes of the last ten years and provide evidence of any early progress.

As immediate targets which will be quantified by the 2001 census the authorities aim to:

- maintain the percentage of people using the bus to come to work in the City Centre at 1991 levels (39%) and increase the numbers by 10%
- restrict the increase in the number of people who travel to work by car in the Plan area to 70% of the total (61% in 1991)
- double the train's share of journeys to work in the city centre to 4% (2% in 1991)
- increase the percentage of people walking or cycling to work from 14% to 15% in the Plan area as a whole.

2.6.3 Centre of Excellence targets

The Centre of Excellence proposal of the authorities sets the following additional targets:



- establish the standards and quality of public transport in Greater Nottingham through Public Transport Plans,
- complete Line One of Nottingham Express Transit, operational by 2003,
- achieve standards of accessibility to public transport as required by the Disability Discrimination Act,
- develop transport hubs in the City Centre, district centres and other strategic locations based on Government guidance on Interchange Best Practice,
- work with operators to encourage the introduction of smartcard technology and through ticketing for the majority of public transport journeys by 2001,
- develop the Greater Nottingham Mobility Centre, and
- achieve a 95% level of bus services arriving within 5 minutes of scheduled time and departing no earlier than timetabled.

2.6.4 Best Value and monitoring of targets

Monitoring mechanisms are set out in Chapter 7, together with a more detailed appraisal of schemes and measurable performance indicators.

Both authorities are committed to delivering best value services; the process of setting objectives, targets and performance indicators is an essential part of that commitment. In order to demonstrate progress towards excellence in transport provision the Plan includes a range of mechanisms to assess impacts, outputs and outcomes.

Quantification of progress towards meeting the targets and Plan objectives will be demonstrated by:

- the performance of the individual schemes and blocks implemented with Local Transport Plan resources,
- performance in relation to public transport performance indicators and targets in the authorities' Public Transport Plans/ Bus Strategies,
- the progress of both authorities in delivering appropriate national and local Best Value performance indicators,
- each authority's corporate Local Performance Plan, and

- the performance and outcome delivery of the various linked strategies and initiatives, for example, the Health Improvement Programme, the Education Action Zone and the New Deal for Communities Delivery Plan.

It is essential to recognise, however, that an almost infinite number of variable factors impact upon issues like travel choice and behaviour. New development, population change and changes in employment patterns and the City economy will all exert an influence over the travel patterns adopted by people in the Plan area. It will be important to monitor these changes at all levels from the Development Plan to the Local Transport Plan and attempt to provide context for the performance monitoring regime.

Changes in national policy emphasis and priorities will also have a part to play; if the Government's Ten Year Investment Plan includes significant investment in providing extra capacity in the local motorway and trunk road network, for example by widening the M1, the impact on patterns of car usage would be significant and require quantification.

Uncertainties also exist regarding the timing of significant demand management tools, from a local level surrounding the need to meet the government's conditions to be met before the introduction of local charging schemes to more uncertain national issues such as charging for parking provision at retail and leisure facilities, or congestion charging on the motorway and trunk road network.

The authorities will continue to seek to meet the target setting, performance prediction and monitoring demands of the Government in this changing context.

3 Problems and Opportunities

3.1 Area characteristics and trend analysis

This section looks at the existing characteristics of the Plan area and trends within the area which will continue to be monitored to anticipate future travel demands and inform future strategy development.

Unfortunately, much of the information, particularly about car-ownership and commuting patterns, is now out-of-date, as it is from the 1991 Census. Nevertheless, the conclusions drawn about trends are still valid. Information from the 2001 Census will not be available until 2003.

The latest population figure for the Plan area is 643,000 (mid 1998). The composition of this population is:

- City of Nottingham 287,000
- surrounding County suburbs 219,000
- surrounding County settlements and rural area 138,000

According to the Nottinghamshire Structure Plan, the total population is projected to rise to about 655,000 by 2011, an increase of approximately 2%.

In considering future travel requirements, changes in the age-structure and increases in the number of households are as important as population changes in estimating travel demand.

Some trip types, for instance the number of weekly shopping trips, are undertaken by households, and thus the projected change in households is a key factor. Between 1996 and 2011 the number of households is likely to increase by about 9%. The number of shopping trips can therefore be expected to increase although the impact of the internet and home deliveries may help to offset this.

The number of children (aged under 16) is expected to fall by 8% between 1996 and 2011, whilst the number of people over retirement age is expected to rise by 13%. All other things being equal, this would mean fewer journeys to schools and more requirement for public transport to meet the needs of elderly people.

The number of people of working age is projected to rise by 2% between 1996 and 2011, which could lead to a small increase in journeys to work. Such a small increase could, however, prove to be insignificant compared to possible changes in working patterns, e.g. part-time working, jobsharing and working from home, the effects of which cannot currently be reliably predicted.

Another consideration about journeys to work is the distance travelled. Generally distances travelled to work are increasing. For instance, 47% of people working in Nottingham City in 1991 also lived there, compared with 53% in 1981. Reducing the need to travel will be a key task to reverse the impact of this trend.

The proportions travelling to work by car also rose between 1981 and 1991. In 1991, 61% of people living in the Plan area travelled to work by car, compared with 48% in 1981. Conversely, the percentage travelling by bus fell from 26% in 1981 to 17% in 1991.

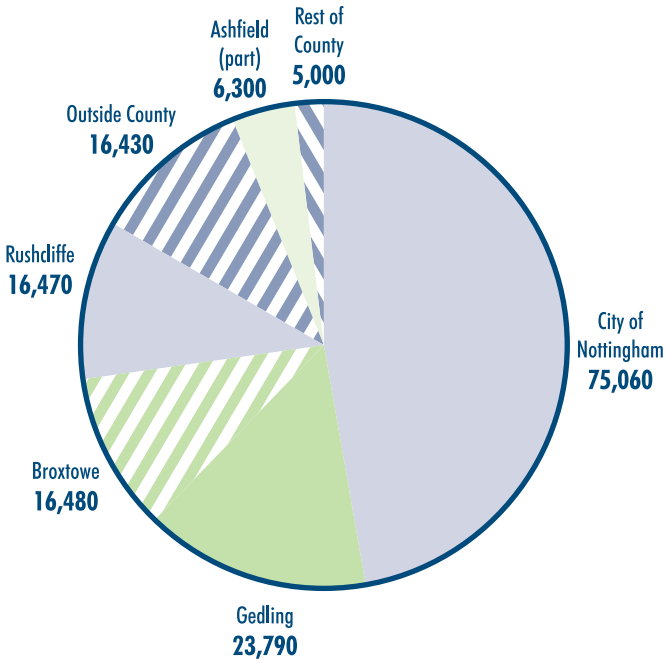


Figure 4

City of Nottingham

Origin of workers

Total workers 159,530

Source: Census, 1991

Figure 4 shows the origins of workers employed within the City of Nottingham demonstrating the dependence of the surrounding districts on the City for employment and the influence of the City Centre as a journey attractor.

Table 6 People working in Greater Nottingham mode of travel to work

Mode	Working in Greater Nottingham (%)	Working in City Centre (%)
Bus	17	39
Train	1	2
Car	61	50
M/cycle	2	1
P/cycle	3	2
Foot	11	5
Other	5	2

Source : Census, 1991

Table 6 compares mode of travel to work for people working in Greater Nottingham as a whole and with those working in the City Centre. It shows that almost twice as many people travel to work by public transport to the City Centre compared to Greater Nottingham as a whole.

The means of travel to work also varies between districts. For example 51% of people living in Nottingham went to work by car and 25% by bus in 1991, compared with 69% by car and 11% by bus in Rushcliffe.

Considerably more men use a car to travel to work than women. In 1991, 70% of men used a car and 11% used a bus, compared with 49% and 25% of women.

21% of households in the Plan area had more than one car in 1991, compared with 24% nationally. The percentage had increased from 13% in 1981.

There is a significant difference in car ownership between districts. 79% of households in Rushcliffe had a car in 1991, compared with 51% in Nottingham. The range in wards is much greater. Ravenshead (Gedling) is the ward with the greatest car ownership (93%) and Manvers (Nottingham) the lowest (30%).

Figure 5 shows the proportion of households without access to a car in 1991 by local authority ward. 63% of households living in the Plan area had a car, compared with 57% in 1981. This percentage is lower than the figure for England, which is 68%. Between 1991 and 1998 the national proportion of households with a car rose to 72%. It is likely that a similar increase occurred locally, with the National Travel Survey showing a 20% reduction in no car owning households since 1991 in the East Midlands.

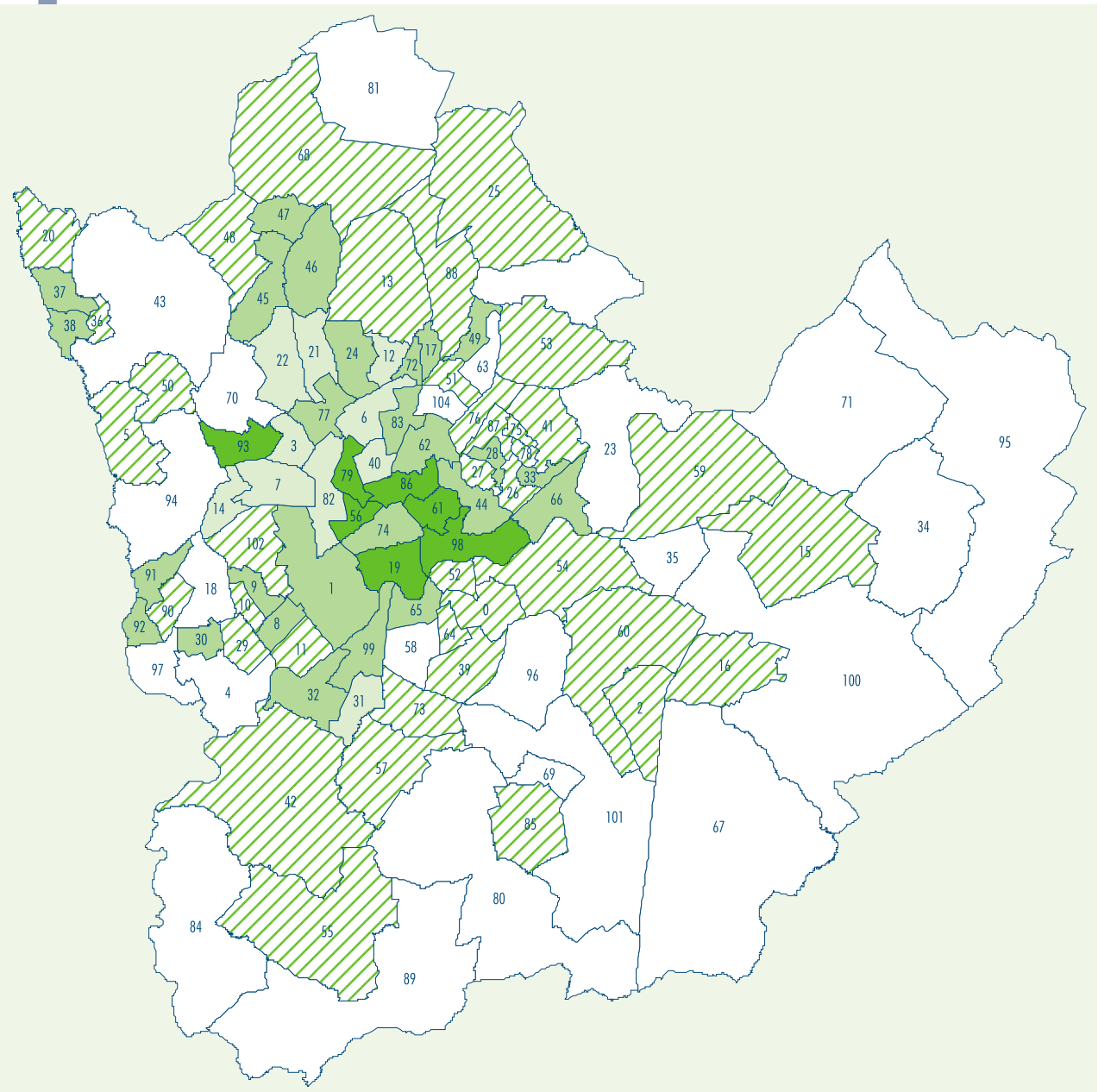
Figure 6 shows the proportion of pensioner households without a car in each ward in 1991 - only 13% of women over pensionable age living alone in the Plan area had a car. Figure 7 shows the proportion of lone parent households without a car in each ward in 1991 - only 27% of lone parent households in the Plan area had a car in 1991. At the other end of the scale 84% of couples (with or without children) in the Plan area did have a car in 1991.

Car ownership amongst some groups of the population can be expected to increase as people who are used to having a car grow older. The most significant effect of this is likely to be an increasing proportion of elderly women having cars or being able to drive the family car. Nationally, in 1996, 74% of women aged 40 to 49 held a driving licence compared with only 41% of those aged 60 to 69 (as against 82% of men aged 60 to 69). Because of this, the number of people with a driving licence in the Plan area could rise by some 12% between 1996 and 2011, even if there is no increase in the proportion of people with licences in younger age-groups. This could clearly have a significant effect on car ownership and usage.

Figure 8 shows the Index of Local Deprivation (DETR, 1998) for each ward in the Plan area. The Index of Local Deprivation is measured by scoring the following indicators for each ward compared with the national average using data from the 1991 census;

- unemployed people as a percentage of the economically active population aged 16 or over,
- the percentage of all children who are in low earning households, which are defined as those with no earner or with a lone parent who is in part time employment,
- the percentage of households living at more than one person per room,
- the percentage of the population living in households lacking or sharing a bath/shower and/or inside wc or living in non-permanent accommodation (eg mobile homes),
- the percentage of households without a car,
- seventeen year olds no longer in full time education.

A positive score is worse than average and a negative score is better than average. An overall score is produced by adding together the positive scores for each ward. A higher score indicates a greater level of deprivation.



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Source: Census 1991

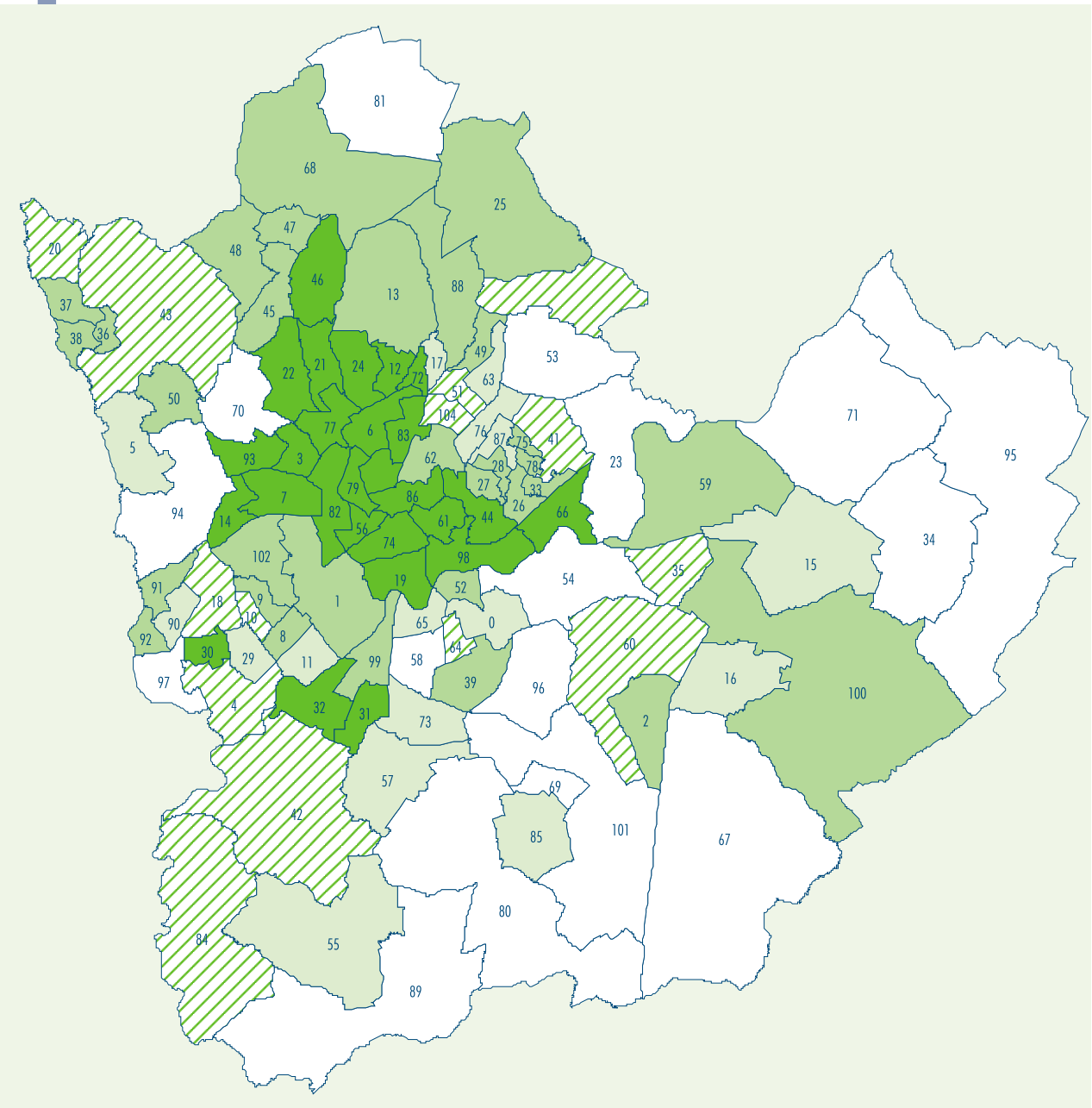
Ward listing included at the end of this section.

Range (%)
- 58 - 71
- 45 - 58
- 32 - 45
- 19 - 32
- 6 - 19

N

Figure 5

% households without access to a car in 1991



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Source: Census 1991

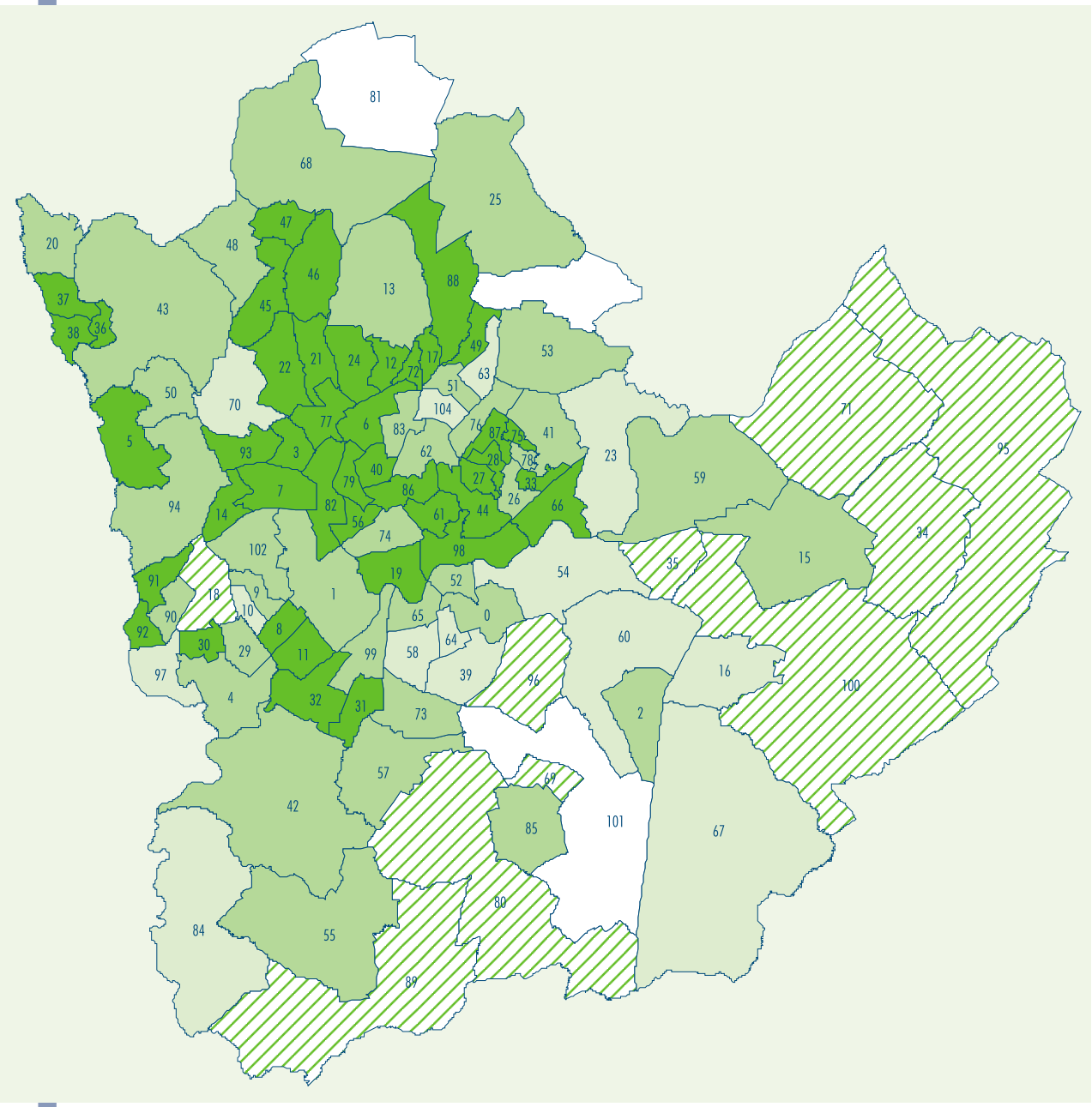
Ward listing included at the end of this section.

Range (%)
- 72 - 90
- 54 - 72
- 36 - 54
- 18 - 36
- 0 - 18

N

Figure 6

% pensioner households without access to a car in 1991



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Source: Census 1991

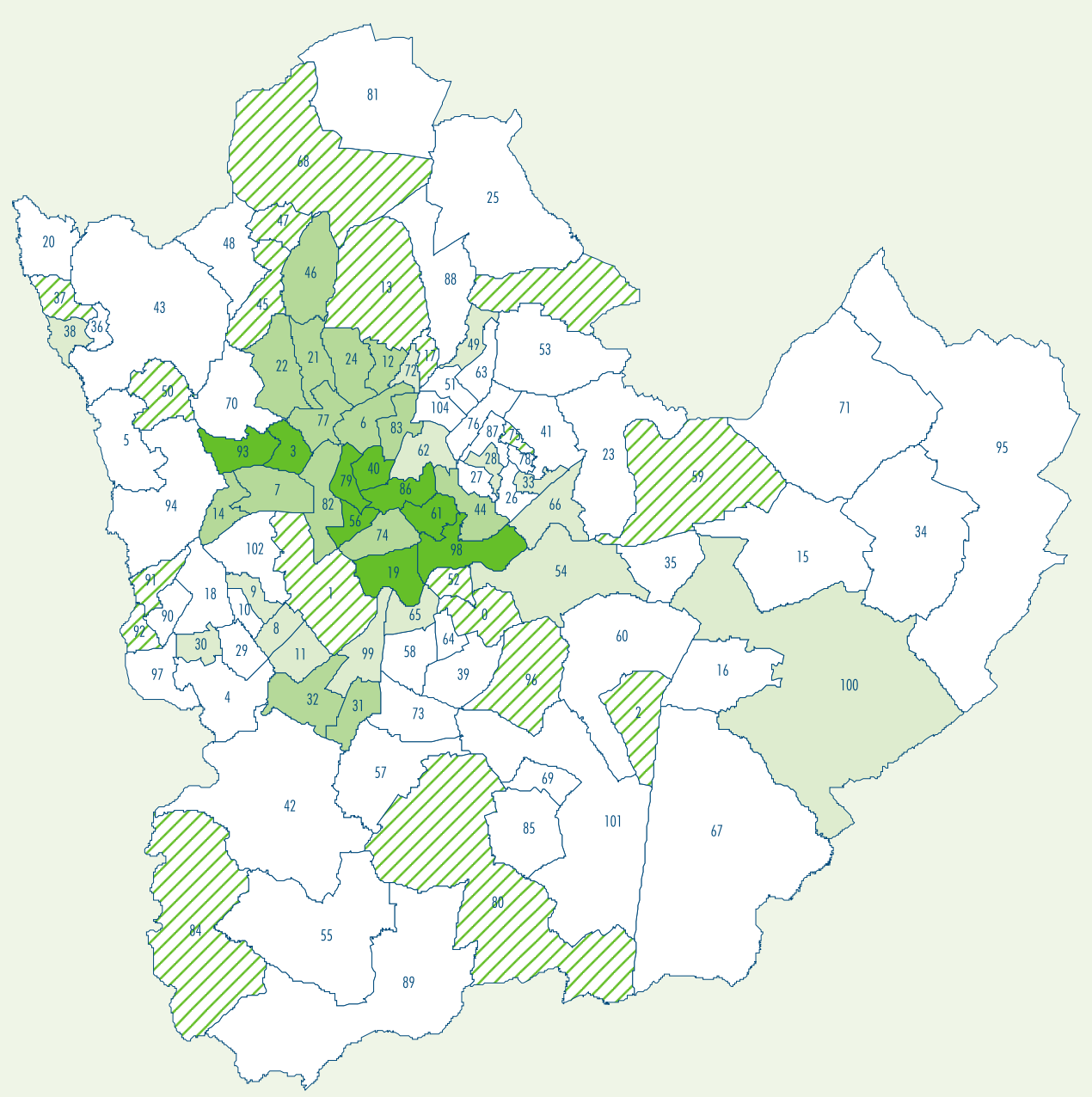
Ward listing included at the end of this section.

Range (%)
- 85 - 97
- 73 - 85
- 62 - 73
- 50 - 62
- 38 - 50

N

Figure 7

% lone parents without access to a car in 1991



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Source: DETR

Ward listing included at the end of this section.

Index
- 9.9 - 15.0
- 5.5 - 9.9
- 2.5 - 5.5
- 0.7 - 2.5
- 0.0 - 0.7

N

Figure 8

Index of local deprivation

Ward Listing

0 Abbey (Rushcliffe)
1 Abbey (City)
2 Ash Lea
3 Aspley
4 Attenborough
5 Awsworth and Cossall
6 Basford
7 Beechdale
8 Beeston Central
9 Beeston North-East
10 Beeston North-West
11 Beeston Rylands
12 Bestwood Park
13 Bestwood Park
14 Bilborough
15 Bingham
16 Bishop
17 Bonington
18 Bramcote
19 Bridge
20 Brinsley
21 Bulwell East
22 Bulwell West
23 Burton Joyce and Stoke Bardolph
24 Byron
25 Calverton
26 Carlton
27 Carlton Hill
28 Cavendish
29 Chilwell East
30 Chilwell West
31 Clifton East
32 Clifton West
33 Conway
34 Cranmer
35 Dayncourt
36 Eastwood East
37 Eastwood North
38 Eastwood South
39 Edwalton
40 Forest
41 Gedling
42 Gotham
43 Greasley
44 Greenwood
45 Hucknall Central
46 Hucknall East
47 Hucknall North
48 Hucknall West
49 Killisick
50 Kimberley
51 Kingswell
52 Lady Bay
53 Lambley
54 Lamcote
55 Leake
56 Lenton
57 Leys
58 Lutterell
59 Malkin
60 Manor
61 Manvers
62 Mapperley
63 Mapperley Plains
64 Melton
65 Musters
66 Netherfield
67 Nevile
68 Newstead
69 North Keyworth
70 Nuthall
71 Oak
72 Oxclose
73 Packham
74 Park
75 Phoenix
76 Porchester
77 Portland
78 Priory
79 Radford
80 Rancliffe
81 Ravenshead
82 Robin Hood
83 Sherwood
84 Soar Valley
85 South Keyworth
86 St Anne's
87 St James
88 St Mary's
89 Stanford
90 Stapleford East
91 Stapleford North
92 Stapleford West
93 Strelley
94 Strelley and Trowell
95 Thoroton
96 Tollerton
97 Toton
98 Trent
99 Wilford
100 Wiverton
101 Wolds
102 Wollaton
103 Woodborough
104 Woodthorpe

3.2 Existing travel patterns, service provision and problems

3.2.1 Overview of existing situation

Like most of the UK, significant growth in the use of the private car has taken place in Greater Nottingham over the past decade. A high reliance on the bus network, however, still remains. The Plan area in general and the conurbation in particular has a comprehensive network of bus services. The local rail network is comparatively underdeveloped. Significant levels of walking and cycling in parts of the area are also evident.

3.2.2 Highway Network

Greater Nottingham's road network comprises a small section of the M1 motorway, trunk roads and local roads. The motorway and trunk roads are the responsibility of the DETR via the Highways Agency. Local roads are the responsibility of the local authorities. The City Council is the highway authority within its boundary. The County Council is the highway authority for the remainder of the Plan area.

Motorways, trunk roads, primary routes and non-primary routes of more than local importance make up the Strategic Road Network as shown in figure 9. The Principal Road Network comprises all non-trunk A roads.

Greater Nottingham has a traditional road pattern comprising a network of radial routes leading to an inner ring road around the City Centre. Orbital movements are catered for by a partial Ring Road around the south, west and north of the conurbation. The M1 motorway runs north-south along the western edge of the Plan area with connections available via the A453(T) to Junction 24, A52(T) to Junction 25 and the A610 to Junction 26. The A52(E) is the main route to the east and A1 south. The A614(T) provides a link to the A1 north.

The key problems identified through the consultation processes:

- 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 M1, and
- community groups are concerned about the speed and volume of through traffic in residential areas - people should come 'first' in residential areas.



- Motorway
- Trunk Road Primary Route
- Non Core Roads to be Detrunked
- City/County Road Primary Route
- City/County Road Non-Primary Route of more than local importance

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N

Figure 9

Greater Nottingham strategic road network

3.2.3 Bus

The Plan area has a substantial network of local bus services. Within the built up area an extensive network is provided by Nottingham City Transport, the largest bus operator within the Plan area. This is predominantly a commercial operation and there are very few tendered services within the built up area. There exists a core network of radial services, provided by full-size vehicles, which operate at least every 15 minutes during the daytime. This is reinforced by a network of midibus services, which penetrate residential areas and operate on a broadly half-hourly basis.

The South Notts and Pathfinder operations of Nottingham City Transport provide services into the rural hinterland to the south and east of the City.

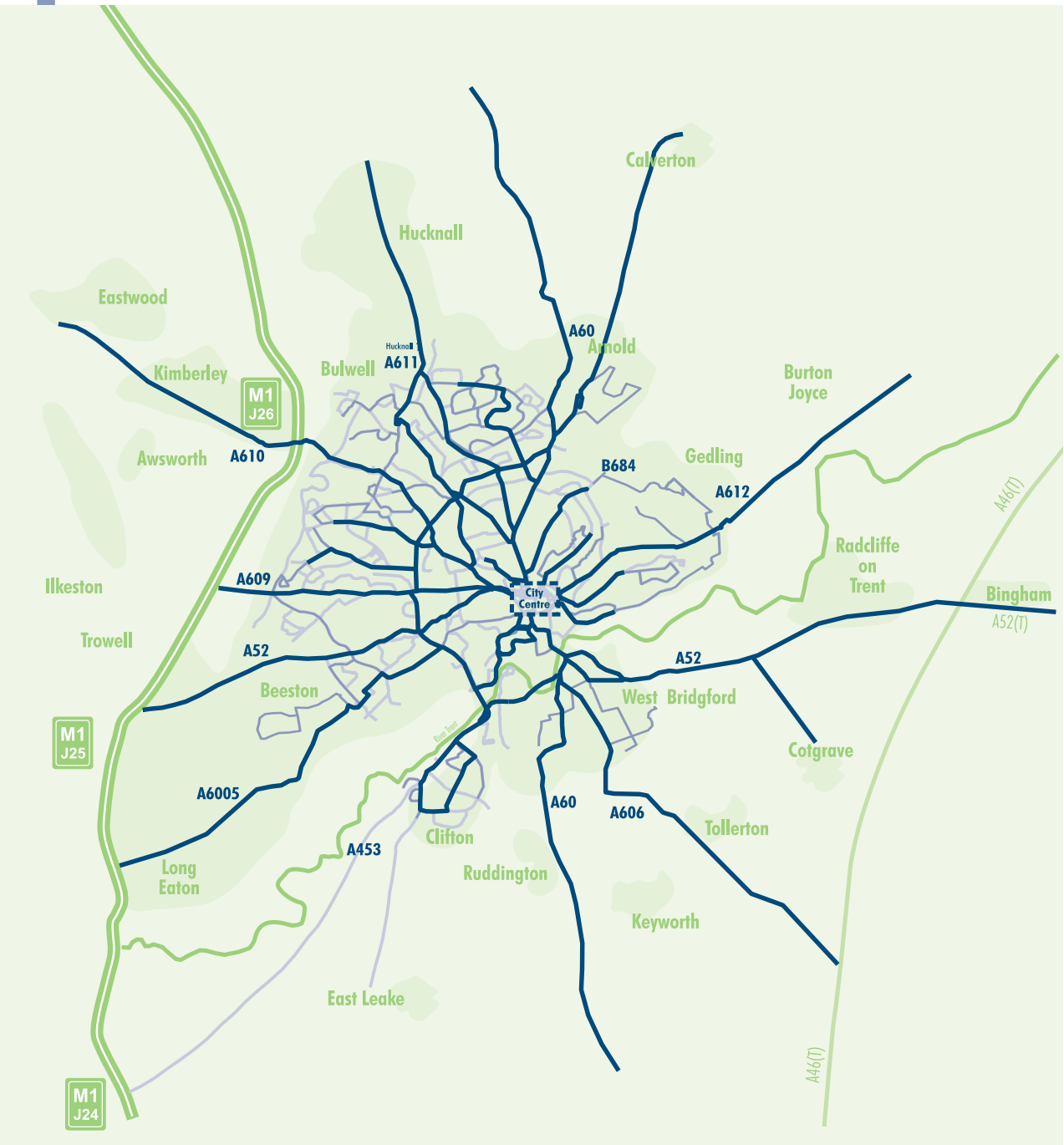
Other outer suburban and inter-urban services are provided by Trent and Barton Buses along with a handful of other bus operators. These services include branded, high frequency operations providing links between surrounding free-standing communities and the City Centre and district centres as well as less regular longer distance services serving smaller settlements and other destinations.

Sherwood Forester is a leisure bus network providing links and tickets to a whole range of attractions throughout Nottinghamshire. It is a partnership initiative with bus and leisure attraction operators to encourage access by public transport. It involves the promotion of the regular bus network along with financial support for additional routes on Sundays and Bank Holidays.

Formal interchanges between services and other modes are currently available within the conurbation at Victoria Bus Station, Broad Marsh Bus Station and Nottingham Railway Station. Other bus stations are located at Bulwell and Beeston. District centres also provide transfer opportunities. The City Centre with the streets surrounding the Old Market Square currently functions as the main hub of most urban bus services.

The key problems identified through the consultation processes 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 more targeted to meet their needs,
- people living in outlying parts of the urban area and rural settlements want more regular services particularly during the evening and at weekends, and
- disabled people want easier access to bus services and information presented in appropriate formats.



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Core routes
Other important routes
Other bus routes

N

Figure 10

Greater Nottingham Core bus route network

3.2.4 Rail

Passenger rail services are currently provided by two rail operators within the Greater Nottingham area.

Former InterCity services serving Nottingham were franchised to Midland Mainline Limited, part of the National Express Group, in 1996, running until 2006.

From May 1999 Midland Mainline doubled the number of services using Nottingham. The interworking of Turbostar stopping services with High Speed Trains has both increased the number of services to intermediate stations and allowed for a reduction in journey times for fast trains to and from London. Midland Mainline carried 7.8m passengers in 1999, 1.2m of which came through Nottingham.

Former Regional Railways services through Nottingham were franchised to Central Trains Limited, also part of the National Express Group, a year later in 1997.

Central Trains offer regular services to destinations throughout the Midlands, to East Anglia, to the North West and to Newark to link with East Coast Mainline and Eurostar. Central Trains have also recently improved services from Nottingham by increasing the frequency of trains to Birmingham. 15% of Central Trains' services go through Nottingham station.

The Robin Hood Line between Nottingham and Worksop was completed in May 1998 and was not included as part of the franchise. This service is sponsored by Nottinghamshire County Council, Nottingham City Council and Derbyshire County Council and was supported during 1999/00 by a 25% contribution from the Shadow Strategic Rail Authority.

A regular hourly service is provided Monday to Saturday on the line with additional services running at peak times, and attracts over 3,000 passengers per day.

Overall the level of service offered to local destinations within the Plan area is low compared to other conurbations of a similar size; Central Trains aim to increase rail commuting from 2% to 4% by 2005.

The key problems identified through the consultation processes are:

- rail users within the area (the views of predominantly Robin Hood Line users) want better reliability of train services, higher frequencies on weekdays, especially local services, and introduction of a Sunday service,
- cycle and motor cycle groups want more secure parking facilities at stations and better provision for pedal cycles on trains,
- train operators are concerned about accessibility to stations,
- residents living in areas poorly served by rail want new stations and rail services introduced,
- local business is concerned about access to inter-urban and European services, and
- disabled people want better accessibility to rail services and information.

3.2.5 Walking

Walking continues to be an important mode of travel particularly for short journeys to work, school, shops and other local community facilities.

Pedestrian activity levels are high within Nottingham City Centre and surrounding district centres. A large scale pedestrianisation scheme in the City Centre was introduced in 1995 significantly increasing the number of paved streets. Pedestrianisation schemes have also been introduced in Arnold, Beeston and Bulwell.

In other centres within the Plan area a large number of pedestrian environmental schemes have been introduced to achieve a better balance between pedestrian and vehicle activity.

The key problems identified through the consultation processes:

- pedestrians want high quality direct routes, introduction of more traffic free zones, safe crossing points and more time to cross at traffic signals.
- they are also concerned about footway maintenance, personal safety and conflicts with cyclists.

3.2.6 Cycling

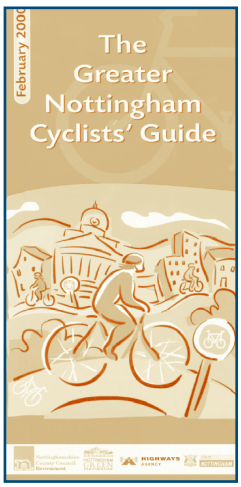
The Greater Nottingham Cycle Route Network is one of the most extensive in Britain with over 100km of cycle routes in place. The Millennium National Cycle Route passes through the Plan area and is due to be completed during 2000.

The provision of cycling facilities however remains distorted with most of the cycle route network concentrated in the flatter south and west with comparatively little development in the north and east.

Cycle parking provision is generally concentrated in the City and district centres and at other large travel generators. Secure cycle lockers have been provided at a number of City Centre car parks. As part of travel plans a number of large employers have considerably improved cycle parking and changing facilities available for staff.

The key problems identified through the consultation processes:

- cycle groups want better dedicated cycle routes, cycle parking facilities and public transport integration facilities.
- They are concerned about conflicts with traffic, pedestrians and maintenance issues, and
- enforcement of local speed limits.



3.2.7 Powered two-wheelers

Specific facilities have not been widely provided for powered two-wheelers in Greater Nottingham.

The key problems identified through the consultation processes:

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

3.2.8 Air travel

Located just outside the Plan area, East Midlands Airport is the most convenient airport for Greater Nottingham. The Airport is operated by the National Express Group. Domestic and international charter and scheduled flights are available to an increasing range of leisure and business destinations. The Airport has seen significant levels of passenger growth in recent years. However, large numbers of air travellers still travel longer distances to Birmingham, Manchester and the London airports due to the greater availability of air services.

The key problems identified through the consultation processes:

- airport users want better public transport links, and
- the airport operator is also concerned about surface access arrangements.

3.2.9 Freight

Wherever possible freight traffic is directed to use the strategic and principal road networks. Environmental weight restrictions are applied to discourage lorries from passing through residential areas. On pedestrianised streets in the City Centre and some surrounding district centres access restrictions are applied during the day to minimise conflicts with large numbers of pedestrians.

With regards to rail freight some movement of bulk goods such as coal between collieries and power stations still takes place by rail within the Plan area but volumes are small compared to those carried in the past. The nearest rail freight terminal for services to Europe is Daventry, although future development of the Toton site within the Plan area is currently under review.

East Midlands Airport has developed into one of the most important cargo and mail gateways in the United Kingdom and as such attracts large numbers of freight traffic both day and night.

Water transport currently only plays a very small part in the movement of all goods to and within Greater Nottingham. The River Trent is a commercial waterway downstream from Nottingham and provides a link to Gainsborough and the Humber ports as well as commercial waterways in Yorkshire, and 250,000 tonnes of goods were transported along this waterway in 1999.

The key problems identified through consultation processes:

- Freight operators are concerned about congestion of the road network access restrictions to urban centres and introduction of weight restrictions to under strength bridges. They want better enforcement of parking restrictions and of designated on-street loading areas and would like to be given more priority in traffic management,
- Rail freight operators want the implementation of local rail freight facilities,
- East Midlands Airport is concerned about the accessibility of the airport, and
- British Waterways are primarily concerned about access to wharf facilities.

3.3 Other transport related problems

Other problems identified are:

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

Pollution
Monitoring of air quality standards indicates that parts of the Plan area experience air quality problems. A major source of these problems is known to be exhaust emissions and problem areas are generally concentrated on the busiest traffic routes.

Poor health
Increased reliance on the private car and less walking and cycling is leading to significant health problems due to inadequate exercise being taken. Poor air quality is also known to be leading to increasing respiratory problems particularly for the young and the elderly.

Social exclusion
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 disabled people
Accessibility for disabled people must be significantly improved to the level that is generally enjoyed by others in society.

Rural isolation
Outlying villages and communities can also suffer from restricted accessibility to services especially for people without access to a private car.

Land available for development that is easily accessible by public transport
There is currently a high development pressure within the Plan area. There is however a shortage of development sites which can easily be integrated with the existing public transport network.

3.4 SWOT analysis

STRENGTHS

Strong economy based around a vibrant City Centre

One of the fastest growing cities in the UK in terms of job creation

Central location in terms of UK transport infrastructure

Local government structure well suited to integration of land use and transport planning

International reputation for transport innovation, i.e .travel planning and school travel plans

Stable public transport network

Good base of cycling and walking activity

WEAKNESSES

Pockets of deprivation within inner city and on some outer estates

Isolation of some rural communities

Lack of PTE powers/funding for co-ordination of public transport

Road network susceptible to severe congestion if disruption occurs at critical points

Perceived poor links to the motorway network, in particular the M1

Under-developed local rail network and capacity constraints associated with Nottingham Station

Backlog of maintenance problems

OPPORTUNITIES

New revenue streams particularly Workplace Parking Levy, can significantly improve the quality of the local transport network

Nottingham Express Transit will enable a step change in integrated transport provision

The boom in development activity presents new opportunities to introduce integrated transport measures

Good working relationships with other East Midlands authorities will enable a strategic approach to strategic issues

Build on established partnerships with operators including bus, rail and freight operators

Local business participating in achieving transport change

Area committees and Local Area Fora are engaging communities in Area Transport Plan and Mobility Management Area work

THREATS

Danger of moving forward without sufficient public support

Not being able to maintain momentum of new initiatives

Capacity of delivery mechanisms

Current legislative constraints may hold back progress

Need for revenue streams to keep pace with capital investment

4 Strategy

4.1 Strategy overview

4.1.1 Review of existing strategy, analysis and testing of alternative scenarios

The former Greater Nottingham Package and the Provisional Local Transport Plan were founded on a well-established strategy which secured Government support for the past 6 years. The three themes identified were travel demand management, infrastructure and revenue support and travel education as set out in table G5.2 of the 1999/2000 Transport Policies and Programme submission.

The authorities' approach to strategy formulation was based upon an analysis of the various components of the former package, assessing their success in achieving measurable outputs, making progress towards achieving the objectives, and a view of how these measures are consistent with the Government's new transportation aims as set out in the White Paper.

In addition, various seminars and participation exercises, as detailed further in chapter 5, were undertaken to seek views on the issues and proposals which combine to make up the updated strategy.

Responses to these exercises confirmed that an incremental, balanced approach, introducing restraint-based measures coupled with investment in making the alternatives to the car more attractive, was the best means of securing public and business support whilst making progress towards achieving the objectives. This 'menu-based' approach also allowed the authorities to tailor implementation of the proposals to local circumstances and needs. The general public endorsement for the authorities' transportation policies provides a good basis upon which to build the new Local Transport Plan strategy although concern about aspects of the Plan such as the City's proposals for workplace parking levy will require further detailed consultation and justification as proposals emerge.

The Plan strategy is set out in graphic form in figure 11. This was developed in the Provisional Plan to respond to the White Paper by including a major new strand of integration of land use and transport planning, and seeking to focus the implementation of the various strategy components on the overall aim of achieving and maintaining sustainable communities. Greater emphasis was also placed upon partnership and participation and upon enhancing interchange and integration across all modes.

The authorities are developing a range of topic-based strategies, Area Transport Plans and implementation mechanisms to ensure that the delivery of the strategy is focused and targeted to appropriate areas, problems or issues. These include for example the County Council's Mobility Management Action Areas, the City Council's Walking & Cycling Strategy and Area Transport Plan programme and both authorities' Travel to School Strategies. The Nottinghamshire Freight Quality Partnership has participated in the preparation of the Plan's Sustainable Distribution Strategy.

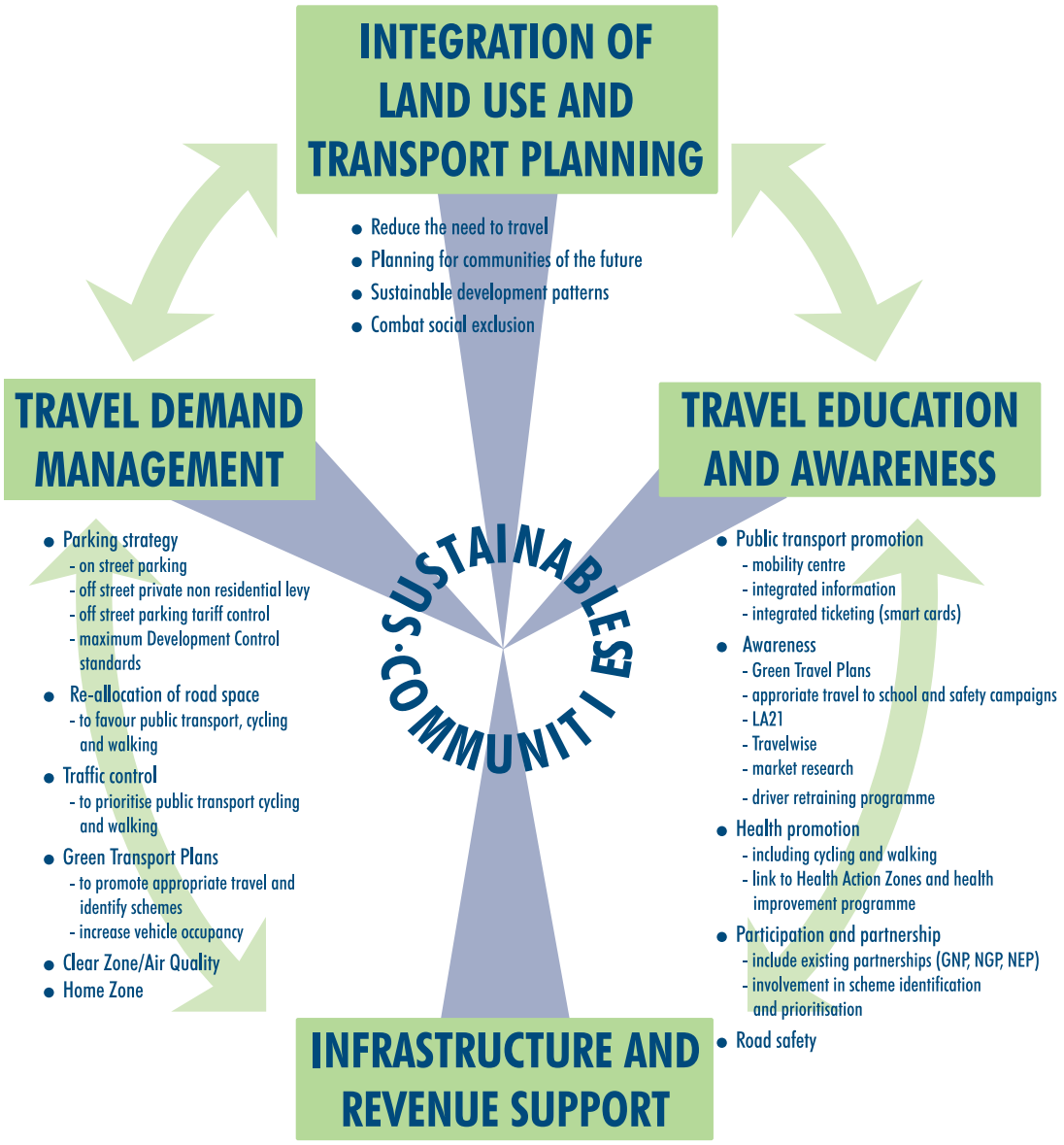


Figure 11

Greater Nottingham Local Transport Strategy

The Provisional Plan was very well received by the Government in terms of the settlement generated. This confirmed the overall direction and content of the Plan to be consistent with their requirements. The production of this Full Plan has required an assessment to be made of the changing context and new opportunities which have recently arisen to maintain this momentum.

Changing context, new opportunities and new priorities

Since the production of the Provisional Plan, a number of key issues have had to be taken into account in the development of the strategy for the Full Plan. In particular, two new major integrated public transport scheme proposals have emerged through this process which are further detailed in the Plan programme and supporting justifications, as well as the even stronger emphasis and commitment to safety issues.

Recent events include:

- contract close and commitment to Line One of Nottingham Express Transit that has highlighted the need for a supporting City Centre integrated public transport scheme to implement supporting bus, pedestrian and cycle priority improvements (major scheme priority one),
- establishment of the Nottingham Transport Partnership to inform the development of the City Council's workplace parking levy proposals that has highlighted the importance of the NET extension and the need for an improved orbital public transport route to serve the major employment sites around the outer ring road (major scheme priority two),
- membership and emerging guidance from the Government's Charging Development Partnership and the need to develop up front improvements prior to the introduction of the Levy,
- publication of the Government's daughter documents on road safety "Tomorrow's Roads - Safer for Everyone" and "New Directions in Speed Management - A Review of Policy",
- the need to provide a more quantified analysis to meet the requirements of emerging Local Transport Plan guidance,
- commencement of two multi-modal studies in the region and timetable for de-trunking,
- urban capacity studies and the work on preparing and publishing the various Local Plan Reviews in the Plan area,
- the City Centre review,
- the district centre review for Hucknall.

Analytical assessment to inform strategy development

Development of the strategy has been informed by a range of factors:

- robust justifications and scenario testing associated with NET Line One,
- problem analysis and opportunity assessment as set out in chapter 3 of the Plan,
- before and after scheme impact assessments for schemes such as the Bus Quality Partnership programme and emerging performance indicators, and
- detailed perception studies to determine effectiveness and importance attached to the various schemes and measures.

It is recognised, however, that to provide more sensitive and informed justification of the complex inter-reaction between mode choice, restraint policies and infrastructure provision and, more specifically, to support the development of the workplace parking levy and the two supporting major schemes, further work needs to be done. It is proposed to undertake the following:

- development of an integrated multi-modal transport model to inform issues such as the impacts of levy tariffs, the potential for modal shift, capacity constraint and reallocation associated with the two major schemes and the impact of potential development proposals,
- participation in and data sharing with the multi-modal studies currently being carried out by the Government Office, and
- consultations, urban capacity assessment and development site identification via the forthcoming City Centre and Local Plan Reviews.

Raising the resources

Commitment to Line One of NET is a landmark stage in the development of an integrated transport network of quality public transport alternatives for the plan area. This has established a new momentum and commitment to develop plans for future lines of NET, integrated within the plan strategy for comprehensive Bus Quality Partnership corridors and a network of park and ride sites to offer premier quality alternatives to the car. These proposals are supported by integrated demand management and awareness raising policies detailed further below.

The potential for making progress to deliver this strategy depends upon the ability of the authorities to raise money locally to supplement the resources made available nationally.

The authorities are exploring various ways of securing extra revenue. These include a formalised approach to securing developer contributions towards sustainable transport alternatives, on-street parking charges in the City Centre and, in the City Council part of the Plan area, pursuing a workplace parking levy pilot project. In support of this latter point, the City Council will submit proposals for up front capital and revenue support which are dealt with later in this section of the Plan.

Alternative scenarios

The strategy allows for a responsive 'tool kit' of measures to be implemented to varying degrees. To a certain extent this obviates the need for extensive alternative scenario development and testing, and the recent commitment to NET Line One has cemented the direction of the Plan strategy, consistent with the authorities' commitment to becoming a Centre of Excellence for Integrated Transport.

Major shifts in the direction of the strategy, for instance, maximising capacity for the private car, have been discounted as unsustainable in economic, environmental and social terms, and throughout the participation processes there has not been a serious challenge or feasible alternative presented to the overall strategy. The following issues of policy and priority have however been raised and are dealt with in the relevant sections of this chapter:

- some support for congestion charging rather than workplace parking levy,
- resistance to the principle of bus lanes by some car drivers and some retailers,
- need for road improvements, particularly to the M1 and various suggestions for the A453 which will be tested via the multi-modal studies,
- trolley buses or other mass transit options rather than trams, and
- resistance to road traffic reduction proposals such as the Clear Zone and detailed traffic management priority issues such as HGV's, taxis and powered two wheelers in bus lanes.

The major scheme appraisal summary tables, the integrated multi-modal transport model and further scheme justifications will take the testing of alternatives further.

The linkages between the objectives and the strategy's specific measures are demonstrated by indicating which objectives each measure is expected to contribute to in Chapter 6. The overall linkages are summarised in figure 12.

Cross-boundary issues

The preparation of a joint plan underlines the commitment of the authorities to cross-boundary working. Following a detailed assessment of transport patterns and networks, the Local Transport Plans of Derbyshire and North Nottinghamshire have been identified as having cross-boundary significance. Dialogue with neighbouring authorities has been long established and partnership working pursued where appropriate, for instance, in development of the Robin Hood Line and seeking the provision of Ilkeston Station as an early element of the South Nottinghamshire Rail Network (SNRN) in this year's submission.

- Joint working on Regional Planning Guidance, the Regional Transport Strategy and other studies or initiatives will maintain continuity and consistency across the region.
- The Three Cities in the region have established joint working arrangements to develop policies, proposals and initiatives of mutual benefit together.
- The shire Counties in the Midlands are actively working together, sharing information, ideas and best practice as part of the Midlands Best Value Working Group

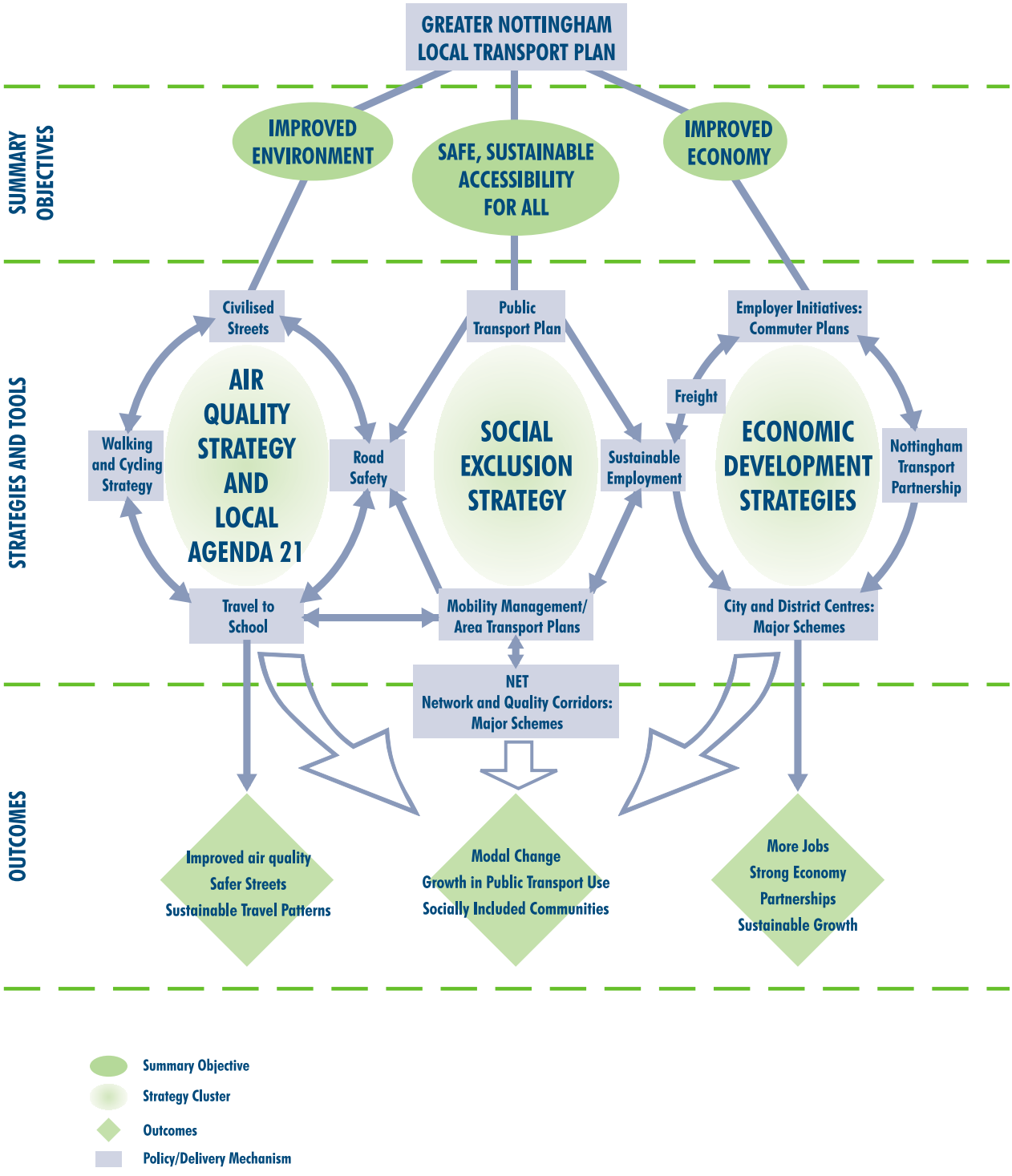


Figure 12

Objectives, Strategies and Outcomes

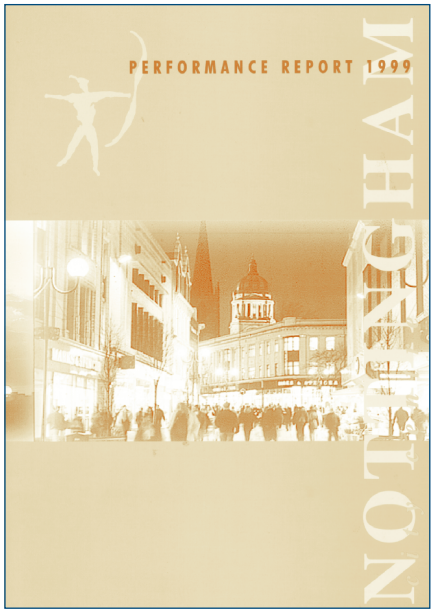
Major investment themes

The rest of this chapter details the various integrated topic-based strategies and policies of the authorities. An integrated programme of capital investment has been developed around five main core themes to deliver these strategies:

1. Integrated Transport Centre of Excellence: In April 1999 the authorities and a number of key partners launched a bid to establish Greater Nottingham as a recognised Centre of Excellence for Integrated Transport. This bid, which has been updated and extended to form an important part of this Plan is detailed in Appendix C, which outlines an integrated approach based around four main components: quality public transport corridors; interchange; information & marketing; and land use/commuter planning. These themes are included within the Plan strategy and will be detailed and developed further in following sections,
2. City and district centres: these are best placed to be served by public transport, cycling and walking networks, and the land-use and transport planning policies of the authorities are focused on maintaining and enhancing these centres by promoting, developing and improving their viability. Investing in pedestrian, bus and cycle links to improve their accessibility will promote their use and reduce the need to travel by less sustainable modes of transport,
3. Civilised Streets: safe, attractive and well maintained streets for people will reduce traffic dominance and danger, re-casting priorities to encourage safe walking and cycling, particularly for travel to school and in residential areas,
4. Travel demand management: raising awareness and promotion of the alternatives to the car, linked to actions on controlling parking provision and improving air quality, will be a major theme to encourage people to make use of more sustainable transport modes, and
5. Management and maintenance of the network: protecting the integrity of existing transport infrastructure is a key task with the emphasis on prolonging its life and improving facilities, especially for pedestrians, cyclists and public transport, as opposed to extending the highway network, is now the priority.

Importance of the City Centre and district centres

The role of the City Centre and surrounding district centres is central to the Plan. Existing transport networks have evolved to serve these centres and enhancing their accessibility, particularly by modes of transport other than the car, and the need to maintain and enhance their vitality are key priorities. This approach underpins the authorities' commitment to promoting sustainable development and communities.



4.1.2 City Centre integrated planning and transport strategy

City Centre Review

Building on the success of the City Centre Review 1997 and City 2000, the City Council is preparing a cross-cutting review of the City Centre. The review will take forward innovative ideas and policies for the City Centre to 2010 and beyond, and will focus on protecting and enhancing the cultural, economic, social and physical well being of the city centre. It will encompass existing transport policies and proposals taken forward from the Provisional Plan and also set the scene for the development of new major investment proposals.

In this way the review reflects the aims, objectives and helps to deliver the targets in the Local Transport Plan. The main focus for the review is to create an attractive, sustainable and accessible City. Priorities will include:

- maintaining and enhancing the competitiveness of the City by retaining and attracting commercial investors - resisting loss of commercial uses to out of/edge of centre business parks,
- ensuring and facilitating the sustainable expansion of the City, east, west and south,
- encouraging the growth of residential development and a range of housing types, and
- facilitating developments and supporting infrastructure to increase the connectivity and cohesiveness of the City Centre.

The following themes will be developed:

Table 7 City Centre review themes

Strand	Themes	Example Projects
Location of Choice		
This theme will promote retention of employment and attraction of new inward investors through provision of high quality, accessible sites.	Maintain sustainable employment growth	Three development areas - East, West and South, building on the model and success of the Southside Investment Plan which is part funded by the Local Transport Plan.
It promotes an image of Nottingham with high quality streets and environment.	Keep retail position strong	Mixed uses
Focus will be placed on an urban capacity study to promote reuse of sites.	Allow for housing growth	High densities with exemplary projects Affordable housing

Strand	Themes	Example Projects
Clean and Green		
This is being developed around maintaining a sustainable and accessible city. Key Local Transport Plan projects such as the Clear Zone and NET integration with bus networks and facilities will form much of the action plan together with accessible travel and transport information.	Tram integration	Transport hubs
	Bus priority and interchange	Bus priority on inner ring road
	Clear Zone	Access restrictions and emission standards
	Intelligent city	Electronic information displays
	Management of parking	Dynamic parking signs
	Walking Strategy	Getting rid of subways
People come first		
This strand will be developed through an Urban Design Strategy as the City Centre Walking Strategy breaking down the barriers of the inner ring and other associated pedestrian and cycle priority.	Urban Design Strategy	City of Squares
	Walking Strategy	Pedestrian links Old Market Square
	Jobs for local people	Job deals, training, MOST mobility management project
	Providing for different groups	Consultation Targeted promotions
Cutting Edge		
This will comprise developing innovative projects and initiatives including a cultural and public art strategy.	Education and training	City of Squares Old Market Square
	Culture	Public art Pedestrian links
	Leisure and tourism	Castle Cultural industries
	Intelligent city	Intelligent transport
Excellent Services		
City Centre management and developing and enhancing partnerships with other agencies.	City Centre management	Review City Centre management
	User friendly	Review management of events and public spaces
	Community safety	Set up rapid response teams City Centre major scheme

The work carried out in preparing the City Centre Review including a major perception study has informed the preparation of the proposals for a major integrated public transport scheme, which is also being promoted to support the City's workplace parking levy proposals and to complement the introduction of NET Line 1. This scheme will bring together many of the action points in the review and is developed further in Chapter 6 of the Plan. These proposals will:

- improve integration of public transport, particularly NET, with buses,
- extend the perceived City Centre,
- bring forward sites for conversion/development,
- create high quality walking and cycling links, and
- provide opportunities for the enhancement of public realm/provision of open spaces.

Timescale

The draft review will be available for consultation by the end of summer. It is anticipated that the final document will be available by autumn 2000.

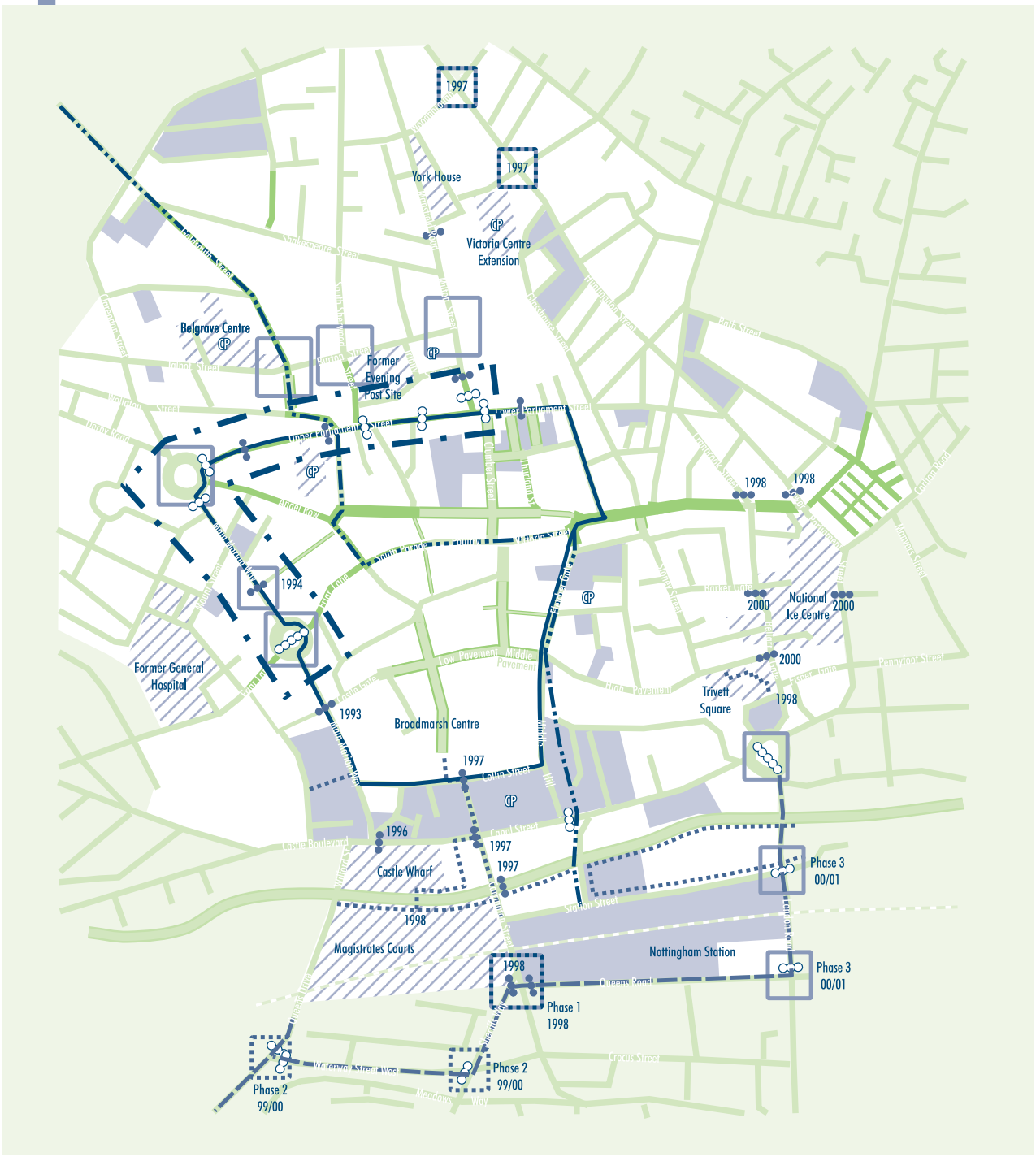
Consultation

A series of working groups have formed the basis for the review, drawing in existing partners and experts from Nottingham and beyond. A perception study has informed the review and further consultation on proposals will take place through the City Council's Citizens' Panel, focus groups, local press and radio.

The strategy for the City Centre is supported by previous studies which have been incorporated into the relevant strategy sections:

- the authorities Parking Strategy review took an integrated approach to re-balancing parking priorities including park and ride, shopper/visitor friendly tariffs and identification of sites for new car parks,
- the Strategic Transport Study set out integrated planning and transport strategy based on the need to reduce car usage and promote development in sustainable locations,
- the Nottingham City Centre Local Plan, 1st Review Consultation Draft Local Plan is based on the City Centre Review,
- the Nottingham Local Plan (adopted) includes a city centre planning and transport strategy, and
- the Southside Investment Plan comprises a strategy to promote and implement public transport, walking, and cycling improvements, together with supporting traffic management (Southern Relief Route).

Progress on the City Centre strategy has been substantial with extensive investment by the private sector following the public investment in infrastructure improvement and upgrading. Progress is shown on figure 13 together with proposed elements of the strategy still to be implemented.



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Figure 13

Progress on City Centre strategy

Details of component schemes and policies are detailed in the relevant sections of the strategy and programme.

4.1.3 District centres strategy

In the remainder of the conurbation, the district centres play an important role in all aspects of life of the community, and are prime locations for business and commerce and for civic, religious, social and cultural activities. In line with Planning Policy Guidance 6 (Retailing), sustaining and enhancing these centres is a key objective of the Structure Plan.

Maintaining access to the district centres is critical and the best means of maximising accessibility is considered to be through improving public transport and improving conditions for cyclists and pedestrians. Satisfactory access also needs to be provided for the private car, especially for shopping through the provision of short-term parking.

The Structure Plan (Policies 6/1 and 13/4) defines Arnold, Beeston, Bulwell and Hucknall as major district centres and Carlton Square, Clifton, Eastwood, Hyson Green, Kimberley, Mapperley Plains, Netherfield, Sherwood, Stapleford and West Bridgford as district centres.

To review the transport needs of the district centres outside the City, a programme of Mobility Management Action Areas (MMAAs) has been determined within the context of a number of important themes which not only support the objectives of the Structure Plan but also help to deliver the targets of the Local Transport Plan.

These themes are:

- to enhance/maintain accessibility,
- to add to the attractiveness of the centres,
- to locate new housing in existing urban areas,
- to promote the role as shopping/service centres,
- to promote leisure and tourism,
- to improve public transport and interchange,
- to encourage walking and cycling,
- to ensure appropriate parking provision through parking policies and traffic management, and
- to reduce traffic dominance through effective traffic management.

Each MMAA will be the subject of a multi-modal study. The key elements of the approach will be:-

- partnership with the District Council,
- extensive public participation to identify problems, prioritise concerns and gain overall support for an integrated strategy, and
- to establish a programme of actions and integrated measures in a sustainable context.

The proposed programme for the commencement of MMAA's, subject to yearly review, is as follows:-

	Study	Prepare Schemes	Commence Implementation
Hucknall	in progress	2000/01	2001/02
Beeston	2000/01	2001/02	2002/03
Arnold	2001/02	2002/03	2003/04
Carlton Square	2002/03	2003/04	2004/05
West Bridgford	2003/04	2004/05	2005/06

Thereafter, it is anticipated that consideration will be given to MMAA's for the remaining district centres identified by the structure plan i.e. Eastwood, Kimberley, Mapperley Plains, Netherfield, Stapleford, and Central Area. These may be included at the latter end of the LTP period subject to. Details of progress for the Hucknall MMAA are included later in the Plan.

For the district centres within the City Council part of the Plan area, a programme of integration audits as part of the Area Transport Plan consultations will inform the development of improvement schemes for pedestrian and cyclist accessibility together with better priority for public transport. This approach will also be extended to other public transport hubs such as hospitals and universities.

4.1.4 Rural areas strategy

Whilst previous funding mechanisms for local transport capital expenditure may have focused on urban transport problems, it is now clear that there is a need to address the transport needs of the rural area, where over 20% of this Plan area's population reside. There is an over-dependency on the car and a lack of alternative transport provision, leading to problems of isolation from employment and key services in local centres. The closure of shops, post offices, and other facilities in rural parishes is adding to this problem. Increasing car usage in the rural hinterland for short journeys is also creating unsustainable travel patterns and increasing concerns over road safety.

The strategy

The strategy in the rural areas of Greater Nottingham is based primarily on tackling the following key issues:

Accessibility and social inclusion.

A recent Countryside Agency survey of rural parishes in Nottinghamshire identified that approximately 50% lacked a shop, post office or school, which is above national average. Accessibility by public transport in these areas is often severely limited, and together with an over-dependency on the car, can lead to isolation from employment and key services and facilities.

The County Council's social need study measured key indicators, including income, unemployment, health and education. Over a third of rural parishes were identified as having an above average social need. Remoteness can compound these problems and above average social need was identified in parts of the rural hinterland which coincided with areas of poor accessibility.

The provision of conventional services varies significantly in rural areas, with better services along main transport corridors. Community and voluntary transport schemes provide a safety net in more remote areas. Provision is however piecemeal, often dependant on local volunteers, and a lack of co-ordination with the conventional bus network leads to major gaps in provision. The Rural Transport Partnership Fund, operated by the Countryside Agency, provides an opportunity to promote innovative transport schemes. It specifically targets schemes which promote social inclusion, including access to health, community care and social facilities, and the County Council and its partners are intent on making best use of the fund.

The dominance of the car, and unsustainable travel patterns

The reliance on the car in rural areas is recognised but this trend is unsustainable, leading to poorer air quality, increased congestion and pollution, reduced quality of the local environment and will further undermine public transport provision. Car dependency must be reduced over time.

Traffic levels, speeds and road safety

The road system is less well developed in the rural areas, often because the level of traffic is less than in the more built-up areas. Road traffic forecasts however predict a disproportionately high growth in rural areas over the next few years, with Nottinghamshire among the highest growth points (CPRE 1999). Many villages have already been affected by increasing through traffic, particularly heavy goods vehicles, with significant effects on the safety, environment and air quality of rural settlements. Increasing speeds in villages and on country roads is also affecting safety and deterring the use of alternative modes. Indeed 55% of road deaths are on rural roads and casualty rates are falling slowest on minor rural roads. There is a need to reduce the impact of traffic on people and their environment.

Access to recreation and tourism

Recreation and tourism play an important role in enhancing the economy of the rural hinterland. There is a long distance strategic cycle network in Nottinghamshire and over 3,000 kilometres of public footpath and bridle-way. These activities, however, are generating increased car use. Recreational activities should be accessible and enjoyed by all, and access by public transport from local centres and the strategic transport network needs to be provided.

Road and bridge maintenance

The condition of many rural roads and bridges in Greater Nottingham is poor. The network was not developed to cope with current levels of traffic and has been declining with several years of under-investment. Following the 2000/01 allocation, conditions on some rural roads will improve for the first time in many years. Much further investment is however required to bring the network up to standard.

4.2 Widening travel choices

4.2.1 Cars

The authorities recognise that the car will remain the dominant mode of transport within the Plan area, but as stated in the approved traffic reduction strategy set out in the report at Appendix A (Road Traffic Reduction Act Report) of the Plan, the vision for the Greater Nottingham area is to slow down overall traffic growth in the short/medium term. The authorities are however pursuing more restraint based policies within the Central Core, the Inner Traffic Area and the Quality Public Transport Corridors and the Plan Strategy will enable significant progress to be made towards radically improving the alternatives to the car:

The role of the car is recognised and provided for in various sections of the strategy which follows:

- the development of intelligent transport systems which will help improve the efficient management of the highway network,
- targeted highway measures to improve road safety,
- small scale traffic management schemes,
- extensive highway maintenance programmes to secure the integrity of the network, and
- in alleviating social exclusion in the more rural parts of the Plan area,

4.2.2 Buses

Bus network development

Commitment to maintaining and enhancing the quality and reliability of Greater Nottingham's bus network is fundamental to the local transport strategy as growth of the bus market is required to make the largest contribution to modal change targets. Even with the introduction of NET, buses will continue to contribute the majority of public transport journeys. There is a high level of bus use in the City with more commuting by bus than any comparable city. Half of all shoppers travel by bus.

'From Workhorse to Thoroughbred - A better role for bus travel', White Paper bus daughter document, sets out the Government's new framework for better integrating bus travel with other transport and for improvements to local bus services. Proposals introduced in the White Paper and daughter document are now embodied in the Transport Bill, which envisages a stronger and more pro-active role for local authorities. This is a welcome development since the authorities recognise that improving local bus services is fundamental to providing genuine travel choice.

New powers are being introduced to require integration and better quality services which will enable the authorities to build on progress already made. However, experience in Greater Nottingham shows that much can be done in advance of the legislation being formally enacted through further co-operation and agreement, since the authorities have a well established track record of improvements through bus quality partnerships.

The framework for further improvements will be developed in the authorities' Public Transport Plans and bus strategies which will form part of the Local Transport Plan. The Plans will set out network requirements and the standards and quality of bus service provision expected for each authority area and will include both qualitative and quantitative targets.

The City Council will publish its Public Transport Plan, which incorporates the bus strategy, as a consultation draft to coincide with the Local Transport Plan. The Plan builds on the comprehensive conurbation wide public transport perception study carried out in 1999 and the City Council's own programme of Area Transport Plan consultation which has now covered Clifton, the Meadows, Hyson Green/Radford and the Bulwell/Bestwood areas of the city. The preparation of these plans allows widespread opportunities for community involvement in decision making using workshops, exhibitions, telephone hot lines, attitudinal and perception studies. The County Council, having recently undertaken a review of its public transport strategy, will in the near future by use of extensive consultation/participation be producing its own Public Transport Development Plan.

Considerable scope for better integration of bus services with other transport modes will arise with the need to provide feeder services to Nottingham Express Transit and to complement further development of the local heavy rail network, in addition to the important role the bus already plays in the conurbation's park and ride network.

Within the urban part of the Plan area, growth of the bus market will be focused on the development of the commercial network. Where services are socially necessary but cannot be run commercially, revenue support is provided. Within the Nottingham City boundary less than 1% of bus mileage is supported. This is mostly targeted at supporting evening and Sunday services including support for the Sherwood Forester leisure network. The establishment of quality and accessibility standards as part of the Public Transport Plan and bus strategy will help guide decisions as to where revenue support should be focused. The standards will also help determine if proposed powers in the Transport Bill to award Quality Contracts, where operators are granted exclusive rights in return for guaranteed service levels and performance, should be taken up. Further opportunities will be explored to "pump prime" useful new services which can be expected to become commercially viable over time, as is the case with NCT service 69, a newly supported cross-city service linking City Hospital, the inner city and Nottingham University.

Accessibility by public transport is often severely limited in rural areas due to the uncommercial nature of services. Nevertheless the County Council gives a high priority to supporting tendered services with the result that the coverage of public transport in the county is high, with 230 out of 233 (98%) parishes served daily, compared to a national average (Rural Development Commission Report) of 75% of England's parishes. However, the services do not provide the flexibility required to access many activities and this contributes to low usage levels and a feeling of isolation, particularly for those without access to cars. A key challenge therefore is to improve the level and accessibility of public transport.

It is not possible to meet the travel needs of a relatively small and dispersed population without very high revenue support. The additional funding received from the Government

under the Rural Bus Service Grant and Rural Bus Challenge is being used to significantly enhance service levels, and introduce innovative transport alternatives.

The two authorities support concessionary fare schemes for the elderly and disabled. These schemes are discretionary at present, however, the Transport Bill proposes the introduction of a statutory half fare concessionary bus travel scheme for the elderly and further concessions for people with disabilities. The City Council currently offers free travel to elderly residents in the off-peak period Monday - Friday and all day Saturday and Sunday. This exceeds the proposed statutory minimum requirements. For eligible disabled residents free travel is given at all times. The concession is available for bus travel throughout the conurbation. In addition a half fare concession is given on Nottingham's Dial-a-Ride service and permit holders can purchase discounted tickets on the regional leisure bus market. Within the remainder of the Plan area the County Council, in partnership with district councils, supports half fare concessionary travel at all times throughout the whole of Nottinghamshire, including the local rail network. Within Gedling, the Borough Council also offer an optional free travel scheme to eligible residents.

The resource implications of the extended schemes brought in by the Transport Bill provisions will need to be met and the authorities will look to Government for support in this matter.

Bus Quality Partnerships

Central to the development of better bus travel and the Integrated Transport Centre of Excellence is the adoption of the 'Quality Partnership' approach. An agreed strategy 'Bus Quality Partnerships - A Strategy for Greater Nottingham' was adopted in December 1997.



A Bus Quality Partnership Steering Group has been established comprising Nottingham City Council, Nottinghamshire County Council, Nottingham City Transport, Trent/Barton Buses, a representative of Greater Nottingham's commuter planner organisations and more recently a representative from the Highways Agency.

The partnership approach has anticipated the proposals of the Transport Bill to give statutory backing to Bus Quality Partnerships. The authorities' successful approach to date, which has been recognised in Government commissioned studies as helping to inform recently published draft guidance on Quality Bus Partnerships, has secured investment from all partners without the necessity of statutory backing.

A programme of quality improvement corridors has been agreed and is being implemented over time:

Priority	Corridor
Short term (up to 2001)	A60(N), Trent Bridge, A6200/A52(W), A610
Medium term (2001 to 2006)	A611, A609, A453, A6005, B684, B686
Long term (Beyond 2006)	A612, Ring Road, B682



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- Short term
- Medium term
- Long term
- City centre
- Proposed Hub
- Railway
- Park & Ride, existing site
- Park & Ride, proposed site
- Park & Ride, seasonal site
- Bus station
- Proposed Interchange

N

Figure 14

Greater Nottingham
Bus Quality Partnership priority corridors

In return for operator commitments to invest in modern low floor vehicles, customer care training and better information provision, the authorities are investing in bus priority measures, bus shelters, 'NextBus' real time information displays, bus boarders/raised kerbs and improved interchange facilities. Discussions are currently taking place with partners over the introduction of a comprehensive Quality Partnership improvement for the A52 West corridor which will complement bus priorities introduced over the past two years.

Services which have already benefited from the approach include:

Rushcliffe Line - Bingham to Nottingham services (Trent/Barton)

Cotgrave Connection - Cotgrave to Nottingham (Trent/Barton)

Calverton Connection - Calverton to Nottingham (Trent/Barton)

Service 90 - Arnold to West Bridgford (NCT)

Rainbow 5 - Derby to Nottingham (Trent/Barton)

Service 12 - Chilwell to West Bridgford (NCT)

Services 26, 46 & 76 - City Hospital services (NCT)

Rainbow 1 - Eastwood to Nottingham (Trent/Barton)

Service 58 - Arnold (NCT)

The approach has seen significant journey time improvements for bus passengers; five minute savings in the peak are typical, and increased patronage, with as many as 25% of regular users travelling more often. Modal shift is encouraged since up to two thirds of new users on quality corridors previously travelled by car.

Priority for buses

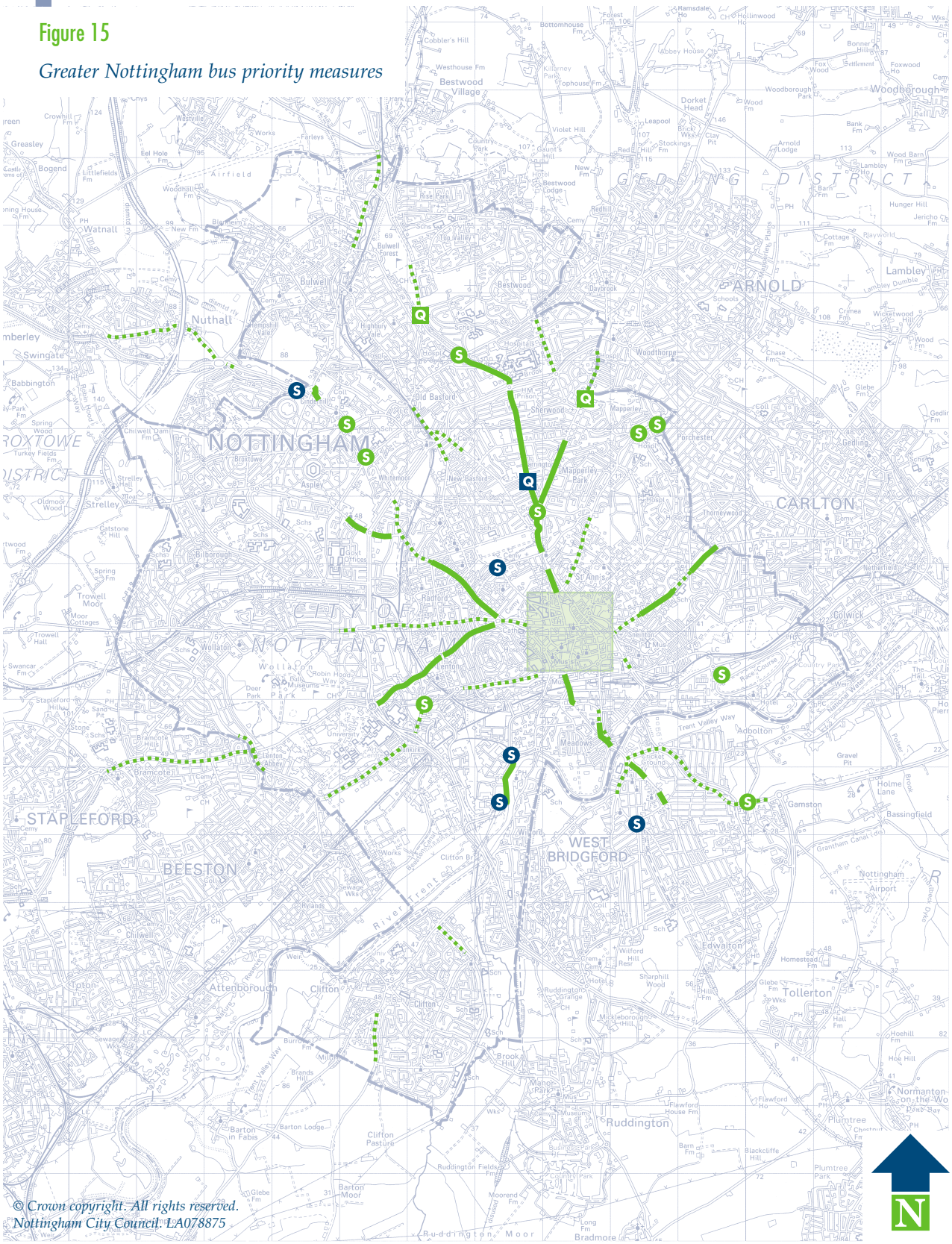
The bus operators identify traffic congestion as the single greatest cause of bus service unreliability. Bus priority measures to address this problem include additional parking and waiting restrictions, bus lanes, traffic signal priority and exemptions to traffic regulation orders. A comprehensive programme of bus priority measures has been identified and is further detailed in Chapter 6.

The introduction of these measures include significant road space reallocation which, through both improving the speed and reliability of bus services, also reduce capacity for general traffic which further encourages greater bus use. Such measures have received over 70% approval ratings in attitudinal surveys commissioned by the authorities.

Comprehensive bus priority schemes have recently been introduced in the A60 (N) and A6200/A52 (W) corridors and on the approaches to Trent Bridge, all involving significant road space reallocation. It is proposed to introduce similar measures on the remaining bus quality partnership priority corridors, some in partnership with the Highways Agency, over the next ten years.

Figure 15

Greater Nottingham bus priority measures



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Existing bus priority
Proposed bus priority
City Centre
Signal priority
Signal priority proposed
Queue management scheme
Queue management scheme proposed

City Centre

The City Centre forms the hub of the bus network. Congestion within the City Centre throughout the day is a regular cause of service disruption and impedes service development. To address these problems a package of improvements is included within the City Council's programme. The proposals complement changes needed to successfully introduce NET which shares road space with buses in the central core and will also benefit pedestrians and cyclists. These proposals comprise:

City Centre Clear Zone

The proposal to introduce a Clear Zone on the streets surrounding the Old Market Square will free up movement for buses and create a much more pleasant waiting environment for bus users. The proposals are detailed further in this Chapter, although of particular relevance to bus users is the City Council and bus operators' agreed bus emissions protocol for those services operating within the Clear Zone. This will help reduce emissions from buses within the area and contribute to improving air quality within the City Centre, where attitudinal surveys show that over 70% of people consider pollution from vehicles to be a problem.

Integration with Nottingham Express Transit (NET)

Existing bus operations will be fully integrated with introduction of NET through the City Centre. This will involve some minor re-allocation of bus routes and bus stop relocation in the central core. The City Council will develop bus and tram integration proposals in consultation with operators which will enable both the NET and buses to run successfully through the central core. This issue is developed further in the major scheme proposals set out later in the Plan.

City Centre West

As an immediate improvement to assist southbound buses leaving the Old Market Square it is intended to signalise the Maid Marian Way roundabout and introduce a new bus lane on Maid Marian Way during 2000/01 following detailed design work.

City Centre East

New bus priority measures have been introduced as part of the revised highway scheme associated with the new National Ice Centre, Sneinton Market and other development in the Lace Market/Hockley. Further bus stop facility and pedestrian access improvements are being implemented as a result of a recent successful European funding bid, supported by Plan resources.

City Centre South

Access to the City Centre for bus services from the south is being significantly improved through the Broad Marsh Gateway scheme and Southside Investment Plan. This has been achieved by a combination of junction improvements, bus lanes and access restrictions. Proposals for a major expansion of the Broad Marsh Shopping Centre, which has received outline planning permission, provides an opportunity for a comprehensive review of the transport network including significant additional bus priority which is being investigated in

conjunction with the developers and in connection with the City Centre major scheme developed below. The scheme includes a new "state of the art" bus and coach facility and future NET interchange. Opportunities will be explored for better integration with Nottingham railway station where it is proposed to undertake a review of access and improvement possibilities.

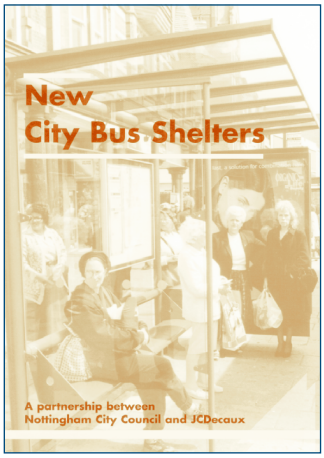
City Centre North

To improve bus access to the north of the City Centre, accommodate NET, promote regeneration and make the most of development opportunities, it is proposed to undertake a comprehensive traffic management review of Upper Parliament Street and its immediate approaches. This scheme, which will involve significant bus priority around the inner ring road, high quality passenger waiting facilities and improvements to the pedestrian environment is included as the priority integrated public transport major scheme in this Local Transport Plan, and outlined in more detail in Chapter 6.

Orbital links

The City Council is also looking at how orbital, cross-conurbation movements can be better facilitated. A proposed second priority integrated transport major scheme will examine options for developing a high quality public transport orbital service around the A6514 Nottingham Ring Road. The scheme will include interchanges with key radial bus routes and NET and developing transport hubs at major travel generators such as the two hospitals.

Passenger waiting facilities



To help secure a more attractive and safer waiting environment for bus users within the City of Nottingham, the programme of high quality shelter replacement at 600 bus stops as part of an agreed advertising contract will be completed by Summer 2000. The contract requires that all new shelters are cleaned and continuously maintained to a high standard. To complement this, bus operators are significantly improving stop plate and timetable information provided at bus stops. The City Council is also in the process of installing Adbus "Roadsider" units which provide comprehensive stop and timetable information and lighting at a further 250 principal bus stops which do not currently have a shelter. The County Council has recently also signed an advertising shelter contract agreement for a programme of 600 new high quality bus shelters, many of which will be located within the Plan area.

Bus stations are a focal point of bus passenger activity. Waiting facilities at bus stations within the Plan area will continue to be upgraded following integration audits. Proposals for a major new integrated transport interchange in the Broad Marsh area are being developed in partnership with the private sector as part of the Broad Marsh Centre expansion proposals. The potential for a contribution from Plan resources is allowed for in the 5 year programme set out in Chapter 6. In the interim work is being carried out to improve lighting, seating and passenger shelters. Interchanges will also be developed and improved at other key points. Feasibility work is currently being carried out into an improved public transport interchange at Queens Medical Centre, one of the most significant generators of trips in the Plan area.

Access for all

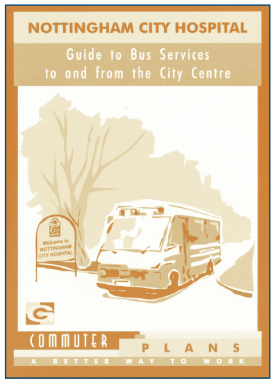
To help make bus services more accessible for elderly, disabled people and for parents with buggies and to complement introduction of new low floor buses, the authorities are implementing accessible bus stop programmes. This involves installing raised kerbs, bus stop boarders, clearway markings and coloured surface treatments at principal bus stops. The improvement programme was initially targeted on the network of routes serving Nottingham City Hospital and Queens Medical Centre but is now being expanded throughout the bus quality partnership priority corridors, and other core bus routes where low floor buses are being introduced.

Safer bus routes

Within residential areas attention will continue to be given to making access to bus services safer and more pleasant. This involves looking at the location and design of bus stops, particularly improving lighting, and pedestrian access routes and implementing measures which improve access for vulnerable groups such as women, elderly and disabled people. Identification of locations where this treatment will have the most significant benefit will be through the Area Transport Plan approach.

Adopting the same principles, opportunities will also be taken to improve access to training and jobs from areas of need by taking advantage of regeneration programmes such as Single Regeneration Budget 5 and from European projects such as MOST. As part of the Civilised Streets Quality Maintenance proposal, revenue from workplace parking levies will be used to extend this approach towards the end of the Plan period.

Links to travel plans



Where possible development of bus services will continue to be linked to development of travel plans. For example the introduction of new bus services which run through the grounds of Nottingham City Hospital is encouraging staff, patients and visitors to leave their cars at home. To assist this process bus stop facility improvements within the site have been funded directly through the collection of car parking charges introduced by the Hospital Trust. Regular liaison with organisations promoting such plans (principally via the Commuter Planners Club) will continue to inform the development of bus services. Suitable groupings of employers will be encouraged to come together with the authorities and operators to look at access issues in a comprehensive manner. Meetings of Southside and Northside employers in the City Centre already provide a useful way to exchange new ideas and best practice.

New technology

Opportunities will continue to be taken to exploit the advantages of new technology and further open up access to bus services.

This will include further development of the County Council's 'Nextbus' satellite bus location system which has been proven to reduce the frustration of an unpredictable wait at a bus stop by displaying the time and destination of the next bus to arrive at the stop.

Work is also being undertaken with bus operators on the introduction of smartcard ticketing shortly to be introduced by Nottingham City Transport. This will allow much more flexible ticketing arrangements to be introduced and create the opportunity to significantly increase the number of travel card sale outlets. It will also open up the possibility of smartcard applications to other travel services such as the City concessionary fares travel permit.

Rural bus services

Following a review of its public transport strategy, the County Council has commenced development of a rural strategy to recast the public transport network on a hierarchical basis. Taking advantage of new thinking and the changes in policy environment the intent is to work closely with local bus operators to develop a new and simplified hierarchical network. The network is based on three levels shown on figure 16:

- The first level (keylines) is to provide links between main urban centres by direct, regular services - probably at hourly intervals and these services are to be operated commercially.
- The second level (linklines) is to concentrate County Council funds in supporting mainstream conventional services that feed from more remote settlements to key nodes on the main network and also to enhance the commercial network around main urban centres.
- The third level (local feeders) is to utilise lower levels of service to provide links to the smallest settlements using the voluntary sector and other small scale transport providers and to offer more demand responsive type services.

This approach is particularly appropriate for the more agricultural rural areas, while in the more densely populated and clustered settlements the development of rural bus quality partnerships may be of greater use.

The County Council will continue to pursue local area initiatives for rural public transport and ensure that basic networks of public transport are available for those in isolated communities.

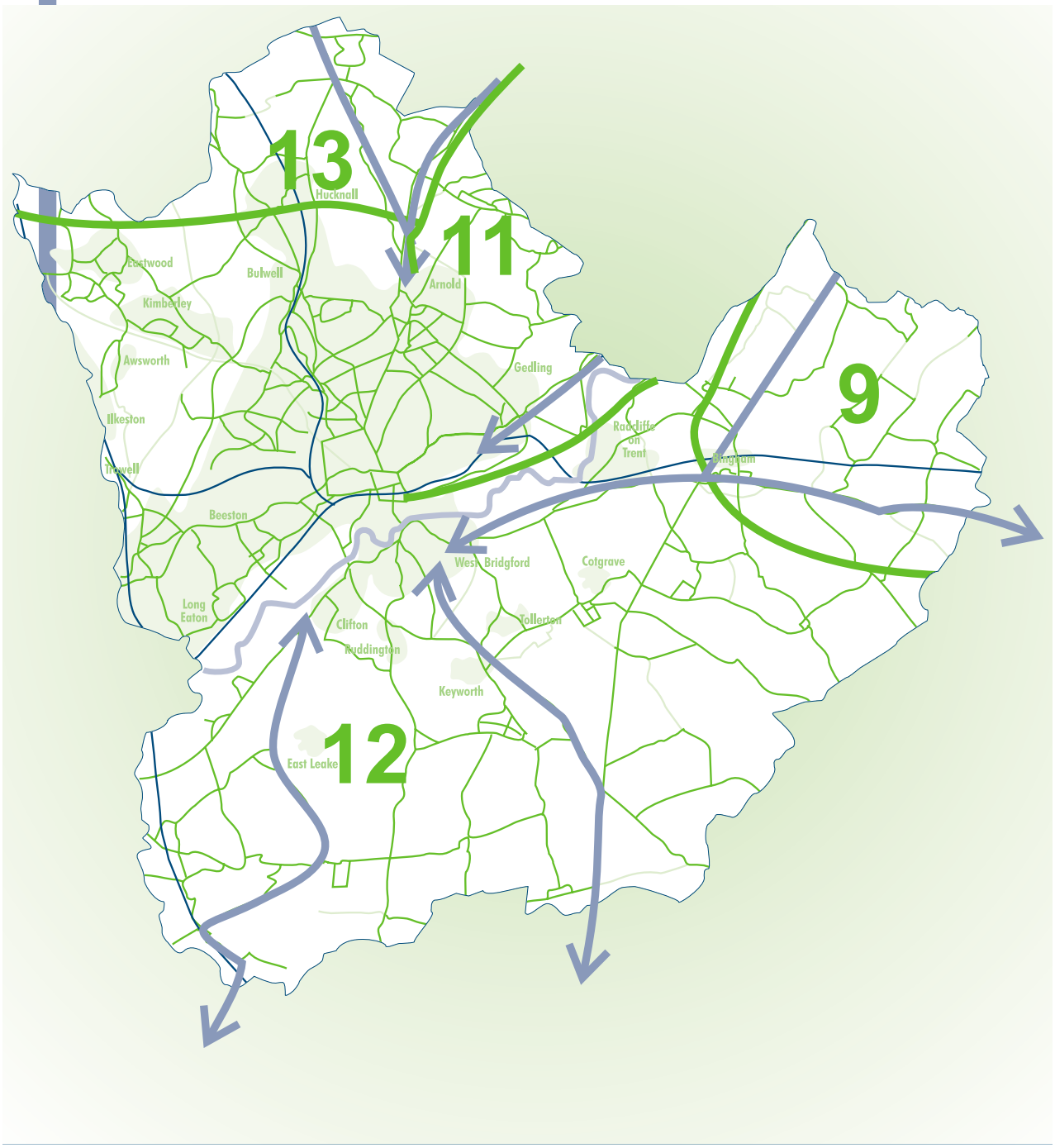
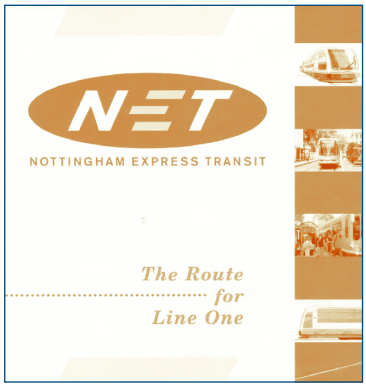


Figure 16

Greater Nottingham Public Transport network

4.2.3 Nottingham Express Transit

Line One



Having secured funding for Line One of Nottingham Express Transit (NET) under the Private Finance Initiative, negotiations were completed between the authorities and the private sector consortium Arrow Light Rail Limited in May 2000. Arrow will design, build, operate and maintain the system over a thirty year concession period. Construction works have started and it is anticipated that passenger services will commence in November 2003.

NET is a light rail mass transit system which has the ability to run at speed, segregated from other traffic, in the outer urban areas, whilst also being able to run on-street from Hyson Green to the city centre, including through pedestrianised areas. Powered by overhead electricity, the vehicles produce no emissions where they run. Light rail is considered to be particularly appropriate to central Nottingham with its narrow radial roads and compact retail and business centre.

Line One runs from Hucknall to Nottingham railway station with a branch to Cinderhill (Phoenix Centre) close to Junction 26 of the M1. It will comprise 23 stops including 5 park and ride sites providing approximately 3,000 car parking spaces. Between Hucknall and Hyson Green the alignment runs alongside the Robin Hood Line and interchange facilities will be provided at Hucknall, Bulwell and Nottingham stations. Bus feeder services will be provided to key stops to expand the system's catchment area.

With its speed, reliability, ride quality, and convenience, NET Line One will provide an attractive alternative to using the car in the north-west corridor of the conurbation. It is expected that Line One will carry up to 30,000 passengers per day and will remove 2 million car journeys annually.

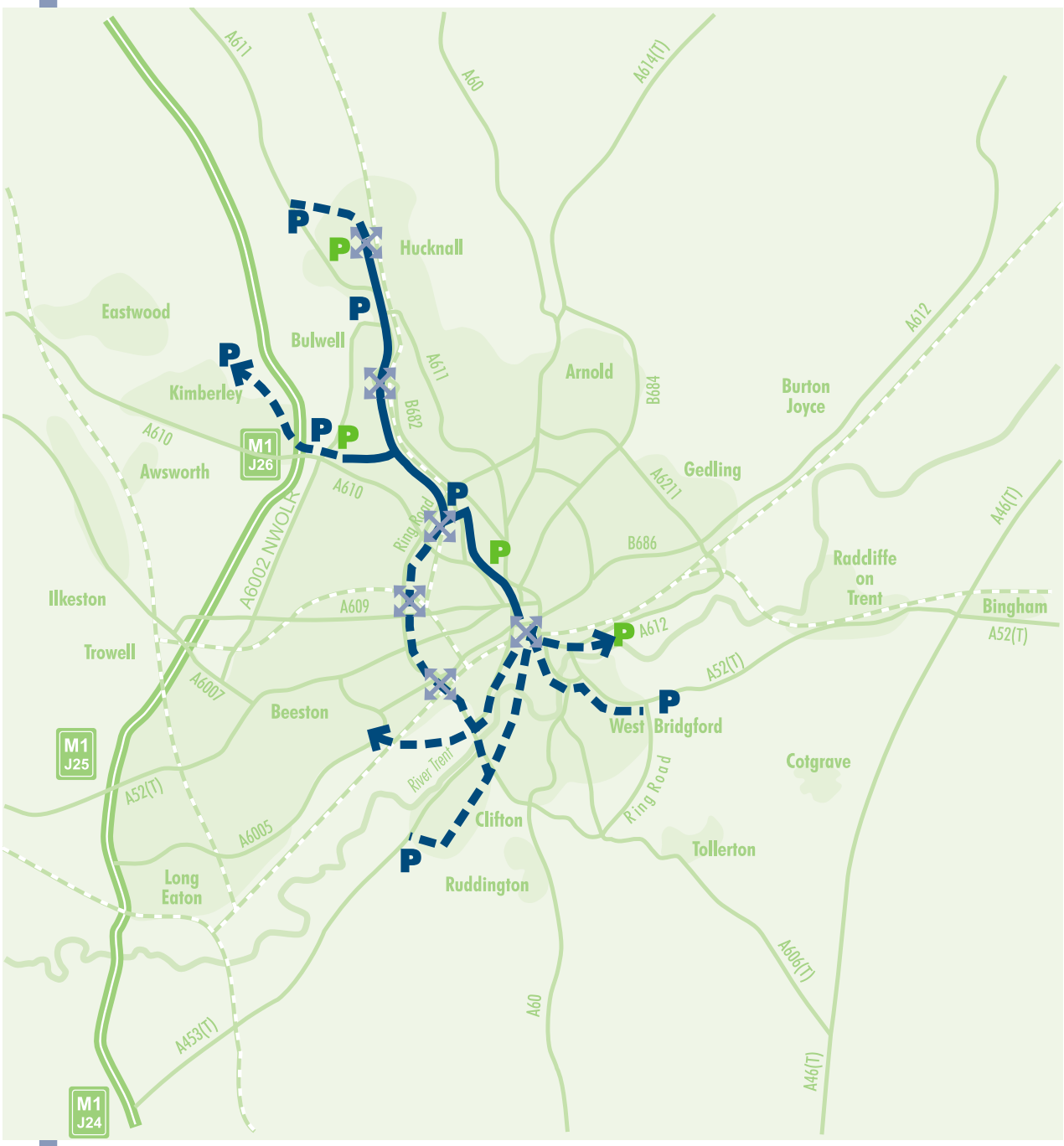
To further maximise the benefits accruing from the implementation of NET Line One it is proposed to introduce additional cycle and pedestrian infrastructure to improve access to the NET system and associated interchanges and Park & Ride sites.

Future network development

Consideration is being given to the provision of a new tram stop and associated transport interchange at Western Boulevard as part of the Ring Road major scheme proposal. This would also facilitate links to the proposed major development of the former Basford Gasworks site and the large New Basford residential and business area to the east of Radford Road.

Line One is intended to be only the first of a network of routes which will eventually bring the environmental, economic, and accessibility benefits of NET to other areas of the conurbation. This will enable other city centre bound and cross-city journeys to be made and access gained to the network from a series of park and ride sites located on the periphery of the built up area adjacent to key routes into the City. Initial work has identified a number of potential routes. Those sections serving Clifton and West Bridgford that lie within the City boundary have been safeguarded in the City of Nottingham's current Local Plan and Gedling Borough Council's Draft Replacement Local Plan safeguards a potential tram route to a possible future major

The route of Line One and potential extensions to the network are indicated on Plan 17 below.



Line One
Future Lines (Indicative only)
Rail Lines
Proposed interchange
Park and Ride, existing site
Park and Ride, proposed site
N

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Figure 17

Proposed Nottingham Express Transit network

development site and park & ride at the former Gedling Colliery. Broxtowe Borough Council, Rushcliffe Borough and Nottingham City Council are considering other tram routes and park & ride facilities for safeguarding within their replacement Local Plans.

Further work which will lead to prioritisation of the above routes is being pursued using advanced workplace parking levy monies, including the appointment of consultants to assist with specific tasks. It is anticipated that recommendations will be formulated by Spring 2001.

Nottingham Transport Partnership supports this initiative. The development of new lines will be subject to the identification of adequate funding and fulfilment of consultation and planning processes.

Powers to construct and operate further lines will be sought under the Transport and Works Act 1992. It is envisaged that funding for such development work will be required during the second half of the Plan programme.

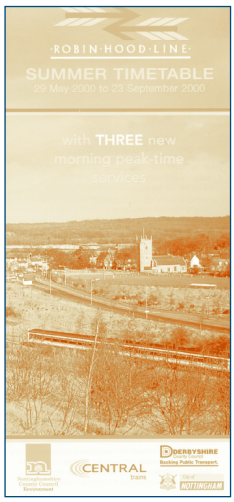
It is anticipated that extensions to the network will be funded from a combination of new revenue made available through workplace parking levy, developer contributions and other sources. Many of the possible network routes extend into and through potential sites for residential and employment development. Additional contributions towards NET construction costs will be sought from developers whose sites will benefit from such network extensions.

Table 8 NET network development programme

Action	Timescale
Route definition	Autumn 2000 to Spring 2001
Transport & Works Order procedures	Spring 2001 to Jan 2003
Tender & Negotiate	Jan 2003 to Jan 2004
Development	Start Jan 2004

4.2.4 Passenger Rail strategy - Greater Nottingham

Introduction



The £28 million Robin Hood Line developed by the County Council as lead authority is nationally renowned for encouraging local passenger rail use. The 32 mile line between Nottingham and Worksop was opened on a phased basis between 1993 and 1998. It included the construction of a new 2.5 mile rail link between Newstead and Kirkby, the first of its kind ever to be built by a Local Authority. The Line was developed in partnership with Railtrack, Central Trains, the City Council and six other Local Authorities.

The Line has been highly successful and patronage levels have continued to grow. Nearly 3000 passengers are now using the line on a daily basis. Problems with over-crowding have led to the introduction of additional morning peak and shoppers services from summer 2000.

Through the Robin Hood Line experience the authorities have seen that rail can:

- achieve modal shift. 37% of passengers made their journey by car before the Line opened,
- provide decongestion and environmental benefits. Over 36% of RHL passengers access the line by car, taking advantage of good secure parking at stations,
- assist community regeneration. 48% of work trips from Stage Two stations were not made before the stage opened, indicating widening journey to work horizons,
- attract passengers through high quality facilities including high quality trains with regular departure times, attractive station environments with block paving, CCTV with 24 hour surveillance of all platforms, car parks and accesses, live passenger information and telephones. A marketing officer has been employed to foster the growth of patronage and react to customer requirements, and
- provide good access for people with disabilities, including portable ramps on trains.

Clearly rail can play a major role in helping to achieve the objectives of the Plan, and it contributes significantly to the main objectives of the Plan covering the environment, economy, accessibility and integration. Using the knowledge and experience gained through RHL, a strategy has been developed for further rail development in the Greater Nottingham area. This is outlined below together with a summary of key strategic developments in the rail industry.

Strategic Issues

Railtrack's 2000 Network Management Statement (NMS) includes significant detail on investment options affecting the East Midlands and is positive about the potential for growth in both passenger and freight traffic. Key points include:

- Railtrack are undertaking speed and capacity studies on the Midland Main Line (MML) as a first step, it is understood, towards formulating a comprehensive development strategy for the line, estimated in outline at £350 million. This is a welcome development following Local Authority concerns that investment in the MML was well behind the East Coast Main Line and West Coast Main Lines. Nevertheless there is much ground to be made before the MML can be on a comparable footing with the other two lines,
- the authorities are supportive of the Thameslink 2000 project which will improve access to South London and beyond,
- the problem of congestion and capacity at Nottingham Station is recognised. This is welcome, although Railtrack indications that a scheme will be developed 'in the next five years' and suggestions that short term problems can be mainly overcome through changes to the timetable alone are of concern. The authorities will be pressing for earlier action on this point, and
- reference is made to developing local lines in conjunction with Local Authorities and LTP schemes, which are consistent with the Local Authorities' proposals.

The franchise replacement process initiated by the Shadow Strategic Rail Authority (SSRA) has included the ECML in the first tranche and Central Trains in the second. It is hoped that this will lead to further service and infrastructure development of benefit to the Plan area and

better links to other provincial centres, for example in the North-East. The SSRA's outline guide to the process includes many of the themes in the rail quality partnership proposals of the authorities. The authorities are disappointed, however that the opportunity is not being taken to review the Public Service Requirement (PSR) which is considered to be inadequate at many of the smaller stations in the Plan area to accommodate local travel needs, consistent with Plan policies.

A key element of the replacement process will be a robust commitment to better performance, with new national standards and increased penalties and rewards. Punctuality and reliability have been of concern on RHL and other local services although CTL and Railtrack have initiated a number of improvements. Better performance will be a vital element in achieving modal shift.

The SSRA is also responsible for administering the Rail Passenger Partnership (RPP), which will fund enhanced rail facilities which are not commercially viable but achieve worthwhile economic, social and environmental benefits. An initial fund of £105 million was announced to cover the three years to 2001/02 and the County Council is seeking funding for its development proposals.

Rail Network Notts

The County Council hosted a rail seminar in November 1999 to debate a vision for the future of the local rail network. The event was well attended, with over 70 delegates drawn principally from Local Authorities, Parish Councils, Government, the SSRA, the rail industry, bus companies and local interest groups.

A revised strategy, known as Rail Network Notts, was proposed. This covers three main development strands as follows:

- Enhancements to the Robin Hood Line through increased service frequencies and possible extensions along existing freight lines,
- The South Notts Rail Network (formerly known as GNARDS), including a number of new services and new stations in and around the Greater Nottingham conurbation, and
- Rail Quality Partnerships (RQP's) to improve quality and access at existing stations throughout the county.

The concept of Rail Network Notts was well received at the seminar, and there was broad consensus that the early implementation of the strategy was essential to achieve the Plan objectives, Structure Plan and SRA objectives, and should be urgently pursued. The proposals achieve wider economic regeneration, social integration and modal shift benefits.

Many of the initiatives have cross-boundary issues and these have been progressed in meetings with Derbyshire and Lincolnshire. Discussion of the rail strategy has also taken place with Central Trains and Railtrack. Both strongly support the strategy and the main elements are included in Railtrack's NMS and CTL's franchise replacement proposal.

In addition to the seminar, further consultation has been undertaken with the Rail Passengers' Committee, Transport 2000 and bus operators, and a meeting was held with all parishes and other interested parties on the Nottingham - Lincoln Line in developing the quality partnerships.



Figure 18

Greater Nottingham local rail network

The measures will be taken forward through the RPP and this Plan although a major problem which affects the full development of rail schemes is that since privatisation, operating costs have increased significantly, particularly track access and train leasing charges. A contribution to the RHL operating deficit has been secured from SSRA, and further support for these base services is being sought. However, unlike Passenger Transport Authorities, the Local Authorities have no specific funding mechanism for rail revenue support to cover operating deficits arising from new services. Apart from any LTP/RPP funding the support for future new services (i.e. non-commercial) may need to be secured by Local Authorities. In the present financial climate, this is likely to be a major issue. The authorities' strategy will be to secure the maximum amount of external funding, including developer contributions with the possibility of contribution from the City's proposed workplace parking levy.

The Development proposals

Robin Hood Line service enhancements

Despite the success of the RHL, the County and City Councils, together with Derbyshire, have been concerned at the cost of sustaining the Line. A contribution of £350,000 has been secured from SSRA in 1998/99 and 1999/00 and the authorities have been negotiating further funding assistance prior to the Line being incorporated within the proposed Central franchise. The negotiations are approaching finalisation and the interim arrangement will transfer more of the revenue risk to the Operator with fixed funding streams from the SSRA and the Local Authorities. In addition the SSRA will administer a much stronger performance control regime for the Line than that which has been in existence to date.

The Local Authorities consider that the Line has substantial potential for further development, and it is hoped that during the transitional funding period the Operator will be able to implement additional services. The Local Authority aspirations include:

- a full half hourly Monday to Friday service between Nottingham and Mansfield Woodhouse; and a Sunday service along the full length of the route, which could be facilitated with RPP funding. A 'fast track' RPP bid has already been submitted for the continued operation of the morning peak enhancements included in the summer 2000 timetable,
- the introduction of a Mansfield - London service, which would convey significant economic benefits to Mansfield and the surrounding coalfield communities, and
- further investigation of the six miles of single line section on the route, which reduces operational flexibility and may constrain the Line's development prospects. The investigation would be in conjunction with Railtrack and the Operators.

The above developments would also enhance integration with Nottingham Express Transit (NET) Line One which will run parallel with the RHL over a 5 mile section of the corridor from its northern terminus at Hucknall which is planned as the major interchange point between the two systems.

South Notts Rail Network

The South Notts Rail Network (formerly known as GNARDS) is a major initiative which will improve passenger rail services in the Nottingham Travel to Work Area by opening new

stations and operating new services cross the City. With rail accounting for only 2% of work journeys into the City Centre, a low proportion for a City of its size, there is clearly an opportunity for an enhanced role for rail.

Subject to resolving the issue of revenue support, it is a key element in the Greater Nottingham transport strategy. It will:

- be an important factor in decisions taken on the location of new residential and employment development within the Structure Plan period up to 2011. Policy 1/2 of the approved Structure Plan states that major new development should be concentrate along identified public transport corridors including Nottingham to Trowell and Nottingham to Bingham,
- contribute significantly to the modal shift required to maintain the accessibility and economic vitality and environment of the city centre by providing an acceptable alternative and sustainable form of transport with high quality facilities and full disabled access,
- help to regenerate areas which have suffered significant job losses through the decline of traditional industries, and
- make better use of the existing rail resources.

The implementation strategy for the network is summarised in the supporting Programme. The initial proposal is for the development of a new station at Ilkeston in partnership with Derbyshire County Council, and an RPP pre-qualification bid has been made and other contributions are expected from the Greater Nottingham and Derbyshire LTP's and Central Trains. The station could be operating in 2002. A further RPP bid for the South Notts Rail Network is being made in summer 2000.

Rail Quality Partnerships

Building on the theme successfully introduced in the bus industry, Rail Quality Partnerships (RQP's) will improve the rail product on existing rail lines and stations within the Plan area. Their objective will be to make travel by train more attractive by improving the quality of all aspects of a journey of which rail forms a major part and will highlight three categories of improvement:

- the service: for example, frequencies and calling patterns, quality of rolling stock, provision of ramps for easier access/egress on trains, effective customer care and integration with bus services including inter-availability of ticketing,
- the station environment: for example, live passenger information on platforms, better security and lighting, and raising substandard platforms for easier access onto trains for people with mobility difficulties, and
- access to stations: for example, improved bus interchange and park and ride facilities, provision of cycling and walking routes, secure cycle storage and improved highway signing to stations.

A number of proposals for quality partnerships initiatives are included in the Plan programme, and reflect widespread consultations at the local level.

The proposals will build on Railtrack's existing station regeneration programme, which to date has seen £3.8 million invested in improvements to stations in the County, and a further £2.8m at Nottingham Station. The NMS also includes a commitment to work with local authorities in making the case for further investment to improve public transport access to Nottingham and other places. It is anticipated that similar improvements will be proposed by bidders in the franchise replacement process and we will be seeking partnerships to plan them as appropriate.

The RQP development will be linked to the progression of integration audits of major transport nodes throughout the area as part of the LTP process. These look at improving walking, cycling and bus links to rail stations and a number of improvements are included in the programme later in the Plan.

Nottingham Midland Station

As well as being the hub of the local rail network, Nottingham station is the key gateway for inter city services and its role will further develop as the rail businesses continue to build patronage and enhance services. NET Line One and future lines will compound this growth and a visionary, long term approach to station development in terms of operational capacity and passenger facilities and access is required.

As a first step the City Council has agreed a draft RQP for further integration and improvement works to Nottingham Station with Railtrack, Central Trains and Midland Mainline. A major investment programme is required to improve the operational flexibility of the station and further improve the internal and external environment. The Plan programme also includes a bid for a feasibility study to prepare options for Station improvements to better integrate tram, bus, taxi, cycle, car and train. This is particularly important in the context of the potential tram network extension over the station.

4.2.5 Taxis and private hire vehicles

Background

Taxi and Private Hire Vehicle usage has grown steadily over the last 30 years. Taxis are becoming more affordable and have an important role to play in the overall provision of transport in the Greater Nottingham area, particularly for those who do not have, or do not wish to have, access to a private car. They also provide a useful service for passengers carrying large amounts of luggage and modern vehicles have a significant role to play in providing an accessible travel mode for people with disabilities.

However, taxis which travel empty contribute to the problem of excess traffic rather than the solution. Empty taxis and the resultant dead mileage are clearly inefficient in economic terms, providing no revenue for the driver or public utility. Measures to increase passenger ridership are therefore, being pursued in conjunction with operators.

The Greater Nottingham area is served by both Licensed Hackney Carriages (taxis) and Private Hire Vehicles (PHVs). Since 1995, in Nottingham, all taxis are required to be of the London Cab style, being accessible to wheelchairs. This has resulted in the City being served by a new, high quality fleet.

The provision of a safe and healthy environment for pedestrians in Nottingham City Centre is important. The introduction of the Nottingham Clear Zone, restricting access to certain vehicles at specific times of the day has been necessary to secure a high quality environment for shoppers and visitors. Buses and the new wheelchair accessible taxis will be permitted unrestricted access, with essential servicing allowed through a permit system.

The policy for issuing licences in Nottingham is demand-led, although it is recognised that daily demand is difficult to gauge accurately as there are obvious peaks on Friday and Saturday nights. Surveys are undertaken to ensure, as far as possible, that there is no unmet demand. Should unmet demand be identified, additional licences are issued; it is anticipated that over the full Plan period a further 25 licences are likely to be issued to meet demand. The number of ranks provided for taxis in the City co-relates to the number of licensed vehicles and the conurbation is served at present by almost 1,000 taxis and 1,500 PHVs.

Area	Taxis	PHVs	Ranks
Nottingham	260	882	24
Ashfield	63	93	3
Broxtowe	145	37	2
Gedling	278	268	3
Rushcliffe	279	216	2

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. Operators are also invited to attend and contribute to bi-monthly consultation meetings at which traffic management proposals are discussed and often modified.

The provision of taxi ranks in terms of numbers and location is also examined when considering the impacts and demands of major new development in the Plan area. Examples include the Victoria centre extension and the National Ice Centre, where in both cases the developers provided new ranks to better serve the developments. This helps confirm the integration of taxis with new development and their use is encouraged by promotion alongside the other public transport alternatives, for example in raising awareness about sustainable travel choices in Travel Plans. In addition provision associated with the major bus and rail stations and with NET Line One links the role of the taxi with other modes.

Operators' key issues

Both groups of the trade, representing taxis and PHVs have been involved at an early stage of the Plan participation exercise. The two main issues which have arisen as a result of the process are access to bus lanes and PHVs being given the same opportunities and exemptions as taxis.

The Greater Nottingham area has a well established network of bus lanes, both 24 hour and peak hour operation, and both authorities are promoting extended coverage of bus priority through the Bus Quality Partnership (BQP) programme. Whilst it is recognised that a small number of authorities have allowed taxis access to bus lanes, at this time, it is felt that providing exemptions to other vehicles could degrade the level of priority currently afforded to

buses particularly within the Inner Traffic Area. The major concern over such exemptions relates to enforcement. Permitting vehicles other than buses to use bus lanes can create enforcement difficulties. The emergence of digital technology and the distinguishable nature of some taxis in the Plan area may assist in this respect.

The number of PHVs serving the conurbation far exceeds the number of taxis; in the City the ratio is 4 to 1. Clearly, the opportunity does not exist for all PHVs to be permitted unrestricted access to the City Centre as the capacity or demand is not there. However, there are ways in which the PHV trade could work pro-actively to make that mode more competitive in environmental and accessibility terms;

- the use of alternative fuels - great technological strides have been made in recent years in the development of alternative fuels and propulsion systems including Liquefied Petroleum Gas (LPG), electric vehicles and hydrogen fuel cells. LPG is quite widely available on many forecourts and consideration is being given to the possibility of using waste incinerated at the City Council's Eastcroft Incinerator to generate electricity which may be used for local public transport vehicles. This could possibly be extended to appropriately powered PHVs,
- wheelchair accessibility - this would bring PHVs in line with taxis particularly with respect to the Disabilities Discrimination Act Pt III which will require taxis to be accessible to people with disabilities. The Act, however, does not cover PHVs, this would have to be undertaken voluntarily as a demonstration of commitment, and
- increased prominence - a major concern, as expressed previously, is one of enforcement. Allowing PHV access to restricted areas is likely to encourage other motorists to follow unless they were marked in such a way that they can easily be identified, particularly through the use of digital video technology, and also by other road users to reduce the opportunity for confusion.

4.2.6 Voluntary and community transport

The support and development of community transport initiatives is seen to be an important way for the authorities to cater for the transport needs of those who are excluded from using conventional services. For Greater Nottingham this exclusion tends to be a result of the person's disability but it can also result from other factors which make the use of conventional transport difficult.

The authorities financially support six voluntary car schemes with grants together with support through concessionary fares payments. Around 47,000 trips are made annually. A Dial-A-Ride scheme provides a wheelchair accessible door-to-door service for Greater Nottingham residents. Concessionary fare permit holders can travel at half fare on the Dial-A-Ride scheme with the operators reimbursed for the lost revenue. Around 19,000 trips are made annually and there are currently around 1,200 registered users.

In addition the authorities actively encourage and support the increased provision of accessible (DPTAC) vehicles on mainstream services and the implementation of infrastructure which facilitates greater access. Over the last year around 100 bus stops have been given raised kerbs to reduce the step height onto vehicles. In addition there is rolling programme to make all



Figure 19

Greater Nottingham community tranbsport review

stops more accessible by the provision of bus boarders, parking enforcement measures, nearby dropped kerbs and the use of different surface treatments such as tactile paving. The authorities will also work towards integrating taxi services into their transport frameworks in order to promote travel opportunities for all groups of society.

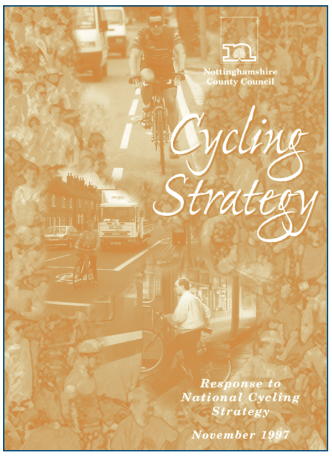
The authorities adopt an integrated approach to transport provision with close links with health and social care to promote the passenger transport services to those who need them and to encourage the recruitment of volunteers and development of new schemes at every opportunity. There is the potential for this sector to play a more significant role in meeting transport need but it is recognised that this can only be realised through a partnership approach.

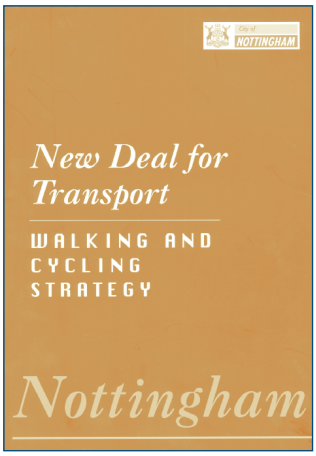
There are, however, gaps in the provision of community transport services in certain parts of the County and variations in the ability of some schemes to offer consistent levels of service and insufficient resources for some schemes to meet all transport need in this sector. There are now opportunities to improve existing services and develop new ones to increase mobility and offer travel choice for those in need.

A review of community transport has been commissioned involving extensive consultation with the sector to develop a long-term strategy and prepare a costed action plan for the next five years. The needs of the sector are diverse and the development potential is dependent on the commitment, resources and ability of each scheme and all parties to work together. A vision of the future will be prepared that sets out the long term requirements and the framework in which the sector can develop. This framework will provide clarity, equity and stability in funding, and offer the sector a choice of support and facilities dependent on individual scheme needs.

The vision will identify the long term goal of offering consistent, high quality, accessible and attractive passenger transport services to all who need them with community and voluntary transport as one component of a wide range of possible travel opportunities. Stable funding, training and other facilities will be offered in exchange for the development of community transport and its role in contributing to the provision of accessible passenger transport services. The authorities will work closer with the health sector to offer better travel opportunities, make better use of existing transport resources and seek to co-ordinate health care appointments with the availability of suitable passenger transport services.

4.2.7 Cycling





The authorities place great importance on developing the role of cycling within an integrated transport system. Strategies for cycling designed to build on recent achievements have been produced by both authorities, in close consultation with interested groups and individuals. The County Council produced its Cycling Strategy in November 1997, which will be revised during the plan period, and the City Council published an integrated Walking and Cycling Strategy in March 1999.

Cycling strategy

The strategies aim to reorder priorities, promoting cycling through better integration of engineering measures with those of education, encouragement and enforcement. Both strategies include objectives and targets together with systems to monitor progress. They will enable the authorities to effectively contribute towards the National Cycling Strategy's vision. Both authorities are committed to undertaking regular reviews of their strategies, in accordance with the 'Guidelines for Cycle Audit and Cycle Review' published by the Institute of Highways and Transportation, with the participation of all interested parties to ensure that it continues to be shaped by both national advice and the views of local people. These reviews will help define the detailed cycling programme and assess progress against targets.

To minimise the conflict between cyclists and pedestrians the authorities will continue to only introduce shared use facilities where other alternative solutions have been ruled out. Such shared facilities will be introduced in accordance with current national advice.

Partnerships

Participation processes will continue to be developed such as the Nottingham Walking and Cycling Forum and the cycle working groups for Rushcliffe, Broxtowe and Gedling as a means of enabling the full involvement of all interested organisations and individuals at the earliest possible stage in the development of cycling policy.

When considering the draft Local Plans of Rushcliffe, Broxtowe and Gedling councils the County Council has encouraged compliance with 'The National Cycling Strategy' and that land use and development planning allows and encourages people to cycle.

There is now over 100 km of cycle route network in Greater Nottingham. The routes have improved cyclists' safety, thus reducing the main deterrent to cycling. Further routes have been identified which include routes designed to link isolated parts in the north of the Plan area with the main network in the south.

The Highways Agency has completed much of the Nottingham Ring Road cycle track connecting Beechdale Road to Daybrook. Other completed schemes are a cycle track along the A52 from Gamston to Radcliffe-on-Trent, a similar link from Bingham to Whatton and the A52 crossing at Holme House. Also programmed are the A52 crossing at Gamston and the A606 crossing at Tollerton.

Millennium Cycle Route

The authorities have made good progress in establishing the Greater Nottingham leg of the Millennium Cycle Route, which was completed in June 2000.

The 24 km Greater Nottingham section of the route, which runs between the boundary with Derbyshire in the south, through to Hucknall in the north, has been developed to a high standard and has introduced several innovative measures which make cycling and walking more pleasant, convenient and safe.

The route has been developed in partnership by the City and County Councils, Broxtowe Borough Council, Sustrans (administering Millennium Commission Funds), the Highways Agency, local employers, Environmental Trusts (administering landfill tax revenue) and the DETR (administering European structural funds).

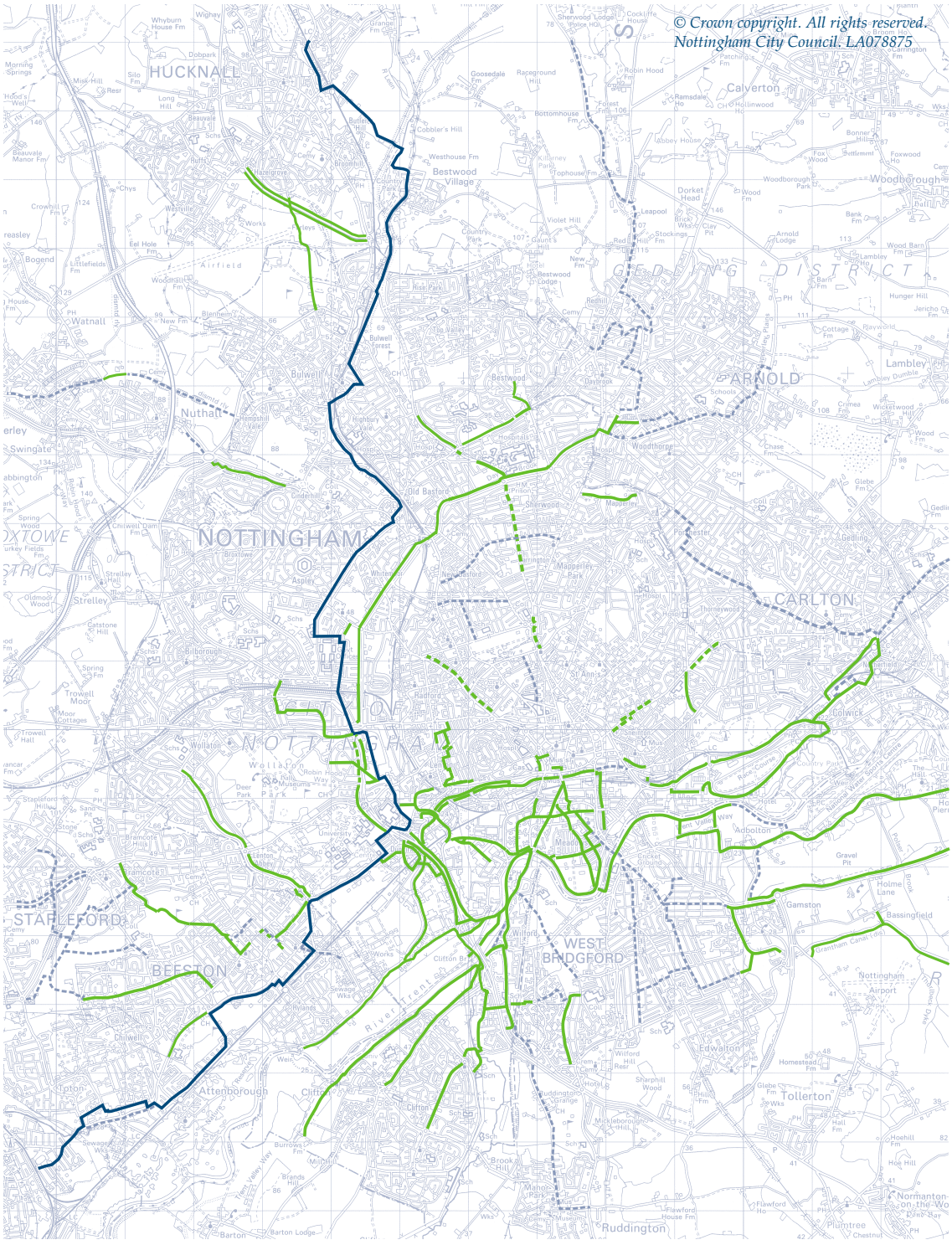


Figure 20

Greater Nottingham cycle facilities



Figure 21

Longer distance cycle routes

Both authorities will seek to capitalise on opportunities provided by the development of the national cycle network in the area. The main Millennium Route will be used as a springboard to develop cycle routes in the north of Nottingham, where an under provision currently exists. The wider strategic network will be further extended by development of additional Sustrans sponsored routes. Links from local businesses and schools to the Millennium Route will continue to be promoted.

This partnerships approach, together with contributions from other sources including Single Regeneration Budgets, developer contributions and lottery funds is likely to be the most practical way of funding further development of the national cycle route network.

As a major sub-strategy to build on the Millennium Route, the City Council intends to develop a linked approach looking at how to promote cycling and walking around the City's ring of boulevards. Phase 1 work is already programmed for Castle Boulevard and it is proposed to extend this around Lenton Boulevard, Radford Boulevard and Gregory Boulevard. These areas are considered to have good local potential as cycle and pedestrian routes although issues such as traffic domination, parking and junction treatments need to be addressed carefully.

Targets

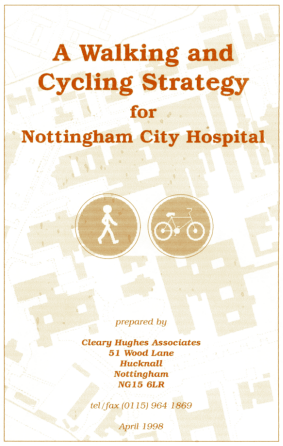
The national target of doubling the modal share of cycling by 2002, and doubling them again by 2012, as detailed within the National Cycling Strategy and endorsed in the Transport White Paper, is fully supported by both authorities. Realistic increases in the number of trips made by cycle will be sought at the local level. Cycle use is already increasing, as demonstrated by the monitoring of the Greater Nottingham cycle route network. Whilst striving to achieve more cycling, the authorities will aim to maintain a downward trend in the number of cycle related casualties in Greater Nottingham. Increases in cycling will be achieved within the context of improving the safety and convenience of cycling across the whole highway network. Road safety considerations are paramount and complementary local safety schemes, particularly those that reduce vehicle speeds, will be developed.

Significant increases in cycle trips can be achieved by changing attitudes towards cycle use. This requires a dual approach between employers and highway authorities, such a system is established in Greater Nottingham. The Nottingham Cycle Friendly Employer Project has put workplace initiatives on an equal footing to new and upgraded highway infrastructure.

Key cycling targets:

- increase in cycle modal share,
- reduction in cycling casualty rate,
- reduction in cycle thefts,
- high quality network expansion, and
- implementation of cycle audits.

Travel plans



Work with employers who are pursuing travel plans has identified opportunities and problems for cyclists and this participation will continue to inform the implementation programmes of the authorities. Findings from the Nottingham Cycle Friendly Employers Project has demonstrated that secure cycle parking and shower/changing facilities reduce deterrents to cycling, spread higher levels of cycling throughout the year and encourage further investment from employers, in response to high utilisation. Both authorities welcome the support for business cycling provided by measures introduced in the budget to encourage commuting by public transport, walking or cycling.

High quality extensions to the Greater Nottingham cycle network will be based upon the programme of schemes which have been identified in consultation with interested groups, individuals, the walking and cycling forum and cycle working groups. The schemes will be prioritised within an auditing process.

Upgrading of the existing cycle network routes will be determined by conducting cycle reviews in accordance with the IHT's 'Guidlines for Cycle Audit and Cycle Review'. Funds will be directed to the areas identified as requiring most attention. It is proposed that in the City area revenue from workplace parking levies will enable development of the network to be underpinned by a Quality Maintenance programme, placing increased priority on the maintenance of cycle facilities.

Cycling and health

Both authorities' strategies aim to produce measurable increases in awareness of the role cycling can play, both in reducing the reliance on car use and producing positive health benefits. Research has identified substantial benefits of regular, moderate intensity physical activity like cycling. Cycling provides protection against coronary heart disease, strokes, non-insulin dependent diabetes and osteoporosis and, through improved strength and co-ordination, protects against falls, fractures and injuries. Because of the level of energy expenditure, cycling can play a part in weight control and the prevention and treatment obesity. In addition people who are physically active have enhanced mood, higher self-esteem, greater confidence in their ability to perform active tasks and better cognitive functioning than sedentary people or those who are less physically active. The role of cycling as a recreational pastime will be promoted. Route developments and enhancements have been identified, such as on canal towpaths, in the programme of walking and cycling schemes, and will be developed in co-operation with all appropriate partners.

Cycling information

Fifteen thousand copies of the Greater Nottingham Cyclist's Guide published in February 2000 have been distributed throughout the Greater Nottingham area. Awareness campaigns incorporating cycling elements have been developed in a number of forms. The City Council, in partnership with the local community, have produced Area Transport Plans for the Clifton/Wilford, Hyson Green, and Bulwell/Bestwood areas. Similar locally based plans will

be developed for other areas in the City. The County Council is developing transport strategies as part of Mobility Management Action Area programmes for Hucknall, Beeston and other district centres, which will include a wide range of cycling initiatives.

The successful promotion of travel plans to local business continues to raise the awareness of sustainable transportation options for local employees. The authorities are both actively involved in school travel measures and the TravelWise initiative. These include the production of school travel plans and the development of safer routes to schools schemes. City schools wishing to introduce or enhance cycle facilities will be encouraged to bid for LTP funding towards schemes. Such bids will be assessed against the developed schedule of criteria.

A programme of adult cyclist tuition is currently being developed by the City Council in partnership with the Nottingham Health Action Group. Within the period of this Plan the County Council will also be developing a similar programme of tuition.

Cycle parking

Cycle parking has been identified as a major factor in determining the use of cycles. Carefully planned secure cycle parking facilities in convenient visible, well lit locations are essential to encourage new users, and make existing cyclists confident about using cycles for more journeys. Further increases in the provision of cycle parking facilities in the City Centre and district centres will be made. These facilities will initially be drawn from a programme of schemes developed with the participation of interest groups through a variety of consultations, including the 1998 parking survey. Improved cycle parking is included in the West Bridgford town centre regeneration scheme and Broxtowe Borough Council has installed cycle lockers in Beeston town centre. Further opportunities will be taken to increase cycle parking provision as sites are identified, particularly at public transport interchanges. The City Council is also reviewing the cycle parking standards contained within the Nottingham City Local Plan, with a view to promoting greater provision of cycle parking through the development control process.

Monitoring

Monitoring existing and future cycle use will be key in the development of an integrated cycling network in Greater Nottingham. The authorities will therefore continue to develop the existing monitoring systems in order to provide accurate information on the number of cycling trips being made. The frequency and purpose of routes used will be identified using measures such as cycle counters and perception surveys which will feed into the performance indicators and output monitoring of the Plan, detailed further in Chapter 7. These performance indicators include cycle use and cycle casualty rate.

The authorities will work towards the integration of cycle usage within other sustainable transport modes and are seeking to build on the significant cycle friendly enhancements introduced at Nottingham Station and proposed at Hucknall Station on the Robin Hood Line. Cyclists have also benefited greatly by the bus priority measures, placing dedicated bus/cycle lanes on key roads feeding into the City Centre.

Elsewhere within the City Centre, several cycle route facilities will be included within the package of demand management measures to be introduced in conjunction with NET Line One. Further improvements in the City Centre include new permanent 24 hour cycle use of the pedestrianised Tourism Link, between the Lace Market and the Castle, as well as cycling

measures included in the traffic management packages associated with the building of the new Ice Centre, the new Broad Marsh Centre redevelopment proposal, the inner ring road review, and the City Centre Clear Zone proposal.

Within district centres cycling facilities in Arnold were improved in conjunction with the new Sainsbury's development. In the West Bridgford town centre regeneration scheme, which includes a pedestrianisation scheme with an exemption for cyclists from the driving prohibitions on Central Avenue, a total of 23 new cycle parking stands have been introduced. In addition continental style cycle markings and surface treatment has been provided on the roundabouts introduced as part of the scheme.

A comprehensive five-year programme of cycling measures is detailed in Chapter 6. Within this programme priority has been given to - making the network safer; developing the existing network; road safety education; cycle parking; commuter plans; and cycle audits and review.

4.2.8 Walking and pedestrianisation

The authorities are seeking to encourage more people to make trips on foot, particularly for those journeys over shorter distances. Additionally, the Councils will seek to capitalise on the significant potential to enhance the role of walking with other sustainable transport modes.

Nottingham City Council published its integrated Walking and Cycling Strategy in March 1999. The strategy was developed in consultation with local and national walking interest groups and representatives of disability groups. The reordering of priorities to establish a walking and cycling culture is a key aim of this strategy. The needs of walkers and cyclists will be given priority in developing transport policy and projects rather than fitted in at the end of the process.

The authorities will continue to seek innovative ways of promoting the environmental, social and personal benefits of walking. The City Council, in partnership with the Nottingham Health Authority are developing a 'prescription for exercise' scheme whereby G.P.'s will prescribe short walks or cycle trips on routes to suitable patients.

Both authorities, working with user groups and local companies, are making good progress towards defining a network of protected Rights of Way.

Responding to the Government Transport White Paper, the City Council has made a number of commitments to make it easier to walk in Nottingham. Within the 'New Deal for Transport: Better for Nottingham' document the City Council has pledged to:

- make sure that all transport schemes are designed to be pedestrian friendly (against the checklist in the Walking and Cycling Strategy),
- designate and upgrade a network of main pedestrian links to district centres, schools and employment areas,
- carry out exemplary schemes in district centres and elsewhere, in co-operation with local communities,
- remove subways in the City Centre and provide surface level crossings,
- maximise priority for pedestrians at traffic lights, and
- give priority to maintenance, which benefits pedestrians and cyclists.

Consultation within the City

The City Council has carried out various consultations associated with the development of a strategy for walking. A large number of leaflets were circulated to schools, colleges, doctor's surgeries etc. giving information on a draft version of the Walking and Cycling Strategy and requesting input towards a final strategy. All respondents were invited to attend a newly formed Nottingham Walking and Cycling Forum, which was also attended by local members of national pedestrian groups and representatives of disabilities groups. This forum has subsequently convened to discuss the role of walking and cycling in the promotion of healthy living, and in the context of the Local Transport Plan process, to seek guidance on scheme prioritisation.

The partnership approach adopted in the production of Area Transport Plans exemplifies the way in which the City Council is keen to facilitate the involvement of local people in identifying transport needs. Pedestrian issues are featuring prominently in Area Transport Plan consultations, leading to action plans that include locally identified pedestrian enhancements to public transport hubs. This process will be ongoing and feed into the implementation programme.

The next stage in the City Council strategy of enabling local ownership of transport issues has begun with the development of the 'Streetwatch' scheme. Residents are now beginning to take up the opportunity to act as voluntary 'wardens', advising the authority on local maintenance issues.

The City Council recognises the role which effective locally based cycle lobbying groups have played towards achieving a quality cycle network in Greater Nottingham. By contrast, pedestrians locally do not have a collective voice. The City Council would welcome the development of local representation on behalf of pedestrians and will give all possible assistance towards its evolution.

The promotion of walking, particularly for short journeys in urban areas, has significant benefits:

- health benefits in the form of exercise,
- emissions benefits through reduced car use, and
- more informal surveillance and associated improvements for community safety.

County Council's walking strategy

The County Council also sees walking as a key component of its sustainable transport policy. A Countywide Walking Strategy, which takes account of the DETR publication "encouraging walking" published in March is provided in full in the North Nottinghamshire Plan. It has been developed around a series of key tasks to promote walking as follows;

- to actively promote walking as a mode of travel and raise awareness by highlighting benefits to individuals and the community,
- to establish high priorities for walking within the policy framework in development control, transportation, health and other sectors,
- to establish effective partnership and consultation at the local level to provide an input into scheme and policy development,

- to significantly improve the safety of pedestrians, particularly vulnerable groups such as the elderly, women and children, through improved facilities, reduced road speeds and changes in attitudes, and
- to implement improvements to the walking infrastructure to make it easier and more convenient for people to walk, and which are targeted to maximise modal shift and to meet the needs of the disabled and socially excluded.



Figure 22

Walking Strategy

These tasks form the basis for a package of measures and policies to encourage walking in the County. These are summarised in Figure 22 and include promotional, infrastructure and travel demand management initiatives and procedures for policy review and formation. Key points are summarised below;

(a) Policy formulation, monitoring and review

Policy development and integration: The County Council intends to publish a 'good developers guide' which will outline in the broadest terms, how new developments can be planned in the most sustainable manner. The guide will stress the need to minimise travel and to prioritise sustainable modes. Walking in particular is highlighted as a key element and emphasises that opportunities for walking should be maximised in decisions on locating development and in its design. In addition to transport matters it will include guidance on the design of buildings with specific reference to energy efficiency, waste collection and dispersal and biodiversity. The guide will be written in partnership with local authority employees, developers and other interested agencies. In addition the emerging supplementary planning guidance interim transport planning statements on developer contributions will allow for contributions towards pedestrian schemes.

The County Council Highway Design Guide places a strong emphasis on layouts which maximise the potential for walking and states that pedestrians should be given a priority over vehicular traffic where this can be achieved safely. Criteria for design of pedestrian and other transport facilities will be reviewed following the publication of the forthcoming Institute of Highways and Transport (IHT) guidelines, 'Walking Friendly Infrastructure'.

The County Council has set a target for all 191 traffic signals with a pedestrian facility in the County to be provided with full facilities for disabled people. Currently 109 are equipped.

The County will continue to safety audit all highway schemes over £5,000, a very low threshold, to ensure safety implications for walkers are fully assessed.

Criteria for pedestrian audits

Priority routes for pedestrian audits will be established, based on:

- short distance routes (under 2 miles)to key employment, shopping centres, schools, and other facilities,
- links to bus stops, and bus and rail stations,
- routes with pedestrian casualty records,
- links from low car availability/high social need to local facilities,
- routes identified through consultation, and
- routes identified through street crime incident data and liaison with police

Survey/Market research and data collection: Regular on-street/household surveys will be undertaken which will establish local views on walking and where the provision of facilities may unlock suppressed demand.

(b) Education and awareness raising

Travel plans and Travelwise: The County Council gives a very high priority to achieving, advising and giving guidance on the preparation of travel plans among employers and schools. A commitment to walking has been established within the Authority through the STEPS campaign.

Partnership and consultation: Partnership and consultation will be enhanced through the local transport forums which are to be set up in each district. These will contribute to the development of the strategy and proposed measures at the local level and attendees will include local authorities, Chamber of Commerce, community representatives and local interest groups.

Preventative health initiatives: A partnership with the health sector will be developed to promote walking for fitness through the Health Improvement Programmes in particular to reduce coronary heart disease; and target GP's to encourage fitness through walking.

(c) Travel demand management

Pedestrian safety: Pedestrian safety will be increased and will assist in achieving Government road safety targets of a one-third reduction by 2010 in accidents involving killed and seriously injured. Key areas will include residential areas, and links to schools and measures will include reduced road speeds and physical measures in urban and rural areas. A new road hierarchy for the County will place a greater emphasis on low speed routes.

Enforcement: Pavement parking can damage pedestrian surfaces and impede walkers on a day to day basis in particular those with mobility difficulties. Reducing this abuse will be a key element of the review of enforcement to be undertaken by the County.

(d) Infrastructure

Schemes will be a mixture of smaller scale improvements following pedestrian audits and major developments including pedestrianisation. Types of improvements are summarised in the section 'measures to improve conditions for pedestrians' below.

Town centre improvements: Town centre improvements including pedestrianisation will be implemented through Mobility Management Action Areas. They will develop high quality networks of walking routes linking from outside areas to activity centres. A series of integration audits have been undertaken to improve pedestrian links to bus stops and bus and rail stations in town centres and elsewhere. These improvements will help to renew the County's district centres and enhance their vibrancy and vitality.

In progressing measures the County Council will bring together landscaping and environmental improvements with engineering improvements to create attractive high quality pedestrian areas in town and local centres and residential areas.

Personal security: Measures to tackle personal security, based on the DETR's report 'personal security issues in pedestrian journeys' will be included. These will target public transport routes to further encourage modal shift, building on the Council's £350,000 investment in CCTV at Robin Hood Line stations. Other measures include lighting, crossings at street level, and removal of recesses and unnecessary landscaping.

Milestones/rights of way: Enhancing links from rights of way into the highway network and providing routes which can perform the dual purpose of leisure/tourism and utilitarian trips in urban and rural areas. The County Council will undertake a study to investigate the

development of Quiet Roads and Greenways. Links between public transport and the rights of way network are being improved to allow easy access from urban areas to recreational pursuits in rural areas. This will include the provision of improved footways at rural bus stops.

Pavement repair and maintenance: Maintenance of footways is important in reducing wear and tear and incidences of litter and dog dirt. Priority will be given in particular to routes identified through school travel plans.

Overall the package of measures provide a real opportunity to increase walking and contribute to modal shift targets. Schemes to be implemented are included in the Nottinghamshire programme for Greater Nottingham.

Measures to improve conditions for pedestrians

The authorities make use of a range of measures and infrastructure to improve pedestrian safety and convenience:

- pedestrian refuges,
- dropped crossings/kerbs,
- zebra crossings,
- pelican, toucan and puffin crossings,
- pedestrian provision at junctions,
- footpath links,
- upgrading pedestrian surfacing,
- upgrading lighting provision,
- upgrading footway maintenance,
- upgrading footway drainage,
- providing appropriate audible, tactile and visual warnings to improve safety for people with disabilities,
- CCTV surveillance,
- appropriate enclosure and landscaping,
- subway replacement,
- pedestrian friendly design practice, and
- pedestrianisation, including time segregated servicing.

Identification of schemes

The authorities receive many requests for pedestrian facilities or priorities, and also engage in a range of other exercises to identify needs:

- monitoring of road traffic accidents involving pedestrians,
- requests from members of the public,

- assessment of planning applications,
- requests from commuter planning organisations,
- requests from schools/school travel plan consultations,
- Single Regeneration Budget, New Deal for Communities and other area based regeneration initiatives,
- consultation on walking and cycling strategies, and
- Home zone consultation exercises.

Prioritisation of schemes

Within the City, schemes will be prioritised by taking into account the above, but in response to the White Paper it is proposed to undertake a more integrated approach including:

- equality and social exclusion issues,
- contribution to other initiatives such as travel plans, travel to school, area regeneration initiatives, home zones, and
- contribution to the Air Quality Management Strategy.

City Centre issues

Nottingham benefits from an extensively pedestrianised central core, although links across the inner ring road require improvement. Of particular concern are the City Centre's subways, which are major deterrents to walking, particularly at night. The City Council has begun a comprehensive review of all signal controlled crossings within the City Centre, giving the opportunity to make a significant re-evaluation of all road users here, promoting conditions for pedestrians. An ongoing programme of pedestrian linkage improvements has already seen significant improvement:

- Station Gateway (Collin Street and Canal Street),
- St James' Street/Maid Marian Way,
- pedestrianisation of Smithy Row and Pelham Street,
- pedestrian priority at Carlton Street, Goose Gate and Hockley,
- Queen's Road/Arkwright Street/Carrington Street, and
- new facilities associated with the National Ice Centre

Priorities which remain are:

- Friar Lane/Maid Marian Way,
- Upper Parliament Street/Theatre Square,
- Toll House Hill roundabout,
- Upper Parliament Street/Milton Street, and
- Canal Street.

The proposed City Centre major scheme will enable these schemes to be progressed in an integrated way, linked to wider proposals for bus and cycle priority.

4.2.9 Home zones

The White Paper highlighted the importance of an integrated approach that tackles local transport issues by linking engineering and traffic calming measures to areas that have regeneration needs. This theme has been continued in subsequent policy documents including the report of the Urban Task Force, "Towards an Urban Renaissance". The contribution of home zones to healthier, safer and more secure communities has also been a recurrent theme in other recent policy documents including "Encouraging walking: advice to local authorities", "Tomorrow's Roads - Safer for Everyone (road safety strategy and casualty reduction targets for 2010)" and the Speed Management Review.

Regeneration of existing residential areas

In existing residential areas, the development of home zones will link transport issues to urban regeneration through community consultation and the creation of spaces for people using environmental improvements such as planting and seating. Home zones require the involvement of residents and the acceptance of a degree of restraint of cars in the interests of the safety and environment of the area as a whole.

The development of home zones within the plan area has a role to play in:

- the development of civilised streets,
- taking forward Area Transport Plans,
- reducing car dependency through Planning for Communities of the Future, and
- the implementation of walking and cycling strategies through the development of safe transport corridors, pedestrian priority areas and expansion of the cycle network.

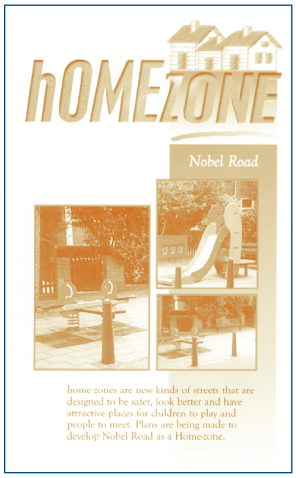
New residential developments

There will also be opportunities to ensure that new residential areas are designed as home zones from the outset. The City Council's "Design Guide for Community Safety in Residential Areas', which sets out principles to guide the design of residential developments in a way that improves their safety and security, has already gone some way to assisting this by promoting residential design that considers the needs of vulnerable members of the community including the elderly, children, women and disabled people. In addition to advice regarding layout and use of public space, the Design Guide includes specific advice regarding parking, traffic calming, cycle ways and pedestrian links. A similar approach has been taken in the County Council's Highway Design Guide revised in January 1999.

This approach is reinforced by "Places, Streets and Movement", companion guidance to Design Bulletin 32 and "Towards an Urban Renaissance", which both emphasise planning new residential developments for people rather than the car. Further guidance is also given in 'By Design' a publication by the Commission for Architecture and the Built Environment.

Following the design principles set out in these documents will enable new developments to be designed as home zones and these principles will be reflected in future revisions to the Highway Design Guides.

Implementation



There are three pilot home zone projects in the plan area:

- Nobel Road, Clifton, Nottingham,
- Beeston Rylands, Broxtowe, and
- Lady Bay, West Bridgford, Rushcliffe.

Nobel Road, Clifton is one of nine pilot studies included in the DETR monitoring programme. Progress on these local pilot projects and the results of the national DETR monitoring programme will help to identify areas suitable for the creation of home zones and determine the development of future home zones in the plan area.

Identification and prioritisation of future home zones

The concept of home zones is very popular with the local community and expressions of interest have already been received from several communities in the plan area. Further proposals are likely to emerge as more Area Transport Plans are developed with local communities and it will be necessary to develop criteria for the selection and prioritisation of potential home zone schemes.

Home zones have a tremendous potential to deliver community regeneration and empowerment objectives and to enhance overall quality of life for residents. Work carried out to date on the pilot home zone in Nobel Road, Clifton demonstrates that to successfully develop and sustain a fully participative home zone project requires considerably more investment in terms of both capital and revenue expenditure than the traditional traffic calming approach.

The selection of future schemes must reflect likely funding opportunities and resource availability. In addition to transport capital funding and in response to the Government's new agenda, any future projects will need to take advantage of other sources of finance where available, including Single Regeneration Budget 5, New Deal for Communities, Housing Capital, New Opportunities Fund and the Health Improvement Programme.

The selection of future home zones will also take into account:

- the regeneration potential of the scheme,
- level of support from the Local Area Committee and the local community,
- road safety, traffic management and engineering considerations,
- links to sustainable school travel initiatives such as school travel plans and safer routes to school,
- contribution to the Casualty Reduction Strategy,
- contribution to the Air Quality Management Strategy, and
- links to the emerging Speed Management Strategy.

Project progress and development

Pilot home zone, Nobel Road, Clifton, Nottingham

The City Council is developing a pilot home zone in the Nobel Road area of Clifton, Nottingham and the project is being independently monitored by the Transport Research Laboratory as part of the DETR's national home zone pilot project.

The Nobel Road Home Zone project is seen as a way to co-ordinate the wider social and physical regeneration of the area and is being used as a catalyst for rebuilding community spirit, developing local skills and providing local employment opportunities. The home zone also forms one of the elements of a suggested package of transport demand management measures aimed at encouraging more local journeys to be made on foot, by cycle or on public transport by Clifton residents helping to reduce the need for significant widening of the A453 through Clifton for consideration by the multi modal study.

Effective partnership working is crucial to the success of the home zone. The Nobel Road project has become a corporate initiative involving seven City Council departments with a remit that goes beyond transport issues. The way that the project is co-ordinated and sustained is very important and the project is testing a management structure and working arrangements that could be used for other neighbourhood regeneration initiatives.

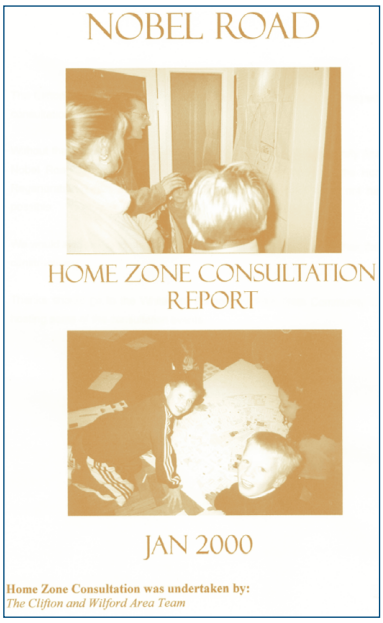
Participation of the local community has been a key part of the development of the scheme from the outset. In order to build and maintain community ownership of the project, the design has been developed in parallel with the consultation process ensuring that the home zone responds to the residents' needs. Consultation with other partners including the bus operators, the police and the emergency services is very important to achieve the co-ordinated approach essential to successful implementation of this proposal. A partnership is already in place via the Area Committee, which includes local councillors and representatives from the police, local residents, schools and community workers.

The physical elements of the home zone are being developed in three phases:

- Phase A: Nobel Road traffic calming, entrance features and landscaping

  This phase uses bus friendly traffic calming measures and hard and soft landscaping features to reduce vehicle speeds on the main spine road to the estate and reinforce pedestrian links across the estate. It is also intended to treat one of the side roads as part of Phase A to ensure future funding commitment from the housing capital allocation in 2001/02 onwards.

- Phase B: Side road treatments to develop "mini home zone" areas incorporating shared surfaces, seating and/or play areas. It is intended that Phase B will be a rolling programme of improvements, within both the street space and the property curtilages, developed in close consultation with the residents of each road. This phase will run through the Plan period, subject to the availability of funding, with side roads prioritised for treatment on the basis of the



level of resident commitment and the City Council's priorities for mainstream housing environmental works.

It is anticipated that construction of Phase A will start in autumn 2000. Construction on Phase B could begin in spring 2001 depending on availability of capital housing allocation. It is intended to let the construction contract as a local employment and training initiative to tie in the physical elements of the scheme with the wider regeneration objectives of the project.

- Phase C: Extension and improvements of the community centre and development of play and social facilities.

  The City Council is intending to make a bid to the New Opportunities Fund to finance these proposals and depending on the success of this bid Phase C could proceed in parallel with work on Phases A and B.

Other home zone projects being promoted

The County Council, in conjunction with the appropriate borough council, submitted bids to the DETR for the inclusion of two pilot home zone projects in their monitoring programme, one in Beeston Rylands and one in the Lady Bay area of West Bridgford. These bids resulted in the Lady Bay scheme being placed on the reserve list. However it was always the intention to proceed with these two pilot home zone projects as Nottinghamshire, together with Broxtowe and Rushcliffe Borough Councils and local community groups are keen to trial the home zone concept and assess the effectiveness, acceptability and potential for transferability of a range of techniques. A mixture of techniques such as traffic calming, landscaping and changes to the road layout and appearance will be used to encourage slower, more careful driving to create a safer environment for children, pedestrians and cyclists. More generally home zones will help to improve peoples' quality of life and create healthier and safer neighbourhoods. In broad terms the Lady Bay Home Zone will be an "area wide" scheme and the Beeston Rylands a smaller more concentrated one, both are being community led.

Lady Bay

Lady Bay was chosen for a home zone because of its cohesive nature and the strong community support for action on traffic and safety problems and the commitment to improve the quality of life for residents. An "area-wide" approach is being adopted because of the strong community pressure, via the Lady Bay Community Association (LBCA)and the West Bridgford Local Area Forum, for action to alleviate anxiety about non essential through traffic and deal with other safety issues within the Lady Bay area. This scheme is being funded by Nottinghamshire County Council, Rushcliffe Borough Council, West Bridgford Local Area Forum (WBLAF), and Gamston and Holme Pierrepont Parish Council (G&HPPC), working in partnership. In addition the project has been successful in attracting £15,000 Action Zone Funding giving a total budget of £122,000 (including approximately £40,000 for landscaping). There is a primary school within the area that is in the process of developing a school travel plan that will integrate with the proposed home zone.

A working group consisting of County and borough Members and officers, representatives from the WBLAF, LBCA and the G&HPPC plus several local residents has been formed. This group has identified the main traffic and safety issues in the area and is currently engaged in designing a scheme to address these issues. Additional local groups such as the Lady Bay

Studio Group, which includes local artists and designers, are also being involved in the design process. An artwork competition has also been run in the Lady Bay Junior School facilitated by members of the Studio Group with prizes donated by the WBLAF. The winning pieces will be incorporated into the scheme. Once a draft design has been prepared full consultation with all residents will be undertaken and the design amended where appropriate. Preliminary discussions with Nottinghamshire Police have taken place and their views are being incorporated into the draft design.

Beeston Rylands

Beeston Rylands has been selected for a home zone because it is a self-contained cohesive area with only two means of access and egress. Most of the housing is 1930's semi-detached with very little off-street parking which results in the streetscape being dominated by the car. Individuals in the area have expressed concerns about traffic; parking and other safety issues during previous consultations carried out by Broxtowe Borough Council. The aim of the scheme is to create a more people-orientated environment within a concentrated sub-area of the Rylands, by combining speed-reducing features with environmental improvement works designed and located in conjunction with the local community. Nottinghamshire County Council and Broxtowe Borough Council are jointly funding the scheme, the current budget being £60,000, however additional funds are being sought from the Nottingham Health Action Zone budget.

Whilst residents of the Rylands seem to have a strong geographical identity there is no specific community or residents association which has resulted in fragmented requests for improvements to the area. A different approach is therefore required. All residents of the Rylands were sent a leaflet which explained the concept of a home zone, invited them to a mobile exhibition "to find out more" and included a questionnaire asking for their views on which street they would like to see become a pilot home zone. Children from the Beeston Rylands Junior School also took part in this first consultation process by visiting the exhibition and highlighting their routes to school.

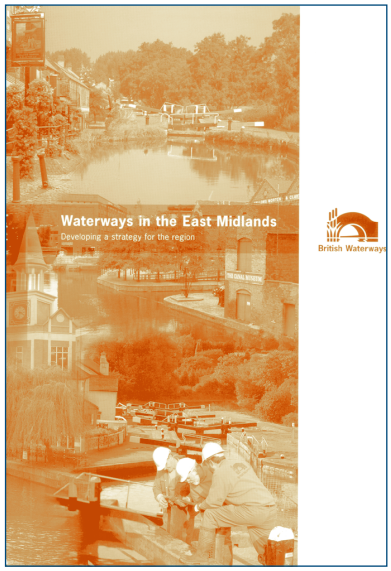
From this first round of consultation it became evident that residents wish to see traffic safety and parking issues addressed but do not wish to see street furniture installed which could be abused by congregating youths. Several streets were identified, from the returned questionnaires, as having significant support for a home zone, however only 20-25% of residents on these streets responded. Therefore all residents of these streets are currently being advised that their street is under active consideration for a home zone, re-consulted for their views and asked if they would be prepared to participate in a residents' working group. As an incentive to respond there will be a prize draw for completed questionnaires, one draw per street, with gift vouchers as prizes, kindly donated by The Boots Company (which is local to the Rylands).

Once the street with the most support has been identified a residents working group will be established. In conjunction with County and borough Members and officers this group will be instrumental in the identification of the issues and problems that need addressing and the design of potential solutions. Part of the brief will be to canvass and take account of the children living in the street and their priorities for improvement. As soon as a draft design is complete, further consultation will be undertaken with all residents of the chosen street. Comments received will be considered and the design amended where appropriate.

Implementation

It is anticipated that both the Lady Bay and the Beeston Rylands schemes will be implemented during the 2000/01 financial year. Extensive before and after monitoring will be carried out on both schemes along the lines outlined for the DETR pilot home zone projects. Once feedback becomes available on the operation of these two pilot schemes a rolling programme of home zones will be initiated covering the whole of the County. Requests for home zones will be assessed on the level of community commitment and the traffic conditions pertaining to the area in question.

4.2.10 Inland waterways



The River Trent is an arterial waterway that provides water access to and from the Humber Ports and beyond to Nottingham. The river is a resource that is under utilised and can offer a number of resource opportunities. These include:

- urban regeneration,
- leisure and tourism,
- freight transport,
- cycling and walking, and
- commuter/consumer travel

Urban regeneration

Specific sites along the River Trent lend themselves to development and can act as a catalyst for further development. Such a scheme is being investigated at the moment by a joint venture partnership involving Nottingham Regeneration Limited and British Waterways for the frontage between Trent Bridge and Colwick Park. A further strategic overview of a larger section of the river is being considered for the River Trent Corridor between Barton in Fabis and Gunthorpe.

Leisure and tourism

The area's waterways are regionally significant tourism resources, and two trip boats operate from Nottingham. 600 pleasure boats are licensed on the Trent, and the National Watersports Centre is based on the Trent at Nottingham. The potential of the Navigation as a leisure resource is supported in the Plan and associated sustainable access and transport demands will be monitored and kept under review. In particular walking and cycling links and the potential for pedestrian/cycle bridges will be reviewed.

Freight transport

The need to make best use of inland waterways for transporting freight in order to keep unnecessary lorries off the road network is recognised by the authorities and this issue is also recognised in the sustainable distribution section of this chapter. The growing potential for the movement of bulk materials is recognised.

Freight movements on the Trent have declined over a number of years but approximately 250,000 tonnes of freight was moved on the Trent in the region last year. The authorities would encourage the development of wharves and transhipment facilities where such provision would not compromise wider regeneration objectives. They would also be considered in the context of the relevant adopted Local Plan and any supplementary planning guidance together with the viability of the facility and any other associated issues such as road access and local residential amenity. Should planning permission be granted for the redevelopment of such a facility the authorities will seek to encourage or secure a suitable and appropriate replacement. The location of such provision should be appropriate to their utilisation and would be discussed with British Waterways and other relevant interested parties.

The adopted City of Nottingham Local Plan confirms that planning permission will be granted in appropriate locations for developments which would provide facilities for freight movements on the River Trent or Nottingham Beeston Canal (Policy T8).

Cycling and walking

The area's waterways and canals already provide valuable traffic free links for pedestrians and cyclists in and between the urban areas and the authorities will continue to work in partnership to promote their use. Towing paths have the potential to be connected to existing footpath, bus and cycle networks, as in Nottingham where significant progress in developing integrated networks has already been made. The authorities will work with British Waterways to investigate opportunities to develop further cycleway studies, schemes and routes.

Commuter and consumer travel

The role of the Trent as a strategic waterway route is recognised and the investigation of future potential for movement of commuters or shoppers will be considered.

Partnership

As part of the developing Local Transport Plan process the authorities have established a dialogue with British Waterways and will maintain such discussions to seek an appropriate balance between the commercial, leisure and redevelopment potential of the area's waterways and the River Trent in particular.

4.2.11 Powered two-wheelers

Mopeds and motorcycles, collectively known as Powered Two Wheelers (PTWs), 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.

However, the safety of PTW users is a key issue in the context of integrating motorcycling into the transport system, and careful consideration must be given to ensure that the benefits that this mode can bring with respect to congestion and the environment, are realised effectively.

The debate has reached the national agenda with the establishment of the Motorcycling Advisory Group 1999 bringing together representatives of Government and the motorcycle industry and those interested in the effects of motorcycling. The conclusions of this group are awaited with interest.

Sales of PTWs have continued to rise steadily over the last few years with sales of mopeds and scooters, typically used for short commuting journeys, being predominant.

Benefits

There are a number of benefits which PTWs can contribute:

- environmental benefits,
- congestion alleviation,
- social inclusion, and
- reduced car ownership.

Environmental benefits

Generally, PTWs have lower fuel consumption characteristics, and hence, lower carbon dioxide emissions than driver only cars. For the type of motorcycle which is commonly used for commuting purposes (generally 125 cc and under) the benefits are even greater; this class of vehicle can deliver exceptional fuel efficiency, often over 100 mpg so their contribution to air quality improvements could be significant if they are used to replace cars for short commuting trips.

Congestion

PTWs are small and highly manoeuvrable and are efficient users of roadspace. On the road, three PTWs would occupy the same space as a single car, and in typical commuting conditions where up to 70% of cars have a single occupant there is a clear spatial advantage to be gained, with a corresponding reduction in queue lengths and associated problems. In addition a stationary car, stuck in traffic does zero miles per gallon; PTWs are capable of manoeuvring through traffic saving both time and energy.

Social inclusion

Many of the densely populated areas of the Plan area, particularly some of the inner city areas of Nottingham, have low levels of car ownership; Whilst many of these areas are well served by public transport, due to the nature and environment of the area, personal security is a key issue and many feel that the journey to the bus-stop and subsequent wait for a bus could render them vulnerable. In addition, many people in these conditions may have to work unsocial hours when there are little or no bus services available. In these circumstances, and unable to afford a car, a motorcycle may provide a viable alternative transport.

Reduced car ownership

The 1991 Census reveals that many households in the conurbation have access to two cars. If motorcycling were made an attractive alternative to the private car for some of these trips, some may consider swapping the second car for a PTW. Appropriate encouragement of the "6-wheel family" concept may be an effective tool in restraining car ownership and usage in the short to medium term.

Key issues

The three main areas of concern to promoting PTWs as a serious alternative to the private car are;

1) Road safety

Danger from other road users - in over 60% of all urban accidents involving PTWs, the responsibility lies with other road users, the rider is usually the innocent victim. Infrastructure deficiencies - poorly placed street furniture and slippery road markings and road surfaces which have lost their skid resistance have safety implications for PTWs particularly in poor weather conditions.

Education and training - motorcyclists have to undertake rigorous testing procedures, to demonstrate both theoretical and practical capabilities; the demands on the PTW learner are far in excess of those placed on car learners.

2) Parking

Five motorcycles can be parked in an area required for a single car which is clearly a more effective use of space. Motorcycles are an easy target for determined thieves as they can be lifted into the back of a van in a matter of seconds if reliant upon stand alone security devices. The provision of hitch rails or ground anchors would greatly assist in this context. The provision of facilities to enable motorcyclists to store helmets and wet weather gear would also be helpful.

The Motorcycle Action Group for Nottingham, British Motorcycle Federation and the Motorcycle Industry Association have been involved in the participation process for the Plan and have been helpful in identifying suitable parking areas and facilities for PTWs. £10,000 was allocated from the Provisional Plan settlement for secure parking facilities in Nottingham. Facilities will continue to be funded through the 5 year plan period.

3) Access

Motorcycle lobby groups have long been campaigning for access to be given to PTW in bus lanes as has been permitted in a number of Cities in the UK and Europe. Currently, however, it is felt that providing comprehensive exemptions to other vehicles may degrade the level of priority given to buses.

Key measures to encourage PTW usage

- raising awareness of the advantages of PTW transport for a proportion of journeys,
- greater promotion of PTW transport as an effective alternative to the car by the motorcycle industry and lobby groups,

- better facilities for PTW users at the journey end, particularly public transport interchanges and shopping centres,
- special facilities at the workplace for PTW users through the development and implementation of green travel plans, and
- recognition of the 6 wheel family concept (1 car and 1 PTW) as a more sustainable alternative.

Strategy

In order to address these issues the strategy will comprise the following elements:

- encourage parking strategies in commercial centres and at public facilities to provide adequate space and suitably located secure parking for current and future PTW users,
- encourage employers through planning conditions and travel plans to make adequate provision for PTWs in the workplace, including secure parking facilities and lockers,
- undertake a PTW audit of all new highway schemes to ensure that the safety of PTW users has been taken into consideration and opportunities for the specific needs of PTWs have been maximised,
- investigate in conjunction with the motorcycle industry and PTW users a suitable location for a properly designed and monitored pilot study on the use by PTWs of a dedicated bus lane. The study will be based on detailed consultation with PTW users, bus operators and the DETR. Until the pilot study has been undertaken, and the results evaluated, consideration will not be given to the opening of bus lanes to PTWs. Groups representing PTW users are invited to present conclusive evidence from other cities where PTWs have been permitted access to bus lanes, and
- where opportunities allow, ensure that charging structures provide an effective incentive to undertake appropriate commuting journeys by PTW rather than by car.

4.3 Traffic management and demand restraint

The strategic view of the authorities with regard to traffic reduction and the role of traffic management and demand restraint in this context is set out in the Road Traffic Reduction Act Report at Appendix A of the Plan.

Travel demand management is a major element of the Greater Nottingham transport strategy. In order to encourage people to use more sustainable modes and to reduce reliance on the car, a range of policies and proposals have been developed to maximise efficient use of the network. This approach to demand management will be emphasised through the Regional Planning Guidance and is included in the Interim Regional Transport Strategy.

The authorities have developed a responsive approach and proposals which require reprioritisation of the use of the highway network are assessed in terms of their impact upon public transport, pedestrians, and cyclists. Traffic regulation orders such as parking and

loading restrictions are introduced in parallel to bus priority schemes, to maximise the benefits for buses. Examples of this include 'tidal flow' peak period loading prohibitions, and a developing programme of bus stop clear way orders, the latter in conjunction with infrastructure improvements such as bus boarders and raised kerbs at bus stops.

Other examples of innovative traffic management to support demand restraint proposals include Traffic Regulation Orders to support the introduction of commuter plans, residents' parking schemes to complement the Plan parking strategy and creative solutions to highway design challenges to ensure traffic calming and other improvement schemes meet the needs of buses, cyclists and pedestrians as well as car drivers.

A strategic review of the use of the highway network has been undertaken, which fed into the development of the Bus Quality Partnerships Programme. The implications of detrunking and future use of the highway network are covered later in this chapter- particularly relevant are the forthcoming outputs from the Government's Multi Modal Studies, the development an integrated multi modal model and the emerging the two integrated public transport major schemes proposed.

4.3.1 Intelligent Transport Systems

Traffic Control Centre development

The Urban Traffic Control (UTC) system, jointly operated by the authorities, continues to play a fundamental part in the control of the road network but with a reducing emphasis on simple capacity maximisation and an increasing accent on demand management. The system has been developed over many years and fully recognises the need to support and improve public transport journeys through the network with a variety of signal priority and demand management strategies.

In addition to the normal traffic management measures to assist public transport, bus priority at traffic signals is being introduced at a number of locations. The use of special vehicle detectors or tags linked to hurry calls or SCOOT (Split, Cycle and Offset Optimisation Technique) signal control offers a high level of priority resulting in reduced journey times.

At other sites, special bus gates offer the option to restrain traffic in order to promote the bus to the front of any potential queues. Local congestion and queue detectors linked to Urban Traffic Control are being used to enable flexible control methods to vary gating depending on prevailing traffic conditions.

The system, which currently employs SCOOT Version 4.2 incorporating vehicle emission estimation and improved bus priority facilities, is being developed further with a view to incorporating signal priority for the Nottingham Express Transit (NET) network. In addition, air quality monitoring is supported by a number of roadside units measuring CO and NO2 and as air quality management strategies are developed the data collected will be used to initiate suitable gating measures. The main components of the Intelligent Transport System (ITS) strategy are outlined below.

1 Urban Traffic Management Centre - The need to identify and develop new technologies has been supported through the UTMC programme and both authorities were partners in the consortium awarded the UTMC08 project (Suitability of the NTCIP protocol for UTC data transmission).

In addition detailed discussions have taken place with Leeds and Sheffield with a view to further development of the selective vehicle priority system developed in UTMC01.

Outside the UTMC program the authorities have sought to develop new and innovative ways of using existing systems and are currently implementing links between the UTC system and CCTV system in order to automatically select and move cameras when congestion is detected. This project has been developed and funded in partnership with Southampton (ROMANSE).

2 Closed Circuit Television - CCTV continues to play an important role in supporting the UTC operators in monitoring the network. Where appropriate the system has been expanded to cover new or changed elements of the road network and will include 3 new cameras specifically to monitor key junctions on the new tram route.

3 Travel Information Services and the Internet - both the UTC and CCTV systems provide important elements in the provision of travel information and real-time data and pictures are now available to the public via the Nottingham TravelWise internet site (www.nottinghamtravelwise.org.uk). This site has now been accredited by the Institute of Logistics and Transport.

4 Strategy Management - an additional computer facility has now been added to the UTC network to provide a central database and strategy management facility. Currently interfacing to the UTC, CCTV and Travel Information systems this will be developed to allow data exchange and control with other systems as they are deployed.

5 Car Park Management and Variable Message Signs - vehicles queuing at car parks and journeys around the network looking for car park spaces can be a major contributor to urban congestion. It is therefore proposed to develop a car park management system. Data from the system will be used for travel broadcasts and internet with predictions of space availability up to one hour ahead to allow for confident journey planning from home. In addition a range of VMS signs will provide car park and general road condition information.

6 Bus Location and Real-time Passenger Information System - Global Positioning satellite (GPS) bus location and variable message signs (VMS) to deliver predicted arrival time information have been implemented on several quality corridors on the periphery of the urban areas. Work is now underway to develop a citywide system covering in excess of 400 vehicles. Bus location information will be delivered to the end user by internet and VMS signs but it is also envisaged that mobile phone technologies will be utilised to enhance ease of data access.

Additionally, innovative new technologies for the delivery of information to mobile phone equipment on the bus are being researched by Nottingham Trent University in partnership with the City and County Councils.

ITS Strategy and Architecture

Whilst all the systems, existing and proposed, have real and defined benefits to the management and control of the urban network there is clearly an added value to gained by integration. The exchange of data between systems will ensure maximum benefits are extracted from the data transmission infrastructure and the additional facilities provided by the central common database and strategy management system. As new systems are added and by the use of open standards the authorities will ensure that a flexible and easily expandable network is created.

The system will also form the basis for future automated data links to the new national Traffic Control Centre and Information Highway projects.

New data transmission

The authorities are aware that as a result of British Telecom proposals to withdraw multipoint analogue services there will be a need to replace the UTC data transmission network in the near future. It is vital that any new network should have the ability to support the enhanced capabilities envisaged in the UTMC program. With this in mind an officer from the authorities is currently acting on behalf of the national Traffic Control User Group in discussions with BT and equipment providers to determine the appropriate path for system migration to digital technologies.

4.3.2 Capacity reallocation

Progress to Date

Significant progress has been made with regard to capacity reallocation in the Plan area. Recent investment in bus lanes (peak period and 24 hr) along Bus Quality Partnership corridors has given priority to public transport and cyclists, and this programme is ongoing. The proposals for Nottingham Express Transit involve significant amendment to access restrictions, and the City Council's Clear Zone proposals in the City Centre will significantly reduce traffic to the benefit of public transport, pedestrians and cyclists. The Station Gateway scheme and phase 1 of the Southern Relief Route are other examples where significant reallocation of highway space to public transport, cyclists, and pedestrians has been implemented.

Assessment of development impacts

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

Recent examples include:

- appraisal of the proposals to extend the Broad Marsh Shopping Centre. The developers were required to undertake an Integrated Transport Assessment. This demonstrated how the scheme proposals involving the closure of Collin Street and other significant amendments to the highway network, would contribute to the City Council's wider planning and transportation objectives, and

- Southern Relief Route: significant reductions in highway capacity in the Collin Street/ Canal Street area are proposed in order to promote the Broad Marsh development in a sustainable, integrated manner. A supporting programme of bus priority, pedestrian and cycle provision together with a new transport interchange linking NET Line One, a new bus station and the Midland Station, is also proposed. Support for elements of this scheme is included in the City Council Programme.

A similar approach is being adopted by the County Council with developers of a number of potential major residential sites within the Plan area. 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. It is not acceptable for developers to assume high levels of modal change without demonstrating how it can be achieved. An example of this is the package of measures proposed to support the development of Nottingham Business Park.

Next steps

The introduction of NET Line One and the proposed workplace parking levy have generated the concept of two new linked integrated public transport major schemes, a major reallocation of capacity in and around the central core to accommodate and integrate bus, pedestrian and cycle networks with the tram proposals and a major upgrade of the outer ring road to provide a cross-conurbation, orbital public transport route.

The development of these two schemes is dependent upon securing an acceptable balance in reallocation of capacity to change existing and proposed patterns of traffic flow in and across the conurbation. In addition, the level of proposed tariffs for workplace parking levy will have a big impact on how travel patterns will change.

To inform these considerations and provide robust data to help inform the Government's Multi Modal Study for the A453 the City Council have initiated the development of a multi-modal model for the City area. Throughout March to June, a comprehensive data collection exercise has been undertaken, including the use of a postcard survey. The information from the postcard survey is extremely valuable and included trip origins and destinations, journey purpose, vehicle classification and occupancy and an indication of willingness to change mode or route in response to influences such as increased congestion or better public transport services. The data collection was co-ordinated with similar exercises being carried out for the two Multi-Modal Study surveys (A453 and M1).

Consultants are to be engaged to develop a transportation model of the City area, initially focussing on the City Centre. The model will inform and test the potential for capacity reallocations, modal transfer, mode and trip choice, to be used for scheme appraisal and to provide key outputs to satisfy the Government's New Approach to Appraisal (NATA) and enable strategic route and mode choice behaviour to be modelled.

4.3.3 Other measures to address congestion and pollution

The authorities have adopted various strategies and partnerships to help address congestion and pollution.

In particular the Nottingham Green Partnership and the Nottingham Energy Partnership have raised the profile of transport issues via Transport Task Groups, comprising representatives from local authorities, the private and voluntary sectors. Small-scale infrastructure investment and wider dissemination and awareness campaigns have been developed to make the environmental costs of car use and congestion more explicit.

Both partnerships are seeking to develop and promote the use of cleaner fuels technologies and more fuel efficient vehicles, as well as helping to promote the wider benefits of travel plans and sustainable working practices.

A particular success was the Millennium Electric Vehicles Project, funded by Powergen and the Energy Saving Trust's initiative Energy Efficiency Powershift. The project promoted the uptake of electric vehicles in the Plan area by providing grant funding to defray additional costs currently associated with the purchase of electric vehicles. Both authorities participated in and supported the scheme, along with other key partners such as the Government Office for the East Midlands and the Nottingham Health Authority. The biggest of its kind in the UK, the project now has 35 electric vehicles up and running in active use in the region.

A further initiative to promote the use of low emission, cleaner fuels in the City which is being explored is the potential of providing a Compressed Natural Gas (CNG) Fast Fill Fuelling Facility which could significantly increase the use of CNG as a fuel by local bulk users with the attendant benefits for the environment in terms of air quality and energy efficiency. Government grants are available towards the conversion/ capital costs of cleaner fuelled vehicles and such a facility would potentially significantly increase their uptake.

At this stage potential public and private sector partners are being sought which could include logistics/freight operators, refuse disposal concerns and bus companies. Boots the Chemist has expressed possible interest in a joint venture, but site location and operation are key issues to be resolved. In order to move the potential project forward a provisional capital allocation of £40,000 has been made from the 2000/01 Local Transport Plan settlement and progress will be reported next year.

Both authorities already use alternatively fuelled vehicles, and as part of its Green Commuter Plan the City Council has committed to phasing in alternatively fuelled vehicles in its replacement programmes. The authorities civic vehicles have been converted to run on liquified petroleum gas (LPG).

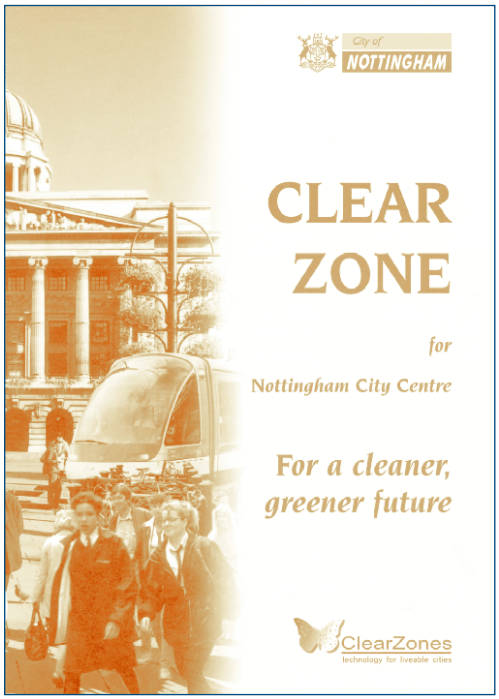
The County Council has promoted School Travel Plans, published and distributed a 'TravelWise' teachers pack to schools, publicised its own commuter plan STEPS, and actively promoted appropriate travel choices through its wider road safety and travel awareness work. It has adopted the use of ultra low sulphur diesel in its fleet vehicles and is trialling other sources including LPG and electricity. Both authorities are partners in the inter authority Nottinghamshire Pollution Working Group which is delivering the national requirements for local air quality management.

Other activities such as enforcement of emission standards and pollution control are included later in this chapter.

Clear Zone in Nottingham City Centre

The Nottingham City Centre Clear Zone is a good example of a scheme promoted to secure a range of benefits that will help meet a number of objectives of the Plan.

Clear Zones are a national initiative to reduce traffic congestion and pollution in urban areas. Air quality monitoring shows that recommended pollution limits are regularly exceeded in the City Centre. A recent survey of local people showed that over 70% think that pollution from traffic in the City Centre is a problem.



Further improving the quality and attractiveness of the City Centre is essential if Nottingham is to continue to grow and prosper. Offering visitors a real transport choice with high quality public transport using vehicles that are as environmentally friendly as possible will help ensure the continued vitality of the city centre.

Nottingham's Clear Zone proposals involve:

- limiting access to essential vehicles (mainly buses, taxis, orange/blue badge holders and cyclists) during the day within the central area,
- the setting of emission and quality standards for buses, taxis and delivery vehicles, and
- encouragement of zero and low emission vehicle technology prompted by the introduction of NET Line One.

The expected benefits of the Clear Zone are

- a significant reduction in cars circulating around the Old Market Square area and reduced pollution levels in the City Centre,
- an increase in pedestrianised and controlled traffic areas,
- freer movement for buses, taxis and cyclists,
- a safer City Centre,
- a more disciplined and managed approach to loading and unloading,
- better quality streets and a cleaner environment.

Consultation

During early 1999 the City Council undertook widespread consultation on the proposals. The principle of a Clear Zone and the aim to reduce traffic and pollution around the Old Market Square were generally well received The consultation allowed the details of the Clear Zone proposals to be amended to better reflect the needs of retailers and other businesses in the City Centre. The scheme allows for Restricted Access Permits will be issued by the City Council to individuals or businesses who demonstrate they would suffer hardship if their vehicles can not gain access to the Zone during core time.

Enforcement

It is proposed to make use of the latest vehicle registration recognition camera technology to help enforce the Clear Zone.

Bus Emissions Protocol

In order to help meet their responsibilities in establishing the Clear Zone the major bus operators serving the city centre have entered into an agreement with the City Council to meet strict emission standards for buses in the Zone. This will mean that by 2003, all buses serving the core area of the city will meet Euro 2 engine standards or will have a valid Reduced Pollution Certificate. When this principle is extended to include all vehicles serving the Clear Zone area, phase 2 will become effective.

The Protocol will run for three years and be succeeded by an updated agreement at that time reflecting higher standards and revised priorities.

Programme

It is proposed to introduce the Clear Zone in a phased manner:

Phase 1: the restriction of access to essential vehicles at specific times of 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 technological advancements in vehicle propulsion and possible introduction of zero emission vehicles.

Traffic regulation orders associated with Phase 1 have already been advertised and objections will be considered at an inquiry into traffic management measures associated with the introduction of NET Line One later this year. Implementation is anticipated in summer 2001.

The City Council is committed to working with the national Clear Zones Co-ordinator, helping to develop criteria such as environmental impact targets, and demonstrating how to link proposals with wider integration, accessibility and economic vitality objectives.

4.3.4. Road user charging and workplace parking levy

Position with regard to the Three Cities of Nottingham, Leicester and Derby

The East Midlands cities have agreed to work together on transport issues and are now co-ordinating projects and programmes. The Three Cities will continue this joint working on developing new revenue streams for transport.

Effective joint working so far:

- co-ordination and joint preparation of the East Midlands Parking Study (along with the three County Councils and GOEM),

- sharing information and co-ordinating timetables for charging for on-street parking in the city centres, and decriminalisation of on street parking across the cities,
- preparing joint responses to regional consultation documents, to make sure due attention is paid to urban issues, and co-ordinating representations at the Regional Planning Guidance Examination in Public, and
- setting up a Three Cities Travel Survey to allow for comparison across the three areas, and to record a baseline position for the imposition of charges

Proposals for joint working on charging include:

- each city will include individual proposals within their Local Transport Plan,
- each city will have a different strategy to ensure consensus amongst stakeholders including the County Councils who are partners in the Local Transport Plan process,
- relevant information, including research and monitoring, will be shared. Nottingham City Council, as a member of the Charging Development Partnership will provide information and advice on charging to the other two cities, and
- the existing regular Member and officer meetings will ensure continued co-ordination and co-operation on all matters relating to charging.

Greater Nottingham Local Transport Plan position

Road user charging

Neither the City or County Council proposes to implement a road user charging scheme. However both will be monitoring the experiences of road user charging schemes implemented in other local authority areas with particular emphasis on the various economic, social and physical impacts and consequences of the schemes' implementation. The City's position as a member of the Charging Development Partnership allows direct access to information on road user charging.

Workplace parking levy

The City Council announced its intention to introduce a workplace parking levy last year. The County Council is not proposing to introduce a workplace parking levy scheme to cover the remainder of the Plan area, however, decriminalisation of parking offences will need to be considered jointly with the City Council across the conurbation to deal with possible ripple effects of the workplace parking levy outside the City boundary.

The City Council has, for the time being, decided not to pursue the idea of road user charging. This is for the following reasons:

- a considerable amount of work on transport demand management and complementary transport improvements has already been done with employers and the workplace parking levy can be seen as a logical continuation of that work,

- employers in Nottingham recognise that they have a role to play in reducing congestion and also that they should be in a position to influence policy and programmes. The workplace parking levy allows for the development of partnership structures, such as the Nottingham Transport Partnership, to allow this to happen. Road user charging applies to individuals only and does not have this same facility,
- road user charging implies a 'charging cordon' around the city centre. The City Council feels that this would involve encouraging dispersal of employment and reduce the attractiveness of the City as a retail centre, and
- congestion patterns around the city are heavily correlated to travel to work; existing alternative transport networks are best placed to accommodate mode changes at these times eg in terms of bus service frequencies. The nature of the overall Plan strategy is to improve these alternatives to offer improved transport choice as opposed to penalising car ownership

The City Council will continue to monitor progress and new ideas in road user charging via the Charging Development Partnership.

Charging Development Partnership

The City Council is a member of the Charging Development Partnership (CDP), set up to oversee the introduction of road charging schemes and workplace parking levy projects. It will also contribute to relevant sub-groups of the CDP - Workplace Parking Levy Scheme Details, Finance and Procurement, Communications and Monitoring and Appraisal. Membership of the CDP also allows networking and information exchange with other participants.

Nottingham Transport Partnership

The Nottingham Transport Partnership (NTP) was set up in February 2000 to gain consensus on a vision for transport in Nottingham and to consider ways of funding it. The NTP is a partnership between the City Council and the Nottinghamshire Chamber of Commerce and Industry, and participants include major employers such as Capital One, Nottingham Trent University, University of Nottingham, Boots, Experian and NTL, together with representation from the County Council.

The NTP meets monthly and has demonstrated both a keen interest in and new ideas for transport in the city. Current projects include:

- integrated parking management research project,
- feasibility study for future NET tram network,
- marketing the vision for transport,
- lobbying on removing tax disincentives for commuter planners,
- new city centre bus service for employers,
- study on partnership structures, and
- study on new technology and the vision for transport

It is proposed to involve the NTP further in the development and implementation of innovative transport projects, including proposals to improve transport alternatives prior to the introduction of a charging scheme. To this end the City has included an additional bid for further Supplementary Credit Approvals and revenue support to develop the above list of projects as discussed below.

Workplace Parking Levy Scheme Details

Details of the City's workplace parking levy scheme are being developed for a separate submission to the DETR, after further research, confirmation of the legislative context and consultation with businesses. The Nottingham Transport Partnership will be taking a lead in the consultation work, and the Commuter Planners Club will also play a major role. The NTP is currently in the process of commissioning a scoping study on marketing the vision for transport.

Nottingham's scheme is likely to include the following elements:

- area to be covered: City-wide,
- estimate of parking spaces (private non-residential spaces): 58,000,
- revenue generation:
  The potential revenues from the levy are subject to a range of assumptions and will be confirmed following detailed surveys of parking provision, agreeing appropriate exemptions for small businesses with the Nottingham Transport Partnership, and other issues such as VAT, exemptions for orange/blue badge holders and alternatively fuelled vehicles. In addition, the nature of the operation of the scheme, selected procurement route and supporting enforcement mechanisms will have a big impact on potential revenues. For guidance purposes, a levy of between £150 and £300 per space per annum with exemptions for small businesses and orange badge holders could generate between £7m and £14m p.a.,
- introduction of on street parking charges in the City Centre - April 2001,
- introduction of decriminalised parking enforcement - estimated 2002/03,
- discounts for approved expenditure on commuter plans,
- exemptions for small businesses, possibly linked to regeneration activities or business rates, and
- timetable for implementation: assuming the Transport bill is enacted in Autumn 2000, the anticipated target for implementation is year 3 of the Plan period i.e. 2003/4. An indicative process map of detailed stages is set out below:

Table 9 'Process Map' for Introduction of workplace parking levy and public transport improvements:

Action	Timescale
data collection and analysis	spring/ summer 2000
submission of Full LTP	July 2000
establish desired procurement routes for elements of the process	ongoing
NTP scoping studies and consideration of alternatives	summer/ autumn 2000
off-street parking surveys/quantification	2000/01
consultations, stated preference surveys and perception studies on scope of levy and options including exemptions	2000/01
development of integrated multi modal model	summer 2000/summer 2001
development of submissions to DETR/CDP for supplementary up front funding proposals including supplementary revenue/ major scheme proposals	ongoing
development and public consultation on up front improvements including major scheme options	summer/ winter 2000/01
revenue potential analysis- option modelling, scenario testing and appraisal	2000/01
further consultation	spring 2002
recommended option development and discussion of outline workplace parking levy prospectus/ draft business plan and financial profile with DETR/CDP	ongoing
decriminalised parking enforcement regime/ review of Traffic Regulation Orders	commence 2001, introduce 2002/03
publish draft orders and confirm scope of workplace parking levy scheme and supporting business plan	summer 2002
public inquiry	winter 2002
Secretary of State's decision	spring 2003
implement TRO's	summer 2003
commence charging	winter 2003/04

Expenditure proposals

The detailed spending plans for expenditure generated by the Levy will be determined with the Nottingham Transport Partnership in the light of the Settlement of this Plan, the response of the Government to the City Council's proposals for upfront investment in the public

transport alternatives and the forthcoming national Ten Year Investment Plan. In addition, the response to consultations undertaken in the development of the scheme and the views of the Commuter Planners' Club will be of particular significance.

Key expenditure proposals will include:

- NET Network extension,
- revenue support for new commuter bus services,
- enhanced Bus Quality partnerships Programme, and
- 'Civilised Streets' Quality maintenance Programme to promote cycling and walking.

Proposals for improving alternatives to cars in advance of the levy: a realistic approach

The City Council's strategy for improving the alternatives to the car is based upon this Plan submission, and in particular:

- the Centre of Excellence for Integrated Transport Block of the Programme. This includes NET Line One, extensive improvements via the Bus Quality Partnerships Scheme and proposals to enhance park and ride and heavy rail networks in the city,
- partnership working with the major employers,
- the proposed city centre integrated transport major scheme to complement the to the introduction of the levy, and
- the linked strategy to develop a integrated transport major scheme to improve the outer ring road.

The two major schemes, however, are not sufficiently developed to provide full analysis for appraisal at this stage due to:

- data collection and integrated multi-modal model development process is currently underway but not yet complete,
- impact of levy setting not fully tested,
- progress on city centre proposals delayed by timing of eventual contract close for NET Line One,
- uncertainties over timing of detrunking, and
- the desire to take account of GOEM Multi Modal Study data.

To respond to this, and in order to conform with the Government's policy to implement improvements to the alternatives prior to the introduction of the levy, the authorities have adopted a realistic approach, focused around three main strands:

- the submission of a high overall Bid in this Full Plan. This should enable substantial progress to be made in the years preceding introduction of the levy by implementing the Plan Programme as set out in Chapter 6 of the Plan,
- the submission of a supplementary bid for additional capital and revenue resources to develop the Nottingham Transport Partnership's role and programme of work to fully engage the major employers in the city in the process, and also to develop the major schemes, and

- subsequent submission of full justifications, appraisals and other requirements associated with the major schemes to a timetable to be discussed with the Government.

The draft anticipated funding profile of these strands is shown below, together with the city element of the Plan Bid.

The revenue elements of the supplementary bid have been separated out for clarity. It should be noted that as the workplace parking levy will continue funding of these projects in Year 4, the supplementary bid is for a 'pilot' period of three years. The proposed revenue elements - bus service improvements and the City Centre bus service - are considered vital to the achievement of the City Council's transport objectives and are also required to demonstrate quality public transport alternatives to commuters faced with a workplace parking levy charge. Both proposals have arisen from discussions with employers.

Table 10 Supplementary Workplace Parking Levy Bid (millions)

Capital Bid	**2001/02**	**2002/03**	**2003/04**
NTP/ Employer Initiatives			
Parking management projects/commuter plan incentives	0.5	0.5	0.5
City Centre bus	-	0.75	-
Marketing the vision	0.2	0.2	0.2
NTP running costs- -2 part time staff; -liaison with businesses, Chamber of Commerce, servicing meetings etc	0.05	0.05	0.05
Other Studies eg Partnerships and structures	0.1	0.1	0.1
NET Network Development Contribution (50%- remainder to be met from LTP SCA)	0.2	0.6	1.0
TOTAL	**1.05**	**2.2**	**1.85**
Workplace Parking Levy Scheme Development			
Review of TRO's and establishment of Decriminalised parking enforcement			
City	0.1	0.2	0.2
County	0.1	0.2	0.2

Data Collection	0.1	-	0.1
Consultation/attitude surveys	0.1	-	0.1
WPL unit (2 full time staff plus budget)	0.1	0.1	0.1
TOTAL	**0.5**	**0.5**	**0.7**

Public Transport Improvements

Advance preparation of integrated public transport major schemes	0.1	0.2	0.1
Further phases of Intelligent Transport Systems (AVL/real time information)	0.5	0.3	0.3
TOTAL	**0.6**	**0.5**	**0.4**
GRAND TOTAL (Capital)	**2.15**	**3.2**	**2.95**

Revenue Bid

City Centre bus	-	0.3	0.3
Bus service improvements	0.5	0.5	0.5
TOTAL (Revenue)	**0.5**	**0.8**	**0.8**

Notes

1. Workplace parking levy takes over funding in Year 4
2. NTP continues until WPL comes in - then there is a step change
3. Bus service improvements based on assessment of employer demands through commuter plan process ie travel surveys of staff

Viewed together with the anticipated revenue from the levy and projected LTP resources, a potential City Council ten-year investment plan is indicated in Table 11.

Table 11 Indicative Ten Year funding profile (millions)

Income	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	Totals
LTP (City element)	8.84	9.46	9.98	10.3	10.7	11.4	11.4	11.4	11.9	12.4	107.8
Supplementary wpl capital bid	2.15	3.2	2.95	-	-	-	-	-	-	-	8.3
Supplementary wpl revenue bid	0.5	0.8	0.8	-	-	-	-	-	-	-	2.1
Major schemes											
City Centre	-	-	2	6	5	1	0.5	0.5	0.5	-	15.5
Ring Road	-	-	-	1	2	6	4.5	1.0	0.5	0.5	15.5
Workplace parking Levy Revenue	-	-	-	7	7	8	8	10	12	14	66
On Street Parking Charges	0.7	0.8	0.9	1	1	1.2	1.3	1.4	1.5	1.6	11.4
Total	12.19	14.26	16.63	25.3	25.7	27.6	25.7	24.8	25.9	28.5	226.6

Relieving congestion

The proposed workplace parking levy scheme will contribute to relieving congestion in the following ways:

- the charge itself will encourage some people to consider alternative modes and some employers to reduce parking provision. Incremental increases would promote this modal change progressively,
- the associated improvements to the transport alternatives will secure modal shift; in the short term this will be dependent on the LTP settlement and the response of the Government/ CDP to the above three strand investment approach but upon introduction of the levy significant progress will be made through developing the NET Network,
- the City Council will be continuing to work closely with employers on commuter plans, which have been shown to have a measurable effect on commuters' travel behaviour, and will be incorporating further incentives for employers to do commuter plans in the details of the scheme, and
- the City Council will be integrating the workplace parking levy with planning policies which will also reduce the need to travel by car.

Figure 23 shows the anticipated relationship between components of the strategy.

Links with planning policies

The proposals will be formulated to be consistent with Regional Planning Guidance, including the Regional Transport Strategy. The Nottinghamshire Joint Structure Plan and the City of Nottingham Local Plan are currently under review. The proposed workplace parking levy will be an important component of these reviews in three ways:

- as a transport demand management tool in itself,

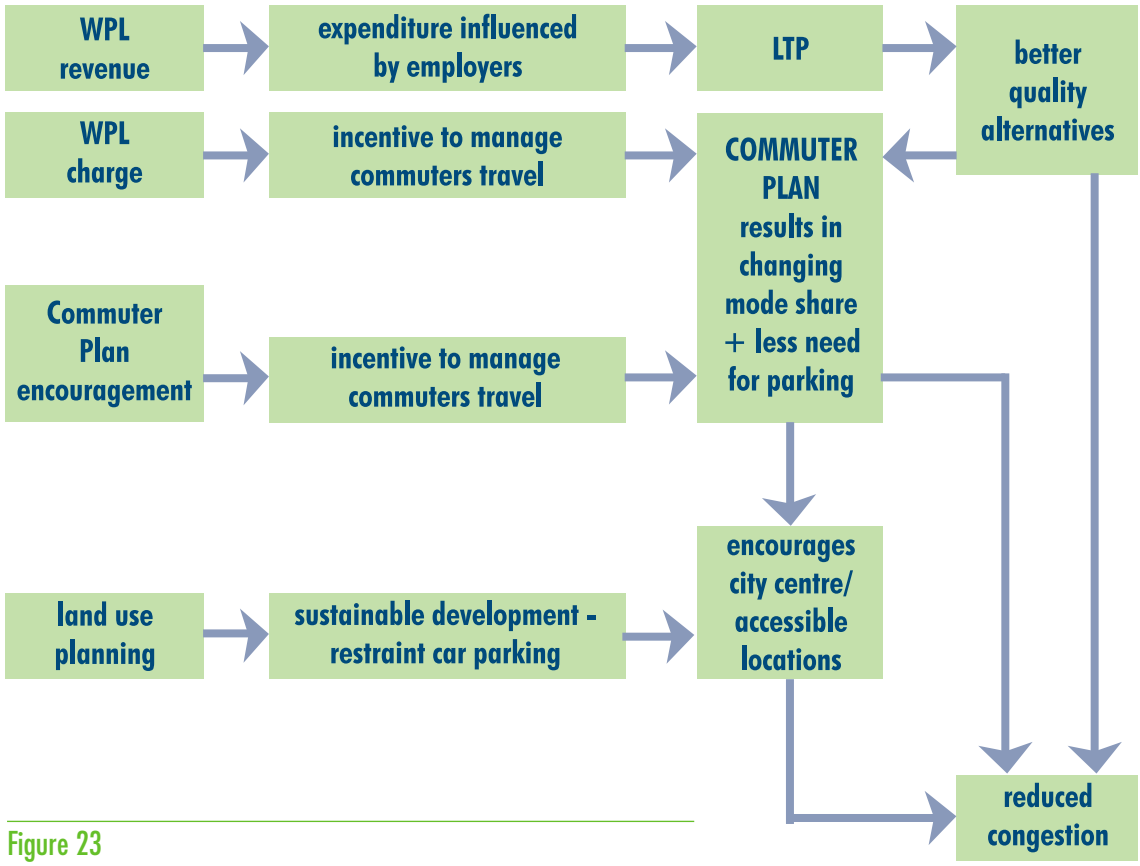


Figure 23

Reducing congestion: wpl causal chain for employers

- as an income generator for radical transport improvements, and
- as a 'trigger' for other actions by employers such as building on car parks, greater commuter plan activity, greater densities of employment on scarce land resources- all likely to be of value in creating a sustainable city.

The City Centre Review, now out to consultation, is attempting to recognise the importance of these links to planning and land use by stressing the importance of an accessible City Centre and in providing good employment sites, well served by public transport and with fewer parking spaces.

This also ties in with the joint City/County proposals for an Interim Transport Planning Statement on developer contributions to transport and Supplementary Planning Guidance on parking standards.

4.3.5. Parking

1990 Parking Strategy

The authorities recognised in the late 1980's that an integrated approach to controlling parking provision and its use in the context of land use and transport planning was essential. A joint parking strategy was subsequently adopted which sought to balance demands for parking in a way which maintained the economic viability and attractiveness of the City and district centres but sought to reduce congestion and promote sustainable travel patterns. This strategy sets the context for an integrated demand management approach to controlling parking in the Plan area.

Current strategy

The Plan area parking strategy adopts a comprehensive restraint based approach to managing parking provision, based around the following elements which are detailed more fully below and in the relevant sections of the Plan:

- control and management of on-street provision,
- management of the supply of off-street provision,
- control of the pricing of off street provision,
- restraint based development control policies,
- workplace parking levy (City only), and
- complementary Park and Ride networks.

The nature of travel patterns in the Plan area are such that greatest demand for parking exists in the city and district centres, and to a lesser degree around employment sites and associated with major leisure facilities such as the football grounds and the National Ice Centre. The parking policies adopted have been developed to respond to these pressures in a manner consistent with Government Guidance as set out in PPG 13 and PPG 6 and form the basis of the parking policies in the Draft Regional Transport Strategy.

1. Control and management of on-street provision

Demands for on-street parking are varied, relating to commuter or business use close to employment sites, shopping or tourism related uses close to the City, district centres and shopping centres on radial routes and residential demands in areas of high density housing with limited parking provision off street. As pressure to use land more efficiently increases, off-street parking provision will become more restrained and reduced and it will become more necessary to manage and prioritise the use of on-street parking carefully.

Enforcement

Enforcement is becoming increasingly important and has been highlighted in the various consultation exercises carried out by the authorities. The rising pressure for parking will

require more rigorous and responsive enforcement regimes which will be set up incrementally as the parking strategy is implemented. This will be particularly important in the context of the City Council's workplace parking levy proposals and it is proposed to introduce decriminalised parking enforcement to support the levy and the wider Plan objectives.

Controlled Parking Zone and on-street parking charges

The Controlled Parking Zone in the City Centre seeks to limit long term parking and the City Council proposes to introduce charges for parking on street in the area. It is proposed that any surplus revenue generated will be ring-fenced for transport related purposes. In the short term this will enable much improved enforcement of parking restrictions in the central core. In the longer term consideration for on-street parking charges in district centres may be a possibility.

The authorities remain committed to appropriate provision for disabled people; orange badge spaces within the area play an important role in maintaining access to the City Centre and district centres.

Other controlled parking areas

In April 1998 a controlled parking area was introduced in the area surrounding the Queen's Medical Centre and Nottingham University. The scheme is designed to reduce all day commuter parking in a manner complementary to the organisations' travel plans.

The authorities 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.

Residents' parking schemes

Residential areas, throughout the conurbation, subject to external parking pressures will continue to be considered for residents' parking schemes subject to resources being available. Where appropriate schemes are introduced to support the wider strategic objectives, for example in the Meadows to complement the Southern Relief Route and the restraint based approach to parking in the city centre.

2. Management of the supply and the control of pricing of off-street provision

Existing provision and charging policy

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.

Details of the provision are included in the monitoring chapter of the Plan. The charging structure of the various types of parking controlled by the local authorities seeks to prioritise short term shopper and visitor parking in the City and district centres, with progressive increases in the charges for longer term parking. Charges for park and ride are also set to be

consistent with the parking strategy. The establishment of on-street charges and a workplace parking levy in the City area will allow a comprehensive, strategic view to be taken over the priority and use of car parking. This should enable significant progress to be made in respect of travel demand management in a way which can be adapted to respond to progress towards meeting the Plan objectives.

Extent of provision

The level of provision in the city centre was reviewed through the 1990 strategy, the preparation of the Nottingham Local Plan, and more particularly in the context of PPG 6. In order to maintain the attractiveness and vitality of the City as a retail and leisure destination and to respond to perception studies about parking difficulties at peak times, a number of sites for parking development were identified in the Local Plan.

The development and implementation of the strategy has secured improvements in the quality and increased the extent of provision, particularly in Nottingham City Centre, for example:

- Victoria Centre extension,
- Upper Parliament Street car park,
- Gold awards for Broad Marsh, Trinity Square and Fletcher Gate refurbishments, and
- Belgrave Centre car park, Talbot Street.

These have now all been developed and through careful demand management and setting appropriate tariffs the balance of demand and use has been found to be adequate apart from at peak shopping times. The need for new sites will be considered further as part of the City Centre Review process and significant expansion of the parking stock is not promoted at present. The need to protect the role of the city and district centres in the face of external competition and the developing use of e-commerce will however remain a priority and be kept under review.

It is envisaged that anticipated growth in the demand for car parking will also be largely met by investment in Park and Ride provision, particularly associated with NET Line One.

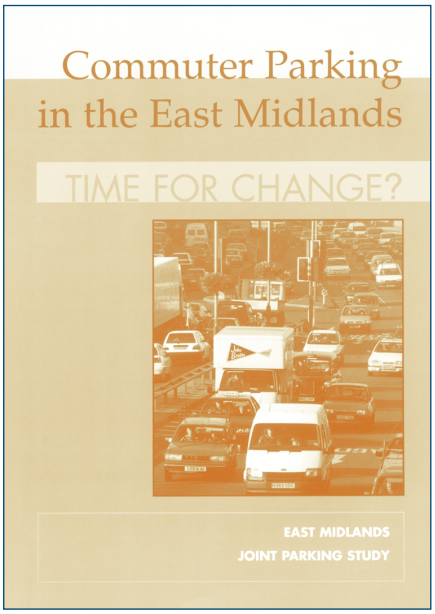
In addition, investment in car park management systems as detailed earlier in this chapter will help maximise the use of existing provision and minimise the impact of congestion associated with circulating traffic.

3. Restraint based development control policies

Parking standards for new development have an important long term role to play, and this is reflected in PPG 13 which requires a more restraint based approach to parking provision. Parking provision has a major influence in determining modal split, and traditionally more spaces have been allowed in the less sustainable, out-of-town locations encouraging car dependent businesses to disperse from more restrictive central locations.

To redress this situation the City and County Councils of Nottingham, Leicester and Derby, supported by the DETR, commissioned a Regional Car Parking Study to inform and recommend an appropriate review of car parking standards. The study concluded that a review of existing standards is needed, and this should concentrate on employee provision. A methodology to be applied by all Local Planning Authorities to achieve more consistent maximum parking levels for new employment development has now been incorporated in

draft Interim Regional Transport Strategy for consultation. Further work will be necessary on developing a similar approach for other uses in particular retail, leisure and residential development.



Existing policy is being applied rigorously via the development control process:

- Section 106 agreements or planning conditions restricting the tariffs of new public car parks to shopper/visitor friendly regimes e.g. Victoria Centre extension, Upper Parliament Street and Talbot Street, and
- reduced or restricted provision of parking for new developments e.g. General Hospital Site and National Ice Centre, and enforcement action against unauthorised use as commuter car parks (recently successful at Traffic Street and being pursued at Trent Street/Station Street) or contravention of conditions (being pursued at former Pearson's car park, Upper Parliament Street).

Development control procedures are being amended to secure contributions towards more sustainable transport alternatives in the form of Section 106 agreements. This ties in with the joint City/County proposals for an Interim Transport Planning Statement on developer contributions to transport and Supplementary Planning Guidance on parking standards. Developers on sites where additional transport measures are required to improve accessibility will be able to negotiate contributions based on the guidelines (now out to consultation with the development industry and District Councils).

The Parking Standards SPG (again currently out to consultation) will require restraint level parking in suburban areas so that employment will not be attracted by easy parking arrangements away from central, accessible areas.

While the level of demand for parking is not as high in district centres compared with the City Centre, it is still important to balance access by car with that by public transport, cycling and walking. District Councils have a responsibility to manage their car parking stock and their strategies are outlined in the District Council statements submitted in Appendix B.

4.3.6 Road safety

Casualty reduction strategy

The City Council and the County Council each has a casualty reduction strategy based upon the Government's own road safety strategy contained in the DETR publication 'Tomorrow's Roads - Safer For Everyone'. This document provides a framework for improving safety around 10 main themes.

- safer for children,
- safer drivers - training and testing,

- safer drivers - drink, drugs and drowsiness,
- safer infrastructure,
- safer speeds,
- safer vehicles,
- safer motorcycling,
- safer pedestrians, cyclists and horse riders,
- better enforcement, and
- promoting safer road use.



The action plans described within these themes will help to achieve the new casualty reduction targets for 2010 which are described in Chapter 2. Both authorities have adopted these new targets and they are incorporated in Chapter 7 which presents the monitoring of road traffic casualty data. Figure 24 summaries the integrated strategy.

It is recognised that the new targets will only be achieved by working in partnership and promoting improvements through road safety planning. For this reason the City Council established a Transportation Safety Forum in October 1998 which is regularly attended by the emergency services, the local health authority, transport organisations, cycling groups and major employers. The forum has produced a Road Safety Plan for the City in which members have 'signed-up' to casualty reduction activities for their organisation. The forum has encouraged highly successful collaborative projects between members, such as a head protection campaign between the Queen's Medical Centre and the City Council's Road Safety Education Team.

The County Council has a long established Road Safety Committee in each of the districts with Members representation from both tiers of local authority. The emergency services, public transport operators, education sector and other local groups with an interest in road safety and transport matters generally are represented. The Committees provide a valuable means of communication between each group and this gives direct access into the decision making process.

A casualty reduction working group has also been established at the City and County level. This involves both Highway Authorities, the Police, the Highways Agency and the Local Health Authority. This group is concerned with strategic planning and co-ordination on a much wider scale than the local based forums.



Figure 24

Greater Nottingham Road Safety Strategy

Theme 1: Safer for children

Although Great Britain's road safety record is relatively good in national comparisons, its child pedestrian record is very poor compared with other European countries. For this reason the Government's targets propose a 50% reduction in fatal and serious casualties to children by the year 2010 compared to the 1994-1998 baseline.

The authorities recognise that considerable effort is needed to both achieve the targets and reduce the levels of unnecessary suffering which is being experienced by children in the Greater Nottingham area.

The authorities are committed to providing a comprehensive road safety education programme for children. Each year a road safety diary is produced which documents all the major events planned. The programme can be divided broadly into campaigns which are led by DETR and activities or publicity generated by the two authorities road safety services. Examples of national campaigns include the 'Conspicuity and Speed Kills' initiatives. These are also supported at a local level by both authorities, in addition to local campaigns such as 'Walk to School'.

Activities generated at a local level are specifically directed at reducing accidents within the Plan area. This is achieved by two complementary processes. One is to provide a comprehensive programme of road safety education which provides the background understanding necessary to promote a continuous improvement in road safety for all road users. The second process is the implementation of targeted activity to deal with specific safety problems. The 'Move On Up' campaign aimed at children moving from junior school to secondary school is one example being implemented by both authorities.

At the heart of the County Council's road safety education programme is the School Travel Plan initiative. This provides the opportunity to respond to needs of individual schools by tailoring a package of education and training measures along with infrastructure improvements which meet local needs. It recognises the essential integration of road safety and travel awareness activities of the Council. However, in addition to addressing these specific problems the County Council still provides a 'background' level of road safety education for all schools. The County Council's School Travel Plan methods have also been adapted by the City Council who recognise the value of this approach when delivering Safer Routes to Schools Programmes.

Cycle training is an essential part of road safety education. It is recognised that promoting cycling is an important part of developing sustainable transport and the two authorities are committed to achieving the national targets to increase cycle mileage. This is central to the authorities Cycling Strategies. However, it is necessary to address the vulnerability of cyclists, especially child cyclists. The cycle training programme deals with the issue. It is currently restricted to Year 6 pupils but it is proposed to continually develop the programme to provide cycle training over a wider age range. Currently consideration is being given to developing on-road cycling training targeted at 12-14 year olds and encouraging family cycling. It is also intended to target some cycle education towards adults. This is an ongoing programme which started in 1998 and will continue over the next five years.

The authorities are committed to pre-school education and in 1999 the City Council launched three packs for parents, 'Keepsafe Keepsake ', 'Tiny Trekker' and '5 Alive'. The 'Keepsafe Keepsake' pack contains information on seat belt use for pregnant women and how to transport babies and young children safely in cars. It is distributed through antenatal classes in hospitals

and given to parents who are preparing to take a baby home. The 'Tiny Trekker' pack is distributed through pre-school playgroups and gives advice to parents on protecting their children. The '5 Alive' pack is distributed through nursery schools and it gives parental road safety advice for new starters. The pack contains road safety jigsaws which have been developed in collaboration with Orchard Toys. The County Council will continue to distribute its successful "toolkit" packs for parents/carers of each child entering nursery and infant schools. The packs cover issues of in-car safety, early pedestrian training and healthy travel options.

Both authorities are introducing home zones to improve residential environments in the conurbation. Plans for Nobel Road, Beeston Rylands and Lady Bay are well under way with strong support from the respective communities. These proposals offer safe environments for children where walking and cycling can be encouraged.

Both authorities are also introducing 20mph zones using the new powers given by the Government and are promoting safer routes to school projects. The City Council has just completed a major safer routes to school scheme around the Fernwood Schools Complex on Arleston Drive. This had involved the close collaboration of Education and Environmental Services Departments to co-ordinate building works with highway improvements and traffic calming in a 20mph catchment area.

Older children are involved in a considerable number of road safety activities in preparation for their ever increasing mobility. Drama productions are delivered in secondary schools which focus upon common scenarios which lead to road traffic accidents involving older children. All emergency services and major transport operators collaborate each year in a 'Safety Zone' project where teams of children have to cope with safety problems at semi-permanent safety activity centre. Pre-driver education is provided to young adults attending sixth form colleges and the County and City are considering holding a second young driver conference following the success of an earlier one.

Both authorities welcome the DETR and DFEE co-operation to help schools incorporate road safety effectively into the curriculum. The authorities have been adopting this approach for over 15 years and have in many cases used road safety material to support the core elements eg using road traffic accident data in maths or geography assignments.

Theme 2: Safer drivers - training and testing

Young driver training, described in the previous section prepares older children for a safer introduction to learning to drive. It instills in them the right attitudes towards road safety and learning to drive. This is often lacking in young drivers and is regularly encountered on the Nottinghamshire Driver Improvement Scheme that was launched in 1999. The scheme is jointly managed by Nottingham City Council, Nottinghamshire County Council and Nottinghamshire Police. It is self funding and provides re-training for drivers who would otherwise be referred to the Magistrates' Courts for Section 3 offences under the Road Traffic Act for Failure to show due care and attention.

Both authorities recognise the extensive use of vehicles for work related activity and have undertaken some exploratory road safety training in companies. Van drivers for Nottingham Evening Post attended a series of road safety talks and the local Gas Board were shown how to analyse their safety records. However, further pilot work is needed in this area to establish a structured approach. The driver improvement framework is being considered for fleet vehicle driver training and the work of RoSPA on managing occupational road risk may yield self assessment systems which can be sent to organisations in the conurbation.

Theme 3: Safer drivers - drink, drugs and drowsiness

In collaboration with the Police the authorities actively support the national campaigns to reduce drink driving. They also run their own local campaigns. In the 1999/2000 year the County used bus back advertising with the theme "from beer to eternity". The City Council used local radio with commissioned advertisements. It also experimented with internet publicity campaigns which used e-mail to communicate with computer users. The authorities will also support the Government's proposed drugs and drowsiness campaigns in a similar manner.

Theme 4: Safer infrastructure

Both authorities have adopted the new casualty reduction targets and have prepared a programme of local safety schemes which will contribute to achieving these targets. The schemes have been identified on the basis of reported injury accidents and prioritised using their predicted first year rate return. This performance indicator relates to capital investment to anticipated casualty savings using the Government's financial assessment of casualty costs.

Both authorities have adopted route and area wide treatment programmes. In many cases this has involved collaborative working practices and shared funding with maintenance, housing, highways, and planning specialists all contributing to the implementation of a scheme.

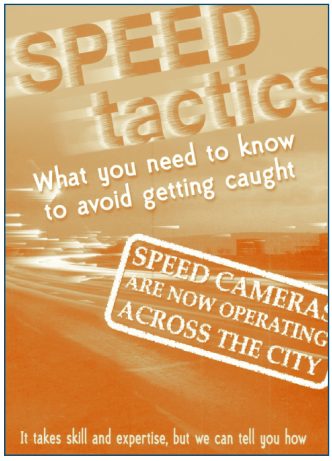
Traffic calming measures play a very important part in improving safety in residential areas. The features used have been revised considerably since 1980 to cater for bus operators and the emergency services. The materials and method of construction have also been improved to reduce maintenance costs and simplify implementation.

Both authorities undertake safety auditing to ensure that all new designs are free of inherent safety problems. They also undertake cycle audits and naintenance audits for similar reasons.

Theme 5: Safer speeds

Both authorities are working to an Urban Speed Management Programme which is essentially a hierarchical classification of the road network. Speed management measures are being implemented in accordance with this hierarchy. Roads or areas are therefore treated with speed cameras, traffic management, speed cushions, road humps or home zones according to their position in the hierarchy. In practice this programme will take many years to complete. Schemes are therefore prioritised in terms of their casualty saving potential.

In April 2000 Nottingham City became one of 8 pilot areas to hypothecate fixed penalty speeding fines. Nottinghamshire Police, Nottingham City Council, the Highway Agency and Nottinghamshire Magistrates' Courts Service formed a partnership whereby a revenue stream from fines would be used to fund additional casualty led speed enforcement. As a result of this process the City now has 2 permanent mobile speed enforcement teams and has introduced the first digital cameras in Europe. It is anticipated that the project will save 236 reported injury accidents in the first 2 years of operation. Because of this high saving the City Council has set itself a more demanding casualty reduction target than that proposed by the Government's strategy document for slight casualties.



The County Council is reviewing its existing road hierarchy to better reflect the function of each road, both in urban and rural areas and to use it as a more coherent basis for setting speed limits. A possible new hierarchy, which will be subject to wide consultation, links functions to speed as follows:

1. Pedestrianised Streets, with speeds governed to 10 m.p.h.
2. Restricted Roads e.g. home zones, quiet lanes, traffic calmed residential roads, with speeds governed to 20 m.p.h.
3. Local Distributor Roads, subject to 30 m.p.h. speed limits.
4. District Distributor Roads subject to 30 or 40 m.p.h. speed limits in built-up areas.
5. Primary Routes, subject to 30 or 40 m.p.h. speed limits in built-up areas.
6. Motorways, usually 70 m.p.h speed limits.

Theme 6: Safer vehicles

Whilst the authorities have no direct responsibility for vehicle design they are supporting the research which feeds back into the manufacturing design processes. Loughborough University is undertaking a study which relates vehicle accidents to the injuries sustained by vehicle occupants and other road users, ie pedestrians and cyclists. The injuries and their severity are then related to the impact points on vehicles. This way the manufacturers can be given advice on individual vehicle design improvements which could reduce the injuries sustained in any impact. The authorities collaborate in this research by providing access to 100,000 accident records dating back to 1979 that are stored on microfilm and referenced to a geographic information system.

Theme 7: Safer motorcycling

Nottinghamshire County Council, Nottingham City Council and Nottinghamshire Police have consistently worked together to address motorcycle safety. In 1995 one in five of all fatal casualties in Nottinghamshire was a motorcyclist. This prompted the development of the highly successful 'Endangered Species' programme which included assessment rides and educational publicity. The programme ran through 1997 and 1998. The authorities recognise the importance of promoting motorcycle safety at a regional and national level since many of the accidents were found to be associated with social or recreational rides at locations many miles from the rider's address.

Theme 8: Safety for pedestrians, cyclists and horse riders

Both authorities are committed to the promotion of cycling and walking and support the Government's targets for these modes of transport. The City Council has published a walking and cycling strategy document which outlines proposed developments in the City. The document presents both the educational programme and the infrastructure development to promote cycling and walking. The County Council published its cycling strategy in 1997 and this will be under review during the life of this Plan. Its walking strategy is detailed in full in the North Nottinghamshire Local Transport Plan.

The Greater Nottingham area is covered by an extensive cycle network which is linked to route 6 of the national cycle network. In 1999 sections of the Millennium route were opened on

Melbourne Road and the ring road and a new network map was published. Traffic calming in the area is designed to be 'cyclist friendly' and engineering schemes are subjected to cycle auditing in both attributes. Measures to reduce vehicle speeds such as camera enforcement are also seen as beneficial to cyclists.

Both authorities provide cycle training. The City Council will be building bike sheds in some secondary schools near the Millennium cycle route, and financial support for this is specifically mentioned in the bid. The schools given these facilities will manage the children's competence at riding a bike safely and the proper maintenance of the cycles. Appropriate cycle training will be provided by the City Council. The County Council will respond to demands from individual schools arising from school travel plan activity.

Both authorities are engaged in activities to promote walking and pedestrian safety. The County Council pioneered the use of school travel plans and this approach is now being used in the City. Both are also introducing home zones and are engaged in safer routes to school projects eg in the catchment area of the Fernwood Schools Complex. Local safety schemes are both used to enhance the pedestrian environment in terms of safety and convenience. Dropped kerbs, tactile paving, lighting improvements, new and improved pedestrian crossing facilities, and maintenance improvements are all contributing to a more favourable pedestrian environment. This has been achieved by collaborative working between various funding bodies within the Councils.

Horse riding is an important leisure activity in the rural parts of the Plan area, with a substantial number of riders and clubs. The level of accidents is very low but the County Council is considering the implementation of quiet lanes which seek to give priority to pedestrians, cyclists and horse riders. The County Council will support appropriate campaigns via its Road Safety Committees.

Theme 9: Better enforcement

Nottinghamshire County Council, Nottingham City Council and Nottinghamshire Police have established a casualty reduction partnership to promote road safety. This partnership views enforcement as an integral component of achieving the casualty reduction targets and a considerable amount of traffic police activity is casualty led. The partnership shares a common accident database and information system. This is used to identify and target areas for Police enforcement eg roads with speeding problems and junctions with signal violations. The partnership has promoted the use of digital speed cameras, and the introduction of the driver improvement programme as an alternative to prosecution.

Both authorities promote the good safety reasons for adhering to the laws in their road safety educational activities. In this way road users can develop an understanding of and respect for road traffic law. The road safety quiz and cycle training are just two examples of where the authorities promote this understanding.

Theme 10: Promoting safer road use

Both authorities will support the Government's 2000-2002 Road Safety Publicity programme. The 'THINK Road Safety' branding was adopted from 1 June 2000 and the authorities welcome the coherence this will bring to educational practices.

At a local level the County Council and the City Council are both engaged in partnership activity to promote safety. This not only includes the major players such as the emergency

services and transport operators but also includes employers and residents. The City Council has area committees which discuss transportation and safety issues. Several of these committees have produced their own transport plans. The County Council is moving toward district based consultative groups with a wide-ranging mandate including safety issues.

The summary table below sets out the County Council's five-year education, training and publicity programme based on the theme of "Lifelong Learning".

Table 12 Lifelong Learning: Road Safety and Travel Awareness Education (RSTA)

Age	Subject	Outputs	Years	Links to National R.S Strategy
0-5	Parents advice "toolkit"	• In-car safety. Early pedestrian skills and healthy travel options	1-5	Safer for children Safer for pedestrians Safer vehicles
5-16	School Travel Plans	• Promote healthy travel options, child safety audits, walking routes. • Implement R.S.T.A./ Survey local views • Partnership working • Cycle training	1-5	Safer for children Safer pedestrians Safer infrastructure Safer cyclists
5-11	Child pedestrian. Training Scheme	• Introduce Training 3-5 years old • Provide trainers 7-11 years old • Implement schemes • Safe crossing places, pedestrian skills based on needs and accident stats.	1-2 3-5 1-2	Safer for children Safer pedestrians Safer cyclists Safer road use Safer drivers
7-11	Road Safety + Travel Awareness Quiz	• In-car safety, cycle, pedestrian and horse-rider skills. Travel options Highway Code for young road users	1-5	Safer for children Safer pedestrians Safer cyclists Safer horse-riders Safer road use
7-14	TravelWise Teachers Pack	• Promotes sustainable travel, safety + environmental issues	1-5	Safer roads Safer children Safer road use

Age	Subject	Outputs	Years	Links to National R.S Strategy
9+	Cycle Training (Bikeability)	• Develop on-road training	1-2	Safer road use
			1-5	Safer cyclists
		• Promote family/adult training Work/Leisure use		Safer children
		• Promote cycle helmet wearing	1-5	
		• RS education Highway Code	1-5	
9+	Safety Zone	• Multi-agency safety event	1-5	Safer children
				Safer road use
		• Promote RSTA		
5-16	Safer routes to school	• Identify walking routes/child safety audit/accident clusters.	1-5	Safer road use
				Safer children
				Safer infrastructure
		• Improve infrastructure to encourage walking and cycling.	1-5	Safer pedestrians
5+	Seat belts	• Support seat belt campaigns with local emphasis and stats	1-5	Safer vehicles
				Safer for children
		• Target older children		
11-16	Move up to secondary	• Inform/promote safer independent travel, healthy travel options, bus travel.	1-5	Safer road use
				Safer cyclists
				Safer pedestrians
				Safer for children
12-13		• Cycling skills/road user skills.	1-5	
16-18	Pre/novice driver education.	• Support DSA educational input	1-5	Safer drivers
				Safer road use
		• Driver attitudes		Safer vehicles
		• Hazard awareness and seat belts		
		• Build awareness of vulnerable road users		
17+	Motorcycle education & publicity	• Promote Compulsory Basic Training	1-5	Safer motorcyclists
				Safer drivers
				Safer road use
		• Driver awareness campaigns of m/c vulnerability.	1-5	
		• Publicise dangers to motor-cyclists	1-5	

Age	Subject	Outputs	Years	Links to National R.S Strategy
17+	National Driver Improvement Scheme	• Hazard perception, driver attitudes, in-car training	1-5	Safer road use Safer drivers
		• Driver awareness of all vulnerable road users	1-5	Safer speeds Safer motorcycling
		• Investigate possible cross-over to novice drivers	1-2	Safer horse-riders
17+	Drink, Drugs and Drowsiness	• Drink/Drive support national/local campaigns in partnership with Police.	1-5	Safer drivers Safer road use
		• Publicity re driver fatigue/ company driver pressures		
17-25	Young drivers	• Publicity re-speed. Drink/ drive Drugs, loss of control.	1-5	Safer road use Safer drivers
26-64	Drivers	• Driver attitudes. Build awareness of vulnerable road users		
65+	Older drivers	• Travel options	1-5	Safer road use Safer drivers
		• Information and publicity re fatigue/route planning/in-car safety		
		• Build awareness of vulnerable road users		
65+	Older pedestrians	• Publicity and information	1-5	Safer road user Safer pedestrians Safer infrastructure
		• Publicise new pedestrian facilities relevant to community.		
		• Suvey needs		

4.4 Integrated Transport

4.4.1 Interchange

To provide an attractive alternative to car travel the development of a comprehensive, efficient pubic transport network is vital. This requires easy 'seamless' transport interchange both between services and between modes. To facilitate interchange the authorities propose a series of measures which focus around the following areas.

Development of a series of transport 'hubs' designed to facilitate transfer between radial and orbital routes. They will be of differing scales depending on their location, which would typically be at district centres, hospitals, major employment sites, universities, local shopping areas and more localised formal/informal interchange points which would typically be identified through a comprehensive audit procedure.

Facilities at hubs will be tailored to meet individual circumstances and could include some or all of the following components :

- easy walking links, accessible by all through the provision of ramps, dropped kerbs, tactile paving and safe pedestrian crossings,
- covered walkways,
- bright and well directed lighting,
- clear and legible comprehensive signing,
- safe, comfortable waiting environment - always lit, covered and with seating possibly also heated and air conditioned,
- clear comprehensive timetable, fares information and local maps displayed at strategic points,
- CCTV surveillance and/or security staff present,
- level boarding facilities eg raised kerbs,
- electronic information displays,
- ticket purchase points and information kiosks,
- refreshment kiosks and vending machines,
- retail outlets,
- telephones, and
- fully accessible toilets.

The development of hubs will be complemented, in partnership with the public transport operators, by the use of effective marketing and market research, service co-ordination and ticketing initiatives.

Smartcards are being introduced by both local authorities and the major bus operators in Greater Nottingham. They will increasingly offer a more flexible, easy option for changing between services or modes. The authorities will actively promote discount schemes which encourage this transfer. The County Council is already piloting the use of smartcards for school children and concessionary travel pass holders within parts of the Plan area. The authorities will encourage partnership working through the Commuter Planners Club whereby major employers can market and sell such tickets to their employees in co-operation with operators.

Where necessary land will be safeguarded in partner authorities' Local Plans to enable the development of hubs in the future. All hub facilities will be developed to high environmental and design standards and will be maintained to high standards.

The authorities have already commenced work on auditing facilities at key on-street interchange points in the City Centre and a programme of improvement works has been established. This audit will be broadened to cover the whole of the Plan area, with continual monitoring to measure change.

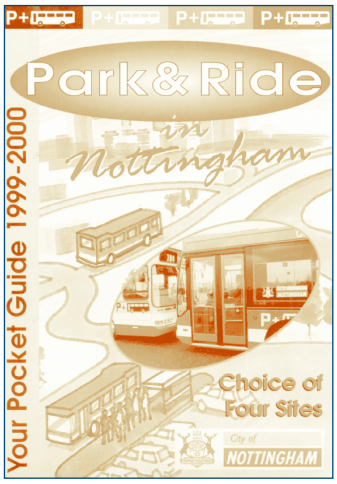
In addition, attention is being given to promoting and upgrading existing bus station facilities at Victoria Centre, Bulwell and Beeston through the provision of high quality facilities, electronic information displays, and marketing on the TravelWise website.

Planning is already underway to develop a new "state of the art" bus/coach station in the Broad Marsh area, linked to the NET, associated with the redevelopment of the Broad Marsh Shopping Centre. Work is also taking place to develop other NET/heavy rail/bus interchanges at Nottingham Station, Bulwell and Hucknall.

A significant element of the proposed ring road major scheme is the construction of high quality interchange facilities at intersections of radial public transport services with an upgraded orbital public transport route. These interchanges will be served by a variety of modes, at Basford with Line One of the tram, at Beechdale with the local rail network and with Bus Quality Partnership corridors at the intersections with Derby Road, Hucknall Road and Mansfield Road.

4.4.2 Park and Ride

Safe, convenient and secure park and ride facilities associated with efficient public transport services has proven to be successful in attracting car users onto public transport for at least part of their journey. They have improved the accessibility of the City Centre helping to maintain Nottingham's position as a leading retail centre and contribute to reducing traffic on congested radial routes. Although initially introduced as a shoppers' service, park and ride is increasingly also being targeted to attract weekday commuters.



Park and ride is an integral part of the Greater Nottingham car parking strategy. Park and ride facilities are being promoted as an attractive alternative to complement increased City Centre off-street parking tariffs and constrained availability targeted at favouring shorter stay shoppers and visitors over long stay users.

The strategy is based on an inner ring of sites within three kilometres of the city centre and an outer ring beyond. The inner ring of sites have successfully established the concept of park and ride within the Plan area with the outer ring now being promoted to achieve greater congestion and pollution reduction benefits.

The development of outer ring park and ride sites mostly requires the release of land in the Green Belt which will be co-ordinated with the preparation of district Local Plans.

The costs of operating bus based services to outer sites is high therefore may require revenue support. To ensure reliability extensive bus priority needs to be in place.

The potential for increased park and ride facilities is being considered in the ongoing A453 and M1corridor multi-modal studies.

Bus based sites

Bus based park and ride is a well established feature of Greater Nottingham's transport network. A combination of high quality secure sites with high quality linking services attracts in excess of 500,000 cars per year.

The Forest, Queens Drive and the Racecourse form the core of the inner ring of sites. Phoenix (close to M1 junction 26) is currently the only existing bus based outer ring site in operation.

Park and Ride availability

Site	Spaces	Operation
Forest	2,000	6 days per week*
Queens Drive	1,000	6 days per week*
Racecourse	460	6 days per week
Phoenix Centre	600	6 days per week
County Hall	250	Pre Christmas Saturdays only

*(*Plus pre-Christmas Sundays)*

The locations of park and ride sites are shown on figures 14 and 17 in the Bus Quality Partnership and NET sections of this chapter. The oldest and largest site at the Forest continues to be the most heavily used and is operated commercially by Nottingham City Transport. The first new generation purpose built high quality permanent site at Queens Drive opened in 1994 and is operated by tender. An interim upgrading of the Phoenix site was undertaken in 1996. This site is also operated commercially by Nottingham City Transport. Expansion and upgrading of the Racecourse site was completed during 1997/98 with operation of this site, like Queens Drive, by tender.

Securing the provision of a new major bus based park and ride site at Gamston (A52 east) is now the highest priority outer ring site. Such a facility is programmed within the Plan period. Its development links in with Trent Bridge Bus Quality Partnership corridor improvements, Southside Investment Plan and is in a corridor where a significant amount of new housing development is proposed. The feasibility of sites at Leapool (A60/A614 north) and in the vicinity of M1 junction 25 (A52 west) is currently being investigated.

All new sites will be developed in accordance with 'Bus-Based Park & Ride - A Good Practice Guide' (2nd Edition) and will strive to be well signed; close to a major radial approach route; on the edge of built-up area; provided with safe and easy access and egress; outside the congested area; located to reduce likelihood of abstraction from conventional bus services; surrounded by sufficient land to allow expansion; and in keeping with surrounding land usage.

A comprehensive survey of users at the four main bus based park and ride sites carried out in September 1998 demonstrates a high level of public support for park and ride in Greater Nottingham. The key findings of this survey and comparisons with research recently undertaken for the DETR is summarised in Chapter 7.

Rail and tram based park and ride

In addition to bus based park and ride 200 parking spaces are provided at Hucknall and Bulwell Robin Hood Line car parks within the Plan area.

Up to five new rail based park and ride sites at Ilkeston North, Ilkeston South, Gedling, Attenborough and Bingham, to add to the two existing car parks at Hucknall and Bulwell as part of the Robin Hood Line, are also proposed within the Plan area as part of the future development of the suburban rail network.

Midland Mainline and partners have submitted a planning application for an East Midlands Parkway station, with 1,000 car parking spaces plus coach and taxi interchange facilities, to be located in the A453 corridor adjacent to Ratcliffe Power Station within the Plan area. If approved, in addition to providing a new facility for Greater Nottingham residents to access rail services on the Midland Mainline, encouragement will be given to promoting the station as a park and ride opportunity for commuters, shoppers and visitors to Nottingham City Centre.

Park and ride is an integral part of Nottingham Express Transit implementation. The Forest and Phoenix sites will be served by the tram when Line One is introduced. The NET system will also be integrated with an expanded park and ride facility at Hucknall, currently served by the Robin Hood Line, and new sites to be constructed at Moor Bridge (north of Bulwell) and at Wilkinson Street.

4.4.3 Public transport information

The provision of accurate, relevant and timely information is necessary to facilitate a modal shift to public transport.

Legislation in the Transport Bill currently passing through Parliament will give the local authorities the power to determine and arrange the provision of bus information as required within the context of Local Transport Plans. Bus operators will be under an obligation to provide the information necessary to allow local authorities to undertake this role and can be recharged if they fail to meet their obligations. In addition satisfaction with local public transport provision is now one of the Government's key best value performance indicators.

Public transport information broad strategy

The authorities intend to adopt the following key principles to ensue more effective public transport information with in Plan area:

- close partnership working with operators, between authorities and with the private sector,
- the authorities to be the lead advocate in public transport information provision,
- work through partnership structures to ensure that data flow is consistent and accurate,
- ensure that a consistent message is given using high quality public transport information,
- fill in the gaps by providing specialist and bespoke information meeting particular community needs, and
- consistently monitor how public transport information is used and what the gaps in provision are.

In advance of the Transport Bill the County Council will consider carrying out consultative procedures with a view to establishing a Public Transport Information strategy ready for when the Transport Act's provisions come into force.

Existing information sources, identified customer needs and proposed enhancements.

Printed timetables & booklets

All bus (both commercial and tendered) and rail services are currently shown in printed timetables available from a range of outlets throughout the conurbation, including the tourist information centres, bus stations, hospitals, universities and libraries. This information can also be provided in braille or tape form. In addition both the authorities and individual operators distribute summaries of service changes on a regular basis. The bus operators arrange for door-to-door timetable distribution along bus quality partnership routes.

Nottingham City Transport issues a booklet of their service timetables at irregular intervals. In addition the County Council produces local area travel guides showing all bus services for some parts of Greater Nottingham. However, there is no comprehensive booklet showing all bus and/or local rail operators timetables. Similarly there is no central point where a timetable of any local bus/rail services can be collected or distributed.

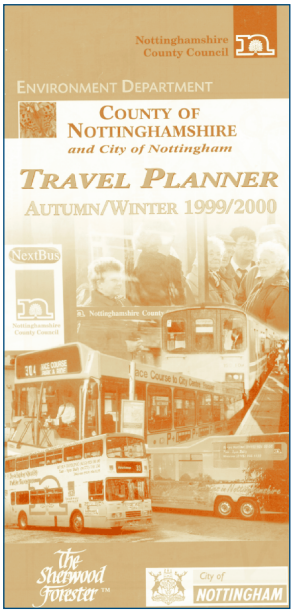
Timetables can be printed directly from the authorities TravelWise website or the main bus/rail operators websites. This has been found to be particularly useful for those with visual impairments who can then enlarge and tailor this information on their own computers to suit their needs.

The attitudinal study recently commissioned by the City Council into public transport information showed that over 30% of both bus and park & ride travellers make regular use of printed timetables. Respondents in the study generally felt that less detail and more use of stylised maps and large bold lettering within timetables was preferred.

The study showed that residents outside the City found it more difficult to obtain relevant printed timetables than those in the City. This matter is to be addressed as outlined in the public transport information strategy detailed below.

Route maps

Two network maps are currently produced for public transport services in the conurbation. The authorities' own "Travel Planner" map covers all local bus/rail services. In addition Nottingham City Transport produces its own bus network map. Both are specific to Greater Nottingham and include details of the City Centre, the hub of the conurbation's public transport network. Copies of these network maps are made available at the same outlets as the printed timetables, including the websites.



Attitudinal research suggest that whilst recognising its value some people find the authorities "Travel Planner" map complicated and difficult to understand. The City Transport bus network map was better received. To address this issue the authorities will produce core bus/rail service maps for the conurbation to complement the "Travel Planner" and will encourage operators to produce joint publicity where appropriate. In addition there was a call for an A-Z atlas version of the map, incorporating other local information useful for trip planning.

Information at bus stops

Comprehensive information at stops provides reassurance that the public transport system is well managed and many travellers, even frequent ones, rely on at-stop information. Attitudinal research shows that around one third of all travellers would go to the bus stop or station platform to establish bus/rail times. In the light of this the authorities are giving priority to the comprehensive provision of clear printed scheduled information at stops.

An audit of the information provided at bus stops in 1999 showed significant shortcomings in what information was provided by operators. Less than half of the 'alighting' stops had timetable cases, whilst those that had a timetable often had different cases for different operators. On multi-operator routes there was usually a separate flag for each operator, few of these contained a stop code or name and many were without service details. This is very confusing for passengers and particularly discourages infrequent users from travelling by public transport.

The audit findings are beginning to be addressed by the authorities who are increasingly taking a co-ordinating role with respect to bus stop infrastructure. The City Council has taken a pro-active role in the provision of stop infrastructure and the co-ordination of stop information. Integral large-format timetable cases, new bus stop flags showing stop code, name, all service and operators details and bus telephone hotline number have been provided in the City's 600 new bus shelters. A similar approach will be taken by the County Council for the new shelters to be provided in the remainder of the conurbation.

The City is installing 250 Adbus "Roadsider" information poles at principal bus stops without shelters. These units all have a co-ordinated, lit bus stop flag, with comprehensive service details. They also have a four sided, large format lit timetable drum displaying all operators times together with other useful information such as fares, telephone numbers and website addresses.

The authorities are currently in the process of electronic grid referencing, coding and naming of all stops for plotting on a geographical information system which will enable future local journey enquiries to be made on the internet. This will be developed further over the lifetime of the Plan.

Telephone enquiries

The authorities have operated a telephone hotline for a number of years, providing local bus and rail information daily from 7 a.m. to 9 p.m. and this receives over 150,000 calls per year. In addition two of the three major bus operators run their own enquiry lines taking a further 100,000 calls per year. A minicom version of this service is available.

The demand for the local authorities hotline service has increased by around 10% per year over the past 5 years and the staffing levels have been increased accordingly. At present around 90% of all calls are currently answered within 30 seconds.

The use of the telephone to gain access to public transport information is becoming increasingly significant. Local research shows that over 50% of public transport users already have a mobile phone and a further 9% will be getting one soon. At present 40% of bus users and nearly 70% of train passengers use a telephone hotline to ascertain service details.

PTI2000

The authorities and its bus operators have participated fully in the PTI2000 project, which will provide a national public transport telephone information service, and their joint call centre will be totally integrated into the East Midlands Region.

The authorities have some concerns about the limitations of the present proposals, in particularly the difficulties which may be anticipated when attempting to handle complex public transport enquiries requiring specific local knowledge.

The authorities have a number of strategies intended to address these issues which are detailed below.

- further development of the public transport database to include comprehensive stop-based information, walking links, fares, operator-specific enquiries, graphical interface, automatic registration inputting and real-time information, and mobile WAP phone applications etc. A bid for capital expenditure has been made in the Plan and the authorities are committed to dedicate staff time to introduce these enhancements locally,
- fully participate in the company set up with the bus operators to fund and run the hotline. The authorities have given a commitment to cover the cost of all calls relating to tendered services,

- provision of local authority resources to develop and maintain the information databases using local knowledge on aspects such as walking links, interchanges, fares. To help reduce social exclusion this will include disability information such as which routes are operating low-floor buses, which interchanges are on the level, where there are raised kerbs at stops and where there are dropped kerb crossings,
- promotion of the telephone hotline on all publicity - timetables, bus stop flags etc - in partnership with the public transport operators, and
- fully integrate the new call centre into the TravelWise Centre so that additional information on traffic conditions, roadworks and traffic diversions etc. will inform travel decisions.

TravelWise Centre

The authorities, in partnership with the Highways Agency and BBC Radio Nottingham, have now established the TravelWise Centre which provides a focus on all traffic and travel information.

The first phase in the development of the TravelWise Centre is now complete with the provision of regular radio broadcasting of traffic and travel information, based on information received through many sources including video monitoring of traffic and a database of all roadworks and road diversions. The centre has a comprehensive internet site co-ordinating all transport information on all modes including taxis, coaches, walking and cycling. It has direct links to the bus/rail operators' websites and the PTI2000 Trip Planner for multi-modal enquiries. The centre also promotes the sustainable transport policies of the authorities by providing accessible up-to-date information on work in areas such as Bus Quality Partnerships, commuter planning, safer routes to school and home zones.

Further developments to the TravelWise Centre are planned. These are designed to broaden the range of facilities covered and make it a fully comprehensive one-stop information shop. Some of the developments over the Plan period are set out below:

- provide tailored information services to individuals and employers,
- develop real-time information in partnership with the public transport operators,
- consolidation with the PTI2000 hotline,
- develop on-street information terminals,
- further improve the internet site,
- provide ticketing facilities, and
- start cycle hire.



On-street information terminals

Both authorities are in the process of introducing stand alone public transport enquiry terminals. These include the 'Station Master' computerised timetable enquiry service which uses the database developed for the PTI2000 project at over 20 sites throughout the County and City. Some sites also give internet access to the TravelWise Centre website, from which other sources of traffic and travel information can be accessed. The authorities intend to introduce information terminals at other locations, concentrating on district and local shopping centres and recognised transport interchanges and hubs.

A new database provided through Station Master now provides for better customised printed material and roadside publicity, and the authorities propose to establish an internet facility and full compatibility with the regional journey planner.

Real time passenger information

Some routes within Greater Nottingham are now equipped with real-time information displays at bus stops, showing a prediction of bus waiting times. Following customer research new software has now been tested to address some of the short comings of this evolving new technology. Another development being examined is the use of audible information for those with vision difficulties. An investigation of 'voice link' facilities to connect bus and rail stops with hotline and TravelWise centres is also being considered to bolster access to real time information and provide passenger reassurance. New computer programmes for Nextbus, which address shortcomings in the original system, are working well under test conditions prior to a formal launch. New display formats are also proposed in response to customer research.

Both authorities have plans to expand this to further corridors through the joint Bus Quality Partnership strategy. The information will also be shown graphically on the TravelWise website, and there are plans to investigate its application on WAP mobile phones, in-house televisions and at the City's 3 bus stations.

Integrated transport information

Information is increasingly being provided in conjunction with other modes. Leisure routes including walking and cycling are included in the Sherwood Forester bus service booklet, and connecting public transport services are now being highlighted in recreational guides. A series of leaflets for walks between Robin Hood Line Stations has been developed.



Commuter planning work has lead to most large employers undertaking audits of transport needs and facilities for its staff and customers. In many cases bespoke publicity showing the choices available has been produced in printed and electronic form. These cover bus, rail, cycling and walking as alternatives to incurring parking charges or difficulties with parking and road congestion. There are plans to produce such guides for all employment sites and key locations such as the universities, hospitals and principal leisure places.

Transport is being increasingly viewed as a 'derived' demand. Public transport information is now included on many leaflets advertising leisure sites, education facilities and entertainment events. All the tourist information centres are supplied with a comprehensive range of timetable leaflets and easy access to the Station Master computerised timetable system is being investigated.

The variety of information sources provide good availability for people with disabilities or special needs. Visual and audio sources are available which can be accessed from home or at local centres. The hotline service has a minicom and the traditional publicity can also be supplied in braille and on tape. An audio facility on Nextbus is being investigated.

Further development of information through the internet including mapping and the potential for internet transactions e.g. purchasing bus passes is also being pursued.

4.4.4 Travel awareness and changing travel behaviour

It is now recognised that there will need to be a major change in attitudes towards car use if the targets of modal change are to be achieved. Both authorities have been active in raising travel awareness of the impact of car drivers behaviour for some years and have been at the forefront of work on travel plans through the development of commuter planning both within and outside their own organisations. As active members of the National TravelWise Association, the City and the County Councils jointly hosted the annual TravelWise conference in October 1999, with other authorities in the East Midlands region.

The Councils' strategy for travel awareness is based on three inter-related elements:

i) an enabling role to advise and guide other organisations and individuals to adapt their travel behaviour, such as promoting travel plans and sustainable school travel activities,

ii) a co-ordinating role and partnership working 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 and education and health policies for the plan area such as the Healthy Schools Initiative, and

iii) information provision to support decisions for modal change, as provided by the TravelWise Centre, public transport information, and the MOST initiative.

Activities and measures in the Plan area to raise travel awareness and change travel behaviour combine all of these elements to a greater or lesser extent.

Travel plans

Both authorities believe that it is inappropriate to encourage others to adapt their travel behaviour unless we are setting a good example ourselves and accordingly both authorities are continuing to develop and operate their own travel plans:

- established in 1996, the County Council's commuter plan, STEPS with the employment of an officer dedicated to the task, was the first of its kind in the UK. STEPS set an initial target to reduce the proportion of drive-alone car journeys to the main headquarters by 30%. An interim survey held in December 1997 indicated a 17% reduction in solo car use. However, the County Council underwent a major restructuring and reallocation of

staff in April 1998. A recent survey indicates that the earlier trends in modal change had not been sustained. A major review of STEPS is currently underway to reinvigorate the plan and which will result in a number of new targets to be set and monitored on a more regular basis. (Further details are contained in the monitoring chapter of this report.), and

- the City Council's Staff Travel Plan also set an initial target for a 30% reduction in car commuting over the three year period 1996/7 to 1998/9. A designated Staff Travel Co-ordinator was appointed in June 1997 and a comprehensive staff travel survey carried out in October 1997 showed that 54% of total employees travelled to work by car (29% solo car drivers plus 25% car share). A second survey to update the staff travel plan for the City Centre sites after unitary status in 1998 has indicated a swing shift of 9% away from solo car journeys. This result has enabled the development of more specific targets for different modal shares.

Government policy identified the need 'to secure widespread voluntary uptake of travel plans through partnership with business and the wider community'. This is exactly the approach that has been actively pursued within the Plan area for over three years where a key element of the work on travel plans has been to engage the involvement of the business sector in transport decision making by enabling dialogue and partnerships between major employers and public transport operators.

Both authorities have employed full time Mobility Advisors to work with employers and Staff Travel Co-ordinators to work with employees to:

- raise awareness of travel plan issues,
- advise on the development and implementation of travel plans,
- monitor progress and maintain a database of transport information for use in travel plans,
- promote travel planning through publicity programmes, awareness raising and educational events.

One of the most effective mechanisms for progressing this work has been the Commuter Planners Club.

The Commuter Planners Club

The Commuter Planners Club was set up in 1996 as a means of encouraging large businesses, institutes and hospitals throughout the county to adopt commuter plans/travel plans. The Club has grown from strength to strength and has an active membership of over 30 organisations, representing the interests of over 60,000 employees. Meetings are held quarterly and are hosted by different members each time.

The Club has gained a national and international reputation and it is now proposed that a network of Travel Planners Clubs will be established throughout the County with the Nottinghamshire Green Transport Planners' Forum, which held its first meeting in July 1999.

The benefits of this approach can be seen both locally and nationally:

- several large organisations in Greater Nottingham are now expanding the scope of their transport plans beyond commuting to include other user groups such as patients,

students and they are now also including additional sites within the scope of their plans which significantly increases the impact of their work, and

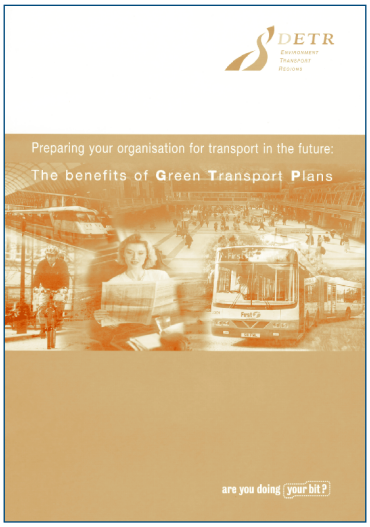
- several organisations are now leading on travel plans for their organisation nationally as a result of the experience and skills gained through the development of commuter plans for the sites in Greater Nottingham e.g. Inland Revenue, National Grid, The Boots Company, Government Office, QMC, City Hospital and Capital One.

Links to business and to other associated issues and environmental business performance have also been enhanced by:

- the work of the Nottingham Energy Partnership Transport Task Group, established last year to reduce the energy impacts of transport through the promotion and support of best practice and demonstration projects for commuter travel, business travel and fleet management, and
- the Traffic and Travel Information Service which provides a valuable up to the minute multi-media travel information service for all transport modes. Development of real-time information and partnerships with large organisations to develop custom intranet information sites will further enhance the value of this service to the business community.

Proposed development of travel plans

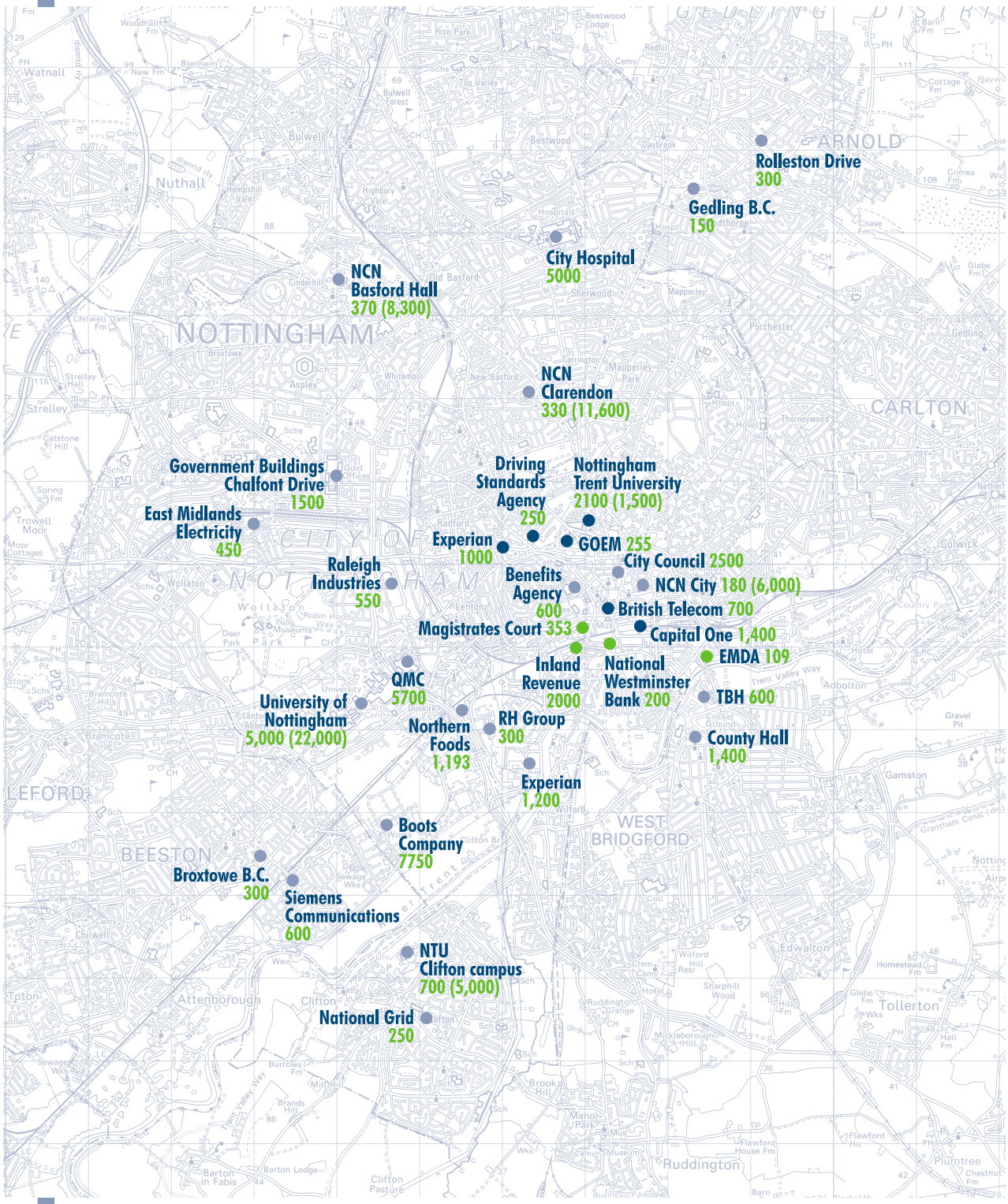
The authorities are continually seeking to develop and improve their travel plan programme. Key work areas for the plan period include:



- developing the travel plan work programme to better respond to the needs of small and medium sized enterprises - there are over 7000 in Nottingham alone employing over 100,000 staff,
- developing the Commuter Planners Club to engage wider personnel beyond estates management, for example, involving personnel and occupational health departments and running themed Commuter Planner's Clubs to address specific issues such as recruitment and health and fitness,
- developing the Nottinghamshire Green Transport Planners' Forum involving the County Council, district councils, the Nottinghamshire Chamber of Trade and Commerce, the education and health sectors and local business, and
- the new National Ice Centre, which opened in April, has investigated the development of a travel plan to maximise the sustainable travel options of its central location.

Southside Employers Group

One of the daughter groups of the Nottingham Commuter Planners Club, the Southside employers was established to serve the local interests of organisations located in the southern quarter of the city. This area is one of the fastest developing in the city and several major



- Active organisations
- Northside employers area
- Southside employers area

370 Number of staff

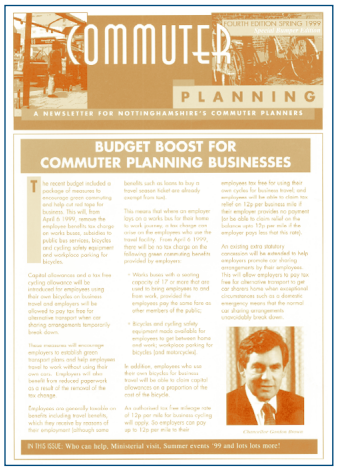
(11,600) Number of students (if appropriate)

N

Figure 25

Principal travel plans in Greater Nottingham

companies e.g. Capital One, Inland Revenue and BBC have built substantive offices. As a result, demand for enhanced transport services has increased. The Southside employers group has provided constructive feedback via:


COMMUTER
PLANNING
A NEWSLETTER FOR NOTTINGHAMSHIRE'S COMMUTER PLANNERS
BUDGET BOOST FOR COMMUTER PLANNING BUSINESSES

- providing staff travel survey results,
- Southside travel report prepared by consultants to consolidate the survey results,
- regular meetings hosted by variety of companies based in the south side, and
- brainstorming sessions and presentations.

Feedback from these meetings has proved to be valuable in the consultation process for the preparation of the Local Transport Plan.

The Southside Travel Report has encouraged public transport operators to explore the viability of running an orbital bus route which would link the Southside with bus services which terminate to the north of the city centre. A bid for resources to pursue this idea is included in the City Council's workplace parking levy Supplementary Bid.

Northside Employers Group

In similar vein to the Southside employers group, the Northside Employers Group aim to provide a forum for organisations based to the north of the city centre. The Northside Employers Group has been consulting with the City Council and public transport operators on how access routes can be improved.

National Ice Centre

Close working has been established with the Marketing department of the National Ice Centre to develop advice and information for users visiting the venue. The emphasis has been on promoting more sustainable forms of transport to get to the venue, as there are no visitor car parking on site. Information has been designed to present:

- access routes to designated car parks,
- web site information,
- location of disabled parking bays and taxi ranks, and
- public transport hotline numbers .

Sustainable school travel

The development of a sustainable school travel strategy is a particularly important area of work that applies the mobility management strategies developed for company travel plans to the school journey and links to both health and education policies. This work is seen as being complementary and interlinked with the authorities' road safety strategies described earlier in this chapter.

In previous years, activities to influence school travel behaviour have concentrated on travel education initiatives:

- both authorities' Road Safety Services have increasingly included advice about modes of travel to school, e.g. "Safety Zone" events and "Your Move" interactive project,
- in 1998 the County Council, with the support of the Nottingham Green Partnership, published the Nottinghamshire TravelWise Teachers' Pack to promote sustainable transport through a wide range of subjects in Key Stages 2 and 3 of the National Curriculum, which is available free of charge to all schools within the Plan area, and
- the TravelWise Centre web site provides a source of transport information that can be accessed by schools exploring environmental, health and safety issues associated with journeys to school and the effects of traffic in the school environment.

Both authorities are developing sustainable school travel initiatives based on mobility management principles to provide a more comprehensive and integrated approach to reducing school travel problems in the plan area that complement and build upon the existing good practice in travel education work.

As a response to the trend for young children to be driven to school and the resultant increase of congestion and pollution around school sites, the County Council launched its school travel plan initiative in March 1999 with a series of governor seminars and an information pack including a School Travel Plan Guide that was sent out to all schools.

A school travel plan aims to:

- reduce the number of private cars used to transport children to and from school,
- reduce the number of road accidents in the immediate vicinity of schools and their neighbouring areas,
- improve air quality in the vicinity of schools,
- increase health and fitness of pupils, and
- increase travel awareness for parents and the local community.

Measures included in school travel plans complement those aimed at improving road safety for children and other vulnerable road users in other locations.

The three key features of any school travel plan are:

(a) Ownership and responsibility resting with the local school community. Schools are encouraged to seek the approval of the governors' body for their plans.

(b) Adaptability. Each school or group of schools identifies its own travel problems and solutions. The local authority acts as an advisor and possible funder to help develop and implement solutions.

(c) Combining behavioural change with appropriate physical improvements. It is expected that many of the problems can be solved by encouraging more parents to walk their children to school or to encourage car sharing schemes. There may, however, be other measures that require infrastructure improvements.

The City Council has also developed a Travel to School Strategy that complements the County's approach whilst reflecting the specific needs of schools mainly located in densely

populated urban areas. The strategy is intended as a framework to guide and co-ordinate all school travel activities that are developed in response to a combination of road safety, education and community regeneration needs.

School travel initiatives will combine three key elements:

- development of a co-ordinated package of alternative travel options (school travel plan) for the school journey appropriate to the school or group of schools under consideration. (The concept of the school "family" can be extended to include associated nursery schools, play groups and youth groups in the vicinity of the school which may also have similar travel issues to address),
- development of Safer Routes to School through the implementation of traffic calming measures and other appropriate infrastructure for pedestrians and cyclists to ensure that no additional risk is imposed by encouraging the uptake of walking or cycling as an alternative to journeys by car, and
- awareness raising and education through the use of appropriate teaching activities within the school curriculum including the internet and the TravelWise Teachers' Pack.

The Travel to School Strategy also sets out a menu of potential measures to extend travel planning principles to all education journeys to nursery, to school and through to college, where the strategy links to the company travel plan programme.

Selection and prioritisation of sustainable school travel initiatives

Both local and national experience has shown that the preparation of school travel plans requires considerable guidance and input from road safety and travel awareness officers. The County Council has an officer dedicated to this task. While a fundamental principle of the school travel strategy is that sustainable school travel should be an opportunity available to all schools, both authorities have developed criteria to prioritise schools that should receive early attention.

There are slight differences in the criteria and emphasis between the City and County selection processes that reflect the different characteristics of and factors affecting schools in the dense urban areas of the City compared to schools in the suburban and more rural parts of the Plan area.

For instance, although there are clearly variations in the travel patterns of individual schools, a 1999/2000 survey of 14,000 junior school children in the City revealed that 68% of children already walk to/from school and so there is likely to be a greater emphasis on improving safety and conditions for those already walking than on achieving significant modal shift. This compares with the latest figures for the County part of Greater Nottingham where, out of 14,000 junior school children, 63% walk to school.

In the City council part of the Plan area, potential school travel initiatives will be prioritised using the following criteria:

- demonstrable commitment to the active promotion of sustainable school travel journeys: Schools must demonstrate active and ongoing commitment to the promotion of sustainable school travel and be willing to play an active role in the development of school travel plans and/or safer routes, to integrate aspects of the travel plan into the

school curriculum and be commited to monitoring conditions before and after implementation of the project. The school should also be willing to co-operate with neighbouring schools,

- the level of support and interest within the school community: Evidence of support for proposed schemes from parents, local residents and local businesses will be an important factor. Financial support in the form of external sponsorship would be an advantage,
- potential to reduce car-borne journeys: The potential for a significant reduction in the proportion of school journeys by car (taking account of size of catchment area and availability of public transport) will be an important consideration for schools in suburban and rural locations. Preference will be given to projects that will have an ongoing role in reducing car-borne journeys to the school. Short term or one-off promotional projects will be unlikely to be as eligible as capital projects,
- the opportunity to co-ordinate with existing or proposed "safer travel" infrastructure such as pedestrian/cycle routes or traffic calming: Preference will be given to initiatives that are located within proposed or existing traffic calmed areas where priority has already been given to pedestrian and cycle journeys. Initiatives that can satisfy an existing demand for walking and cycling facilities will also be considered favourably. Predominantly cycle based schemes will be assessed in the context of the existing cycle network and potential to link to the Millennium Cycle Route and the Greater Nottingham Cycle Network,
- demonstration of Need: The severity of the travel problems (including road accident records) both at the school and within its vicinity,
- need for action identified through the Schools Organisation Plan: In the City area school travel initiatives that are linked to changes in education provision as a result of the Schools Organisation Plan will receive priority,
- need for action identified through the Area Transport Plan and/or other community consultation exercises or located within recognised regeneration area: In the City area identification of the need for school travel initiatives through formal community consultation processes such as Area Transport Plans, SRB or New Deal for Communities will be an advantage, although exclusion from such a plan will not preclude funding. Schemes that are located within a designated regeneration area where that scheme would form part of a wider strategy for regeneration will be given priority. Proposals that add value to and complement other community action strategies such as community safety, health, environmental improvements and Local Agenda 21 activities will also be considered favourably, and
- health and environmental benefits: Support will given to initiatives which can demonstrate benefits in terms of health, community safety or environmental benefits such as increasing health and fitness of pupils, reducing air pollution in the vicinity of the school, creating a safer and more pleasant walking environment etc.

It should be noted that the City Council's approach to sustainable school travel initiatives differs slightly in emphasis to that of the County Council. As the Government recognises, sustainable school travel initiatives are determined by a range of factors that are broader than road safety aspects alone, as demonstrated in the criteria given above.

Although school travel initiatives that could positively enhance local safety conditions for pedestrians and cyclists are clearly to be encouraged, the City Council is tackling schools where road safety issues are the primary motivator for action on school journeys through the road safety programme. This distinction is to ensure that progress on meeting targets and outputs with relation to the new national targets for reduction of child fatalities and serious injuries can be clearly identified.

However it should be made clear that support will not be given to any school travel initiative generated by other factors that could lead to adverse road safety conditions and school travel initiatives will only be approved where:

- a safety audit has been carried out on the road network in the catchment area to identify particular safety risks, and
- finance has been secured to remove inherent safety risks before children are positively encouraged to walk or cycle.

Implementation

Both authorities have been working with a range of primary and secondary schools across the Plan area to develop good practice in sustainable school travel initiatives as shown below:

Table 13 Sustainable school travel

Primary Schools	Location
Abbey Gates Primary, Ravenshead	Gedling
Annie Holgate Infants & Primary School	Hucknall
Awsworth Junior School	Broxtowe
Bramcote Hills Primary School	Broxtowe
Claremont Primary School, Sherwood Rise	Nottingham
College House Junior School, Chilwell	Broxtowe
Eastwood Junior School	Broxtowe
Fernwood Primary School, Wollaton	Nottingham
Forest Fields Primary School, Forest Fields	Nottingham
Haddon Primary & Nursery School, Carlton	Gedling
James Peacock Infants & Nursery	Rushcliffe
Jesse Gray Primary, West Bridgford	Rushcliffe
Ladybay Primary, West Bridgford	Rushcliffe
Lynncroft Primary School, Eastwood	Broxtowe
Phoenix Infants, All Hallows C of E & Priory Junior	Gedling
Spring Street Primary School	Hucknall

Primary Schools	Location
St Peter's C of E Junior School	Rushcliffe
The Good Shepherd RC School, Arnold	Gedling
Trowell C of E Junior School	Broxtowe
West Bridgford Infants School	Rushcliffe
Whyburn Primary School	Hucknall

Secondary Schools	Location
Danecourt Comprehensive	Rushcliffe
Fairham Community College, Clifton	Nottingham
Farnborough School, Clifton	Nottingham
Rushcliffe Comprehensive	Rushcliffe

Whyburn School, Hucknall - The County's pilot School Travel Plan at Whyburn Primary School in Hucknall, has progressed well. The 94% response to the initial consultation survey identifying the concerns of the school community about their journey to and from school set the tone for the schools commitment to the project.

A steering group composed of Governors, parents and residents meets regularly and has produced a school travel plan and Pedestrian Charter which were approved by the Governing Body in September 1999.

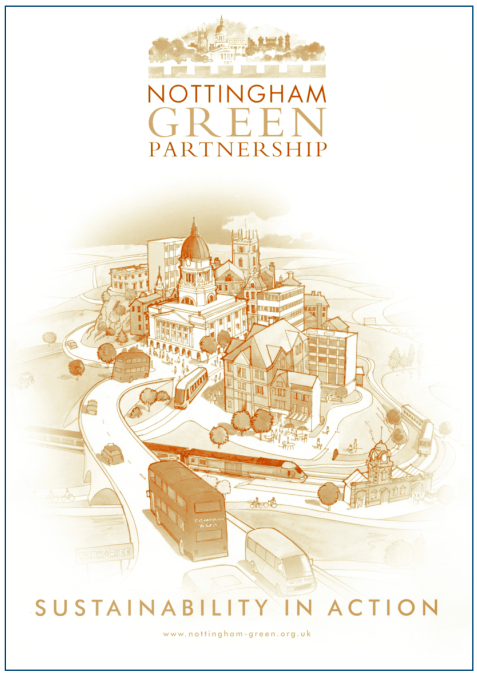
A number of key solutions and practical measures have been implemented to facilitate the objectives of their school travel plan. These include identifying and auditing walking routes and producing a regular newsletter.

A programme of road safety & travel awareness education was carried out and the creation of a school safety zone establishes a pedestrian priority outside the school. The zone also enables a 100% target reduction in parking on the approach to the school to be achieved. A report and second survey to monitor and evaluate the progress of the plan is to be completed in September 2000.

The City Council has developed a Safer Routes to School project with Fernwood Primary School to address an identified road accident problem on Arleston Drive and to reduce the high number of car-borne journeys to the school, particularly in the light of the recent expansion of the school site. The project has involved traffic calming along Arleston Drive and promotion of designated safe walking routes using special paving slabs designed in conjunction with the school. The project will be completed in 2000/01. The other City based initiatives have been identified through the Area Transport Plans. The first stages of carrying out a detailed school travel study and mapping of walking and cycling routes as appropriate and agreeing an action plan with each of these schools have been completed. Appropriate infrastructure such as signing and school safety zone entrance features will be implemented in 2000/01 with the exception of measures for the Clifton schools, which will programmed in as part of the area-wide traffic calming scheme over a three year period.

A further Safer Routes project has been identified at Sycamore Infants and Junior School, Abbotsford Drive, St Anns, Nottingham and work will start in 2000/01 to prioritise a programme of school crossing patrol site improvements to increase visibility and deter parking. This will form the basis of a rolling programme of improvements over the Plan period. The Schools Organisation Plan in the City area has also generated the need for a number of new school travel plans within the Plan period to address changes in school journey patterns due to the transfer of pupils to new schools and these plans will be prioritised accordingly.

Partnership working and policy integration



Another key role of the travel awareness strategy is to build upon the links between transport and other issues to develop effective partnership working, particularly around the themes of transport and education (demonstrated by sustainable school travel initiatives), transport and energy and transport and health. Ensuring links to strategies to improve air quality, reduce CO2 emissions and contribute to environmental management systems is also very important. For instance:

- In the City area, the Nottingham Energy Partnership Transport Task Group's remit is to reduce the energy impacts of transport through the promotion and support of best practice and demonstration projects for commuter travel, business travel and fleet management,
- The Transport and Health Initiatives Group is a multi-sector group established to progress work on healthy transport initiatives such as development of an adult cycle training programme,
- The East Midlands Regional TravelWise Group meets on a regular basis to network and share good practice on travel awareness activities in the region.

Other examples of wider dissemination and dialogue include the Local Agenda 21 process Changing Times in Nottingham. So far, some 1,500 local people have contributed to the development of action plans for a more sustainable Nottingham. Travel and transport have consistently emerged as the highest priority for the participants during the project, through widespread consultation. Nottingham Green Partnership's Transport Sub-Group (including local authority transport professionals, cycling and pedestrian groups, transport campaign groups and business transport managers) has also played a key role, providing specialist input to the process. The ongoing debate over the Travel and Transport section of the Local Agenda 21 Plan has been used to inform the development of the Local Transport Plan.

In the remainder of the Plan area there are well established County Council and district council community based forums set up to address a wide range of local issues. In some areas transport issues are of the highest priority and special events have been organised to raise travel awareness issues. It will be through these forums (set up under the Local Agenda 21 banner) that the main thrust of the public participation programme for the Full Plan will be exercised.

4.4.5 Air transport strategy

A national airports policy is unlikely to be published until 2001/2, the date being largely dependent on the outcome of the Heathrow Terminal 5 inquiry. If the inquiry recommends refusal for its development it will be necessary to increase the rate of growth in the capacity of the regional airports. This will clearly have a significant impact on the East Midlands Airport which is the main airport servicing residents in the Plan area.

The Local Transport Plan has four policy components to its local air strategy:

- the development of East Midlands Airport itself,
- surface access,
- the impact of development in the vicinity of the airport on the local transport network, and
- other airports in the Plan area.

Development of air services at East Midlands Airport

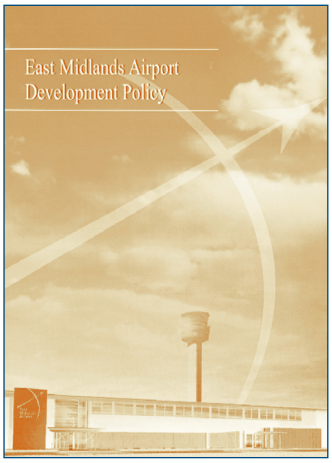
East Midlands Airport is located in Leicestershire so the local and strategic planning decisions are made respectively by North West Leicestershire District Council and Leicestershire County Council. The airport published a Development Policy in December 1998 which sets out development options relating to the operation of the airport based on traffic forecasts and environmental constraints. It identifies a preferred strategy which creates a substantial increase in apron area (parking for aircraft) within the currently available overall land area. Although not considered in this document, the approval for a full runway extension is crucial to meeting future demand.

The DETR has engaged consultants who are currently undertaking a Midlands Regional Air Services Study as one of six studies throughout the UK taking a long term look (up to 30 years) at future demand for air travel and to what extend this should be met by new capacity. It is focusing on Birmingham, Coventry and the East Midlands. After a period of consultation the outcome of the Study will be reported to Government and be integrated into the National Air Policy Statement.

The authorities recognise the importance of the East Midlands Airport to the local and regional economy. This Plan therefore takes a positive approach to the enhancement of the airport whilst recommending important safeguards for the environment and the development of sustainable transport links to it.

A planning application has been submitted for airport development at RAF Finningley in Doncaster Metropolitan Borough, just north of Nottinghamshire. The County Council has expressed concern over the current access arrangements for the development. If the development were to go ahead it would be likely to reduce air passenger growth at East Midlands Airport.

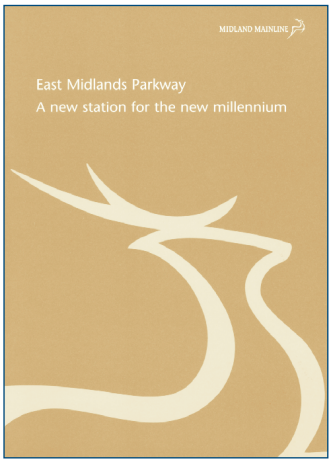
Surface access to East Midlands Airport



The White Paper recommended that all airports in England with scheduled passenger services should lead on an Airport Transport Forum. The objectives of such a forum would be threefold:

- to set challenging targets for increasing the proportion of journeys to the airport made by public transport,
- devise a strategy to achieve the targets, and
- to oversee implementation of the strategy.

East Midlands Airport have set up an Airport Transport Forum and a Strategic Development Forum and both authorities play active roles in developing the links between the planning and transportation initiatives of the airport and the local and regional context. A draft Surface Access Strategy has been published which seeks to enhance sustainable transport options for travel to the airport. It also provides information and advice on setting up and implementing a commuter plan for the major employers on site and details work with local bus operators to build on the recent improvements to bus services from Greater Nottingham to the airport.



Midland Main Line have submitted a planning application for a Parkway Station for the Airport on a site adjacent to the Ratcliffe on Soar Power Station in the Rushcliffe Borough of Nottinghamshire, close to the A453 within 4 km of the site. Details of the scheme are currently being assessed. The scope for a direct rail link between the Parkway Station and East Midlands Airport should also be investigated.

Relevant targets within the Draft Strategy include:

- to increase by 5% the proportion of journeys to and from the airport made by site employees using a mode other than as a single occupant in a car. This increase, bringing the total for these mode choices to 26% to be achieved by the end of 2005, and
- to promote the use of rail transport by passengers and employees. To see 5% of passengers or staff incorporating rail transport as part of their journey within five years of Midland Mainline East Midlands Parkway Station opening.

Other supporting objectives and targets aim to promote the use of buses and to provide infrastructure for cyclists including a cycle route through the airport by the end of 2005.

Development in the vicinity of East Midlands Airport

A steering group, convened jointly by the EMRLGA and EMDA, has prepared an 'Interim Position Statement' on the potential for economic development around J24/23a of the M1 motorway, in the vicinity of East Midlands Airport. Most Local Authorities, EMRLGA, EMDA, the airport and the Highway Authority have endorsed the statement. The statement:

- supports the operational development of the airport,

- notes that there are sufficient allocations either committed or in the pipeline to accommodate developments indirectly linked to the airport, and
- notes the attraction of location for business park development, but considers that such development should only be considered if development can be restricted to that which is genuinely new to the region, and would not locate elsewhere in the region.

The statement has been debated at the Public Examination into the Regional Planning Guidance. The panel will recommend a planning framework for the airport area to the Secretary of State for inclusion in finalised Regional Planning Guidance.

Other airports in Greater Nottingham

Safety, environmental and transport considerations, among other matters, should be taken into account in any future development of air services in the Region. Nottingham (Tollerton) Airport lies in the Green Belt and is quite close to residential areas so major expansion of its activities is not envisaged. Proposals for facilities to increase business or leisure use of airfields elsewhere in the Plan area ought to have regard for safety, environmental and transport considerations.

4.5 Planning and managing the highway network

4.5.1 Structural maintenance of principal roads

Maintaining the structural integrity of the Principal Road Network (PRN) is at the core of delivering the objectives of the Plan, underpinning many elements of the overall proposed transport strategy

The key points of focus over the 5-year Plan period will be to identify major weaknesses in the network and to devise a comprehensive programme of works to improve the condition and residual life of the highway structure. Key to the process is linking the programme to other strategies and co-ordination with the Bridge Assessment and Strengthening programme to maximise the effectiveness of resources. The provision of high quality maintenance, targeted on appropriate routes can have a significant effect upon the success of other strategies such as walking & cycling, powered two wheelers and Bus Quality Partnerships.

A comprehensive City wide survey programme, aimed at providing a robust baseline picture covering the entire network was carried out during the early part of 2000. Both authorities past work has concentrated on partial coverage of 'A' roads by specialist surveys, with approximately 20% of the network having a detailed 'MARCH' survey each year. It is believed that it is essential to increase the level of surveys to enable longer-term planning of investment across the network, with a higher level of consistency. In the City deflectograph surveys have therefore been carried out on all principal roads, and Coarse Visual Inspections (CVI) have been carried out over the remainder of the network. The new survey results were not available for reproduction at the time of going to print. Details will be supplied in a supporting document.

In the County the much larger network has dictated a slightly different approach whereby deflectograph surveys have been undertaken where indicated necessary by CVIs. The survey results are included in Chapter 7.

The primary target for resources will be the lengths of road with zero years residual life as identified by the deflectograph surveys, which will be dealt with in the early years of the 5-year programme. The secondary target of treating roads with a residual life of currently less than four years will be addressed in the later years. In the longer term, the aim will be to steadily increase overall residual life, reflecting structural need and local/economic factors. The overall aim of the strategy will be to ensure that, at any given time, the proportion of the Principal Road Network with less than four years residual life in the first full Plan period (2001/02-2005/06) is less than 30%. For the second Plan period (2006/07-2010/11) this target will be less than 20% of the network with less than four years residual life.

This is considered to be an appropriate overall level of condition for the Principal Road Network for a dense urban area such as Nottingham, which is achievable given the likely availability of resources. The strategy objectives are shown in the following table.

	Percentage Residual Life		
Time Period	**< 4 Years**	**5-9 Years**	**> 10 Years**
1999 (NRMCS)	66	6	28
2000 (Deflectograph)	*	*	*
2005 Do Nothing	72	8	20
2005 Strategy	30**	20	50
2010 Do Nothing	80	10	10
2010 Strategy	20**	30	50

* Figures not yet available ** Target %

Should further funds be made available, the target percentages (**) would reduce to 25% and 15% for 2005 and 2010 respectively.

In developing the programme within Greater Nottingham, consideration has also been given to other known or proposed schemes which are related to other strategies, partnerships or bidding, to achieve as co-ordinated an approach as possible. In addition, where roads are reconstructed through district centres, with typically high levels of pedestrian activity associated with shopping and leisure, the opportunity is taken to undertake footway improvements and street-lighting upgrades to enhance the environment and personal security for shoppers, encouraging regeneration and boosting local economies.

Maintenance Policy

A major review is underway to develop a highway maintenance policy and strategy in Greater Nottingham. The strategy will reflect the needs of highway users, based on the current condition of the network, all relevant City, County and Government strategies, and the likely availability of resources. Within Nottingham City Council, the Highway Maintenance service area is carrying out a first year Best Value Review, and the results of the consultation with users in particular will be used to inform network policy for the future (this will be undertaken within the County in 2002).

Development of a new Network Management Plan for Nottingham is programmed to take place during 2000/01, after completion of the Best Value review. This will embrace all activities which take place on the highway, integrating and complementing existing and proposed City policies (e.g. the Walking and Cycling Strategy). The relevance to other initiatives and cross-service arrangements (e.g. Health Improvement Programmes) will also be considered, as well as the opportunities afforded by programmes such as Urban Management Areas and New Deal. Account will also be taken of environmental aspects, within the context of ISO 14001 Environmental Management Systems accreditation, including the use of surfacing materials to reduce tyre noise and the use of recycled materials.

Work started during 1998 within the City to examine customer needs and requirements for the highway network as part of early work for the Best Value process. Initial findings indicated that priorities are generally seen to be for maintenance of main roads (i.e. those which perform a strategic role including B roads) and all footways, as well as for lighting levels in general. Concurrent work on risk management has shown that most accidents resulting in liability claims to the City Council are related to pedestrian footway accidents. The maintenance policy has been adjusted to reflect these findings, with additional works budget allocations and doubling of the minimum frequency for planned inspections of the network. This approach is essential to ensure that Best Value principles are applied in the delivery of the service.

Particular consideration will be given to the needs of public transport and cyclists and the part which maintenance can play in their promotion as viable alternatives to the private car. Wherever possible, work will be dove-tailed with initiatives such as the Bus Quality Partnership and Walking and Cycling Strategy and the opportunity will be taken to incorporate low cost, or no cost improvements such as advanced stop lines for cyclists and dropped crossings for the disabled. The needs of freight users will also be considered in specific areas; the narrow nature of much of the Nottingham network means that damage caused by heavy vehicles tends to be concentrated in the area of carriageway used by cyclists. Also of great concern is the poor condition of key non-Principal Roads in the area. Whilst these are not eligible for LTP capital, they still carry significant traffic volumes with a high percentage of bus and HGV movements.

Planning of the works programme takes into account any “traffic sensitive” designations and the context of works in environmental impact terms. In areas where the impact upon residential dwellings is not an issue, most work is carried out either off-peak or at evenings/overnight or weekends. The aim is to achieve a balance at each location between the needs of traffic flow and local residents which often conflict.

Programme

The maintenance work programme proposed for the Principal Road network in this submission is based on areas of major carriageway deterioration which have been identified by the recent deflectograph surveys and extensive local knowledge. The City programme is likely to be prioritised, however, when the results of the 2000 deflectograph survey have been analysed along with the associated UKPMS/MARCH PMS analysis. This will be provided in a supporting document. The increased allocation made in the provisional Plan has enabled a further significant improvement in network condition to be achieved, and the proposed programme aims to build on that work initially. As well as structural carriageway works, it is planned to continue replacement of the remaining structurally defective Group ‘A’ street lighting columns where recent condition surveys have revealed major safety problems. This work will result in a substantial improvement in the quality of lighting in the targeted areas.

In the longer term, consideration will be given to allocation of extra revenue raised from workplace parking levy for a major street lighting replacement and improvement programme. In the meantime, this work will complement the work now started on footway maintenance and street lighting improvement using the increased revenue budget funding made available by the City Council Transportation Committee in 2000/01. More detailed information on the programme is contained in Chapter 6.

Consideration has also been given to the likely effects of the start of construction of the Nottingham Express Transit Line One. It is expected that parts of the 'A' road network will be affected by increased traffic flows as traffic diverts on either a temporary or permanent basis as work proceeds. The programme takes these factors into account as far as possible at this stage. As the NET construction programme builds up, this aspect will be kept under review.

Performance indicators

The relevant performance indicators for highway maintenance, including street lighting, are given in Chapter 7. The indicators are all influenced by the available works budget, and it can be expected that they will generally improve as funding, both from the LTP and from the revenue budget, is increased. The Best Value Review will also look in depth at current procurement practice and whether there are areas where better value can be obtained.

4.5.2 Bridge assessment, maintenance and strengthening

Definitions

In Nottinghamshire, structures with a span greater than 3 metres are defined as "bridges", those with a span between 1 and 3 metres are defined as "culverts" and those below 1 metre are regarded as "highway drainage". This section considers bridges and culverts only, highway drainage is regarded as an integral part of the highway and consequently is funded out of the highway maintenance revenue budget.

However in line with Local Transport Plan guidance notes only those structures of more than 1.5m span are detailed in the statistics for Nottingham City. Nottinghamshire County Council will provide updated statistics based on a minimum span of 1.5m in the autumn.

The role of bridges and culverts

There are many significant structures in Greater Nottingham whose role is generally well understood both in terms of transport and aesthetics, for example the major bridges crossing the River Trent. Less well understood, but equally important to the community, are the many smaller structures on both major and minor roads. Within the urban area the travelling public are often completely unaware of the presence of these bridges. Within rural areas they form part of the only viable route to local farms and businesses. In addition, many of these structures are used by local bus services of sometimes marginal viability.

Strengthening works on minor structures can appear to have a low priority, but the alternatives of economic disruption, withdrawn or extended bus journeys or poorly enforced weight restrictions are often unacceptable. Both the City and County Councils welcomes the increased

funding levels now being provided by the Government, and the consequent opportunity to undertake all necessary bridge strengthening works within the timescale of this Plan.

Ownership and obligations

The ownership of structures carrying public highway in Greater Nottingham (excluding Trunk Roads which are the responsibility of the Highways Agency) is given in Chapter 7. The data is split between Table B1A for the City of Nottingham and Table B1B for the Greater Nottingham area outside of the City Boundary. For both areas it can be seen that the Highway Authorities are the predominant bridge owners but a significant number of structures are owned by other organisations such as the various "rail" bodies (Railtrack, Rail Property Limited, Sustrans/Rail Paths Limited), British Waterways Board and an assortment of other private owners.

The Highway Authority has had a general obligation under European Law since 1st January 1999 to ensure that structures supporting public highway can safely carry 40 tonne vehicles wherever these might reasonably require access.

However, the loading obligation of the "rail" bodies and the British Waterways Board was set in 1972 to be 24 tons according to the design standards pertaining in 1968. When compared with modern assessment codes this can sometimes result in strengths of less than 24 tons and considerably less than 40 tonnes for either the whole or parts of their structures. Worse still, the loading obligations of the other bridge owners can be obscure. The policy taken is to assume that the loading obligation for private bridge owners is the traffic at the time of construction. Another complication with private bridges is that within the urban area the ownership of certain voids under the highway is unknown.

General policy

The City and County Council's policy is to operate a system of General Inspections, Principal Inspections and strength assessments for all bridges and culverts on the public highway network; to carry out appropriate maintenance, refurbishment and strengthening work; and to ensure that the bridge stock is maintained in a proper state to safely carry traffic loads well into this century.

Highway authority owned bridges receive a revenue funded General Inspection every two years and a Principal Inspection every 5-20 years (depending on the type of structure). Due to pressure to complete the assessment programme it has not yet been possible to carry out repeat principal inspections of vulnerable structures although some are now programmed. All structures carrying public highway (regardless of ownership) receive a one-off strength assessment which, once done, will not be repeated unless the structure deteriorates significantly or changes in vehicle weights and configurations are legislated.

Assessment progress

Table B1 also details progress on assessment in Greater Nottingham. In essence provisional assessment results are now available for the majority of the City, County, Railtrack, Sustrans/Rail Paths Limited, and British Waterways Board structures. The assessment of other private owner structures is now underway or planned for the next two financial years. The main exception is the handful of City Council bridges for which there are inadequate records and structures fully retained by Rail Property Limited where it has not yet been possible to come to a satisfactory legal agreement. However, it is anticipated that all bridge assessments will be completed by April 2001.

Neither authority has yet made any progress on the assessment of retaining walls. Nottingham City is proposing to commence a programme of assessment of these structures in 2000/01. At present the location and size of retaining walls is not known as the details of only a limited number of these structures have been recorded. Identification and assessment of these structures will probably continue for at least the first three years of this plan as more structures are discovered.

The cost of completing the assessment programme, including retaining walls, is estimated as £150,000 for Nottingham City.

Weight limits and strengthening

The increased level of funding that has been made available has enabled both authorities to carry out extensive strengthening works. However there is still a need for further funds to carry out strengthening works and details are given in the separate sections for Nottinghamshire County and Nottingham City below.

Both authorities are concerned that weight limits not effectively enforced, consequently in many cases the priority remains to strengthen the bridge rather than impose a permanent weight limit. However both authorities recognise that not all bridges need to be strengthened to carry 40 tonnes. In determining the allocation of funds on bridge strengthening the priorities are as set out below:

- structures on the Strategic Road Network,
- structures on other routes where HGVs/buses form a significant proportion of the total usage or are on key transport links to settlements or small towns,
- structures on routes providing access to local industry and agriculture (particularly where they are the only reasonable means of access),
- suitability of alternative routes (if any) and outcome of consultation with affected businesses and farmers, and
- age and condition of structure.

Bridge maintenance

As the number of bridges that require strengthening is reduced emphasis will need to switch from strengthening to maintenance. There is currently a significant backlog of structural bridge maintenance work. Both authorities make a small allowance within the revenue budget for routine bridge maintenance (City Council £30,000, County Council £60,000 Countywide). However funds for major structural maintenance are requested via this Plan as detailed in the detailed programme.

Upgrading bridge parapets

The majority of highway authority bridge parapets do not meet the current containment standards. A risk assessment to establish a priority rating will need to be carried out early within the period of this Plan, to identify where to target the upgrading work. A significant proportion are constructed from unreinforced brickwork or stonework. Some of these may be eliminated from the programme depending on the outcome of guidance given in the CSS published report on masonry parapets. There are also many bridges within both the rural and

urban setting where the appearance and form of construction do not lend themselves to replacement with modern parapets. For these cases, where containment standards are not met and there is a high risk rating, protection measures such as safety barriers and "Trief" kerbing will be adopted.

Co-operation with other bridge owners

As required in the Plan guidance the following is a summary of co-operation with other bridge owners on the public highway:

Highways Agency - The County Council is a member of the PLaN consortium which is responsible for network management on most of Nottinghamshire's Trunk Road network (and beyond), many of PLaN's staff are County Council employees. All Trunk Road structures are up to strength.

Neighbouring Highway Authorities - The County and City councils jointly own two bridges crossing the River Trent and co-operate closely on managing the bridge stock within the Greater Nottingham area. The County Council also has a number of jointly owned structures with other neighbouring highway authorities. In addition there are two way communication mechanisms in place to ensure that, for example, new weight limits or proposed roadworks possibly affecting neighbouring authorities are notified and discussed. There are no weight restrictions on any jointly owned bridges and there are none on the Strategic Road network within Nottinghamshire (and no proposals to introduce any).

Railtrack - A joint venture assessment agreement was signed in 1997 and work is now well underway with good co-operation between the two parties

Rail Property Limited - Regrettably it has not yet proved possible to come to an equitable assessment agreement with Rail Property Limited. However, only a small number of structures are involved in Greater Nottingham (all on minor roads), the remainder having been "transferred" to Sustrans/Rail Paths Limited (see below). It is hoped that agreement can be reached soon and the assessment work completed by December 2000.

Sustrans/Rail Paths Limited - All these structures have now been assessed with the co-operation of Sustrans. None require strengthening in Greater Nottingham.

British Waterways Board - All these brick and masonry structures in rural areas have been assessed with a 50% contribution from BWB. None require strengthening in Greater Nottingham.

Other owners - Within the City there are bridges owned by the Environment Agency as well as shopping centres and other private concerns. As the range of owners (where known) and their associated obligations and responsibilities are very diverse, the City and County Councils are funding the assessment of these bridges through the LTP process.

Funding eligibility

The City and County Councils welcome the recent widening of eligibility for the use of Government Capital funding to include major maintenance schemes and retaining walls. However both authorities would welcome clarification with respect to the eligibility of footbridges, particularly those which form an essential part of the integrated urban pedestrian and cyclist networks now being established.

4.5.3 Detrunking

In July 1998 the DETR published the results of the Government's Trunk Roads Review which included defining a new national core network and proposals for detrunking the remaining non-core routes. The review was followed with a period of consultation between the DETR and affected local authorities to determine an appropriate and acceptable core network. The outcome of the consultation was announced in April 1999.

The resultant effects on the Strategic Road Network in the Greater Nottingham Area are shown in figure 9 in Chapter 3. The roads to be detrunked are:

A606	From A52 Ring Road (Tollerton Roundabout) to A46 (Widmerpool)
A60/A614	North from Woodthorpe Drive
A6514	Ring Road (A52/QMC to Valley Road/Mansfield Road)

There are no schemes on non-core routes in the Plan area withdrawn from the national programme as a result of the July 1998 review.

Generally, the principles of the Trunk Roads Review and resultant detrunking proposals are welcomed by both authorities subject to the adequate transfer of funds to ensure routine maintenance of the non-core roads to appropriate standards and adequate maintenance of these roads in the interim period between virtual and actual detrunking by the Highways Agency.

An overview group of highway authorities in the East Midlands has been formed to establish a consistent approach to detrunking with the Highways Agency. In addition, a series of separate meetings between individual highway authorities and the Highways Agency is on-going. At this stage, it is anticipated that detrunking of non-core in the Greater Nottingham Plan Area will commence in April 2002.

The detrunking programme offers opportunities to both authorities for greater levels of local control and will assist in the promotion and implementation of transport demand management techniques. The proposed major integrated transport scheme for the ring road responds to this opportunity.

Continued consultation between the Highways Agency and both authorities will be essential to ensure that the local/trunk network interface is handled in a way which is conducive to the objectives, strategy and targets in the Plan.

4.6 Sustainable Distribution

The authorities have developed a Local Sustainable Distribution Strategy in partnership with the Freight Transport Association and other partners. The strategy recognises that efficient distribution services are critical to the performance of every sector of the economy. The authorities have an important role to play and this is outlined in the range of measures set out

below which seek to promote the efficient and effective use of all modes of transport, while recognising that road will continue to be the dominant mode of freight distribution for the foreseeable future.

In developing the strategy consideration has been given to the wider supply chain implications and the wide-ranging impacts freight transport has upon, inter alia, congestion, noise, health, climate change and the natural and built environment.

Transport objectives for sustainable distribution

The objectives in the Plan most relevant to sustainable distribution are:

a) to improve sustainable accessibility to City and district centres in ways which enhance activity, encourage development in and reduce social exclusion from these centres;

f) to maintain and enhance Greater Nottingham's accessibility to regional, national and international markets, particularly by modes other than the car;

h) to relieve communities from the adverse effects of through traffic, particularly HGVs, and

i) to maximise the efficiency and maintain the structural integrity of the existing current transport networks.

Targets

(i) Road casualties

Road casualties for all modes and road users will be monitored and will include a separate analysis of accidents involving HGVs. Current (and any emerging) trends in such accidents will form an important component of the work of the Nottinghamshire FQP. It will seek to determine appropriate remedial measures that can be taken by freight operators, the County Council, the Police or other appropriate bodies to meet national road casualty targets.

(ii) Journey times

Regular journey time surveys are undertaken on the principal radial routes, the results of which are monitored on an annual basis. Significant changes in journey times highlighted by the review, would affect both private transport and commercial distribution vehicles and issues affecting efficient freight distribution could in future be considered by local Freight Quality Partnership working groups. The improved techniques for monitoring commercial vehicle flows described below will enable accurate assessments of usage of individual routes and therefore the likely impact of problems on efficient distribution.

Freight movement in the Plan area

At the present time, there is very little information available on freight movements, either by road, rail or water.

The authorities recognise that efficient and sustainable distribution services are essential ingredients in the successful performance of the local economy and, to assist the monitoring and assessment of these services, accurate information is needed on the volumes and types of freight carried locally and the modal split between road, rail and water. It is accepted that for the foreseeable future, road will continue to be the dominant mode.

In the interim, the authorities will continue discussions with the rail freight industry, the Freight Transport Association and the British Waterways Board to obtain a more accurate picture of all types of freight movements in the Plan area.

The Greater Nottingham Freight Quality Partnership carried out a survey of drivers designed to identify key issues influencing efficient and sustainable distribution in the area. Congestion and delays on the A453 into Nottingham from the south featured prominently in the results and a study of movements in this corridor is now being carried out as part of the DETR's programme of multi-modal studies. Other issues highlighted included many examples of illegally parked vehicles obstructing both kerbside delivery points and also service areas, poor traffic signing resulting in wasted time and unnecessary mileage in busy areas and inconsiderate parking around large vehicle entry and exit points. Indications are that these problems are widespread and that examples of similar problems are likely to feature prominently on the agendas of the partnerships which are currently being set up.

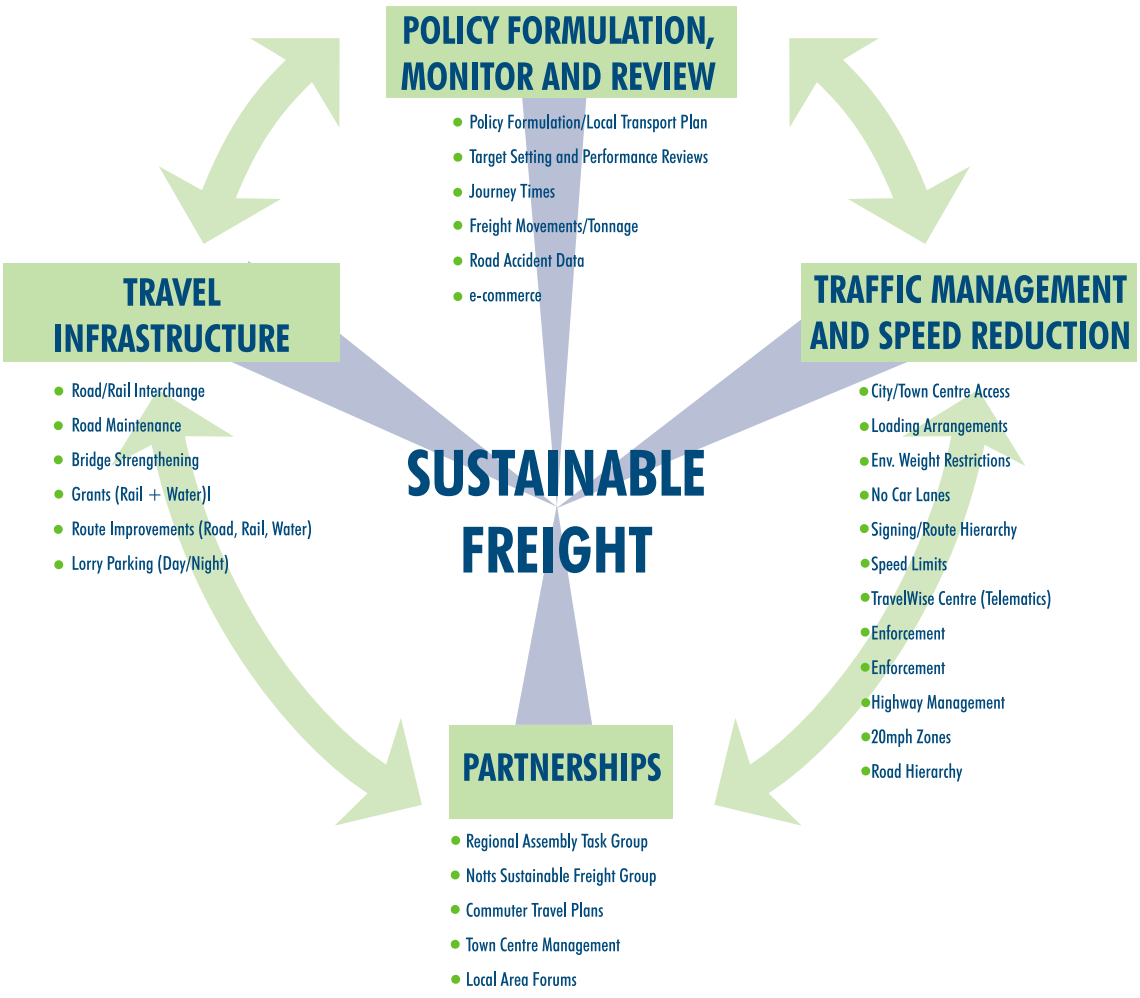


Figure 26

Sustainable freight

Programme of measures

A programme of measures is set out in figure 26 under four headings:

A - Policy formulation, monitor and review

Which includes the process of continuous monitoring through target setting, data collection, performance measuring and policy review.

(a) Policy formulation

The Sustainable Distribution Strategy has been prepared by the County Council and City Council, the Freight Transport Association and local transport users and providers. The strategy will form the basis of a work programme for the new Nottinghamshire Freight Quality Partnership (FQP) which was initially set up as the Greater Nottingham FQP in 1998. At the last meeting of the Nottinghamshire FQP it was agreed that specific elements of the strategy could be progressed through a number of working groups.

b) Data availability

Both the quantity and quality of information on freight movements will improve in subsequent years as a result of changes being introduced in the authority's traffic survey programmes. Previous automatic traffic counts on key routes have been for 9 hour periods only and physical counts for limited peak periods. In future, 24 hour counts will be introduced and this information will distinguish between HGVs and others. Using physical counts as a control, it will be possible to accurately assess volumes of HGV movements and monitor subsequent changes.

It is also anticipated that information from local delivery operators on the number of "drops" possible within a defined area will become available through the local FQP forums and this information may provide realistic figures which can be used to assess and monitor the results of plans to improve distribution efficiency.

Discussions are on going with Railtrack PLC and the rail freight operators to try and produce base information about current rail freight movements in the area to aid future monitoring and review. Most of the information available at present is on a national basis but nonetheless shows that gross tonnage moved by rail has increased significantly since 1994 and growth has been across a wide range of commodities, not just rail's traditional markets. Rail's market share has also increased. The figures also confirm that rail is used over a range of distances and there is now no "break even" point for rail against other modes.

In addition, we aim to develop a tabulation of freight handling sites and private sidings, out of use, currently used and also potential sites as an aid to developing increasing opportunities for the handling of freight by rail.

(c) E-business solutions

E-business, with the latest technology and advancement in communication the www.com label is becoming an essential marketing tool for companies selling products and services, and a necessity to compete within a highly competitive environment such as the logistics and distribution market. The use of the internet and e-mail is allowing organisations to trade more effectively than traditional administrative methods with greater efficiency and accuracy. With the advancement in new technologies and e-commerce, logistics companies can aim towards full utilisation of their resources and strive towards running at optimum capacity.

This enables firms to pass on the advantages to their clients the consumer, offering lower prices, while all the time trying to gain competitive advantage within a fast growing and highly competitive market.

New technologies and supply methods are also required for distributing goods and services. With advancement in technology and warehousing it is possible for goods to be delivered to a central warehouse in bulk for breaking down in to smaller consignments for local areas, or out of town outlets. This initiative is particularly ideal for rural areas where retailers can work in partnership(s) to use out of town warehousing so that consignments can be pooled together and one delivery made in a smaller vehicle. The advantages will be less road congestion and fewer goods vehicles in rural areas.

B - Partnership

Freight transport issues readily divide into four "tiers", those which have regional importance or significance, those which require investigation and action at plan area level and finally those of a more localised nature within individual settlements.

(a) Regional activity

A special task group was set up by the East Midlands Regional Assembly to develop the Interim Regional Transport Strategy. Amongst the partners included in the group were local authorities and the Freight Transport Association. The task group is expected to manage the development of the strategy after the public examination in June 2000.

(b) County activity

"Delivering the Goods" is a joint initiative between the Freight Transport Association (FTA) and the Local Government Association (LGA) under which local partnerships are developed between the freight industry and a number of local authorities throughout the UK to encourage best practice and promote environmentally sensitive, economic and efficient delivery of goods in towns and cities. The initiative was extended to include Nottingham in April 1999. In parallel with this process, the Delivering the Goods Group for Nottingham was expanded to establish a Freight Quality Partnership. This group included representatives of the Freight Transport Association, Nottingham City Council, Nottinghamshire County Council, Nottinghamshire Police, Tarmac, Boots the Chemist, Marks and Spencer, TNT, Jessops, Pork Farms, Securitas and Imperial Tobacco. The group continued to meet through 1999 and 2000 and has been extended geographically to cover the whole of the County of Nottinghamshire.

The main task of the Nottinghamshire Freight Quality Partnership is to establish and promote a framework and strategic guidance on sustainable distribution. Under the umbrella of the Partnership individual "Delivering the Goods" working groups will be assembled to examine and resolve issues at a micro level within towns and district centres. These smaller groups will comprise key representatives relevant to the specific problem.

(c) Local activity

The County Council organises and supports Local Area Forums in many of its local communities providing a platform for issues of local concern, including transport, to be raised and addressed. There were 15 or so such forums established and working in spring 2000 although only two or three, including Beeston and Arnold have members or sub-sections dealing specifically with movement issues. We are actively seeking to strengthen freight and distribution membership of these forums and our Chamber of Commerce colleagues are assisting us through promotional information on their website.

(d) Company travel plans

Whilst discussing freight issues with local companies, the opportunity is being taken to initiate discussions about the development of employee travel plans. Employers will be encouraged to consult with employees about travel to and from work with the aim of encouraging alternatives to the private car. This also provides the opportunity to encourage businesses to consider more sustainable policies for freight movements, and fuel use etc.

C - Travel Infrastructure

(a) Road/rail interchange

Nottinghamshire's Structure Plan Review (Approved November 1996) includes policies designed to ensure that provision continues to be made for a regional rail freight terminal based on the existing English, Welsh and Scottish Railway (EWS) operational depot at Toton, in Nottinghamshire, mid-way between Derby and Nottingham and close to Junction 25 of the M1. Toton is also a major depot for Railtrack PLC Infrastructure Services. The authorities are committed in principle to the development of Toton and understand that EWS are continuing to review development options for the site. In addition, Central Railway (CR) PLC is promoting a project for a major new freight railway from Lille in northern France to Liverpool and the company plans to have a number of major terminal sites en route, including one at Toton.

The authorities support this development in principle, subject to future consideration of environmental and operational issues, and is continuing to liaise with interested parties as the project develops. A major obstacle to progress so far has been the failure to negotiate a new access to the site from A52 trunk road, a short distance east of M1 Junction 25. Negotiations are on-going with the Highways Agency to resolve this difficulty and the Agency has commissioned a study to identify possible options and likely costs. It is anticipated that the study findings will be available by the end of year 2000. The other key issue at Toton concerns greenbelt areas and both the County and Broxtowe Borough Councils will be working to ensure that any plans for the area achieve a sensitive balance between sustainable economic development and environmental benefits.

(b) Road maintenance

Standards of road maintenance have declined in recent years, particularly on the more minor roads which depend on revenue budget funding. However, many of these roads invariably form the beginning and/or the end of distribution journeys and therefore now that the funding situation has eased somewhat, increasing attention will be directed towards redressing this situation.

(c) Bridge strengthening

The principal aim of the Plan's bridge strengthening strategy is to ensure that all bridges are maintained in a proper state to carry loads safely well into the next century. An additional aim is to bring all appropriate bridges up to strength to enable them to comply with the EU 40 tonne vehicle weight limit which became legal on Britain's roads from 1st January 1999.

It has been necessary to carry out an assessment of all bridges and this has involved in excess of 1,100 structures, including over 100 owned by other organisations. There are currently around 40 weight restrictions on the County's network but it is hoped that these can be eliminated within five years now that limited funding is becoming available. The County

Council will increasingly be involving user organisations, particularly the Freight Transport Association, in assessing priorities and setting targets for this programme. Work will be co-ordinated with the Environmental weight restrictions programme.

(d) Grants (rail and water)

The authorities will continue to explore, in conjunction with rail freight operators and British Waterways Board, funding opportunities for projects likely to result in modal transfer of freight from road to rail and/or water. The major freight operators have already been actively involved in local discussions on freight issues and it is anticipated that this will in a number of cases develop naturally into local Freight Quality Partnerships.

(e) Lorry parking (day and night)

Very little is known about the need for lorry parking locally within the Plan area, either for refreshment breaks or for overnight parking and discussions with the Freight Transport Association and others will assist in the development of the Authorities' initial freight strategy and whether to include proposals for dealing with any such problems. This will also involve discussions with neighbouring authorities, the East Midland Region Local Government Association and the Highways Agency.

(f) Route improvements (road, rail and water)

One of the benefits arising from discussions with freight and distribution users and providers is expected to be a greater and more accurate awareness of the preferred routing patterns for distribution vehicles and whether there are particularly areas, road safety, environmental or congestion, for example, where efficiency, safety or environmental impact might be improved. Any such issues will be considered by the Nottinghamshire Freight Quality Partnership. The full programme of road and rail network improvements are set out in the Local Transport Plan. These will benefit both passenger and goods movements.

D - Traffic management and speed reduction

(a) City/town centre access

Many urban commercial centres are turning to pedestrianisation to improve the environment for shoppers and visitors and vehicular access throughout the working day is therefore becoming more restricted. While such improvements are almost universally agreed to have a positive effect on the vitality and viability, the incremental effects of successive pedestrianisation schemes can have significant negative effects on the retail supply chain; greater mileage's incurred as a direct result of such policies generates economic and environmental costs. Restrictions placed on overnight deliveries place an additional major constraint on the flexibility of service delivery operations. The outcome is that, in many cases, delivery access is only permitted during a short period in the morning and evening which concentrates activity in the busy peak hours when congestion erodes supply chain efficiencies. The impacts of the emerging "24 Hour City" relating to deliveries, however, are as yet largely unknown. It is crucial that there is a continuous dialogue between the local authorities, retailers and freight operators to achieve the most appropriate access arrangements.

The City and County Councils are committed to implementing policies which will improve the environment in our urban centres. In Nottingham City Centre a Clear Zone is being introduced (spring 2001) to prohibit all non-essential traffic from the core area at times of high pedestrian activity. This includes restrictions on distribution and deliveries. Phase 1 of the Clear Zone is

Traffic Regulation Order based and permits access at all times to buses and taxis only. Phase 2 (around the end of the full Local Transport Plan period) will be emissions based, only permitting vehicles which conform to a strict emissions protocol defined by the City Council. The distribution industry will have to take such policies on board and review the use of alternative fuels to enhance access to key areas. Phase 3 of the Clear Zone (early in the second full Local Transport Plan) will be based on a review of technological advances and the possible introduction of zero emission restrictions.

(b) Loading arrangements/parking enforcement

The loading and unloading of goods vehicles frequently causes problems in many urban areas and local authorities have in some cases provided bays specifically for the purpose of loading and unloading. These are particularly useful on the periphery of commercial centres where vehicular access is restricted. Problems frequently arise, however, when unauthorised vehicles use the bays for casual parking. The situation is exacerbated where there is inadequate or ineffective enforcement. The result is that delivery vehicles have to "double park" or mount the footway to unload. This is clearly an unacceptable position which is now being addressed.

The current enforcement regime's resources are over-stretched, undermining effectiveness. To improve this, in the context of the introduction of On-Street Parking Charges and Workplace parking levy the City Council is committed to pursuing Decriminalised Parking Enforcement within its administrative boundary. The County Council will be considering with their Freight Quality Partnership partners whether this kind of initiative will be appropriate for other urban areas in the County. However, an essential preamble to the introduction of Decriminalised Parking Enforcement will be a comprehensive review of the existing Traffic Regulation Orders controlling vehicle movements, loading and parking. This review will include specific consideration of the need to relax or remove loading restrictions and to provide loading bays where possible to meet local needs. Progress on this work will be monitored by the Nottinghamshire Freight Quality Partnership.

The two Councils will also be examining local issues affecting efficient distribution, such as adequate kerbside loading points, and will investigate with other bodies, including the Freight Transport Association, appropriate traffic management measures to resolve such difficulties, consistent with maintaining or enhancing environmental standards.

(c) Environmental weight restrictions

There are a number of weight restrictions in force throughout the County which have been imposed for environmental reasons although there have been no new schemes for some time pending the completion of the assessment of all bridges in the County (see section C (c)) which is scheduled to be complete by December 2000. The restrictions will be looked at again after the completion of survey work when any new factors or changes in local circumstances will be considered.

(d) No car lanes

Congestion on the main radial routes serving the urban and district centres, is a long standing problem which contributes to significantly increased journey times and operating costs for distribution services plus associated unreliability.

The overall objectives in the Local Transport Plan are aimed generally at reducing the use of the private car for trips which could be undertaken by alternative modes, thereby reducing congestion and its associated impacts. The resultant "spare" capacity could be reallocated to non-car use in some circumstances. This becomes more relevant in corridors where bus frequencies alone are not sufficient to justify bus-only lanes. This area of policy is under review.

The County Council wishes to explore, with the Freight Transport Association, Highways Agency and other partners the possibility of introducing a pilot no car lane. This may be most appropriate on a busy commuter route with high levels of road freight movement and where the provision of such a lane would not create undue congestion problems. Furthermore there should be an off-road cycle provision so that the No Car Lane would be restricted to buses and HGVs.

(e) Signing and route hierarchy

There are many roads in the Plan area which carry an annual average daily flow of heavy goods vehicles in excess of 500, some of which have been the subject of negotiations about routing and/or operating speeds, particularly in areas adjacent to the Trent Valley Power Stations in the east of the Plan area. The opportunity will be taken within the Notts FQP to use this information to develop a strategy on improved signing, the appropriateness of present speed limits and the development of a route hierarchy for goods vehicles which is consistent with the requirement for efficient distribution but is also sensitive to environmental issues affecting local communities.

(f) Speed limits

The County Council proposes to review its road hierarchy and the speed limits associated with it. This will be done in consultation with the Freight Transport Association.

(g) TravelWise centre

A TravelWise centre opened in Nottingham in October 1999 and is the UK's first Mobility centre. The purpose of the TravelWise centre is to provide extensive traffic and travel information for all Nottinghamshire road users, both private travel and freight operators delivering locally. The information is available via the Internet, local radio broadcasts, a telephone hotline and publications. It is a partnership between Nottingham City Council, the Highways Agency, Nottinghamshire County Council and BBC Radio Nottingham.

Traffic and travel information has been broadcast from the Countywide traffic control centre for over a decade. In 1997 it was decided to enhance the information service using the Internet as another information medium. New computer equipment and communication links were purchased and configured and the traffic and Travel web site for Nottinghamshire went live in December 1997.

Since then the web site has been enhanced to cover more and more information from road news, parking and public transport information to bus and train journey planners, weather conditions and contact numbers for various highway problems. This helps lorry drivers plan their journeys more effectively and maximises the efficiency of the road network.

4.7 Integration with wider policies

4.7.1 Promoting social inclusion

Issues:

- transport disadvantage contributes to social exclusion. People who do not have access to cars have less choice in how they conduct their lives,
- work, training and other facilities need to be easily available for everyone, either located close by or with good, non-car dependent transport links,
- social and leisure destinations are as important as work and training. Some people, particularly young people, value personal mobility for its own sake, and
- transport inequality is increasing, both in real terms and in people's perceptions.

Proposals to address these issues

The authorities are committed to a socially inclusive approach to developing integrated transport planning policies. The Plan provides a key mechanism to help tackle these issues:

Cross-cutting initiatives and bending mainstream programmes

Working alongside a range of other regeneration initiatives such as the Single Regeneration Budget and the New Deal for Communities resources can be targeted to promote public transport, cycling and walking in areas of greatest need. In addition the authorities are in a position to ensure spending in other key areas can be used to complement transport expenditure and assist wider objectives. As detailed earlier in the reference to Spotlight on Regeneration, Greater Nottingham has embraced this approach with encouraging results.

Area transport plans and area focus

Exemplary consultation techniques such as area based community conferences and forums inform implementation programmes and target the needs of socially excluded people. Examples include the City Council's Area Transport Plan programme which is being developed to complement areas covered by other initiatives such as the Single Regeneration Budget, and engage with young people, the elderly and single parents. Joint working across sectors and including bus operators has resulted in significant progress, eg. a new inner orbital bus route linking Hyson Green with employment areas in one direction around QMC, the University and Lenton and in the other direction the City Hospital.

Targeting initiatives to areas of greatest need helps to emphasise and increase individual programme impacts: examples include the Nobel Road Home Zone Pilot which focuses on the regeneration efforts of residents of this estate in Clifton and local travel to school projects.

The development of small scale complementary mobility plans based around schools as described in sustainable school travel plans are being formulated with the involvement of local residents. This is also being extended to other journey types and will develop local community travel plans as demonstrated in the 'MOST' European initiative outlined below.

MOST European project



After detailed consultation with residents in the New Deal and Meadows Partnership council areas on public transport and mobility issues the City Council sought and attained EU 5th framework research project funding through the MOST initiative, to establish new and innovative ways of connecting people to jobs and training. The project is using the successful mobility management techniques adopted in green travel plans for business to develop Community travel plans. The travel plans have successfully established that greater awareness and accessibility to public transport information leads to greater use of available services.

The innovative products to be used include tailored door to door travel information and tickets as well as cycle pools, guaranteed taxi ride home and community car sharing. This service will begin in July 2000 in the New Deal, Meadows and Broxtowe Estate which all have high levels of social exclusion.

This project has established partnerships with the local employment service, bus operators and community organisations with specific attention to targeting and promoting this initiative to the socially excluded within the pilot communities. Complementary funding will be attained from Single Regeneration budget and New Deal monies.

Cross city travel group

Set up by Nottingham Development Enterprise as a contributor to the Greater Nottingham Partnership, this group focuses on the transport needs of unemployed people. Participants include Employment Service, community development workers and community partnership workers, training providers, transport operators, transport planners. Projects include:

- Development of Mobility Centres - ie. One Stop Shop based advice and support workers who work with SRB funded Employment Link Workers to provide a full service in breaking down barriers to social inclusion - the Employment Workers advises on jobs and training, the Training Advice Workers will advise on routes, services, fares, special deals etc and will actively support the client by accompanying them on journeys when required and sorting out a travel plan for all their needs. Funding sources include Single Regeneration Budget, the European Social Fund and EU 5th framework research project, MOST as detailed above.
- development of bus services - building on 'inner orbital' bus route to extend services to new areas, developing jobseeker ticket to be more relevant to needs, providing and organising local bus information, initiating projects to more fully integrate the tram into local area.

Planning for communities of the future

The whole focus of sustainable communities is the importance of retaining local provision of service and jobs which is central to the strategy of the Plan. By reducing the need to travel in this way the drift towards dispersal should be checked. Implementation of travel plans, improving walking and cycling, access to existing local centres and developing people's awareness of alternatives to the car, particularly in the existing urban areas, are all elements of the Plan strategy which will be pursued via the authorities' programmes to support wider planning and regeneration objectives.

Disability issues

The authorities and transport operators in the Plan area are fully committed to meeting the needs of disabled people. The main disabilities to consider in relation to transport planning include impairments of mobility, sight and hearing. Combined with inadequate infrastructure these give rise to problems of:

- inaccessible public transport,
- road safety problems, and
- difficulty in obtaining travel information.

In order to seek views on disability issues, a questionnaire was distributed via various representative groups, organisations and networks. The responses highlighted are set out in Chapter 5 of the Plan which deals with Partnership and Participation.

Accessibility to public transport and other transport facilities is being tackled through significant investment in vehicle improvements and through extensive programmes of infrastructure provision and improvement. Partnerships with the operators in determining programmes are particularly important. Examples are given below:

- introduction of wheelchair accessible buses with complementary kerb side improvements on Bus Quality Partnership Routes eg City Hospital routes, NCT 58 and Trent/Bartons Rainbow 5,
- extensive programmes of raised kerbs and bus boarders at bus stops,
- NET Line One to be fully accessible,
- improvements to Broadmarsh bus station,
- replacement Victoria bus station,
- new bus shelters incorporating seating, lighting and contrasting strips,
- wheelchair accessible taxis (required in the City since 1995),
- provision of orange badge parking and shopmobility centres at Broadmarsh and Victoria shopping centres and Beeston,
- improvements of City Centre car parks (accessible ticket machines, induction loops, minicom facilities),
- provision of specific spaces in planning parking standards,

- minicom facility for bus timetable and fare enquiries, and
- wheelchair ramps on Robin Hood Line trains.

Improvements to the pedestrian environment have been carefully designed to reflect the aspirations of the Disabilities Joint Sub Committee and guidelines such as those produced by the IHT. Examples include:

- dropped crossing programmes,
- programmes to upgrade tactile and audible indicators at pedestrian crossings,
- pedestrianisation/priority schemes incorporating tactile paving, colour contrast paving to provide smooth passage over paved areas,
- full consideration of the needs of disabled people in determining appropriate and predictable locations for street furniture,
- pavement and cafe and street trader design guides incorporating appropriate features and consideration of the needs of all users, and
- segregation of pedestrian and cycle paths where appropriate (e.g. Station Gateway scheme).

The authorities also promote accessibility for the elderly and disabled via their respective concessionary fares schemes, detailed elsewhere in the Plan.

Personal security

Crime and the fear of crime are deterrents to the use of public transport, cycling and walking, requiring a 'whole journey' approach to be adopted. Some sectors of the population are more affected than others, with additional concerns expressed by women, parents and the elderly. A range of initiatives have been employed by the authorities and other agencies to tackle this, notably:

- St Ann's and Sneinton Safer Bus Routes initiatives,
- new JC Decaux bus shelter replacement programme includes lighting in all new shelters,
- closed circuit television camera programmes in City Centre, district centres (Bulwell, Clifton, Hucknall and Hyson Green) and St. Ann's,
- use of video camera surveillance on new Nottingham City Transport vehicles,
- CCTV coverage at Broad Marsh and Victoria bus stations, Nottingham Station and at Robin Hood Line stations,
- increased attention being given to footpath and cycle way design including street lighting, and
- provision of cycle lockers in City Centre car parks and at major trip generators.

The extending coverage of CCTV to cover the public highway, vehicles and destinations demonstrates commitment to tackling personal security across the whole journey.

Street lighting

The authorities are responsible for streetlights throughout the Plan area. The benefits they bring are considerable and include:

- reduced numbers and severity of road accidents,
- reduced levels of crime,
- enhanced perception of community safety, and
- environmental improvement (given sensitive design).

Effective street lighting can, therefore, play an important role in reducing the fear of crime, links with regeneration initiatives and in encouraging the use of public transport, cycling and walking. Unfortunately, the age and condition of the stock is giving cause for concern and the average age of the stock is increasing all the time.

National performance indicators for the percentage of streetlights not working as planned are given in the Monitoring chapter.

4.7.2 Action on Climate Change

Background

Climate change is recognised as one of the greatest environmental threats that we face today. At the Rio Earth Summit in 1992, and more recently at Kyoto in December 1998 it was agreed that developed countries should introduce measures to reduce levels of carbon dioxide and other greenhouse gases. This protocol has imposed a legally binding target to reduce greenhouse gases on the UK; emissions to be reduced to 12.5% below 1990 levels by the period 2008 to 2012.

Contribution from transport to the problem

Greenhouse gas emissions from transport have been the fastest growing of any sector in recent years. This accounts for 23% of total carbon dioxide emissions, 85% of which comes from road traffic (UK Climate Change Programme Consultation Paper - DETR 1998). The other key contributory gases are methane and oxides of nitrogen. Clearly, unrestrained road traffic poses a serious threat to the environment at local, national and international levels and action at all levels is necessary. The County Council is developing a climate change strategy which will set out its integrated approach to reducing CO_2 emissions both from its own activities such as building stock and vehicle fleets and those arising from the community at large such as through measures set out in the Local Transport Plan.

Local action

As part of the Air Quality Review and Assessment process, required under the National Air Quality Strategy, an Air Pollution Emissions Inventory has been compiled for the Greater Nottingham area. When analysis is complete, this will enable the contributions of emissions from various sectors of society to be identified and comparisons made with the national position.

Monitoring and modelling of air quality will be essential to the assessment of the effects of the LTP strategy. The measures proposed in the strategy, such as transport demand management, quality partnerships, walking and cycling initiatives and fiscal measures, and complementary Local Agenda 21 initiatives such as the introduction and promotion of green commuter plans, will be expected to reduce road traffic carbon dioxide emissions to a level 22-27% below 2010 forecasts, as suggested in the Integrated Transport White Paper (New Deal for Transport: Better for Everyone) which will be a significant contribution towards achieving the overall target for reductions set in Kyoto.

4.7.3 Action on air quality

Requirements of the UK National Air Quality Strategy

The UK National Air Quality Strategy requires local authorities to undertake a three stage review and assessment process. Changes to the guidance have rescheduled completion of the process to June 2000. Clearly, air pollution is without boundaries, and a partnership approach between the authorities within the Plan area has been adopted.

Air Quality Management Areas

Pollution modelling will be undertaken where it is expected that pollutant levels will exceed air quality objectives. Results of this process will be published with consequent declaration of Air Quality Management Areas (AQMAs) where appropriate to address the problem. The size and boundaries of such areas will be determined by the Air Quality Review and assessment process described above. It has been identified that a co-ordinated approach between the City, County and other districts towards air quality will be necessary as pollution is a cross-boundary issue. To facilitate this arrangement an Air Quality Steering Group has been established to ensure liaison and co-ordinate the actions of the individual authorities.

The existing legislation requires that comprehensive public consultation is undertaken and a partnership approach adopted; these needs will be fully integrated into the Plan strategy.

Measures to address air quality

Local highway authorities have a number of existing powers with which to control traffic movements so as to protect local air quality to a greater or lesser degree.

New regulations are now in place under the Road Traffic (Vehicle Emissions)(Fixed Penalty) Regulations 1997 through which seven pilot authorities will be allowed to check vehicle emissions by the roadside and issue fixed penalties to motorists whose vehicles do not comply with the legal limits. Authorities will also be empowered to require motorists to switch off their engines when idling for reasons other than traffic conditions or other acceptable reasons. Depending on the outcome of a review of the pilot schemes, these powers may be extended to the rest of the country.

The Road Traffic Regulation Act 1984 gives traffic authorities powers to restrict access to vehicular traffic or particular types of vehicular traffic in certain areas through the introduction of Traffic Regulation Orders (TROs). These restrictions can be applied for all or part of a day.

The Environment Act 1995 extended the purposes for which TROs can be made explicitly to include the pursuit of air quality objectives.

4.7.4 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. In this respect, a methodology for assessing traffic management noise effects has been developed and will be fully integrated into the design process.

The promotion of urban living to reduce the need to travel is an important element and at the heart of the overall strategy. However, in many cases, conflicts arise between the interests of residents and local commerce/industry. The planning process allows conditions to be imposed upon new developments and redevelopments to reduce and control noise from their activities. In a recent example, planning permission included for the lowering of local speed limits. The authority will continue to ensure developers implement appropriate measures to minimise noise from these various sources to facilitate a revival of urban living.

In line with the Environmental Management System procedures adopted and followed by both authorities, noise control measures are included in all highway construction and maintenance contracts to ensure adequate levels of mitigation.

The Green Paper on Future Noise Policy (COM(96)540) adopted by the Commission DGXI suggests that all urban areas with a population over 250,000 will be required to undertake Noise Mapping. The aim is to use noise mapping as a tool for gathering data on noise for forecasting the noise effects of traffic management and redevelopment proposals and demonstrating the effectiveness of noise reduction measures. The work undertaken by Birmingham City Council on noise mapping has been reviewed and the development of a similar model for Nottingham will take place during the life of the Plan.

In a busy conurbation, the opportunities to reduce traffic flows to the extent that there is a perceptible effect on traffic noise are limited. In this respect, efforts are to be focused upon reducing vehicle speeds to mitigate noise impacts from road traffic and, where appropriate, adopt the use of suitable surfacing materials.

A pilot speed management scheme has been introduced in partnership with the Police and the Highways Agency (detailed in the Road Safety section of this Chapter) on key residential sections of the Principal Road Network and Trunk Road network. Although the scheme is primarily aimed at reducing accidents, the spin-off benefits will include reduced traffic noise impacts, particularly at night when sensitivity to road traffic noise is greater.

Careful consideration is given to the selection of materials for resurfacing of Principal Roads to achieve noise reduction. To date a small number of sites have been treated with this surfacing and this will be extended as part of the increase in Principal Road maintenance.

Vehicles generate noise from their engines (if petrol or diesel fuelled) and from the interaction of tyre and road. The contribution from these two sources to ambient noise levels depends upon the vehicle's speed and acceleration. Stop-start driving with rapid acceleration and driving at speed generates the highest noise levels.

Measures to reduce ambient noise levels from transport therefore include:

- smoothing traffic flows,
- reducing stop/start driving,
- reducing speeds,
- quieter road surfaces, and
- non petrol/diesel engine propelled vehicles.

The first three areas also have air quality implications and will be linked to the Air Quality Strategy for the Plan area.

Concern has been expressed regarding the noise effects derived from some of the older traffic calming schemes in the area. The features introduced were designed to reduce vehicle speeds and the number and severity of accidents, and have been successful in this respect. Justification for such schemes is based upon the economic rate of return relating to the schemes' costs and forecast accident savings. Many features of an out-dated design which, whilst effectively reducing traffic speeds, can create noise problems. It is intended, therefore, to "retro-fit" some of these older traffic calming schemes with state-of-the-art designed features which will maintain their safety benefits but improve noise performance. Justification for this proposal is on an environmental rate of return basis and the principle will be extended to include other highway features which may be treated in a similar way to reduce noise nuisance. The level of the bid reflects this proposal.

It is anticipated that the Government will develop a new strategy for noise in which transport related noise impacts may feature highly. The Noise Strategy for Greater Nottingham will be adapted to reflect the objectives of the Government Strategy when published.

4.7.5 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 and accidents. Children are driven to school and not allowed to play on the street due to traffic levels, 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 that enable people to carry out their everyday activities with less need to travel thereby reducing the reliance on the motor car. This would lead to a healthier population, as walking/cycling to the shops, school 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 transport strategy will take full account of the initiatives being introduced by Nottingham Health Authority.

Nottingham Health Authority has been engaged in participation at an early stage through the Nottingham Health Action Group which considers the links between health and the environment including transport. Work is already underway through Nottingham Health Action Group to make the links between the Local Transport Plan and the Health Improvement Programme, which aims to improve the health of people in Nottingham Health District through partnership work. Some of the ideas, which have emerged from Nottingham Health Action Group's (NHAG) work, are already being considered for implementation through the Health Improvement Programme.

The Health Authority is engaged in a number of other key areas that consider transport issues, including New Deal for Communities, Healthy Schools Initiative and the National Service Framework for Coronary Heart Disease:

- 'Creating a Healthier Community', one of the seven programmes in the New Deal Delivery Plan includes projects to set up local cycle schools, 'bike taxi's', cycle helmet provision for children, home zones,
- the Healthy Schools Initiative is being piloted in a number of local schools includes provision to provide 'safe routes to school', walking buses etc. ,and
- the National Service Framework (NSF) for Coronary Heart Disease (CHD), issued in March 2000, establishes 12 standards for the prevention, diagnosis and treatment of coronary heart disease. One of the first steps will be for the National Health Service and its partner agencies to draw up Local Delivery Plans for improving the prevention and treatment of CHD. The NSF makes it clear that one of the key determinants of health that needs to be addressed is transport, and there will be a lot of work undertaken in this area in the next twelve months.

The Health Improvement Programme is the local strategy for improving health and healthcare and it is the means to deliver national targets in each health authority area. The Health Improvement Programme covers:

- the most important health needs of the local population and how these will be met by the NHS and its partner organisations through broader action on public health,
- the main healthcare requirements of local people and how local services should be developed to meet them either directly by the NHS, or where appropriate jointly with social services, and
- the range location and investment required in local health services to meet the needs of local people.

The Health Improvement Programme is underpinned by an agreed vision for health improvement, "To achieve the best possible health, well being and health services for all people living in Greater Nottingham", to which all the partner agencies have signed up.

The Health Improvement Programme for the Nottingham area (April 1999 - March 2002) takes a truly holistic approach to health and includes a broad range of areas for health action, many of which will indirectly benefit from the Greater Nottingham transport strategy, including: Cutting Health Inequalities; Avoidable Injury; Coronary Heart Disease, Stroke, Diabetes; Cancer; Mental Health; Mental Heath Promotion; Older People; Physical and Sensory Disability; Promoting Independence; Education; Regeneration; and Modernising NHS Services.

The Health Improvement Programme specifically identifies transport as having a direct impact on health through access to services and amenities, employment, education and training, accidents and pollution.

In addition to the key national policies outlined in the first programme this second year also encompasses the national policies and priorities published between April 1999 and March 2000, including: 'Saving Lives - Our Healthier Nation' (published in July 1999).

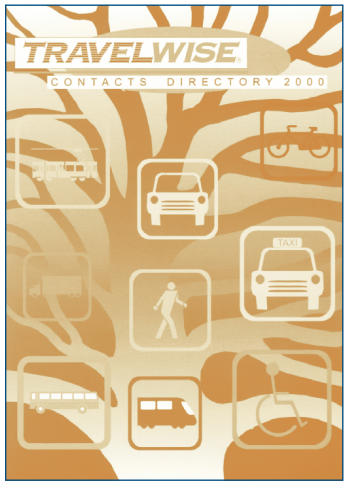
Avoidable injury

The Health Improvement Programme identifies effective action to reduce accidents including traffic management schemes, road safety education and awareness raising, including speed reduction, use of seat belts and child seats and increased use of cycle helmets. Nottingham Health Authority is represented on Nottingham City Council's Road Safety Forum and the Road Traffic Accident Reduction Forum co-ordinated by the police. One initiative instigated by the Road Traffic Accident Reduction Forum, was a successful media event at the Queens Medical Centre's Accident & Emergency Department to illustrate that if car drivers reduce their speed there will be less serious and fatal road traffic accidents. This would have both a direct impact on people's health and indirect benefits for reducing hospital admissions and waiting lists. A key objective of the Health Action Zone is to 'devise and implement a safe driver programme' to reduce accidents.

Coronary heart disease and stroke

Cycling and walking are acknowledged in the Health Improvement Programme as activities which can reduce the incidence of coronary heart disease and stroke; a key target of the programme. In the coronary heart disease and stroke supporting documents in the Programme, there are three action areas specifically relevant to transport:

- establish five 'cycling schools' for adults and make them accessible to people from all communities including ethnic minority groups in each Local Authority,
- examine ways that NHAG can promote the use of pool bikes, electric and gas powered cars to partner organisation, and
- produce a directory of contacts and services Health District wide in order to encourage walking and the uses of public transport and bicycles and discourage the use of cars.



Over the last year significant progress has been made in these areas:

- the cycling schools initiative is being progressed through the Transport, Health Initiatives Group, which was established by Nottingham Health Action Group,
- NHAG has promoted the use of pool bikes and electric cars and Nottingham Health Authority is now one of many local organisations which uses an electrically powered vehicle as one of two pool cars. Nottingham Health Authority has also purchased two pool bikes for use of staff for local journeys, and
- Nottingham Health Authority contributed to the funding and development of the TravelWise contacts directory produced in 2000 to signpost people to transport related contacts, services and initiatives available in the Nottingham Health District area.

Nottingham Health Action Zone

An important part of the Health Improvement Programme is the Nottingham Health Action Zone (HAZ), a seven year initiative that aims to achieve real improvements in health by focusing on areas of greatest need and directly involving the people living in the communities in improving their own health. It is acknowledged that good health is based on a number of factors including transport, lifestyle and environment. Amongst a number of other important areas locally, the Health Action Zone supports the development of the Social Action Research Project and Healthy Living Centres:

- the Social Action Research Project is a partnership between Nottingham City Council, the Nottingham Health Authority and the Health Development Agency (formerly the Health Education Authority). The SARP aims to identify the relationship between social capital and health. It has begun this process by carrying out a baseline survey in Clifton and St Anne's which has shown that social capital indicators such as trust, power, networks, and reciprocity are indeed related to levels of perceived health. The SARP now aims to identify mechanisms that can increase social capital in local communities and organisations that deliver services to those communities, and
- the 1998 White Paper "The Peoples Lottery" outlined the government's intention to create a network of "Healthy Living Centres" and earmarked £300 million of lottery money to be distributed through the New Opportunities Fund of the National Lottery. The purpose of the Healthy Living Centres initiative is to promote health in its widest sense, helping people of all ages from all kinds of communities to get the most out of life, and to improve quality of life. Activities can include transport-related activities.

Table 14 below summarises the linkages between the transport strategy and the health policies for the Plan area using the key themes from "Saving Lives - Our Healthier Nation" (July 1999), namely, taking action on coronary heart disease, cancer, mental health and accidents and creating healthier neighbourhoods, workplaces and schools.

Table 14 Transport and health policy links

Health topic	Transport policy link	Comments
General	• Promotion of alternatives to the private car through improvements to conditions and facilities for public transport users, pedestrians and cyclists • Awareness raising and education of the benefits of using alternatives of the car • Improved access to healthcare through NHS Direct • Partnership working with the Health Authority including production of the TravelWise contacts directory • TravelWise Teachers' Pack for Key Stages 2 & 3	• "A New Deal for Transport, Better for Nottingham" the City Council's response to the Transport White Paper was published in March 1999 • Hosted 1999 National TravelWise conference which included health as one of its key themes
Reduction of coronary heart disease	• Reduce air pollution/exhaust emissions • Promotion of low emission fuels • Promotion of electric and dual fuel vehicles	
Increase exercise through the promotion of walking and cycling	• Links to the Air Quality management Strategy • Links to the work of the energy partnerships • Links to the Walking and Cycling Strategy	• Clear Zone proposed for Old Market Square, Nottingham Nottingham Energy Partnership/ Powergen subsidy for electric fleet vehicles • Promotion of walking and cycling through "Prescription for Exercise" scheme by providing graded walking routes and pool cycles
Reduction of cancer	• Reduce air pollution/ exhaust emissions • Promotion of low emission fuels • Promotion of electric and dual fuel vehicles	• Links to the Air Quality management Strategy • Clear Zone proposed for Old Market Square, Nottingham Nottingham Energy Partnership/ Powergen subsidy for electric fleet vehicles

Health topic	Transport policy link	Comments
Improving mental health	• Address isolation/social exclusion by improving accessibility to services including the improvement of public transport services and information provision • Links to Anti-Poverty and Equalities Strategies	• SRB5 project proposed to look at access to health facilities • Improving access for socially excluded communities a key aim of LTP • Provision of community transport to reduce rural isolation
Reduction of accidents education	• Links to road safety network	• Awareness raising through road safety and travel awareness partnership working through the Transportation Safety Forum and district road safety committees • Developing an adult cycle training scheme
Healthier neighbourhoods	• Homes Zones create a people orientated environment favouring pedestrians and cyclists and creating a safer environment for vulnerable road users including the young and elderly	• Developing pilot home zone projects • SRB5 projects • General work to reduce traffic dominance
Healthier workplaces	• Travel plans can improve health and fitness of employees and reduce stress through the promotion of walking and cycling	• Cycle Friendly Employers' initiative provided cycle facilities at workplaces • Commuter Planners Clubs to support organisations developing travel plans
Healthier schools	• Development of safer routes to schools to enable walking and cycling in safer conditions • Promotion of walking and cycling to school encourages physical activity and reduces air pollution near school sites • Links to Healthy School Initiative under physical activity and safety themes	• Development of school travel plans to reduce the need for travel to school by car • Developing sustainable school travel initiatives including school travel plans • Use of TravelWise Teachers' Pack

5 Partnership and Participation

5.1 Introduction to public participation

This Plan has been prepared following as closely as possible the Government's written guidance, published in March 2000. This makes clear the need for the Plan to be based on effective partnership and participation with the community, and defines the various groups and interests which need to be engaged. The guidance, however, is not prescriptive about the methods which should be used to achieve community involvement. These need to reflect the local situation, and in particular take advantage of consultation mechanisms which already exist. This Plan has built on the partnership and participation working as undertaken for the Provisional Plan, and clearly these mechanisms will continue throughout the Plan period. The provisional guidance, published March 1999, defined 6 characteristics of good consultation, namely:

- early involvement,
- interactive,
- inclusive,
- continuous,
- open, and
- effective feedback to participants.

The authorities have addressed all of these characteristics, but not for the whole Plan area between submission of the Provisional and Full Plans. This process will continue throughout the five-year plan period. The following table summarises the range of participation mechanisms and how they relate to the various levels of the Plan:

Influences and Partners	General	Residents	Employers	Developers
Plan wide Policy (LTP Strategy, WPL, Local Plans)	● LA21/ Changing Times ● Nottingham Green Partnership ● Nottingham Energy Partnership ● Health Action Group/Health ● Initiatives Group ● Lobby groups ● Disability groups	● Citizen's Panels ● LTP Consultations ● Media: press and radio Arrow/Your Environment ● Best Value surveys ● City and District centre perception studies	● Nottingham Transport Partnership ● Greater Nottingham Partnership ● Nottingham Development Enterprise ● Chamber of Commerce/ CBI etc	● Developers Forum ● Consultations on RPG ● LTP Consultations

Influences and Partners	General	Residents	Employers	Developers
Plan area projects and practice (LTP Programme and strategy components) components	● Joint events on health, disability, pollution/ awareness	● Media: Arrow/ Your Environment ● Cross City Travel Group ● Road Safety Forum ● Walking and Cycling Forum	● Commuter Planners Club	● Consultations on Interim Transport Statements and Supplementary Planning Guidance
Local area based projects and practice (LTP Programme)	● New Deal for Communities ● Single Regeneration Budget	● Area Committees ● Area Transport Plans ● Residents Groups ● Planning for Real Exercises	● Area based groups- eg South Side Employers Group	● Consultations on development proposals eg Trent side development
Individual sites/ companies (LTP Programme)		● Scheme consultations ● Home zones ● Travel to school ● MOST Mobility Management	● Transport Partnerships Officer- one to one support and advice to companies	● Advice and assessment of projects/ planning applications

Table 15 Consultation mechanisms: engaging and feeding back responses into the various levels of the Plan and Programme

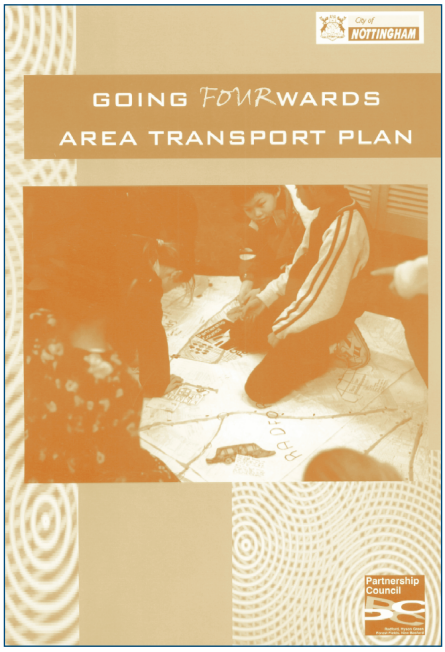
5.2 Approach

The approach taken by the authorities in the preparation of this Full Plan has therefore been to adopt a strategy for participation with a number of different strands. These may be described as follows:

- key partners, notably the district councils within the Greater Nottingham area, have been involved in detailed bilateral discussions over both objectives, priorities and packages of measures,
- establishment of the Nottingham Transport Partnership to help to develop and shape the Plan strategies,

- a wide number of representative groups with interests in transport issues have been involved in discussions primarily over the broad objectives of the Plan, and a 'generic' menu of measures that might be adopted to meet these objectives,
- existing consultation mechanisms have been used wherever possible to discuss transport issues and develop programmes with specific groups and the wider community. These include Citizens' Panels and the LA 21 'Changing Times' consultation and participation processes,
- specific topic groups have been established to discuss issues such as rail developments, and the recruitment of developer contributions for integrated transport measures,
- attitudinal surveys across the Plan area have been undertaken by Social Research Associates,
- summary papers outlining the key issues in the Provisional Plan have been made widely available by both authorities,
- the County Council has published its own paper 'Your Environment' with a special issue explicitly on the Local Transport Plan seeking the views of local people,
- the City Council published a 'Transport Special' of the Nottingham 'Arrow' publication to raise awareness and seek views on the Plan,
- comprehensive leafleting, with supporting exhibitions have been undertaken as part of our ongoing Mobility Management Action Areas, and
- ongoing development and adoption of local Area Transport Plans in the City.

This has allowed the two authorities, throughout the preparation of both the Provisional and Full Plans, to involve a wide cross-section of partners, interested parties and even the general public across the Plan area by use of a number of complementary techniques. Feedback to participants has and will continue to be undertaken via a range of routes, tailored to meet the circumstances of the particular consultation strand.



5.3 Identification and involvement of key partners

Government guidance is clear that Local Transport Plans should be developed in partnership with those organisations that have a role in delivering particular aspects of transport policy. District and borough councils are key partners, with a number of specific roles including land use planning, parking policy and provision, and the regulation of taxis and private hire vehicles. The following have been involved in the preparation of this plan:

- Ashfield District Council,
- Broxtowe Borough Council,
- Gedling Borough Council, and
- Rushcliffe Borough Council

With these authorities, regular meetings to discuss the development of the strategy and specific packages of measures have achieved partnership working. It has also focused on the role these authorities have in delivering the objectives of the Plan. For the district councils, this role has been set out in the 1500 word submissions appended to the Plan as required in the guidance.

5.4 Engaging with employers: Nottingham Transport Partnership and working with commuter planners

Engaging with employers is a key element of the participation strategy, particularly in the context of the City's proposals for a workplace parking levy.

The **Nottingham Transport Partnership** was set up in March 2000 to advise the City Council on transport policy and to influence the developing workplace parking levy proposals and expenditure plan. It is a partnership between the Chamber of Commerce and the City Council and includes representatives from the County Council and major employers in the city. The City Council anticipates that the role of the Partnership will increase over time.

The main issues to result from the four meetings so far are:

- the Partnership is in agreement that something needs to be done about congestion and to improve transport quality,
- the vision for transport in Nottingham needs to be strongly marketed to ensure consensus,
- bringing forward NET tram network proposals to serve employment sites is a priority, with improved commuter buses and better information,
- most employers oppose the workplace parking levy proposals in their current form because of the administrative burden and the perceived unfairness of being asked to 'collect taxes' on behalf of the Government,

- employers feel strongly that they are already doing a lot, in the form of commuter plans, to manage their employees travel, and
- the Partnership is investigating possible structures for private sector involvement in transport in the future, and is also interested in the future uses of new technology in transport.

The **Nottingham Commuter Planners Club** was set up in 1995 as a network to encourage employers to develop commuter plans. It has been remarkably successful and has generated considerable interest amongst local employers with 40-60 people attending each meeting and up to 30 employers represented. Meetings are held quarterly, and the venue is rotated so that host employers can demonstrate their commuter plan actions to others. Presentations are also given on other important transport issues and discussions held on policy and practice.

Important issues are:

- bringing forward a NET tram network to serve employment sites,
- getting the bus companies to work together on smart cards and integrated ticketing and other employer-led promotional activity,
- linking commuter plan actions to land-use planning ie allowing expansion of buildings on car parks, and
- setting a 'level playing field' by getting rid of taxes on commuter plan financial incentives.

Two City Centre based sub-groups of the Commuter Planners Club were set up in 1999, partly with the aim of raising awareness of the advantages of an accessible city centre location. The two groups are:

South Side Employers Group - consisting of recently located companies on the south side of the City Centre. This is an experiment with a geographically closely related group to see if there are issues of common interest which can be tackled together. For example, this group is located close to the rail station and has worked closely with Central Trains on promotions. One of the largest companies in this group, Capital One, now has 20% of its workforce arriving by train.

North Side Employers Group - set up to complement the south side group, this consists of slightly longer established companies. Their main project so far has been the promotion of the city centre bus proposal (see Supplementary Bid detailed in Chapter 4) which will bring together the city centre employers and major traffic generators such as the rail station.

Work with individual companies on encouraging commuter plan development continues. The City Council employs a Transport Partnerships Officer to progress this work.

5.5 Identification and involvement of other groups and interest groups

A much larger number of groups with an interest in transport issues have participated in the process of developing this Full Plan than the Provisional Plan. These groups have been identified and invited to take part based initially on the different sets of guidance provided by Government, but also from experience gained in the development of the Provisional Plan, and include:

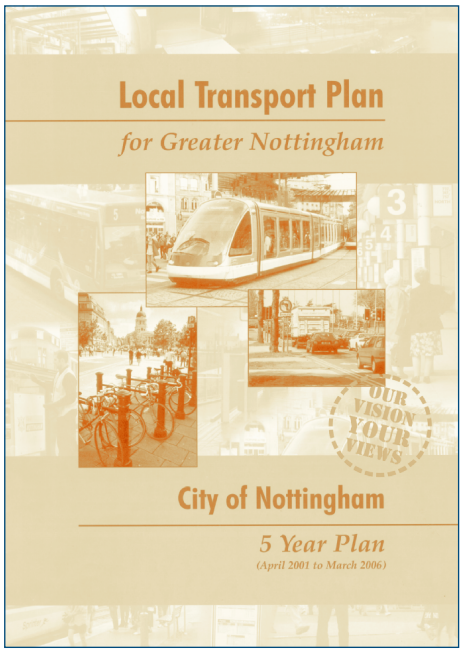
- transport associations and lobby groups such as Transport 2000, Pedals, Cyclists Touring Club, the Nottingham Motorcycle Action Group, and the Freight Transport Association,
- the Highways Agency,
- British Waterways,
- bus and rail companies,
- representatives of the taxi and private hire professions,
- environmental groups such as Friends of the Earth, Women's Environment Network, and CPRE,
- the wider voluntary sector, including community transport providers,
- representatives of specific disadvantaged groups in society, such as Age Concern and disabled peoples' groups,
- representatives of the business sector through the Greater Nottingham Partnership, Business Alliance, and the Nottingham Chamber of Commerce,
- representatives of the fire, ambulance and police services,
- universities and others within the education sector,
- health care providers through the Nottingham Health Action Group,
- parish councils, and
- district, City and County Councillors.

These groups were engaged through a variety of mechanisms. All were invited, in the early stages of the development of the Plan, to take part in seminars designed to discuss the key objectives, priorities and strategic issues. Additionally numerous of these groups have been met on a one-to-one basis with the sole purpose of discussing Local Transport Plan issues. These specific exercises are in addition to numerous on-going consultation mechanisms which both authorities have developed over a number of years (summarised below) and on top of the detailed studies undertaken as part of the development of the Provisional Plan.

5.6 Existing consultation mechanisms

Over recent years, both authorities have developed effective mechanisms for discussing transport and other issues with the wider community, and 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 mechanisms whenever possible, in order to avoid duplication and to reinforce the relevance and role of these structures in the decision-making process.

Existing consultation processes:



- Nottinghamshire Local Area Forums,
- Nottingham City Council Area Committees,
- Nottingham City Disabilities Joint Sub-Committee,
- Nottingham Green Partnership,
- Nottinghamshire Local Agenda 21 Forum 'Changing Times' and other LA21 initiatives,
- Nottinghamshire Voluntary Sector Forum,
- Greater Nottingham Partnership,
- Cross City Travel Group,
- Gedling Community,
- Attitudinal survey carried out by Social Research Associates,
- Nottingham City Council Integrated Transport White Paper Consultation process,
- Nottinghamshire Cycling Strategy,
- Nottingham City Council Cycling and Walking Strategy process, and
- Nottingham Energy Partnership.

5.7 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 these areas. The following groups have been set up in this way:

- Bus Quality Partnership,

- East Midlands Rail Forum,
- cycle working groups,
- City Cycling and Walking Forum,
- Developer's Forum to debate contributions to integrated transport measures,
- City Council taxi and private hire vehicle liaison, and
- Freight Quality Partnership and others to discuss freight and logistic issues.

5.8 Additional specific Plan consultation mechanisms adopted since the production of the Provisional Plan.

Report on seminars

Over 200 key organisations, representing all those identified during and since last year's Plan process, were invited to take part in seminars in the identified Plan areas. These included: County Council Members, Districts, GOEM, Parish Councils, transport operators, community transport operators, transport interest groups for all modes, environmental interest groups, disabled peoples' groups, women's and elderly groups, emergency services, business groups, major employers, education and health sectors. Their views were sought both on areas which required further development from the Provisional Plan and on how to develop these areas. Priorities were then agreed to focus the discussion as follows:

1. Public transport issues
2. Integrated transport
3. Network improvements
4. Issues relating to cyclists (motor and pedal)
5. Road safety / speed reduction
6. Hearts and minds.

All the issues raised were documented and reported back to those attending the meetings. These discussions have helped in the development and refinement of the overall and individual strategies within the Plan area. Due to the size of the Plan area these broad issue based seminars were not considered the best way of dealing with detail at a local level. Other techniques as described below have started this process which will be ongoing throughout the Plan period.

County Council Publication: Your Environment

A special edition of 'Your Environment' highlighted all elements of the Local Transport Plan, and was published following the settlement letter to enable the County to share its good news with the local public. This allowed the County to give details of how it intends to spend the settlement and seek public opinion on their priorities.

38,000 copies were distributed through supermarkets, major employers, libraries, schools, public transport operators, health centres, country parks, newsagents, parish councils, district councils, hospitals and voluntary sectors.

98% of respondents supported the County Council's general strategy and all priorities identified were rated very highly by over 50% of respondents, with the exception of a review of parking standards.



Nottingham Arrow

A parallel exercise was undertaken in the City with the circulation to all City households of a special transport edition of the Nottingham Arrow. A competition with the prize incentive of a bike was included to encourage residents to give views on the three worst things about travelling in Nottingham and what actions they would recommend.

A wide range of issues was identified of which the following received the most responses:

Worst things about travelling in and around Nottingham:

- congestion, in particular during the rush hour,
- air pollution,
- lack of cycling facilities / cycle lanes,
- volume of traffic on roads intimidating pedestrians and cyclists,
- impatient / selfish motorists,
- inadequate bus service especially for the outer areas of Nottingham,
- impatient bus drivers,
- irregular / late bus service,
- dirty buses,
- road works, and
- uncoordinated traffic lights.

Suggestions to improve transport in Nottingham were much wider ranging and the most widespread responses were:

- more Park and Ride sites,
- extend the tram system,
- implement an integrated ticketing system,
- promote car sharing,
- ban cars in the City Centre, at specific times with the exception of buses and taxis,
- promote and advertise cycling,
- provision of more cycle routes,
- provision and improvement of cycling facilities,
- better facilities for pushchairs on buses,
- more out of town bus routes,
- orbital bus routes that do not enter the City Centre,
- improved bus service at regular intervals,
- cheaper bus fares,
- more bus lanes and better enforcement of existing bus lanes, and
- re-introduce bus conductors.

There is a broad consistency between the outcome of this exercise with the other participation strands undertaken to inform the Plan. The strategy and programme development work undertaken by the authorities have been improved by these exercises.

Local Agenda 21 Forum

Back in 1992 the United Nation Conference on Environment and Development (more widely known as the Earth Summit) took place in Rio de Janeiro. Its aim was to look at sustainable development to improve quality of life for all people and the future generations. It produced a strategy called Agenda 21 (a framework of principals for the 21st Century) and asked local government to take on the job of producing Local Agenda 21 (LA21) strategies for local areas. Within the Nottinghamshire area all districts are pursuing Local Agenda 21 in their own way. The Nottingham Agenda 21 Forum was set up to provide support. The Local Agenda 21 strategy is due to be published in December of this year and key points discussed at the Forum were:

1. Built and Cultural Environment

- communities to create and protect their own environment,
- replace land use planning with sustainability planning, and
- re-educate decision makers, encourage them to turn strategy into reality.

2. Business Environmental Action

- communication between support organisations, local authority, business and media, and
- look outside the county for examples of best practice.

3. Crime Prevention

- safety within the community and at home links with education.

4. Education and Awareness Raising

- establish the take up and success of the TravelWise Teachers Awareness packs for schools, as well as research other awareness raising materials, and
- pooling resources to achieve quality awareness raising campaigns.

5. Employment and Poverty

- make sure regeneration projects are more in tune with local needs and ensure they survive after SRB support, and
- greater communication within local community layer of government, to ensure that regeneration services local communities.

6. Energy

- develop accessible information on savings possible in each aspect of energy use, and
- address people's fears of high initial cost outlay of energy efficient alternatives, possibly extending grants to overcome this.

7. Health

- co-ordination of health interests, to exchange practical action ideas and identify early wins countywide, and
- rationalisation of local authority / health authority partnership groups.

8. Housing

- educate planners, promote sustainable buildings, and
- look again at new housing for Nottinghamshire.

9. Pollution Prevention and Water Conservation

- groups are to use existing regulation, economic incentives and marketing techniques to influence behaviour to offer people a choice, and
- choice / influence / regulate - three stages to achieving targets.

10. Recreation and Open Space

- local organisations need to be encouraged to be involved n the development of identified passive / inactive open space, and
- promote understanding, information and awareness of recreational activities linked to healthy living.

11. Transport

- transport / health initiative group,
- encourage neighbourhood / community level actions for local transport provision - using Rural Transport Partnership, Notts. Rural Community Council, CPRE, and
- provide better travel information.

12. Voluntary and Community Organisations

- define Local Agenda 21 and identify local groups who can become involved and work within, and
- encourage youth networks, for example resource centres about sustainable development in their communities.

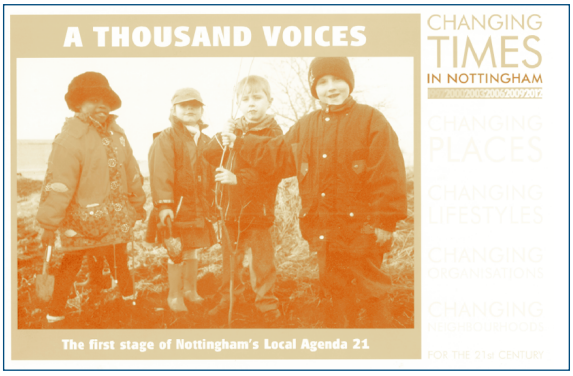
13. Waste and Recycling

- education plan, and
- partnership between community groups and councils.

City Council's 'Changing Times' LA 21 Consultations

The Local Agenda 21 process has generated much debate and dialogue on transport issues in Nottingham. Transport consistently generated the most comment throughout the consultations; many of the responses received throughout the process have supported the Plan approach, but emphasised the need for more concerted efforts to overcome the various challenges that face us. A one-day 'Open Space' event was held at the Nottingham Trent University to discuss the draft LA21 Plan and summarise the consultation outcomes. With regard to transport, two workshops were held and six key points were agreed to be put forward for consideration in the Plan:

- integration/tickets - quality alternatives - total service - more funding,
- substantial car traffic reduction in City Centre,
- safety and health,
- reduce the need to travel through planning,
- maintain momentum and develop consensus, and
- need for education/awareness and even propaganda.



City Centre survey

A comprehensive attitude survey of City Centre users was completed in March 2000. Around 550 people were interviewed at various locations throughout the City Centre. A range of respondents was targeted to obtain a representative sample of views. The City Council will produce Performance Indicators based upon selected issues raised in the survey.

The headline results are encouraging and show that:

- Nottingham continues to be perceived as a vibrant and popular city by those who use it. Most people feel that the City Centre has improved in recent years with positive ratings from the point of view of pedestrians, shoppers, tourists and bus passengers and high rates of approval for the Victoria Centre extension, new bus station and new bus shelters,
- there is strong support for continued pedestrianisation, and a sense that this should be accompanied explicitly rather than implicitly, with restrictions in car use in the City Centre,
- a very positive theme is the reduction in the perception of crime and less concern about personal safety both in the day and at night. The most striking result is the fall in people's perception of crime both day and night when comparing the 1995 and 2000 studies. In 1995 39% judged personal safety at night to be a big problem but in 2000 this has more than halved to 18%,
- as concerns about crime and safety have receded there is a sense in which the urban space might be reclaimed as a place not only to shop but also to spend time, meet friends and be entertained. There were suggestions for more open spaces and seating, more street entertainment, as well as facilities for children and teenagers, and
- parking is also seen as less as a problem than in 1995 but public transport is now seen as an increasing problem. Comments received suggest that this reflects rising expectations of the quality of public transport especially on the part of car owners who usually drive but are beginning to use public transport for trips to Nottingham City Centre

Areas for further improvement have been identified as follows:

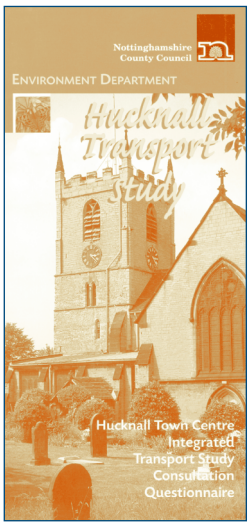
- overall the rating for Nottingham as being attractive for shoppers has risen, in line with the City Centre's reputation for its good range and quality of shopping outlets. However Nottingham is now viewed as a very crowded city, and a less attractive place for disabled people and for children. It seems that there is now a greater awareness amongst disabled people of the desirability of creating a more accessible city centre. However, this does not seem to reflect a perception that Nottingham has actually become less attractive or accessible,
- cyclists noted that some facilities were improving, for example at Broadmarsh, but they also felt that routes on the ring road were dangerous and that cycle theft was increasing, and
- toilet facilities were regularly mentioned as a problem, second to congestion, and personal safety at night.

Nottingham's Citizens' Panel

In December 1999, Nottingham City Council commissioned consultants to recruit a residents' panel of 2,000 local residents, and to conduct an initial survey of attitudes and opinions of panel members about the Council and partner organisations' services. The panel will be maintained for a minimum of 2 years, and throughout this period will be consulted to obtain views on a number of local issues. The panel will provide valuable input into the monitoring of people's attitudes towards the changing local context in transport.

District centre surveys

Hucknall Mobility Management Action Area



Hucknall has been the focus of an in-depth transport consultation study which sought to establish general support for the County Council's transport strategy and to identify and prioritise the main local transport issues. The consultation process included:

- a transport questionnaire to all households in and around Hucknall town centre,
- a public exhibition in the town centre and the opportunity to raise issues with transport staff,
- presentations to the Hucknall Local Area Forum and other local groups, and
- discussions with Ashfield District Council.

There have been over 750 responses to the consultation with preliminary analysis of the results indicating that 98% of responses support a general strategy to improve walking, cycling and public transport and 86% support pedestrianisation of the High Street.

The next stage is to prepare the final strategy and final design based on the results of the transport study and consultation. It is proposed to look at alternative options for the pedestrianisation, including the consideration of an inner relief road, programmed to be complete by December 2000. The chosen option will form the basis of a planning application programmed to be submitted in early 2001. Subject to statutory procedures it is anticipated a scheme will be introduced by mid 2004.

In the meantime the analysis of the questionnaire responses will feed into a five-year programme of public transport, walking and cycling measures that reflects the wishes and priorities of the local community.

The City Council is also undertaking a programme of local district centre customer perception surveys which include sections on transport, travel and car ownership. In conjunction with the Area Transport Plans, they will inform programme development and develop performance indicators to help monitor progress. It is proposed to repeat the exercise as resources allow, and further data will be reported in the annual progress reports.

Clifton district centre Perception Study

The customer perception survey revealed the following modal split for journeys to the district centre:

Mode of Travel	% of respondents
car driver	36
car passenger	4
bus	15
foot	39
cycle/other	6

Nearly as many people walked to the centre (39%) as arrived by car (40%) and there was a high degree of willingness amongst car users to switch to other modes of transport, especially walking and public transport. The majority of respondents (96%) felt that it was easy for them to get to Clifton district centre.

Sherwood district centre Perception Study

The customer perception survey revealed the following modal split for journeys to the district centre:

Mode of Travel	% of Respondents
car driver	33
car passenger	8
bus	13
foot	43
cycle/other	3

The majority of respondents walked to the centre (43%), with slightly fewer arriving by car (41%) and there was a significant degree of willingness amongst car users to consider other transport modes, particularly walking. Most respondents (95%) thought that it was easy for them to get to Sherwood district centre. There is a perception however, that car parks are used as “park and ride” facilities into the city centre and this limits use of the provision.

Hyson Green district centre Perception Study

The customer perception study showed the following modal split for journeys to the district centre:

Mode of Travel	% of respondents
car driver	20
car passenger	3
bus	16
walked	56
cycle/other	5

The customer perception survey showed that 84% of those respondents who lived locally had walked to the shopping area compared to 30% of those who lived elsewhere. Those who lived outside the area were almost equally as likely to have travelled by foot, car or bus. There was some resistance amongst car users to consider other forms of transport, with only 34% saying they would do so. A majority of residents (74%) felt that it was very easy to get to the shopping area.

Bulwell district centre Customer Perception Survey

The Bulwell survey included the following information about travel patterns:

Mode of Travel	% of respondents
on foot	37
car driver	27
car passenger	9
bus	23
cycle	1
taxi	2
other	1

97% of respondents said they thought it was very easy or quite easy to get to Bulwell.

5.9 Consultation over issues paper

The authorities undertook an issues based consultation exercise to inform the Plan development last year and the results may be summarised as follows:

Objectives:

There is a very strong level of support for the broad objectives of the Plan. Of all the objectives, the one receiving the highest degree of priority in the issues paper consultation was "to restrict traffic growth and encourage modal change away from the private car, particularly for work journeys to the City Centre, surrounding district centres and other major transport generators". This is a broad objective which reflects national transport policy closely, concurs with Structure Plan policy, and provides a clear justification for many of the programmed measures.

Measures:

Of the possible measures for achieving the objectives listed in the consultation, most received a high degree of support. There was however disagreement with some, in particular, allowing lorries in bus lanes (38%), greater priority for pedestrians at traffic signals (22%), and park and ride (19%). There was no clear message concerning the possible introduction of road user charging. Workplace parking levy appears to attract slightly more support. However the survey samples were small and not sufficiently representative.

Targets:

The targets for the Plan were broadly supported, although a number of additional ones were suggested. These particularly centred around increasing the supply and ease of use of public transport, but also related to issues such as parking enforcement, curtailing out of town development, and reducing heavy goods vehicles.

5.10 Disability issues consultation

A specific exercise targeted at disability issues was undertaken, circulated via the City Council's Disabilities Joint Sub Committee and supporting networks of disabled groups and organisations. Respondents were asked to set out their top three priorities in respect of each of the following:

A: The most important transport or access issues for disabled people

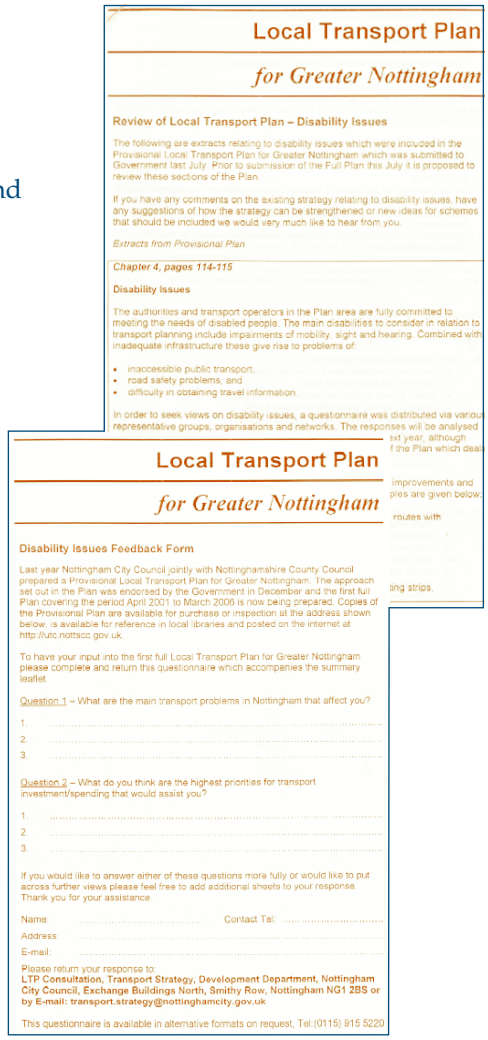
B: The highest priorities for investment/spending to improve transport or access for disabled people

C: Issues for the authorities to take up with others to improve transport or access for disabled people e.g. the Government, bus operators or train companies.

Disability Issues Questionnaire results

(NB not in priority order)

A "Most important" issues highlighted


Local Transport Plan

for Greater Nottingham

Review of Local Transport Plan – Disability Issues

The following are extracts relating to disability issues which were included in the Provisional Local Transport Plan for Greater Nottingham which was submitted to Government last July. Prior to submission of the Full Plan this July it is proposed to review these sections of the Plan.

If you have any comments on the existing strategy relating to disability issues, have any suggestions of how the strategy can be strengthened or new ideas for schemes that should be included we would very much like to hear from you.

Extracts from Provisional Plan

Chapter 4, pages 114-115

Disability Issues

The authorities and transport operators in the Plan area are fully committed to meeting the needs of disabled people. The main disabilities to consider in relation to transport planning include impairments of mobility, sight and hearing. Combined with inadequate infrastructure these give rise to problems of:

- inaccessible public transport,
- road safety problems, and
- difficulty in obtaining travel information.

In order to seek views on disability issues, a questionnaire was distributed via various representative groups, organisations and networks. The responses will be analysed

Local Transport Plan

for Greater Nottingham

Disability Issues Feedback Form

Last year Nottingham City Council jointly with Nottinghamshire County Council prepared a Provisional Local Transport Plan for Greater Nottingham. The approach set out in the Plan was endorsed by the Government in December and the first full Plan covering the period April 2001 to March 2006 is now being prepared. Copies of the Provisional Plan are available for purchase or inspection at the address shown below, is available for reference in local libraries and posted on the internet at http://utc.nottscc.gov.uk.

To have your input into the first full Local Transport Plan for Greater Nottingham please complete and return this questionnaire which accompanies the summary leaflet.

Question 1 – What are the main transport problems in Nottingham that affect you?

1.
2.
3.

Question 2 – What do you think are the highest priorities for transport investment/spending that would assist you?

1.
2.
3.

If you would like to answer either of these questions more fully or would like to put across further views please feel free to add additional sheets to your response. Thank you for your assistance.

Name: Contact Tel:

Address:

E-mail:

Please return your response to:
LTP Consultation, Transport Strategy, Development Department, Nottingham City Council, Exchange Buildings North, Smithy Row, Nottingham NG1 2BS or by E-mail: transport.strategy@nottinghamcity.gov.uk

This questionnaire is available in alternative formats on request. Tel:(0115) 915 5220

- reduced travel/taxi fares for disabled people,
- more raised kerbs at bus stops,
- retain access for orange badge holders to City and district centres,
- reliable, regular, accessible transport for all,
- accessible information in a variety of formats,
- rotating cone provision at pedestrian crossings and junctions, and longer crossing times,
- wheelchair and powered wheel chair accessibility generally,
- investment in communication and disability awareness training,
- wheelchair accessible buses with more space and clamps for users, and
- extend shopmobility schemes.

B Highest priorities for investment

- more wheelchair accessible buses,
- extension of shopmobility and community transport schemes,
- dropped crossing programmes,
- extension of wheelchair accessible taxis throughout the area,
- raised kerbs at bus stops,
- investment in accessible information, and
- Nottingham Express Transit.

C Other issues to be raised with Government/transport operators etc.

- ensure wheelchair accessible ramps are available on all forms of transport,
- effective orange badge scheme,
- improved access at train stations and better on train provision,
- extend Disability Discrimination Act to cover transport itself, not just the infrastructure,

- disability awareness programme to be extended throughout Government and organisations dealing with transport provision,
- more Government finance, and
- guidance to deal with disabled travellers.

5.11 Public attitude surveys

Greater Nottingham public attitude survey

This survey was undertaken to ascertain views on public transport in particular and produced a rich picture of local ratings, attitudes and priorities for public transport which is applicable to the Greater Nottingham area. Although there are some differences in response between the different areas, often related to variations in infrastructure and distance from the City Centre, there are mostly broad similarities.

Priorities

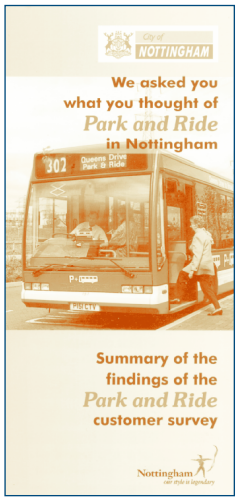
There are some clear indications of the kinds of priorities people support, but strong indications that these are influenced by lack of knowledge. There are many issues relating to transport policy that people do not understand or do not know about. These include parking policy, traffic calming, the reasons for bus lanes, and the highway engineering possibilities available to achieve bus priority. There is a strong case for more emphasis on marketing transport policies. People are actually very interested in these subjects including why some things are not a feature of policy, for example, why there are no bus conductors.

Car ownership

The number of cars per household is an interesting indicator. Some responses vary according to household car ownership but especially with regard to two-car ownership. This suggests that even in car-owning households, public transport plays an important role for members of the household without access to the household car.

Many households with cars, especially those with only one car, are as interested in improvements to public transport as those without cars. There is a new awareness of the desirability of restricting car use. At the same time there is little evidence of diversion to other retail centres due to any charging or control of car use in central Nottingham. People do drive to such centres but their motives are complex and not primarily to avoid parking controls. In addition very few people never visit Nottingham City Centre. Amongst those supporting lower bus fares there were a noticeable group of people on low income, some of whom walked to save money, or did not undertake journeys due to cost. Others who had struggled to buy a car could not afford the choice of using buses, especially when travelling with a family. In contrast most retired people were happy with the concessionary system.

Park and ride is strongly supported and seen as a relatively painless way of reducing car use. On the other hand there is some resentment on the part of regular bus and train users who may be charged more for shorter distances and parking at stations.



Pollution, impact of traffic and cycling and walking

There are very high levels of concern about pollution in the City Centre and also along the main radial roads into the City. There was also a lack of information, misunderstanding and substantial speculation about the causes and effects of pollution.

Residents of the inner city areas of Nottingham are also concerned about the impact of transport policies on their neighbourhoods. Problems include traffic speeds, pollution, commuter parking and lack of crossings on radial routes. There is a strong desire to see more spent on the walking and cycling infrastructure in these areas.

There are far stronger levels of support for longer phases to cross at pedestrian crossings than for shorter walks.

The majority of people dislike shared use of pavements with cyclists, although there are examples of areas (such as Beeston) where such routes receive rather higher levels of support. Unfavourable initial reactions to shared pavement use may crucially depend on the extent to which users understand and appreciate that this implies demarcated space for pedestrians and cyclists. Where this is better understood (as in Beeston) there tends to be higher levels of support.

Bus lanes

Whilst there is strong support for bus lanes, there is far less agreement that cycles, taxis and especially lorries should be allowed in bus lanes.

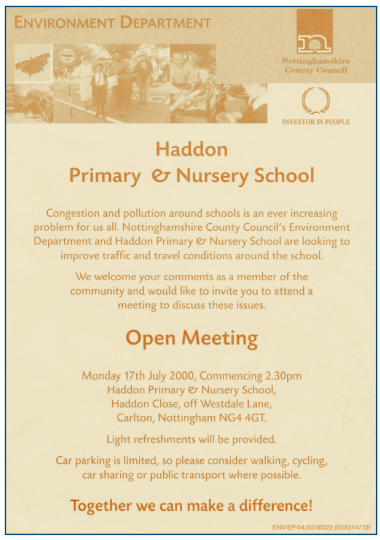
There was much comment and discussion about the need to improve the transport network for people with accessibility problems including the need for accessible buses and trains, staff training, better signing, improved interchange facilities and use of existing facilities and pavement repairs. The issue of orange badge parking is also controversial and needs further debate.

Finally, there is clearly interest and involvement in the subject of transport amongst local people. Particularly at the very local neighbourhood level, people have many ideas and suggestions about what could be done to improve road safety, walking, cycling and public transport opportunities. There is also a need for the authorities to inform people since there are many misconceptions about transport policy. The development of community indicators and service levels would also be of interest. Clearly opportunities for dialogue, including with operators, should be continued. However as the traditional style of public meetings are not always well attended, a range of consultation mechanisms should continue to be pursued.

5.12 Ongoing Participation

The authorities are committed to Best Value delivery and will undertake further targeted consultations and exercises to inform the yearly monitoring reports and the Local Performance Plans. Relevant Best Value performance indicators will be included, along with details of ongoing supplementary exercises such as those underpinning Local Plan reviews and more scheme specific programmes.





6 5 Year Implementation Programmes

6.1 Background to 5 year programmes

As a development of the Provisional Plan the two authorities have developed an integrated joint programme for Greater Nottingham to deliver the Plan strategy.

6.2 Joint Greater Nottingham funding bid

Table 16 shows the Greater Nottingham joint bid and breakdown of main programme elements for each authority for the five year period 2001/02 to 2005/06. The bid is separated into integrated transport elements and network maintenance elements. Expected developer contributions have been included within the programme.

Table 17 shows supplementary items and major schemes. This includes workplace parking levy programme schemes (capital and revenue bids). Major schemes are defined as those costing greater than £5 million.

Table 16 Greater Nottingham joint bid 5 year programme - 01/02 to 05/06

Capital programme All figures £000 (outturns)	City bid 01/02	County bid 01/02	City bid 02/03	County bid 02/03	City bid 03/04	County bid 03/04	City bid 04/05	County bid 04/05	City bid 05/06	County bid 05/06
Local Transport Plan bid	**8845**	**6955**	**9460**	**7390**	**9980**	**7768**	**10300**	**7998**	**10705**	**8294**
Expected contributions	60	200	60	200	150	350	250	500	250	500
Grand totals	**8905**	**7155**	**9520**	**7590**	**10130**	**8118**	**10550**	**8498**	**10955**	**8794**
Total integrated transport	**6255**	**4505**	**6845**	**4915**	**7405**	**5393**	**7800**	**5748**	**8155**	**5994**
Total network maintenance	**2650**	**2650**	**2675**	**2675**	**2725**	**2725**	**2750**	**2750**	**2800**	**2800**
Centre of Excellence	**1540**	**1671**	**1800**	**1207**	**2300**	**1277**	**2250**	**1003**	**1950**	**925**
NET	600	106	700	109	1000	113	1000	116	600	119
Bus promotion	750	796	820	563	850	585	850	638	850	597
Rail development	140	292	220	82	350	84	300	87	400	90
Park & ride	50	477	60	453	100	495	100	162	100	119
City & district centres	**1500**	**53**	**1350**	**563**	**1000**	**1238**	**1100**	**2241**	**1250**	**2315**
City Centre	1150	0	800	0	450	0	450	0	600	0
District Centres/MMAAs	350	53	550	563	550	1238	650	2241	650	2315
Civilised Streets	**2400**	**2250**	**2725**	**2428**	**2900**	**2495**	**3025**	**2158**	**3225**	**2350**
Local safety schemes	1150	530	1275	546	1350	563	1400	580	1450	597
Safe travel to school	350	263	400	251	450	256	450	266	500	258
Home Zones/residential traffic calming	300	212	350	311	400	306	450	318	500	327
Walking schemes	300	737	350	767	350	827	375	383	400	681
Cycling schemes	300	295	350	333	350	314	350	381	375	248
Rural Schemes	0	213	0	220	0	229	0	230	0	239
Travel Demand Management	**665**	**476**	**795**	**662**	**1005**	**327**	**1185**	**288**	**1480**	**344**
Awareness/education	50	53	60	55	70	56	70	58	80	60
Traffic management/ highway improvements	240	318	325	492	450	140	455	58	540	60
UTC/ITS	185	45	200	50	275	70	450	110	650	160
Commuter plans	50	10	50	10	50	10	50	10	50	10
Air quality management	80	0	80	0	80	0	80	0	80	0
Freight quality partnerships	60	50	80	55	80	51	80	52	80	54
Other	**150**	**55**	**175**	**55**	**200**	**56**	**240**	**58**	**250**	**60**
Monitoring/model development Programme co-ordination	150	55	175	55	200	56	240	58	250	60
Network maintenance	**2650**	**2650**	**2675**	**2675**	**2725**	**2725**	**2750**	**2750**	**2800**	**2800**
PRN maintenance	1895	2225	1910	2250	1950	2300	1970	2325	2005	2375
Bridge assess. & strength.	755	425	765	425	775	425	780	425	795	425

Note: revenues from workplace parking levy not programmed

Table 17 Supplementary items and major schemes

Programme All figures £000 (outturns)	City bid 01/02	County bid 01/02	City bid 02/03	County bid 02/03	City bid 03/04	County bid 03/04	City bid 04/05	County bid 04/05	City bid 05/06	County bid 05/06
Supplementary WPL bid (capital)	2150	0	3200	0	2950	0	0	0	0	0
Supplementary WPL bid (revenue)	500	0	800	0	800	0	0	0	0	0
Coventry Lane (approved major scheme)	0	2610	0	850	0	84	0	0	0	0
City Centre (major scheme bid)	0	0	0	0	2000	0	6000	0	5000	0
Ring Road (major scheme bid)	0	0	0	0	0	0	1000	0	2000	0

6.3 Supporting revenue

Planned revenue income and expenditure is set out in tables 18 and 19. It should be noted that revenue expenditure budgets are subject to annual review and should be regarded as indicative only.

The authorities remain committed to providing appropriate revenue support for the capital programme and will be actively exploring the potential of new revenue sources including:

- revenue from bus shelter advertising contracts,
- charges for on-street parking in Nottingham City Centre (City Council only), and
- workplace parking levy (City Council only).

It is proposed to ring fence revenue income to support sustainable transport schemes and enhance the Local Transport Plan programme. Priorities for expenditure include:

- NET network development,
- "Civilised Streets" programme to enhance maintenance,
- enhanced City Centre bus, pedestrianisation and cycle facilities,
- enhanced Bus Quality Partnerships programme, and
- revenue support for new commuter bus services.

Table 18 Supporting revenue income

	Budget	Indicative	Indicative	Indicative	Indicative	Indicative
	00/01	01/02	02/03	03/04	04/05	05/06
	(£000)	(£000)	(£000)	(£000)	(£000)	(£000)
Bus shelter contract(net)						
City	100	100	100	100	100	100
County	0	0	0	0	0	0
Park & ride (gross)						
City	156	156	156	156	156	156
County	na	na	na	na	na	na
On-street parking charges (net)						
City	0	700	800	900	1,000	1,000
County	0	0	0	0	0	0
Developer contributions						
City	50	60	60	150	250	250
County	180	200	200	350	500	500
Workplace parking levy (net)						
City	0	0	0	0	7,000	7,000
County	0	0	0	0	0	0
Driver improvement programme						
City	92	92	92	92	92	92
County	0	0	0	0	0	0
Speed camera pilot project						
City	800	800	800	800	800	800
County	0	0	0	0	0	0

Notes:

- na - not available/applicable.
- Inflation not included.

Table 19 Annual supporting revenue expenditure

Based on 00/01 budget figures	(£000)	(£000)
Concessionary fares	City 3,914	County 335
Bus support	City 189	County 1,366
Education travel	City 161	County 474
Community transport	City 205	County 51
Rural bus subsidy grant	City na	County 200
Rail support	City 199	County 473*
Park & ride (gross)	City 156	County na
Bus shelter (provision & maintenance)	City 252	County 77
Public transport (promotion & information)	City 55	County 83
Highway maintenance (including traffic signals)	City 5,544	County 6,012
Traffic management (including UTC)	City 151	County 8
Road safety (schemes, education & patrols)	City 538	County 273
Driver improvement programme	City 92	County 0
Speed camera pilot project	City 1,100	County 0
On-street parking charges (enforcement)	City na	County 0
Workplace parking levy (enforcement)	City na	County 0

Notes:

- na - not available/applicable.

* County-wide figure.

6.4 Programme development and relationships with objectives

The development of the programme has been undertaken following a review of the objectives, an assessment of problems and opportunities and extensive participation via existing and new networks as set out in previous sections of the Plan.

The authorities will maintain a consistent and co-ordinated approach to programme development across administrative boundaries, to maximise contributions to the Plan objectives.

6.5 Realism and prioritisation

Due to the differing position of the two authorities on charging, it is necessary to define the relative views on prioritisation in a separate but complementary manner.

City Council position

The elements of the City Council's bid can be summarised as follows:

1. Local Transport Plan bid (integrated transport and maintenance programmes)
2. Major integrated transport schemes:
   - City Centre major
   - Ring Road major
3. Workplace Parking Levy Supplementary bids;
   - Nottingham Transport Partnership/ Employer Initiatives including contribution to NET development
   - Workplace parking levy scheme development
   - Improving the alternatives (major transport scheme development and supporting bus services)

Priorities

In terms of priorities, the Local Transport Plan bid is overall priority number one; the bid is a large one but it can be justified in the context of needing to improve the alternatives prior to the introduction of the workplace parking levy. The bid also includes development costs for NET network extension, the cost of which is proposed to be shared with the supplementary workplace parking levy bid. The Local Transport Plan forms the backbone of the necessary resources sought to deliver the overall Plan objectives and targets; charging revenues are seen as additional resources. The proportions of the bid have been constructed to reflect national priorities.

The two major schemes are considered overall priority number two; the relative priorities of the two major schemes are as follows:

City Centre major scheme - first priority, which needs to be pursued in relation to the introduction of NET Line One. This scheme would still be pursued in the event of the authority not proceeding with charging proposals, although it proposed to part fund the scheme development via the supplementary workplace parking levy bid.

Ring Road major scheme - second priority, due to constraints surrounding detrunking which preclude construction in advance of the city centre scheme. It is considered this scheme would not be commenced within this Plan period in the event of the authority not proceeding with charging proposals. It is proposed to part fund the scheme development via the supplementary workplace parking levy bid.

The supplementary workplace parking levy bid is not prioritised against other elements of the bid.

Realism in the City Council bid

The strategy adopted by the City has been to develop an integrated, incremental strategy based upon a range of anticipated capital and revenue streams building to a robust and ambitious yet deliverable programme. The authority has experience of developing a major public transport private finance initiative scheme which has enabled an informed and realistic view to be taken of programme development.

Should more resources be made available as a result of the forthcoming Ten-Year Investment review, the City Council would seek to advance work on NET Network extension as its priority. This is consistent with the aspirations of the Nottingham Transport Partnership and has featured highly as a priority in consultations on the Plan.

In the event of Local Transport Plan resources not meeting the anticipated levels, the City Council would adopt the following reallocation procedure:

1. An initial pro-rata reduction of allocations in line with the bid.
2. Assessment of extent of 'commitment' to schemes in relationship to progress, contributions, expectations of partners, links with other funding sources and contribution to outputs/performance indicators.
3. Relationship to Best Value principles.

Where possible the following will also be taken into account:

- the views of transport operators eg via bus, rail and freight quality quality partnerships,
- the views of local communities, eg through the Area Transport Plan consultation programme based upon the Council's Area Committee boundaries:-

  Area 1: Bestwood Park, Bulwell East, Bulwell West and Byron

  Area 2: North East Nottingham Area Committee

  Area 3: West Nottingham Area Committee

  Area 4: Going Four Wards Area Committee

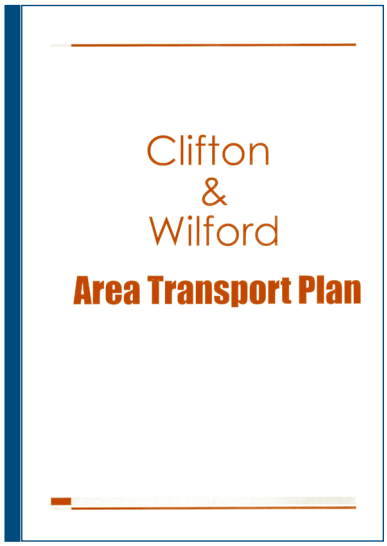
Area 5: Area Committee East

Area 6: City Centre (no formal Committee)

Area 7: Abbey, Bridge and Park Wards

Area 8: Clifton and Wilford Area Committee

- consultations with user groups eg disabled, public transport, motorist, cyclists and pedestrian groups,
- the views of employers via the commuter planning network, and
- the views of other organisations eg local business, other public authorities.



County Council position

The County Council bid includes the following:

- continuation of funding for the Coventry Lane Improvement major transport scheme which was accepted in the Provisional Local Transport Plan settlement,
- a five year programme of integrated transport measures including a phased Mobility Management programme for local district centres, and
- a five year programme for road maintenance and bridge strengthening.

The bid is supplemented by a Ten Year Investment Plan setting out a number of proposed major schemes which are at an early stage of preparation. These include new transport infrastructure relating to major new developments which are being identified in District Council Local Plans but are not expected to take place until after 2005/06.

The significant elements of the County Council's bid can be summarised as follows:

- Gamston Park and Ride
- A610/A6002 Nuthall Roundabout Improvement
- A6011 Radcliffe Road Bus Priority Measures
- Ilkeston Station
- A60 Ring Road - Woodthorpe Drive Bus Priority Measures
- Primary Route Network (PRN) maintenance

The Ten Year Investment Plan includes:

- A612 Bus priority measures between Burton Joyce and Nottingham
- A52 (East) Measures for bus/rail/cycle to supplement HA proposals
- A610 Eastwood and Nottingham (complementary measures to support developer proposals).

Priorities

Securing the provision of a new bus based Park and Ride site adjacent to the A52 at Gamston is the number one priority. It is well located to meet the demand for travel to the City Centre from south and east of Nottingham, at the junction of a key orbital (ring road) and radial route. The scheme links in with the Trent Bridge Bus Quality Partnership corridor improvements, the City Southside Investment Plan, and is a corridor where a significant amount of housing development is likely to be located.

The A610/A6002 Nuthall Roundabout Improvements is the second priority. This is a key intersection on the Strategic Road Network between the A610 radial and the A6002 orbital road. A package of measures is proposed comprising pedestrian/cycle facilities and congestion management improvements so that buses on the A610/B600 corridor are not unduly delayed and that interference at junction 26 of the M1 is minimised.

In the longer term (year 2005/06 to 2009/10) the priority will be the 'Major' public transport schemes, namely: the A612 bus priority measures between Burton Joyce and Nottingham including possible park and ride; A52 (East) Measures for bus / rail / cycle along corridor to supplement Highways Agency proposals on A52; and A610 complementary measures between Eastwood and Nottingham to support developers proposals.

Realism in the County Council bid

Should more resources be made available as a result of the forthcoming announcement of the Government's Ten Year Investment Plan, the County Council would, on a pro-rata basis, enhance the five integrated transport block allocations.

In the longer term should more resources be made available the County Council would give priority to the 'Major' public transport scheme - A612 bus priority measures between Burton Joyce and Nottingham including park and ride, bring forward the Mobility Management Action Area programme, and on a pro-rata basis, enhance the five integrated transport block allocations.

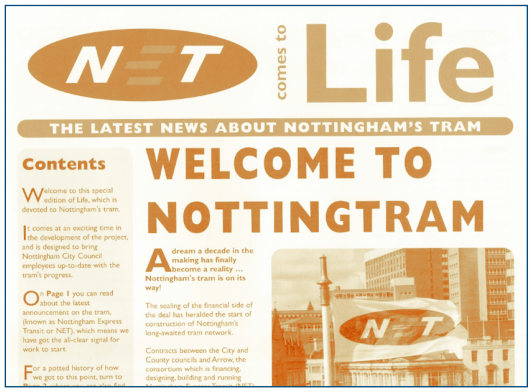
In the event of Plan resources not meeting the anticipated levels the County Council would delay the implementation of the A6011 Radcliffe Road bus priority measures and the implementation of the Mobility Management Action Area programme.

6.6 Detailed joint programme

As a development of the previous Plan this section sets out an integrated programme of schemes and measures for implementation over the Plan period by the two authorities. The programme includes schemes completed during 1999/00, schemes programmed for 2000/01, and bid schemes and blocks for 2001/02 to 2005/06. Consistent with Government guidance details of minor schemes costing under £250,000 are not specified individually but grouped together as blocks.

6.6.1 Integrated Transport Centre of Excellence programme

Nottingham Express Transit


NET comes to Life

THE LATEST NEWS ABOUT NOTTINGHAM'S TRAM

Contents

WELCOME TO NOTTINGTRAM

- £170m for construction for Line One secured via Private Finance Initiative.
- Additional resources being sought for integration, information, and inter-ticketing, including linkages with proposed new Broad Marsh integrated transport interchange.
- Development of network subject to consultation, Street Works Act and funding processes and to be integrated with new housing and employment development sites being identified in Local Plans.
- Line One to become operational during 2003.

Nottingham Express Transit is promoted jointly by the City Council, County Council and the private sector. Programme to be integrated with workplace parking levy programme.

Completed 1999/00 : City £400,000, County £100,000
Contributions for Line One client costs (City £400,000, County £100,000).

Programmed 2000/01 : City £400,000, County £100,000
Contributions for Line One client costs (City £400,000, County £100,000).
(In addition the City Council received £1 million supplementary funding to support tram implementation).

Bid 2001/02 : City £600,000, County £106,000
Contributions for Line One client costs (City £400,000, County £106,000).
Tram integration (City £100,000)
Contribution to network development (City £100,000)

Bid 2002/03 : City £700,000, County £109,000
Contributions for Line One client costs (City £400,000, County £109,000).
Tram integration (City £100,000)
Contribution to network development client costs (City £200,000)

Bid 2003/04 : City £1,000,000, County £113,000
Contributions for Line One client costs (City £400,000, County £113,000).
Tram integration (City £100,000)
Contribution to network development client costs (City £500,000)

Bid 2004/05 : City £1,000,000, County £116,000
Contributions for Line One client costs (City £400,000, County £116,000).
Tram integration (City £100,000)
Contribution to network development client costs (City £500,000)

Bid 2005/06 : City £600,000, County £119,000
Tram integration (City £100,000)
Contribution to network development client costs (City £500,000, County £119,000)

Bus Quality Partnership programme, including bus promotion and information

- Quality improvements on priority corridors co-ordinated with service improvements by operators.
- Bus shelter replacement linked to advertising contracts.
- Bus stop improvements include installation of raised kerbs to provide near level access onto low floor buses.
- Integrated transport development.
- PTI 2000 project funding.
- Information initiatives.



Bus Quality Partnership schemes to be co-ordinated via the Bus Quality Partnership Steering Group. Schemes on the trunk road network to be developed in partnership with the Highways Agency.

Completed 1999/2000 : City £311,000, County £112,000

A60 Mansfield Road	Mansfield Road Bus Priority (City £103,000) Completion of corridor raised kerb programme (City £64,000, County £15,000) Completed installation of NextBus on Calverton Connection QP (County £4,000)
A52W Derby Road	Bus stop improvements (City £40,000) Stapleford BQP (County £12,000)
A610 corridor	Bus stop improvements including Nextbus (County £37,000) B600 Nottingham Road bus priority measures phases 1 and 2 (County £25,000)
A611 Hucknall Road	Completion of Waldeck Road bus priority scheme (City £32,000)
Bus promotion	Installation of 300 non-advertising shelters (City) Minor bus stop related infrastructure improvements (City £25,000) Public transport integration & information (City £47,000) Cotgrave - Complete upgrade of Nextbus to new version of software (County £19,000)

Programmed 2000/2001: City £530,000, County £661,000

Trent Bridge	Meadows Way/Trent Bridge outbound bus priority and bus stop improvements (City £25,000) Commence Loughborough Road bus lanes on approach to Trent Bridge (County £311,000) Real time displays on Central Avenue as part of environmental improvement scheme (County £15,000) Review existing Quality Partnership Cotgrave Connection (County £10,000)
Mansfield Road	Bus priority and bus stop improvements, Sherwood to City boundary (City £130,000) Continue programme of corridor improvements and Arnold Town Centre (County £20,000)
A52W Derby Road	Wollaton Vale/Woodside Road bus priority, linked with HA scheme (City £25,000) Stapleford bus stop infrastructure and bus priority measures (County £70,000)
A610 corridor	Canning Circus to Ring Road bus priority and bus stop improvements phase 1 (City £60,000) Complete Phase 3 of B600 Nottingham Road bus priority measures, including measures at Nuthall Roundabout (County £220,000) Introduction of Nextbus and additional infrastructure (County £15,000)
A609 Ilkeston Road	Commence bus stop improvements programme Canning Circus to Ring Road (City £30,000)
A611 Hucknall Road	Bus priority, outbound approach to Ring Road (City £40,000)
B686 Carlton Road	Commence bus stop improvements programme Manvers Street to City boundary (City £20,000)
Bus promotion	Installation of bus shelters, City 100 remaining non-advertising shelters, phase 1 of County programme (City & County advertising contracts) Non-shelter site bus stop pole/flag/timetable case replacement on core network (City, advertising contract) Broad Marsh bus station/Collin Street passenger waiting environment improvements (City £40,000) Minor bus stop related infrastructure improvements (City £160,000)

Bid 2001/2002 : City £750,000, County £796,000

Trent Bridge	Bus priority Gamston to Davies Road and Traffic signals at Davies Road junction (County £350,000) Extend quality partnership with NCT to include service 90 (County £55,000)
A60 Mansfield Road	Sherwood to City boundary, bus lanes and bus stop improvements (linked with Sherwood District Centre improvements plan)(City £50,000) Bus priority between Ring Road and Woodthorpe Drive and complete Quality Partnership on services to Arnold (County £275,000)
A52W Derby Road	Bus stop improvements, Woodside Road and Wollaton Vale (City £50,000) Complete Quality Partnership including real time information & Beeston bus priority (County £70,000)

A610 Alfreton Road	Canning Circus to Ring Road bus priority and stop improvements phase 2 (City £60,000) Nottingham Business Park public transport access improvements phase 1 (contribution to sustainable transport package to match funding from developer and SRB5) (City £40,000)
A453 Queens Drive	Farnborough Road, Southchurch Drive to Clifton Lane bus priority (City £180,000)
A609 Ilkeston Road	Canning Circus to Ring Road, continue bus priority and bus stop improvements (City £100,000)
B686 Carlton Road	City boundary to Manvers Street, bus priority and complete bus stop improvements (City £150,000)
Bus promotion	Minor bus stop related infrastructure improvements (City £60,000) Public transport integration & information including PTI 2000 project (City £60,000, County £46,000)

Bid 2002/2003 : City £820,000, County £563,000

Trent Bridge	Radcliffe Road, Lady Bay to Trent Bridge bus priority (County £100,000)
A60 Mansfield Road	Oxclose Lane/Edwards Lane, phase 1(City £90,000)
A52 Derby Road	Toll House Hill to Canning Circus bus priority (City £50,000)
A610 Corridor	Nottingham Business Park public transport access improvements phase 2 (contribution to sustainable transport package to match funding from developer and SRB5) (City £40,000)
A453 Queens Drive	Clifton Lane, City boundary to Crusader rdbt bus priority (City £200,000)
A6005 Beeston / University Blvd	Corridor bus stop improvements (City £60,000) Bus priority and bus stop improvements (County £200,000)
A609 Ilkeston Road	Ring Road to City boundary, bus stop improvements (City £100,000) Bus priority and bus stop improvements (County £15,000)
A611 Hucknall Road	Ring Road to City boundary, bus stop improvements phase 1 (City £80,000)
A612 Daleside Road	Corridor bus stop improvements (City £50,000)
Bus promotion	Minor bus stop related infrastructure improvements (City £60,000, County £198,000) Public transport integration & information including PTI 2000 project (City £40,000, County £50,000)
Safer bus routes	Estate based safer bus routes (City £50,000)

Bid 2003/2004 : City £850,000 County £585,000

Trent Bridge	Radcliffe Road, Davies Road to Lady Bay, bus priority phase 1 (County)
A60 Mansfield Road	Oxclose Lane/Edwards Lane, phase 1 (City) Forest Road to Gregory Blvd outbound bus priority (City)
A610 Alfreton Road	Ring Road to City boundary bus priority including Stockhill Lane junction and bus stop improvements (City)
A453 Queens Drive	Wilford Street to Ring Road corridor bus stop improvements (City)
A609 Ilkeston Road	Ring Road inbound approach bus priority (City)
A6005 Beeston/ University Blvd	University Blvd and approaches to Dunkirk rdbt, bus priority (City) Complete BQP, real time information (County)
B686 Carlton Road	Bus priority and bus stop improvements (County)

A611 Hucknall Road	Arnold Road/Gainsford Crescent junction, bus priority & Kersall Drive queue management scheme (City)
	City Hospital to City boundary, bus stop improvements phase 2 (City)
B684 Woodborough Rd	City boundary to Huntingdon St, bus priority and bus stop improvements (City)
Bus promotion	Minor bus stop related infrastructure improvements (City)
	Public transport integration & information including PTI 2000 project (City, County)
Safer bus routes	Estate based safer bus routes (City)

Bid 2004/2005 : City £850,000, County £638,000

Trent Bridge	A6011 Radcliffe Road, bus priority Davies Road to Lady Bay - phase 2 (County)
A60 Mansfield Road	Mansfield Road/Hucknall Road junction, bus priority (City)
A611 Hucknall Road.	Commence BQP with Nottingham City Transport/Trent including programme of bus priority measures and bus stop improvements.
A6005 Beeston/ University Blvd	Abbey Street/Gregory Street junction, bus priority(City)
B686 Carlton Road.	Commence BQP with Nottingham City Transport/ Pathfinder including programme of bus priority measures and bus stop improvements (County)
B684 Woodborough Rd	Porchester Road junction, bus priority (City)
A612 Daleside Road	Manvers St/Pennyfoot St, bus priority (City)
Bulwell/Radford Road	Corridor bus stop improvements (City)
Bus promotion	Minor bus stop related infrastructure improvements (City)
	Public transport integration & information including PTI 2000 project (City)
Safer bus routes	Estate based safer bus routes (City)

Bid 2005/2006 : City £850,000, County £597,000

A6005 Beeston/ University Blvd	Castle Blvd, bus priority (City)
A611 Hucknall Road	City boundary to Moor Bridge, bus priority (City)
B684 Woodborough Rd	Wells Road/Mapperley Rise, bus priority (City)
	Commence BQP (County)
Bulwell/Radford Road	Approaches to Ring Road, bus priority (City)
	Moor Bridge to Bulwell District Centre, bus priority (City)
Bus promotion	Minor bus stop related infrastructure improvements (City)
	Public transport integration & information including PTI 2000 project (City)
Safer bus routes	Estate based safer bus routes (City)

Rail Development

- Contributions to rail quality partnership initiatives
- Development of local rail network

Schemes to be developed in partnership with Railtrack, Train Operators and Shadow Strategic Rail Authority.

Programmed 2000/01 : City £51,000, County £106,000
Passenger waiting environment and information improvements (City £50,000)
Local rail network development/feasibility (County £81,000)
Nottingham Station Rail Quality Partnership, station access plan, consultation, passenger survey and discussions with operators (City £1,000)
Ilkeston Station (County £25,000)

Bid 2001/02 : City £140,000, County £292,000
Nottingham Station Rail Quality Partnership, station access improvements plan, feasibility study (City £140,000)
Contribution to Ilkeston Station (County £200,000)
South Notts rail network development (County £92,000)

Bid 2002/03 : City £220,000, County £82,000
Nottingham Station Rail Quality Partnership, station access improvements plan (City £220,000)
South Notts rail network development (County £82,000)

Bid 2003/04 : City £350,000, County £84,000
Nottingham Station Rail Quality Partnership, station access improvements plan (City £350,000)
South Notts rail network development (County £84,000)

Bid 2004/05 : City £300,000, County £87,000
Nottingham Station Rail Quality Partnership, station access improvements plan (City £250,000)
South Notts rail network development (City £50,000, County £87,000)

Bid 2005/06 : City £400,000, County £90,000
Nottingham Station Rail Quality Partnership, station access improvements plan (City £350,000)
South Notts rail network development (City £50,000 County £90,000)

Park and Ride

- Development of outer ring bus based park and ride sites.
- Small scale improvements to existing sites (access arrangements, dynamic signing, passenger waiting facilities, security, and electronic/real-time information).

New and upgraded park and ride sites also linked to NET and local rail network development. New park and ride sites, particularly if in Green Belt, subject to land allocations in Local Plans.

Completed 1999/00 : City £15,000, County £20,000
Queens Drive/Racecourse small scale improvements (City £15,000)
Gamston park & ride (County £20,000)

Programmed 2000/01 : County £50,000
Gamston park & ride (County £50,000)

Bid 2001/02 : City £50,000, County £477,000
Gamston Park & Ride commence phase 1 construction (County £477,000)
Racecourse Road/Daleside Road, Park & Ride bus egress priority (City £50,000)

Bid 2002/03 : City £60,000, County £453,000
Gamston Park & Ride continue phase 1 and commence phase 2 construction(County £453,000)
Park and ride development, linked with NET Line One (City £60,000)

Bid 2003/04 : City £100,000, County £495,000
Gamston Park & Ride complete phase 1 and continue phase 2 construction (County £495,000)
Park and ride development, linked with NET Line One (City £100,000)

Bid 2004/05 : City £100,000, County £162,000
Gamston Park & Ride, complete phase 2 (County £162,000)
Park and Ride development, linked with NET Network (City £100,000)

Bid 2005/06 : City £100,000, County £119,000
Park and Ride development, bus based (County £119,000)
Park and Ride development, linked with NET Network (City £100,000)

Outcomes for Centre of Excellence programme

- Increased public transport patronage
- Modal transfer (from car)
- Increased accessibility for all
- Improved public transport reliability

Contribution to objectives and summary appraisal:

Key objectives a,b,d,e,g,j,k

In terms of the five appraisal criteria, the programme has been assessed as follows:

Environment (Beneficial)	Beneficial effects in respect of encouraging the use of non-car modes to reduce traffic and thus contributing to improving local air quality and reducing greenhouse gas emissions. The development of park and ride sites on green belt sites may have negative landscape effects.
Safety (Neutral)	Accidents and security effects neutral other than travel by public transport is inherently safer than travel by private car.
Economy (Beneficial)	Beneficial effects will be created by significantly improving journey times and reliability of public transport services. Bus priority measures will help reduce operating costs for bus operators. NET system expected to have very positive regeneration effects.

Accessibility (Beneficial)	Programme particularly helps those without access to the car and through the introduction of low floor technology and targeted information will make public transport accessible to more people.
Integration (Beneficial)	Integration effects are beneficial, with improvements to public transport being a key component of central and local government policies.

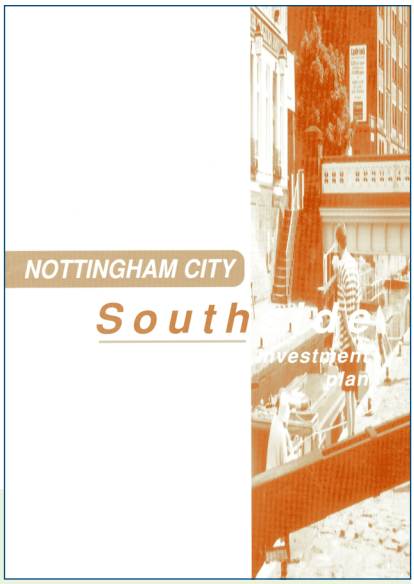
Performance indicators

- User satisfaction and perception studies
- Operator ticket information
- Multi-modal corridor surveys
- Targeted surveys of disadvantaged groups
- Public transport reliability surveys

6.6.2 City and District Centres

City Centre Strategy

- Development of Clear Zone within central core.
- Tram integration.
- Development of bus, pedestrian and cycle priority networks.
- Traffic management, infrastructure and awareness measures.
- New enforcement mechanisms.



Extensive consultation and scheme development through the City Centre Review process. Leverage from Capital Challenge, ERDF and private sector contributions.

Completed 1999/00 : City £560,000
Phase 2 of Southern Relief Route, Queen's Drive/Waterway Street/Meadows Way junctions including enhanced pedestrian and cycle facilities (City £550,000)
Clear Zone Traffic Regulation Order consultation (City £10,000)

Programmed 2000/01 : City £600,000
Clear Zone traffic restrictions implementation (City £85,000)
Maid Marian Way/Friar Lane bus priority (City £55,000)

Southern Relief Route phase 3a (City £350,000)
City Centre cycle parking (City £10,000)
City Centre motorcycle parking (City £15,000)
City Centre pedestrian convenience/signing (£85,000)

Bid 2001/02 : City £1,150,000
Phase 3 of Southern Relief Route, Queen's Road/London Road junction (City, £600,000)
London Road/Canal Street/Station Street junction capacity reallocation phase 1 (City £350,000)
National Ice Centre complementary accessibility works to compliment ERDF funding (City £70,000)
City Centre pedestrian and cycle network development (City £50,000)
Central area traffic signing phase 1 (City £80,000)

Bid 2002/03 : City £800,000
London Road/Canal Street/Station Street junction improvements phase 2 (City £150,000)
Maid Marian Way/Mount Street junction remodelling for bus priority, linked to NET implementation (City £350,000)
George Street/Fletcher Gate bus link (City £70,000)
Canal Street pedestrian environment improvements (City £80,000)
City Centre pedestrian and cycle network development (City £70,000)
Central area traffic signing phase 2 (City £80,000)

Bid 2003/04 : City £450,000
City Centre pedestrian and cycle network development (City £100,000)
City Centre bus passenger waiting facility improvements (City £100,000)
City Centre variable message signing, phase 1 (City £100,000)
City Centre traffic management/reduction (City £100,000)
Coach facility enhancements (City £50,000)

Bid 2004/05 : City £450,000
Contribution to Broad Marsh interchange (City £250,000)
City Centre pedestrian and cycle network development (City £80,000)
City Centre traffic management/reduction strategy(City £70,000)
City Centre variable message signing, phase 2 (City £50,000)

Bid 2005/06 : City £600,000
Contribution to Broad Marsh interchange (City £250,000)
City Centre pedestrian and cycle network development (City £100,000)
City Centre variable message signing, phase 2 (City £100,000)
City Centre traffic management/reduction (City £100,000)
City Centre bus passenger waiting facility improvements (City £50,000)

District Centre/Mobility Management Action Areas/Public transport hubs

- District Centre Mobility Management Action Areas.
- Small scale accessibility/infrastructure improvements.
- Targeted improvements for disabled people.
- Development of interchange hubs at key district centres and points on the transport network where routes/services intersect.

Identified District Centres/hubs:

Arnold*

Beeston*

Bulwell

Carlton*

Clifton

Hucknall*

Sherwood

West Bridgford*

Phoenix Centre

Hyson Green

City Hospital

Queen's Medical Centre/University

Boots

Large industrial areas

Other local travel generators

* Designated Mobility Management Action Areas

Programme to be co-ordinated with other funding sources such as SRB5, URBAN and New Deal For Communities. Details of work to be developed following integration audits to be undertaken with users, operators, and in conjunction with Area Transport Plans.

Programmed 2000/01 : City £230,000
Sherwood District Centre, integrated transport package (City £60,000)
Clifton District Centre, local transport hub (City £50,000)
QMC public transport hub, phase 1 (City £120,000)

Bid 2001/02 : City £350,000, County £53,000
Hucknall Mobility Management Action Area (County £53,000)
Bulwell interchange, linked to NET Line One construction, phase 2 (City £100,000)
QMC transport hub, phase 2 (City £100,000)
Sherwood District Centre improvements plan phase 2 (City £40,000)
Clifton District Centre, public transport hub (City £50,000)
Small scale interchange improvements (City £60,000)

Bid 2002/03 : City £550,000, County £563,000
Hucknall Mobility Management Action Area (County £344,000)
Mobility Management Action Area (County £219,000)
Bulwell interchange, linked to NET Line One construction, phase 2 (City £200,000)
Clifton District Centre, accessibility improvements, linked to multi-modal study outcomes, phase 1 (City £100,000)
Hyson Green, public transport hub, phase 1 (City £150,000)
District Centre, improving access for disabled people block (City £50,000)
Small scale interchange improvements (City £50,000)

Bid 2003/04 : City £550,000, County £1,238,000

Hucknall Mobility Management Action Area (County £1,013,000)
Mobility Management Action Area (County £225,000)
Clifton District Centre, accessibility improvements, linked to multi-modal study outcomes, phase 2 (City £100,000)
Hyson Green, public transport hub phase 2 (City £150,000)
Phoenix Centre, public transport hub, phase 1 (City £100,000)
Boots public transport hub phase 1 (City £100,000)
Small scale interchange improvements (City £50,000)
Improving access for disabled people (City £50,000)

Bid 2004/05 : City £650,000, County £2,241,000
Hucknall Mobility Management Action Area (County £1,681,000)
Mobility Management Action Area (County £560,000)
Clifton District Centre, accessibility improvements, linked to multi-modal study outcomes, phase 3 (City £200,000)
Phoenix Centre, public transport hub, phase 2 (City £150,000)
Boots public transport hub phase 2 (City £100,000)
Small scale interchange improvements (City £100,000)
Improving access for disabled people (City £100,000)

Bid 2005/06 : City £650,000, County £2,315,000
Hucknall Mobility Management Action Area (County £991,000)
Mobility Management Action Area (County £1,324,000)
City Hospital, public transport hub (City £150,000)
Lenton Lane industrial area, public transport hub (City £150,000)
Blenheim industrial area, public transport hub (City £100,000)
Glaisdale industrial area, public transport hub (City £100,000)
Small scale interchange improvements (City £100,000)
Improving access for disabled people (City £50,000)

Outcomes for City Centre and District Centre programme

- Modal transfer (from car)
- Traffic reduction
- Increased economic activity
- Improved environmental quality
- Reduced walking and cycling accidents

Contribution to objectives and summary appraisal:

Key objectives a,b,c,d,e,l,k

In terms of the five appraisal criteria, the programme has been assessed as follows:

Environment (Beneficial)	Beneficial effects in respect of encouraging the use of non-car modes to reduce traffic and thus contributing to improving local air quality and reducing greenhouse gas emissions. The Clear Zone proposals will result in additional benefits within the central core area.
Safety (Beneficial)	Reduced traffic levels will lead to a safer environment for pedestrians and other vulnerable road users.
Economy (Beneficial)	Through an improved environment economic activity in the City Centre is expected to increase. Reduced traffic levels will reduce public transport operating costs.
Accessibility (Beneficial)	The programme will improve the accessibility of the City Centre including those without access to a private car. All measures will be designed to be accessible for as many people as possible.
Integration (Beneficial)	The City Centre is the hub of the public transport network. Central to the programme is the integration of NET into the City Centre and the provision of improved public transport interchange facilities.

Performance indicators

- User satisfaction and perception studies
- Local multi-modal surveys
- Traffic flow surveys
- Rental values/vacancy rates and retail turnover
- Local personal injury accident statistics

6.6.3 Civilised Streets programme

- Proposals to reduce traffic danger, improve the urban environment and promote walking and cycling
- Scheme blocks incorporated : detailed schemes to developed via :

  Area transport plans

  Cycling and walking groups

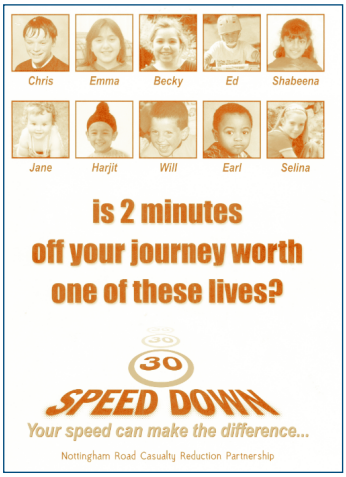
  Commuter planning organisations

  Schools

  Disability groups

  Local residents groups

  Transportation Safety Forum.



Links with other funding sources eg SRB5, URBAN, contributions from Area Committee budgets.

Completed 1999/00: City £695,000, County £633,000
Local safety schemes:
- Traffic calming/safety schemes (City £332,000)
- Safety at signal crossings/junctions (City £11,000)
- Speed management cameras (City £2,000)

Casualty Reduction (County £330,000)
- Stapleford Town Centre traffic calming
- A 6097 East Bridgford new traffic signals
- A610 Eastwood safety fencing works

Safer travel to School:
- Wollaton scheme (City £100,000)
- Toton Lane/Chilwell Lane, Eastwood (County £30,000)
- Arnovale Road school crossing patrol (County £35,000)
- Wilford Road area (County £8,000)

Walking schemes:
- Dropped crossing programme (City £46,000)
- Pedestrian facilities (City £42,000)
- Pedestrian Access (County £31,000)
- Pedestrian convenience (County £66,000)

Cycling schemes:
- Millennium cycle route (City £125,000)
- Cycle network development (City £35,000)
- Cycle parking facilities (City £2,000)
- Cycle network development inc. Millennium Cycle route (County £133,000)

Programmed 2000/01 : City £1,340,000, County £1,206,000
Local safety schemes:
- Traffic calming schemes including Clifton area scheme (City £100,000)
- Speed management cameras (City £100,000, County £40,000)
- Safety at traffic signals (City £75,000, County £100,000)
- Minor schemes block (City £160,000, County £320,000)
- Urban lengths (County £170,000)

Safer travel to School:
- School travel plan development (City £260,000)
- Small scale sustainable transport grants for schools (City £100,000)
- Safe Routes to School (County £158,000)
- School Awareness Zones (County £84,000)

Home Zones/residential traffic calming:
- Nobel Road Home Zone pilot scheme (City £225,000)
- Beeston Rylands, Broxtowe (County 30,000)
- Lady Bay, Rushcliffe (County £30,000)

Walking schemes:
- Dropped crossings/directional signing programme block (City £30,000,County £35,000)
- Tactile facilities at crossings (City £60,000)
- Pedestrian facilities (County £80,000)

Cycling schemes:
- Completion of Millennium cycle route (City £100,000)
- Cycle network development (City £95,000, County £143,000)
- Network signing and promotion (City £35,000)
- Cycle parking (County £16,000)

Bid 2001/02 : City £2,400,000, County £2,250,000
Local safety schemes:
- Clifton area traffic calming phase 2 (City £200,000)
- Other area wide traffic calming (City £150,000)
- Speed management cameras (City £100,000)
- Pedestrian and cycling safety (City £175,000, County £40,000)
- 20 mph speed limits (City £50,000)
- Speed management (City £250,000, County £40,000)
- Safety at signals/junctions (City £150,000, County £40,000)
- Surfacing/lighting mass action plans (City £75,000, County £100,000)
- A610/M1 full signalisation/misc. c/o (County £100,000)
- Urban lengths (County £170,000)
- Child safety (County £40,000)

Safer travel to School:
- Sustainable travel grants (City £100,000)
- School safety zones/ Safe Routes to School (City £100,000, County £263,000)
- Network links eg to NET, National Cycle Route (City £75,000)
- School crossing patrol site improvements (City £75,000)

Home Zones/residential traffic calming:
- Nobel Road Home Zone, phase 2 (City £140,000)
- Other home zones (City £90,000, County £122,000)
- Residential traffic calming (City £70,000, County £90,000)

Walking schemes:
- Canal side improvements, phase 2 (City £50,000)
- Pedestrian crossing block (City £60,000)
- Facilities for the disabled (City £100,000, County £367,000)
- Pedestrian links to core bus network (City £75,000)
- Rights of way improvements (City £15,000)
- Netherfield Pedestrian Priority Scheme phase 1 (County £120,000)
- Ruddington Village Centre (County £130,000)
- Dropped crossings/direction signing (County £20,000)
- Other pedestrian schemes (County £100,000)

Cycling schemes:
- Links to National Cycle Route (City £150,000)
- Cycle network development (City £100,000, County £275,000)
- Cycle parking/facility improvements (City £50,000, County £20,000)

Rural schemes:
- Schemes (County £213,000)

Bid 2002/03 : City £2,725,000 County £2,428,000
Local safety schemes:
- Clifton area traffic calming phase 3 (City £200,000)
- Other area wide traffic calming (City £220,000)
- Speed management cameras (City £100,000)
- Pedestrian and cycling safety (City £175,000, County £50,000)
- 20 mph speed limits (City £80,000)
- Speed management (City £250,000, County £40,000)
- Safety at signals/junctions (City £175,000, County £70,000)
- Surfacing/lighting mass action plans (City £75,000, County £90,000)
- Urban lengths (County £200,000)
- Child safety (County £100,000)

Safer travel to School:
- Sustainable travel grants (City £130,000)
- School safety zones/Safe Travel to School (City £125,000, County £251,000)
- Network links eg to NET, National Cycle Route (City £75,000)
- School crossing patrol site improvements (City £70,000)
- Urban lengths (County £200,000)
- Child safety (County £100,000)

Home Zones/residential traffic calming:
- Nobel Road Home Zone, phase 3 (City £100,000)
- Other home zones (City £150,000, County £180,000)
- Residential traffic calming (City £100,000, County £131,000)

Walking schemes:
- Pedestrian crossing block (City £100,000, County £90,000)
- Facilities for the disabled (City £100,000, County £273,000)
- Pedestrian links, including links to core bus network (City £100,000, County £97,000)
- Rights of way improvements (City £50,000)
- Kimberly Town Centre (County £45,000)
- Area pedestrian facilities (County £262,000)

Cycling schemes:
- Links to National Cycle Route (City £150,000)
- Cycle network development (City £100,000, County £243,000)
- Cycle parking/facility improvements (City £100,000, County £10,000)
- Low Wood Road/Woodhouse Way cycle facilities (County £80,000)

Rural schemes:
- Schemes (County £220,000)

Programmes for future years to be based on similar programme blocks.

Outcomes for Civilised Streets programme

- Reduced personnal injury accidents
- Reduced traffic speeds and flows
- Increased walking and cycling for short journeys
- Improved freedom of movement for people with disabilities
- Improved public health

Contribution to objectives and summary appraisal:

Key objectives b,c,g,k,l

In terms of the five appraisal criteria, the programme has been assessed as follows:

Environment (Beneficial)	Beneficial effects in respect of improving local air quality and reducing greenhouse gas emissions. Also encouragement of non-polluting modes.
Safety (Beneficial)	Reduced traffic levels will lead to a safer environment for pedestrians and other vulnerable road users. Particular benefits sought to promote safer travel to school.
Economy (Beneficial)	Through an improved environment a positive impact on local economic conditions is anticipated. Reduced traffic levels will reduce public transport operating costs.
Accessibility (Beneficial)	The programme will improve the accessibility for those without access to a private car significantly.
Integration (Beneficial)	Safer streets will encourage use of a range of modes and encourage integration.

Performance indicators

- Personal injury accident statistics
- Rate of return
- Local traffic speed and flow surveys
- Pupil/employee travel behaviour surveys
- Area Transport Plan activity surveys
- More active population and reduced respiratory illness

6.6.4 Travel Demand Management programme

- Supporting programme of awareness raising to establish support and progress development of strategy.
- Traffic management and small-scale highway improvements targeted to benefit public transport, cycling, or walking.
- Support for parking policy development.
- Commuter plan support.
- Air quality management.
- Development of UTC and intelligent transport systems including “TravelWise Centre”.
- Measures to support implementation of Freight Quality Partnership.

Completed 1999/00 : City £109,000, County £30,000
A52/Queens Drive junction improvement contribution (City £97,000)
Air quality management (City £2,000)
Traffic management/UTC (City £10,000)
A610/A6002 improvements (County £30,000)

Programmed 2000/01: City £170,000, County £92,000
Awareness/education programme (City £30,000)
Traffic management/UTC (City £60,000)
Parking policy/commuter plans (City £20,000)
Air quality management (City £20,000)
Freight quality partnerships (City £40,000)
A610/A6002 improvements (County £20,000)
Kirkhill new signals (County £72,000)

Bid 2001/02: City £665,000, County £476,000
Awareness/education:
- Travelwise Centre outstations (City £30,000)
- Small-scale awareness projects (City £20,000, County £53,000)

Traffic Management/Highway Improvements:
- Contributions to highway changes linked to new development (City £100,000)
- Minor highway improvements (City £100,000, County £53,000)
- Area-wide residents parking schemes (City £40,000)
A610/A6002 improvements phase 3 (County £265,000)

UTC/ITS:
- Enhancement of UTC functions (City £100,000, County £45,000)
- Camera Enforcement (City £65,000)
- Car Park Signing/Variable Message Signs phase 1 (City £20,000)

Commuter Plans:
- Small-scale infrastructure improvements to support Commuter Plans (City £50,000, County £10,000)

Air quality and noise management:
- Air quality monitoring (City £20,000)
- Noise mapping (City £20,000)
- Minor highway works to relieve localised air quality/noise problems (City £40,000)

Freight Quality Partnerships:
- CNG Fast fill facility phase 2 (City £30,000, County £20,000)
- Improved signing for lorry routing (City £15,000, County £10,000)
- Incident reporting to freight operators via UTC (City £15,000, County £20,000)

Bid 2002/03: City £795,000 County £662,000

Awareness/education:
- Travelwise Centre outstations (City £35,000)
- Small-scale awareness projects (City £25,000, County £55,000)

Traffic Management/Highway Improvements:
- Contributions to highway changes linked to new development (City £130,000)
- Minor highway improvements (City £120,000, County £55,000)
- Area 1 orbital route review phase 1 (City £80,000)
- Area-wide re-signing schemes (City £50,000)
- A610/A6002 improvements phase 3 (County £84,000)

UTC/ITS:
- Enhancement of UTC functions (City £100,000,County £50,000)
- Camera enforcement (City £50,000)
- Car Park Signing/Variable Message Signs phase 2 (City £50,000)

Commuter Plans:
- Small-scale infrastructure improvements to support Commuter Plans (City £50,000, County £10,000)

Air quality and noise management:
- Air quality monitoring (City £20,000)
- Noise mapping (City £20,000)
- Minor highway works to relieve localised air quality/noise problems (City £40,000)

Freight Quality Partnerships:
- Improved signing for lorry routing (City £35,000, County £25,000)
- Incident reporting to lorry operators via UTC (City £25,000, County £15,000)
- Review of loading restrictions (City £20,000, County £15,000)

Bid 2003/04: City £1,005,000, County £327,000
Awareness/education:
- Travelwise Centre outstations (City £35,000)
- Small-scale awareness projects (City £35,000, County £56,000)

Traffic Management/Highway Improvements (City £455,000)
- Contributions to highway changes linked to new development (City £180,000)
- Minor highway improvements (City £120,000, County £56,000)
- Area 1 orbital route review phase 2 (City £100,000)
- Area-wide re-signing schemes (City £55,000)
A610/A6002 improvements phase 3 (County £84,000)

UTC/ITS:
- Enhancement of UTC functions (City £100,000, County £70,000)
- Camera Enforcement (City £50,000)
- Car Park Signing/Variable Message Signs phase 2 (City £125,000)

Commuter Plans:
- Small-scale infrastructure improvements to support Commuter Plans (City £50,000, County £10,000)

Air quality and noise management:
- Air quality monitoring (City £20,000)
- Clear Zone phase 3 trials (City £40,000)
- Minor highway works to relieve localised air quality/noise problems (City £20,000)

Freight Quality Partnerships:
- Improved signing for lorry routing (City £35,000, County £21,000)
- Incident reporting to lorry operators via UTC (City £25,000, County £15,000)
- Review of loading restrictions (City £20,000, County £15,000)

Bid 2004/05 : City £1,185,000, County £288,000
Awareness/education:
- Travelwise Centre outstations (City £35,000)
- Small-scale awareness projects (City £35,000, County £58,000)

Traffic Management/Highway Improvements:
- Contributions to highway changes linked to new development (City £220,000)
- Minor highway improvements (City £200,000, County £58,000)
- Area-wide re-signing schemes (City £35,000)

UTC/ITS:
- Enhancement of UTC functions (City £75,000)
- Car Park Signing/Variable Message Signs phase 3 (City £125,000)
- Data transmission links phase 1(City £250,000, County £110,000)

Commuter Plans:
- Small-scale infrastructure improvements to support Commuter Plans (City £50,000, County £10,000)

Air quality and noise management:
- Air quality monitoring (City £20,000)
- Clear Zone phase 3 trials (City £40,000)
- Minor highway works to relieve localised air quality/noise problems (City £20,000)

Freight Quality Partnerships:
- Improved signing for lorry routing (City £35,000, County £22,000)
- Incident reporting to lorry operators via UTC (City £25,000, County £15,000)
- Review of loading restrictions (City £20,000, County 15,000)

Bid 2005/06 : City £1,480,000, County £344,000
Awareness/education:
- Travelwise Centre outstations (City £35,000)
- Small-scale awareness projects (City £35,000, County £60,000)
- Travelwise effectiveness review (City £10,000)

Traffic Management/Highway Improvements:
- Contributions to highway changes linked to new development (City £250,000)
- Minor highway improvements (City £230,000, County £60,000)
- Area-wide re-signing schemes (City £30,000)
- Programme development (City £30,000)

UTC/ITS:
- Enhancement of UTC functions (City £75,000)
- Car Park Signing/Variable Message Signs phase 4 (City £100,000)
- Data transmission links phase 2 (City £250,000, County £160,000)
- Development of advanced telecommunications systems (City £225,000)

Commuter Plans:
- Small-scale infrastructure improvements to support Commuter Plans (City £50,000,County £10,000)

Air quality and noise management:
- Air quality monitoring (City £20,000)
- Clear Zone phase 3 (City £40,000)
- Minor highway works to relieve localised air quality/noise problems (City £20,000)

Freight Quality Partnerships:
- Improved signing for lorry routing (City £35,000, County £24,000)
- Incident reporting to lorry operators via UTC (City £25,000, County £15,000)
- Review of loading restrictions (City £20,000, County £15,000)

Outcomes for Travel Demand Management programme

- Awareness of transport related problems
- Positive attitudes to public transport, walking and cycling
- Reductions in unnecessary journeys and circulating traffic
- Improved management of freight traffic
- Improved air quality

Contribution to objectives and summary appraisal:

Key objectives a,b,c,k

In terms of the five appraisal criteria, the programme has been assessed as follows:

Environment (Beneficial)	By promoting use of less polluting modes, environmental benefits are anticipated with consequent improvements for air quality in particular.
Safety (Beneficial)	Less reliance on and use of the car will deliver attendant safety benefits.
Economy (Beneficial)	More efficient employer and employee working practices are anticipated, particularly in the context of Freight Quality Partnership work. Consequent energy consumption savings anticipated.
Accessibility (Beneficial)	Accessibility for those without access to a car improved by increased viability of the alternatives. Prioritisation of access to parking by employers is more equitable.
Integration (Beneficial)	Enhanced viability and awareness of the alternatives will generate demand for and work in favour of integration objectives

Performance indicators

- Travel plan surveys
- Public satisfaction and perception surveys
- Traffic flow and car park queue surveys
- Freight user surveys
- Air quality monitoring

6.6.5 Monitoring programme

- Develop ongoing commitment to monitoring.
- Transport data analysis
- Development of multi-modal transport computer model.
- Tram impact monitoring

Completed 1999/00 : City £31,000, County £10,000
Greater Nottingham Package monitoring (City £20,000, County £5,000)
Greater Nottingham public attitude survey follow-up surveys (City £5,000, County £5,000)
Advanced design fees (City £6,000)
Plan monitoring revenue (County £52,000)

Programmed 2000/01: City £60,000, County £15,000
Integrated transport attitudinal surveys
City centre travel movements data collection and analysis
Public transport performance indicators
Programme co-ordination
Plan monitoring revenue

Bid 2001/02 : City £150,000, County £55,000
Programme monitoring
Transport model development
Tram impact monitoring
Programme co-ordination

Bid 2002/03 : City £175,000, County £55,000
Programme monitoring
Transport model development
Tram impact monitoring
Programme co-ordination

Bid 2003/04 : City £200,000, County £56,000
Programme monitoring
Transport model development
Tram impact monitoring
Programme co-ordination

Bid 2004/05 : City £240,000, County £58,000
Programme monitoring
Transport model development
Tram impact monitoring
Programme co-ordination

Bid 2005/06 : City £250,000, County £60,000
Programme monitoring
Transport model development
Tram impact monitoring
Programme co-ordination

Outcomes of monitoring programme

Production of annual progress reports.

6.6.6 Maintenance of the network

Principal Road Network maintenance programme

- Maintenance of the Principal Road Network

Provisional programme which may be revised in light of deflectograph results.

Completed 1999/00 : City £800,000, County £726,000
Structural maintenance on Principal Road Network (City £800,000, County £726,000)

Programmed 2000/01 : City £1,050,000, County £1,185,000
A610 Gregory Blvd to Ring Road resurfacing (City £500,000)
A6200 Gregory St to Lenton Blvd resurfacing (City £250,000)
Lighting enhancements on PRN (City £300,000)
A6002 to M1 new bridge - reconstruction (County £135,000)
Mansfield Road/Forest Lane to Bottom House Farm - overlay (County £190,000)
Loughborough Road/Wilford Lane to Trent Bridge - overlay (County £350,000)
Other schemes (County £510,000)

Bid 2001/02 : City £1,895,000, County £2,225,000
A60 Mansfield Road, Sherwood to City Boundary carriageway/footway resurfacing and lighting enhancements (City £550,000)
A611 Hucknall Road, phase 2 carriageway resurfacing (City £500,000)
A6130 Lenton and Radford Boulevards, phase 1, carriageway resurfacing (City £200,000)
Lighting enhancements on PRN (City £245,000)
Melton Road - Musters Road to Lings Bar (County £430,000)
Thackerys Lane/Arno Vale Road (A60 to Gedling Road) (County £235,000)
Other Schemes (City £350,000, County £1,560,000)

Bid 2002/03 : City £1,910,000, County £2,250,000
A6008 Queens Road and Wilford Street carriageway/footway resurfacing (City £600,000)
A611 Hucknall Road, phase 3, carriageway resurfacing (City £460,000)
A6130 Lenton and Radford Boulevards - phase 2 carriageway resurfacing (City £150,000)
Lighting enhancements on PRN (City £350,000)
A6011 Lady Bay to Priory Road (County £250,000)
A60 Mansfield Road (Quarry Entrance to Blidworth Way) (County £215,000)
A610 Kimberly/Eastwood Bypass (Bennerly site slip to Layby east of A608 slip) (County £250,000)
Other Schemes (County £1,535,000)

Bid 2003/04 : City £1,950,000, County £2,300,000
A610 Alfreton Road, Gregory Boulevard to City Centre, carriageway/footway resurfacing (City £750,000)
A6008 Inner Ring Road phase 1, carriageway/footway resurfacing to complement City Centre Major Scheme (City £450,000)

Lighting enhancements on PRN (City £350,000)
A6006 Stanford Hall to Hill Farm (County £160,000)
A60 Mansfield Road (Longdale Lane to Larch Farm) (County £130,000)
Other Schemes (City £400,000, County £2,010,000)

Bid 2004/05 : City £1,970,000, County £2,325,000
A6008 Inner Ring Road phase 2, carriageway/footway resurfacing to complement City Centre Major Scheme (City £550,000)
A6130 Gregory Boulevard, carriageway/footway resurfacing and lighting enhancement (City £400,000)
A6005 Abbey Bridge carriageway resurfacing (City £300,000)
Lighting enhancements on PRN (City £370,000)
A60 East Leake to Remstone cross roads (County £75,000)
A6211 Arnold Lane (Stanhope Road to Mapperley Plains) (County £230,000)
Other Schemes (City £350,000, County £2,020,000)

Bid 2005/06 : City £2,005,000, County £2,375,000
A609 Ilkeston Road carriageway/footway resurfacing (City £600,000)
A612 Daleside Road carriageway resurfacing (City £650,000)
Lighting enhancements on PRN (City £405,000)
Other Schemes (City £350,000, County £2,375,000)

Bridge assessment and strengthening

- Maintenance of bridge stock in safe condition and prolong asset life.
- Assessment and strengthening of bridges to meet 40 tonne loading requirements.

Completed 1999/00 : City £460,000, County £215,000
Bridge assessment (City £156,000)
Bridge strengthening/maintenance schemes (City £304,000, County £215,000)
Schemes include:
- Beeston station bridge waterproofing (County)- Brook House Orston strengthening (County)
- Brookside Cottage Upper Broughton strengthening (County)

Programmed 2000/01 : City £600,000, County £450,000
Bridge assessment, strengthening and maintenance (City £600,000, County £450,000)
Schemes include:
- River Lean bridge, Lenton Lane strengthening (City)
- Daybrook culvert, Edwards Lane strengthening (City)
- Subways under Southglade Road strengthening (City)
- Beeston Station bridge strengthening (County)
- Burton Walk, East Leake strengthening (County)

Bid 2001/02: City £755,000, County £425,000
Bridge assessment/Principal Inspections (County £45,000)
Bridge strengthening (City £445,000, County £130,000)
Schemes include:
- Tinkers Lean side stream strengthening (City)
- Queens Drive, river Lean strengthening (City)
Maintenance (incl parapets and footways) (City £310,000, County £250,000)

Bid 2002/03 : City £765,000, County £425,000
Bridge assessment/Principal Inspections (County £35,000)
Bridge strengthening (City £425,000, County £80,000)
Schemes include:
- Carrington St bridge strengthening (City)
- Highbury Rd West approach strengthening (City)
Maintenance (incl parapets and footways) (City £340,000, County £310,000)

Bid 2003/04 : City £775,000, County £425,000
Bridge assessment/Principal Inspections (County £35,000)
Bridge strengthening (City £590,000, County £80,000)
Schemes include:
- London Rd, widened section, phase 1, strengthening (City)
- Highbury Rd redecking, phase 1 (City)
Maintenance (incl parapets and footways) (City £185,000, County £310,000)

Bid 2004/05 : City £785,000, County £425,000
Bridge assessment/Principal Inspections (County £35,000)
Bridge strengthening (City £590,000, County £40,000)
Schemes include:
- London Rd, widened section, phase 2, strengthening (City)
- Highbury Rd redecking, phase 2 (City)
Maintenance (incl parapets and footways) (City £195,000, County £350,000)

Bid 2005/06 : City £795,000, County £425,000
Bridge assessment/Principal Inspections (County £35,000)
Bridge strengthening (City £600,000)
Schemes include:
- Church Street Basford redecking (City)
Maintenance (incl parapets and footways) (City £195,000, County £390,000)

Outcomes for network maintenance programme

- Halted structural deterioration of roads and bridges
- Improved ride quality for all highway users
- Improved footways
- Safer streets after dark

Contribution to objectives and summary appraisal:

Key objectives f,i,l

In terms of the five appraisal criteria, the programme has been assessed as follows:

Environment (Beneficial)	Reduced noise. Recycled materials and thin surfacing to minimise new material extraction. Modern lighting will be used designed to reduce light pollution.
Safety (Beneficial)	Safer condition of roads and bridges. Improved skid resistance. Higher lighting standards safer for all road users.

Economy (Beneficial)	Reduced operating costs for vehicle operators through removal of structural weight restrictions. Economies allows for 40 tonne lorries.
Accessibility (Neutral)	Improved accessibility favours most modes.
Integration (Neutral)	Improved reliability of bus services.

Performance indicators

- CVI/deflectograph results
- Bridge assessment results
- Number of road condition related complaint letters
- Reduced third party claims

6.7 Major integrated transport schemes: development and appraisal strategy

In addition to the committed A6002/A6007 Coventry Lane Improvement scheme, two new major schemes are proposed to be introduced to support the introduction of the workplace parking levy in the City. Both schemes form a linked strategy, developed to respond to Government policy which requires that before any workplace parking levy scheme is introduced, significant improvements to the alternatives to the car must first be put in place.

The major schemes are part of the strategy to provide such improvements to be put forward as part of the City's membership of the Charging Development Partnership. In addition, the Government's current funding review and forthcoming Ten Year Investment Plan for Transport should unlock further resources for major, integrated/public transport based schemes.

More detailed scheme development and appraisal work is required to be developed via a multi modal transport model with consultants when appointed; it is proposed to fund the development of the schemes via supplementary resources to be secured as detailed in the workplace parking levy section of this Plan. This will feed into detailed appraisal and assessment processes including meeting the full requirements of Annexes D, E and supporting detailed guidance. The timetable for this separate submission is to be further discussed with the Charging Development Partnership/DETR. It is not possible to determine the detailed scope of the schemes at this stage due to:

- scope and level of levy not yet confirmed and multi modal model being developed,
- data collection issues and the need to combine assessment with Multi Modal Study data,
- timetable for detrunking, and
- need for more detailed participation and consultation.

At this stage the City Council is confident that the acceptability and broad justification for both schemes and their relationship with the Plan objectives can be demonstrated and seeks provisional approval of the schemes to allow reassurance before moving on to more detailed scheme development. The following sections detail the broad justifications and anticipated benefits of the proposals with consideration of Plan and NATA objectives and alternative options. More detailed costings will be developed as part of this process. At this stage, anticipated costs are anticipated to be in the region of £15m for each scheme.

6.7.1 Coventry Lane

A major improvement to the Nottingham Western Outer Loop Road along the A6002 Coventry Lane and a short length of the adjoining A6007 Ilkeston Road was accepted for support in last year's settlement, up to a maximum of £5.544m throughout the life of the scheme. An initial allocation of £2.0m was make available to enable works to commence in 2000/1.

All the statutory procedures have been completed and all the necessary possessions have been obtained from Railtrack to enable the scheme to proceed.

The Coventry Lane section of the works is due to commence with a site clearance contract in September 2000, followed by a main contract in November/December 2000. Works on the Ilkeston Road section, which do not involve any statutory procedures, are scheduled for 2001/2 and 2002/3.

The outstanding funds to complete the scheme are included in the bid for the Plan period as per the following profile:-

Year	**00/01**	**01/02**	**02/03**	**03/04**
£(000)	2,000	2,610	850	84

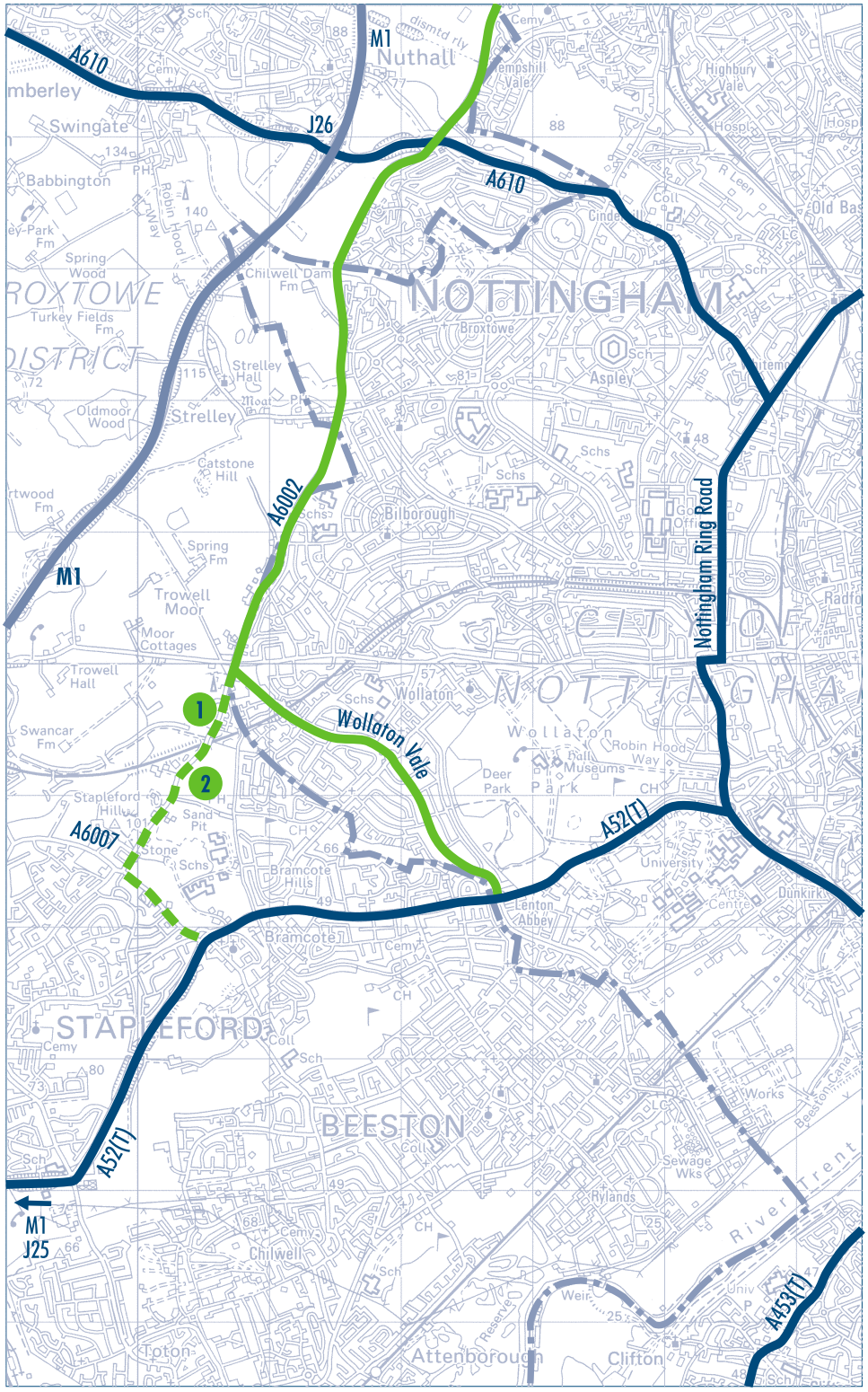


Figure 27

Coventry Lane improvement

6.7.2 New Major Scheme 1 - City Centre

Major integrated transport scheme to improve conditions for buses, pedestrians and cyclists on the Inner Ring Road

Overview and problem analysis

Maid Marian Way and Parliament Street form two sides of an existing traffic dominated inner ring road which surrounds the city's central core. The nature of its design and original concept was to carry high levels of fast flowing, predominantly car traffic through and around the city centre; pedestrians were segregated and required to use subways by the use of pedestrian safety barriers.

Nowadays, despite progress on introducing some surface level crossings pedestrians, bus passengers, cyclists and car drivers suffer from a range of problems highlighted in various surveys, perception studies and consultations associated with this Plan:

- frustration and delay caused by high levels of congestion, particularly at peak periods,
- unreliable bus services with limited effective priority, particularly for cross city centre journeys,
- actual and perceived pollution/poor air quality and high noise levels from traffic,
- subways which are unpopular and perceived as unsafe,
- restricted pedestrian movement between key areas in the city centre such as the Old Market Square and the Castle which holds back the expansion of City Centre activities and development,
- increasing demand for pedestrian crossings where development on the 'wrong' side of the ring road has been secured, eg General Hospital site,
- intimidating, speeding and dangerous driving behaviour particularly at times when traffic flows are light, such as at night, and
- perceived high levels of through traffic which could seek alternative routes.

Opportunities and the need for change: Impact of NET Line One

The construction of Line 1 of Nottingham Express Transit requires fundamental changes to be made in the city centre. In order to maintain essential bus services both routes and bus service facilities will have to be carefully developed and prioritised if reliability and service quality is to be maintained/ improved.

There is also a need to provide high quality passenger facilities ("concourse standard") associated with new bus routes, conveniently accessible on foot from the central core and key interchange points.

Opportunities and the need for change: Traffic Reduction Strategy and the Clear Zone

A key element of the Plan Strategy is the Clear Zone proposal and Nottingham's approved traffic reduction strategy. Increasing awareness of the problems of air quality, particularly in central areas and the requirements of the national Air Quality Strategy help justify the scheme.

Opportunities and the need for change: City Centre Review

Compared to other parts of the city centre, the northern section of Maid Marian Way and western end of Parliament Street experience lower economic performance and suffer from higher than average vacancy rates. The scheme is part of the City Centre review of development opportunities and it fits in with the intention to improve infrastructure in areas of poor performance.

Key aims

- Establish a new movement framework to prioritise buses, pedestrians and cyclists.
- Promote integration with NET.
- Complement central core Clear Zone proposals.
- Continue momentum on the reduction of unnecessary City Centre traffic.
- Provide new high quality on-street bus passenger waiting facilities.
- Improve the pedestrian environment and promote east-west walking links.
- Be integrated with development opportunities.
- Improve road safety.
- Opportunity to better manage loading and unloading.

Relationship with Plan objectives and workplace parking levy

The scheme is central to the delivery of the Plan strategy in that it is essential to ensure that NET and city centre bus services will be prioritised and remain accessible and attractive to users of the city centre. NET and the bus network will be the major transport alternatives to the car and as such the scheme is intrinsically linked to the proposals to introduce a workplace parking levy. It is also central to the following Plan Objectives and associated NATA priorities:

a) To increase sustainable accessibility to the City Centre and district centres in ways which enhance economic activity, encourage development in and reduce social exclusion from these centres. NATA e, ec, a, i

b) To reduce traffic growth and to encourage modal change away from the private car particularly for work journeys to the City Centre. NATA e, a, i

c) To encourage safe walking and cycling for short journeys including travel to schools, shops and other local facilities. NATA s, a, e

d) To improve integration and interchange between modes. NATA i, a

e) To integrate land use and transport planning by encouraging all new major development is well connected to the public transport system and accessible on foot and by cycle. NATA a, i, e

f) To maintain and enhance Greater Nottingham's accessibility to regional, national and international markets, particularly by modes other than the car. NATA ec

g) To reduce social exclusion and to improve the accessibility to transport for disadvantaged groups, particularly disabled people. NATA a

h) To relieve communities from the adverse effects of through traffic, particularly heavy goods vehicles. NATA e, s

k) To improve air quality within the plan area and to alleviate other transport impacts upon health. NATA e

l) To improve road safety, particularly for vulnerable road users. NATA s

Initial option assessment/ potential alternative scenarios

The alternatives considered and reasons for discounting them are as follows:

Do Minimum/phasing the scheme in smaller elements:

- increased congestion in the short, medium and longer term,
- would work against progress towards plan objectives and targets,
- would compromise the inter-action of pedestrian routes and patronage expectations of NET and re-routed bus services,
- would compromise the integration elements of the scheme,
- would lead to prolonged construction and traffic disruption, with consequential impact upon bus and NET reliability,
- would lead to developer uncertainty and could inhibit investment,
- would not deliver full range of anticipated user and non-user benefits.
- economies of scale in terms of scheme development, design and procurement would be lost, and
- worse air quality.

Do nothing:

- as above but worse impacts,
- reduced patronage on bus and NET,
- increased congestion and poorer air quality, and
- discouraged investment and poorer economic performance of city centre leading to more unsustainable development patterns.

Full appraisal will follow as the scheme is developed.

Potential components and key benefits:

Remodelling of this section of the City's inner ring road will allow for the establishment of the new bus network and promotion of east-west walking routes linking the Lace Market, Old Market Square, Theatre Square and Western Entertainment Quarter (ie Playhouse/Albert Hall) including replacement of subways with convenient surface crossings and capitalise on NET.



Nottingham Express Transit Line 1

Major improvements to bus, cycle and pedestrian environment proposed

Improvements to pedestrian crossing conditions required

Proposed junction improvements

Clear Zone (Proposed 2001)

Alternative through traffic routes

Figure 28

City Centre Integrated Transport Major Scheme

The scheme is to be integrated with major development proposals which are being promoted through the City Council's City Centre review process.

Public transport benefits

- Enhanced priority for NET across Parliament Street and promote Theatre Square as important tram/bus/pedestrian hub.
- Potential for bus lanes along Parliament Street and northbound on Maid Marian Way between Friar Lane and Toll House Hill (shared with cyclists).
- Potential for contra-flow bus lane on Parliament Street between Sherwood Street and Milton Street.
- Potential Milton Street bus, taxi and cycle only between Trinity Square and Parliament Street.
- Introduce "concourse standard" bus stop waiting facilities on Maid Marian Way, Parliament Street and Milton Street including bus boarders, raised kerbs and seating
- Implementation of public transport information system access points (linked to TravelWise Centre), electronic information displays and bus fleet management/priority technology.

Traffic reduction benefits

- Reduce road space for general traffic on Parliament Street.
- Remodel Parliament Street/Burton Street/Milton Street gyratory system.
- Direct cross-city traffic onto favoured routes.
- Develop Talbot Street as a limited alternative cross-city traffic route.
- Rationalise loading/unloading bays.

Pedestrian benefits

- Pedestrianisation of Long Row, Beast Market Hill (partial) and Chapel Bar.
- Pavement widening on Parliament Street and Milton Street.
- Pedestrianisation of Theatre Square area.
- Improved links to interchange points.
- Improve Clumber Street/Parliament Street/Milton Street crossing facilities.
- Relocate Sherwood Street pedestrian crossing to better link NET stop with Forman Street pedestrianisation and route to Victoria Centre.
- Removal of Maid Marian Way, Mount Street, Theatre Square and Chapel Bar subways and replacement with surface crossing facilities.
- Review of inhibitive pedestrian guard rails.

Road safety and community safety benefits

- Introduce measures to reduce vehicle speeds.
- Improve night time accident problem sites.
- Fear of crime reduction measures such as CCTV/enforcement initiatives.

New development benefits

- Integrate with development opportunities being identified through City Centre Review process eg Trinity Square/Burton Street, Toll House Hill, Mount Street/Chapel Bar and Maid Marian Way/Friar Lane.

Implementation

The timing of implementation is aimed to be compatible and complimentary with the introduction of the City Centre Clear Zone, the expansion of the Broad Marsh Shopping Centre and taking advantage of the opportunity to remodel the City Centre following on directly from NET construction programme.

The indicative programme is as follows, including supporting elements of the City centre traffic reduction strategy:

Advanced Enabling Works:

(i)	Southern Relief Route-phase 3 (Highway improvements to facilitate City Centre traffic reduction)	Summer 2001
(ii)	London Rd./Station St. (Junction capacity reallocation to facilitate pedestrian/cycle and public transport links)	Summer 2001
(iii)	Clear Zone (City Centre access restriction to facilitate reduction in traffic and pollution levels)	Summer 2001
(iv)	Alterations to City Centre Bus Routes	Summer 2001
(v)	London Rd./Canal St. (Junction alteration to facilitate City Centre traffic reduction)	Spring 2002
(vi)	NET Line 1 (construction) (operational)	Spring 2003 Autumn 2003

City Centre Integrated Transport Scheme:

(i)	Appoint Transportation Consultants (To develop multi-modal transport model)	Summer 2000
(ii)	Data Collection	Autumn 2000
(iii)	Develop City Centre multi-modal transport model	Winter 2000
(iv)	Preliminary Design	Winter 2000

(v)	Preliminary NATA appraisal	Spring 2001
(vi)	Detailed Design	Spring 2002
(vii)	Detailed NATA appraisal	Summer 2002
(viii)	Commence TRO consultations	Summer 2002
(ix)	Advertise TRO's for (x)	Autumn 2002
(x)	Talbot St.-Huntingdon St. (Limited highway improvements to create alternative cross city traffic route)	Summer 2003
(xi)	Advertise TRO's for (xii), (xiv) and (xv)	Summer 2003
(xii)	Maid Marian Way/Parliament St junction (Junction capacity reallocation to facilitate pedestrian/cycle and public transport links)	Spring 2004
(xiii)	Possible Public Inquiry regarding highway alterations to Parliament St.	Spring 2004
(xiv)	Burton St./Milton St/Parliament St.Gyratory (Junction capacity reallocation to facilitate pedestrian/cycle and public transport links	Summer 2004
(xv)	Parliament St. (Highway capacity reallocation to facilitate pedestrian/cycle and public transport links)	Spring 2005
(xvi)	Maid Marian Way (Highway capacity reallocation to facilitate pedestrian/cycle and public transport links)	Autumn 2005
(xvii)	Scheme completion	Autumn 2005

Broad Marsh Redevelopment:

(i)	Advertise CPO and highway alterations	Autumn 2001
(ii)	Public Inquiry	Spring 2002
(iii)	Canal St./ Collin St. (Closure of Collin St. and highway capacity reallocation to facilitate pedestrian/cycle and public transport links)	2004/2005

Safeguarding issues

At this stage it is envisaged that most if not all of the land required for the scheme will be highway land or other land within the control of the authority. Confirmation of the extent of land required will be specified as the design process progresses, and subsequently safeguarded in the Development Plan review.

6.7.3 New Major Scheme 2 - Ring Road

Ring Road Multi-Modal Transport Strategy: Major Integrated Transport Scheme To Improve Public Transport Priority On A6514 Ring Road

Overview and problem analysis

Nottingham has in the main a radial street pattern with most main routes leading to the City Centre. The Nottingham Ring Road comprising of two distinct sections, the A52 section (Gamston to QMC) and A6514 (QMC to A60 Mansfield Road), is the predominant orbital route.

The principal roles of the Ring Road are as follows:

- principal route avoiding the City Centre for both traffic and public transport services,
- it is an important strategic route for through traffic,
- principal freight route (most other orbital routes not suitable for large numbers of heavy lorries),
- frontage access to commercial and residential property, and
- local pedestrian and cycle movements

There are some key issues and problems associated with the use of the ring road identified by businesses, public transport/ freight operators, residents and cyclists:

- congestion and delay (both on the Ring Road itself and intersecting radial routes) which results in much traffic using radial routes through the city centre as a quicker alternative,
- associated problems for the city centre environment and public transport reliability, particularly since most cross-city public transport journeys require movement through the City Centre,
- whilst Nottingham has a well established system of radial public transport services focused on serving the City Centre, many journeys are suburb to suburb and are poorly served by direct public transport; current absence of a high frequency quality public transport service with attractive interchange facilities is a significant missing component of the City's public transport network,
- a network of NET routes is proposed which includes a proposal for a future Ring Road Route but this is unlikely to be constructed however for at least ten years,
- high levels of pollution and noise,
- accident problems,
- severance of communities either side of the road, and
- an intimidating environment for pedestrians and cyclists.

Some improvements have already been put in place. Significant junction improvements have already been carried out at Dunkirk, QMC and A610. New bus shelters have been provided as part of a City-wide advertising bus shelter contract. Shared use cycle routes have been

provided alongside the Ring Road and an upgraded cycle crossing for the Millennium cycle route. Significant further expenditure is however required to bring the whole route up to a consistent standard.

Opportunities and the need for change: Local control and the need to integrate the route into the City's transport networks

Following the Government's Trunk Roads Review and outcome of consultation, the A52 section of the Ring Road from Gamston to the QMC is being retained as part of the national core network with the A6514 section proposed for detrunking. This will bring the road under the control of the City Council and enable us to develop a strategy which responds more closely to local priorities. Local employers and residents have reported the importance of the route, together with its deficiencies in public transport terms, and the proposals will enable the route to be integrated into the city's transport networks much more effectively. The route serves a number of large travel generators, including:

- Lenton and Queens Drive industrial areas
- Chalfont Drive Government offices
- QMC and City hospitals
- Nottingham University
- Showcase Cinema leisure complex

Opportunities and the need for change: NET network development

Now that Line One is committed, there is a need to step up work on potential future lines; the private sector representatives of the Nottingham Transport Partnership have already begun to identify preferences for future lines. Money has been made available to look more closely at options via the Charging Development Partnership and the potential of the ring road will need to be considered as part of this process, particularly in the light of the travel generators listed above.

Opportunities and the need for change: Local Transport Plan Strategy and proposed City Centre major integrated transport scheme

Associated with plans to transform the city centre in association with the NET proposals, the developing strategy for the conurbation and in particular the approved traffic reduction strategy has highlighted the need to review the role and function of the ring road as a complementary strategy to the proposals in the central area. Together they form a coherent, city-wide movement framework. Work on establishing data on traffic movements has already been commenced to inform the Plan and other studies.

Key aims

- Implementation of a system of comprehensive bus priorities as an interim quality orbital public transport route to build up patronage and establish the corridor for possible further upgrading to a full NET route.
- State of the art interchanges at intersections with major radial bus routes, NET Line One and local rail network development to promote transfer between radial routes and the proposed enhanced orbital service.

- Public transport hubs incorporating high quality waiting facilities developed at QMC and City hospitals and at other key intersections with other main bus corridors.
- Junction improvements at congestion hotspots.
- Road safety improvements.
- Improved crossing facilities for pedestrians and cyclists.
- Maximise development opportunities.

Consistency with Plan objectives and relationship with workplace parking levy proposals

The scheme is central to the delivery of the Plan strategy and is linked to the city centre major scheme. It is essential to ensure that the proposals for NET and the knock on consequences of the City Centre traffic reduction strategy can be accommodated by the wider transport networks of the conurbation. Bus services around the city which link major employment sites will be a major transport alternative to the car and as such the scheme is intrinsically linked to the proposals to introduce a workplace parking levy. This is central to the following Plan Objectives and associated NATA priorities:

a) To increase sustainable accessibility to the City Centre and district centres in ways which enhance economic activity, encourage development in and reduce social exclusion from these centres. NATA e, ec, a, i

b) To reduce traffic growth and to encourage modal change away from the private car particularly for work journeys to the City Centre. NATA e, a, i

d) To improve integration and interchange between modes. NATA i, a

e) To integrate land use and transport planning by encouraging all new major development is well connected to the public transport system and accessible on foot and by cycle. NATA a, i, e

f) To maintain and enhance Greater Nottingham's accessibility to regional, national and international markets, particularly by modes other than the car. NATA ec

g) To reduce social exclusion and to improve the accessibility to transport for disadvantaged groups, particularly disabled people. NATA a

h) To relieve communities from the adverse effects of through traffic, particularly heavy goods vehicles. NATA e, s

k) To improve air quality within the plan area and to alleviate other transport impacts upon health. NATA e

l) To improve road safety, particularly for vulnerable road users. NATA s

Initial option assessment/ potential alternative scenarios

The alternatives considered and reasons for discounting them are as follows:

Ring Road NET route:

- need to establish network extension priorities,
- limited patronage of public transport at present; scheme will build this in interim,

- costs potentially prohibitive, and
- deliverability issues.

Do Minimum/phasing the scheme in smaller elements:

- increased congestion in the short, medium and longer term,
- would work against progress towards plan objectives and targets,
- would compromise the integration elements of the scheme,
- would lead to prolonged construction and traffic disruption, with consequential impact upon bus reliability and air quality,
- would not deliver full range of anticipated user and non-user benefits, and
- economies of scale in terms of scheme development, design and procurement would be lost.

Do Nothing:

- as above but worse impacts,
- increased congestion and poorer air quality, and
- discouraged investment and poorer economic performance of wider city development leading to more unsustainable development patterns.

Full appraisal will follow as the scheme is developed.

Potential components and key benefits:

Public transport benefits

- High quality bus route/NET Ring Road route with enhanced priorities to improve reliability and capacity.
- Bus priority on radial routes approaching Ring Road.
- State of the art interchanges at intersection with NET Line One at Basford and linked to the proposed Beechdale Station on the Radford-Trowell rail line to encourage modal change and integration.
- Public transport hubs incorporating high quality waiting facilities at the QMC and City hospitals and at other important intersections of radial bus routes.
- Ring Road bus stop improvements including raised kerbs.
- Electronic 'real-time' information displays.

Junction improvements

- Capacity improvements at critical junctions including Crown Island, Nottingham Road, Hucknall Road, Edwards Lane and Mansfield Road to reduce congestion and improve air quality.

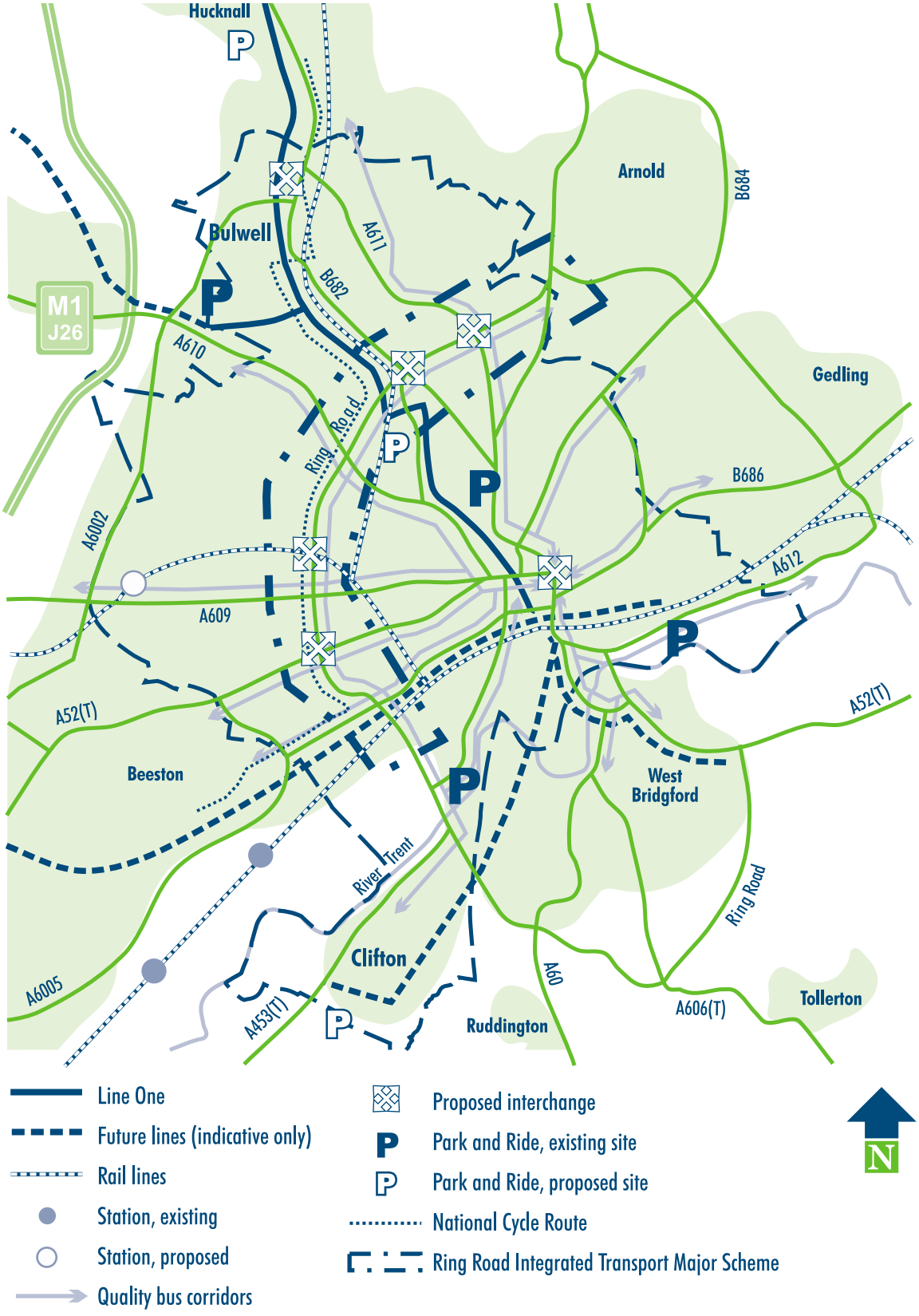


Figure 29

Ring Road Integrated Transport Major Scheme

Road safety/community safety benefits

- Development of speed reduction/enforcement strategy, building on the Speed Camera project.
- CCTV.
- Replacement of underpasses at Queens Drive and Dunkirk with surface level alternatives.
- Lighting improvements.

Pedestrian and cycle facility improvements

- Provision of controlled crossings at all major junctions.
- Upgrading of all crossing facilities to latest disability standards.
- Improved footway lighting.
- Completion of cycle network missing links.
- Upgrading of cycle route and crossing facilities.

Other Issues:

Partnership

The scheme will need to be developed in partnership with the Highways Agency, County Council, Rushcliffe and Gedling Districts, major employers, hospitals, Nottingham University, NET, bus and rail companies as well as with the public and local groups.

Implementation

The improvements proposed will need to be phased over a number of years and integrated with proposed carriageway reconstruction programme, detrunking, outputs from multi-modal studies and outcome of the City Centre Review. The development of the major interchanges will also be influenced by the LRT and local rail network implementation programmes. Due to the detailed consultation and appraisal work required to prepare the scheme it is not envisaged works will commence until the end of the first Local Transport Plan period and will continue into the second Plan period.

A draft programme is as follows:

(i)	Data Collection	Autumn 2001
(ii)	Develop City Wide multi-modal transport model	Winter 2001
(iii)	Preliminary Design	Spring 2002
(iv)	Preliminary NATA appraisal	Summer 2002
(v)	Detailed Design	Spring 2004
(vi)	Detailed NATA appraisal	Summer 2004
(vii)	Commence statutory procedures	Autumn 2004

(viii)	Commence construction	Spring 2006
(vix)	Scheme completion	Spring 2008

Safeguarding issues

At this stage it is envisaged that most if not all of the land required for the scheme will be highway land or other land within the control of the authority. Confirmation of the extent of land required will be specified as the design process progresses, and subsequently safeguarded in the Development Plan review.

6.8 Other significant schemes

Gamston park and ride

The further development of both bus and rail based Park and Ride sites is a key element of the Greater Nottingham transport strategy. A combination of high quality, secure sites with high quality linking services already attracts in excess of 500,000 cars per year, which has helped to improve accessibility to Nottingham City Centre and maintain its top ranking position nationally as a retail centre, and contributed to reducing traffic on the congested radial routes.

The strategy for Park and Ride is based on an inner ring of sites within the conurbation and an outer ring on the edge of the conurbation. Whether these sites are rail or bus based depends on their relationship with existing/proposed rail facilities, the scope for extensive bus priority measures en route, and the cost of operating bus services.

Securing the provision of a new bus based Park and Ride site adjacent to the A52 at Gamston is now the top priority. It is well located to meet demand for travel to the City Centre from south and east of Nottingham, at the junction of a key orbital (ring road) and radial route. The scheme links in with the Trent Bridge Bus Quality Partnership corridor improvements, the City Southside Investment Plan, and is in a corridor where a significant amount of housing development is likely to be located to satisfy Structure Plan requirements.

It is proposed to build the facility in two phases, 600 spaces commencing in 2001/2 and, subject to established demand, expanded by 400 spaces commencing 2003/4. The total cost of the project is estimated at £1,495,000 with the following cost profile:-

£(000)	2000/1	2001/2	2002/3	2003/4	2004/5	2005/6
Phase 1	40	450	385	10	-	-
Phase 2	-	-	30	430	140	10
Total	40	450	415	440	140	10

The scheme contributes to LTP objectives a, b, d, j, k.

In terms of the five appraisal criteria, the scheme has been assessed as follows:-

Environment (Beneficial)	Significant beneficial effects in respect of Park and Ride being a key element of transport strategy to reduce the effects of car traffic. There are resultant beneficial effects on local air quality and reducing greenhouse gas emissions. The site is in the green belt and there will be some adverse effects on landscape. Effects on other environment sub-criteria are neutral
Safety (Beneficial)	In terms of accidents, the effects of the scheme are likely to be neutral, but a lot of attention is given to making the Park and Ride sites safe and secure, and therefore security effects are beneficial.
Economy (Neutral)	The combination of this scheme and associated bus priority measures in the Trent Bridge area will reduce journey times and improve reliability for public transport users, but in isolation the effects of the introduction of Park and Ride are neutral. There are no direct regeneration effects.
Accessibility (Beneficial)	The scheme provides significant accessibility benefits by virtue of introducing a major improvement to transport in the area. Severance/community and social inclusion effects are neutral.
Integration (Beneficial)	Integration effects are very beneficial with improvements to public transport being a key component of central and local government policies, and the specific provision of Park and Ride at this location dovetailing with projected land use in the corridor. Integration with other Government policies is neutral.

A6011 Radcliffe Road : Bus priority measures

As part of the programme of bus priority measures a series of improvements are proposed for Radcliffe Road between Gamston and Trent Bridge, as follows:-

- 2001/2 Bus Priority, Gamston - Davies Road (£120,000)
- 2001/2 Traffic Signals, Davies Road Junction (£230,000)
- 2002/3 Bus Priority, Lady Bay - Trent Bridge (£100,000)
- 2003/4 Bus Priority, Davies Road - Lady Bay (£350,000)
- 2004/5 Bus Priority, Davies Road - Lady Bay (continued) (£200,000)

The proposals carry a high priority because of their important contribution to augmenting other elements of public transport. Firstly, on the A52 Bus Quality Partnership corridor, introduction of traffic signals at the Davies Road Junction will enable a resolution of existing problems for buses of egress onto the main road and allow re-routing of many services through West Bridgford to take advantage of the bus lane recently introduced on Bridgford Road, and the improved conditions for buses through Central Avenue which have been introduced as part of the West Bridgford Environmental Improvement Scheme. Inbound, these services will

also benefit from the proposed bus lane between Gamston and Davies Road. Secondly, bus priority measures on Radcliffe Road, the direct route from Gamston to the City Centre, are seen as essential to support the major investment of the proposed Park and Ride site at Gamston.

The proposed bus priority measures contribute to LTP objectives a, b, g, k, l.

In terms of the five appraisal criteria, the scheme has been assessed as follows:-

Environment (Beneficial)	Beneficial effects in respect of encouraging the use of non-car modes to reduce traffic and thus contributing to improving local air quality and reducing greenhouse gas emissions. Neutral effects on the other environment sub-criteria.
Safety (Beneficial)	Road accidents will be reduced through encouraging modal shift.
Economy (Beneficial)	Beneficial effects will be created by significantly improving journey times and reliability for buses. This in turn contributes to reduced operating costs. Regeneration effects are neutral.
Accessibility (Beneficial)	Severance and social inclusion effects are beneficial by the scheme improving transport facilities in the area, which particularly helps those without access to the car.
Integration (Beneficial)	Integration effects are beneficial, with improvements to public transport being a key component of central and local government policies. Neutral effects on other integration sub-criteria.

Ilkeston Station

The first step in establishing the South Notts Rail Network is the early implementation of a new station at Ilkeston on the Notts/Derbyshire border, which would be served by Central Trains Nottingham to Sheffield service. A demand study completed by Central Trains confirmed that the station has good potential, as follows:-

- a high catchment population of over 40,000 people,
- within commuting distance to Nottingham with a significantly faster journey time than travelling by car,
- within easy reach of major development sites within Derbyshire and Nottinghamshire, and
- has the support of Railtrack and Central Trains, and meets the economic, social and environmental objectives of the LTP and Rail Passenger Partnership (RPP).

A recent study undertaken by the consultants JMP has identified good cycle and walking links into the station and car parking space for 130 cars. It also confirmed that there will be full access for people with disabilities.

A pre-qualification bid to the RPP fund has been made for the station in conjunction with Derbyshire, and Central Trains have confirmed a contribution of £100,000 in their franchise replacement proposal. It is proposed to design the station during 2000/01, and this will take account of the turnback requirement for the later development of the South Notts Network.

Implementation is expected in the first year of the Plan with the station opening in May 2002. The proposed funding package is:-

£(000)	00/01	01/02
Rail Passenger Partnership	50	1,450
Greater Nottingham Local Transport Plan	25	200
Derbyshire Local Transport Plan	25	200
Central Trains		100*
Total	100	1950

*subject to variation based on net present values.

The scheme contributes to LTP objectives a, b, d, f, g, k, l.

In terms of the five appraisal criteria, the proposed station has been assessed as follows:-

Environment (Neutral)	Beneficial effects are created by encouraging a modal shift leading to reduced traffic and thus contributing to improving local air quality and reducing greenhouse gas emissions. Some negative effects are created by construction noise, noise and pollution from an increased number of train journeys, and some land will be required for car parking purposes.
Safety (Beneficial)	The scheme will provide significant non-user benefits through a reduction in road accidents through modal shift.
Economy (Beneficial)	Modal shift will provide beneficial improvements to journey times for non-users. Specific regeneration criteria of NATA are not satisfied, but significant local economic benefits are derived through the high number of economically active people living in the catchment area of the station and the proximity of a major tourist attraction, the American Adventure Park.
Accessibility (Beneficial)	Improved access will be provided to public transport which will be particularly beneficial to those without access to the car. Access to rail services will be a genuinely attractive alternative to the car.
Integration (Beneficial)	At the policy level integration is achieved by assisting sustainable objectives of the LTP, and playing a key role in influencing the location of new development as per the Local Plan. Integration with other modes is achieved by good pedestrian and cycle links and the provision of secure park and ride facilities.

A60 Ring Road - Woodthorpe Drive : Bus Priority Measures

The A60 is an important Bus Quality Partnership route on the north side of the City. Bus lanes already exist over much of the length of the route between Sherwood and the City Centre, and there are programmed proposals within the City of Nottingham for a bus lane between Woodthorpe Drive and Sherwood. The proposal to also introduce a bus lane between the Ring Road and Woodthorpe Drive, on this short section of A60 to be de-trunked, will complete the current programme of bus priority measures between the Ring Road and City Centre. The scheme is estimated to cost £250,000 and, subject to funding, is programmed for construction in 2001/2.

The proposed bus priority measures contribute to LTP objectives a, b, g, k, l.

In terms of the five appraisal criteria, the scheme has been assessed as follows:-

Environment (Beneficial)	Beneficial effects in respect of encouraging the use of non-car modes to reduce traffic and thus contributing to improving local air quality and reducing greenhouse gas emissions. Neutral effects on the other environment sub-criteria.
Safety (Beneficial)	Road accidents will be reduced through encouraging modal shift.
Economy (Beneficial)	Beneficial effects will be created by significantly improving journey times and reliability for buses. This in turn contributes to reduced operating costs. Regeneration effects are neutral.
Accessibility (Beneficial)	Severance and social inclusion effects are beneficial by the scheme improving transport facilities in the area, which particularly helps those without access to the car.
Integration (Beneficial)	Integration effects are beneficial, with improvements to public transport being a key component of central and local government policies. Neutral effects on other integration sub-criteria.

A610/A6002 Nuthall Roundabout Improvement

Nuthall Roundabout is a key intersection on the Strategic Road Network between the A610 radial route and the A6002 orbital road. The A610 links the Greater Nottingham Area with the M1 Motorway at the nearby Junction 26. There are significant congestion and safety problems at the junction. Queues on the A610 (west) approach are a particular problem extending back and interfering with Junction 26 in peak periods. To minimise such effects traffic signal settings favour the A610 (west) to the detriment of conditions on the other approaches. There are also serious adverse effects on the bus services on the A610/B600 routes which fall within a Bus Quality Partnership corridor. Pedestrian/cycle facilities are minimal.

Even though exacting modal shift targets have been applied to significant new development proposals in the area and traffic growth may be reduced by modal shift targets for the Greater Nottingham Area, in future there is expected to be increased traffic through the junction. The situation is not helped by the geographical location of the intersection. For example, the introduction of NET Line One to the nearby Phoenix Park will be a major factor in encouraging a switch from the car to public transport, but vehicles from the M1, A610 (west) and A6002 heading for its Park and Ride site still have to pass through Nuthall Roundabout.

Clearly, as time moves on, further pressure will be placed on the operation of the roundabout resulting in an overall worsening of peak period conditions. This would not only be serious in terms of congestion affecting air quality, the economy etc, but would have a serious knock-on effect of undermining the measures to assist public transport already introduced on the B600 approach and programmed for introduction on the Nottingham Road approach later in 2000/1.

Furthermore, although some of the safety concerns at the junction were addressed by improvements undertaken in 1996, the roundabout continues to have the highest accident rate in the County. Knock-on effects at Junction 26 also raise safety concerns.

To address these combined problems a package of measures is proposed comprising pedestrian/cycle facilities and congestion management improvements so that buses on the A610/B600 corridor are not unduly delayed and that interference at junction 26 is minimised.

Proposals for combined pedestrian/cycle facilities on Low Wood Road and Woodhouse Way are included in the cycle programme. The remainder of the package, the provision of pedestrian/cycle crossings on Low Wood Road and A610 (east) and modest carriageway widening, forms the proposed Nuthall Roundabout (Phase 3) scheme.

The total cost of the scheme is £765,000 with the following cost profile:-

Year	2000/1	2001/2	2002/3	2003/4
£(000)	20	270	400	75

In addition, the developers of the proposed Nottingham Business Park approximately 1 kilometre to the south of Nuthall Roundabout have entered into a Section 106 Agreement to provide an extra lane on the Woodhouse Way approach to the junction to accommodate the development traffic and to contribute £150,000 towards integrated transport measures in the area, particularly pedestrian and cycle facilities unless they have already been undertaken by the County Council.

The Nuthall Roundabout (Phase 3) scheme contributes to LTP objectives a, b, c, f, i, k, l.

In terms of the five appraisal criteria, the scheme has been assessed as follows:-

Environment (Beneficial)	Beneficial effects in respect of reducing congestion helping to improve local air quality. Neutral effects on other environment sub-criteria.
Safety (Beneficial)	Road safety will be improved.
Economy (Beneficial)	Beneficial effects will be created by improving journey times, and reliability will be improved for buses. This in turn contributes to reduced operating costs. Regeneration effects are neutral.
Accessibility (Beneficial)	Improved access will be provided for pedestrians, cyclists and public transport, and the new pedestrian/cycle crossing will reduce severance.
Integration (Beneficial)	The scheme is consistent with integrated transport policies and contributes to Structure Plan and Local Plan objectives of maintaining Greater Nottingham's accessibility to regional, national and international markets.

6.9 Joint appraisal summary tables and finance forms

The appraisal summary tables, major scheme appraisals and finance forms are submitted separately. Copies of these are available on request.

7 Monitoring

7.1 Background to monitoring

Through the last decade, Greater Nottingham has attracted a significant level of Government capital funding for local transport schemes. In order to demonstrate the effective investment of this money and future resources in line with the over-arching principles of the Integrated Transport White Paper, it is essential that comprehensive and meaningful monitoring is undertaken.

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

As 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 methodologies for forecasting the effects of future schemes to be developed.

As a complementary measure, Nottingham City Council is in the process of developing a multi-modal transportation model for the City. This will be a valuable tool to evaluate and inform transportation policy.

Monitoring will include:

Traditional road traffic monitoring:

- traffic flows and composition,
- traffic growth,
- journey times,
- junction delays, and
- road safety statistics.

Baseline Monitoring will include:

(to provide a snapshot against which travel behavioural changes can be assessed)

Quantitative -

- modal share,
- pedestrian counts,
- use of the cycle network,
- car park usage, and
- car occupancy.

Qualitative -

- attitudinal surveys,
- Best Value Perfomance Indicators
- citizens' panels, and
- local workshops.

Scheme Monitoring:

- before and after studies.

Complementary Monitoring:

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

7.2 Monitoring results

7.2.1 Traffic flow and congestion monitoring

Both authorities undertake monitoring of traffic volumes and growth, radial route journey times and junction delays.

Traffic volumes have been comprehensively monitored in Greater Nottingham since the early 1980's. Data is obtained from a number of sources to provide information on annual growth, seasonal and daily variation:

- 35 Automatic Traffic Count (ATC) sites linked to the urban traffic control system supplemented by a number of other permanent and rotating ATC installations,
- information from the DETR's National Traffic Census, classified by vehicle type, and
- other counts, classified or unclassified (scheme specific).

In Greater Nottingham there has been an increase in Annual Average Daily Traffic of 9.7% over the last ten years (1989-1999). This compares with a national increase of only 0.5% on major built-up roads over the same period. Whilst this is clearly a cause for concern, it does reflect a corresponding increase in economic development in the Plan area. Traffic flows on the main routes within the Plan area are shown in Figure 30. More detailed information on peak period and daily traffic flows is contained in Appendix A - Greater Nottingham Road Traffic Reduction Act Report.



Figure 30

Greater Nottingham traffic flows 1999
Annual average daily traffic

The key effect of increased vehicular activity is congestion, and the environmental, economic and social impacts that it brings. Inbound journey time surveys have been carried out annually in the morning peak period on the major radial routes since 1991 and the results in terms of average journey speeds and junction delays are summarised in Table 20 below.

Table 20 a.m. peak inbound journey speeds and junction delays, Greater Nottingham - 1991,1995 & 1999.

Year	Average Journey Speed (mph)	Number of Junctions > 1 minute Average delay	Number of Junctions > 2 Minutes Average Delay
1991	15.5	34	15
1995	16.3	37	15
1999	16.6	45	18

The extent of morning peak congestion in 1999 is illustrated in Figures 31 and 32 which indicate journey speeds and junction delays on the major radial routes in the Plan area. A programme of surveys to monitor outbound evening peak period congestion has also been established, together with others on orbital routes. The initial results from these will be presented in next year's Annual Monitoring Report.

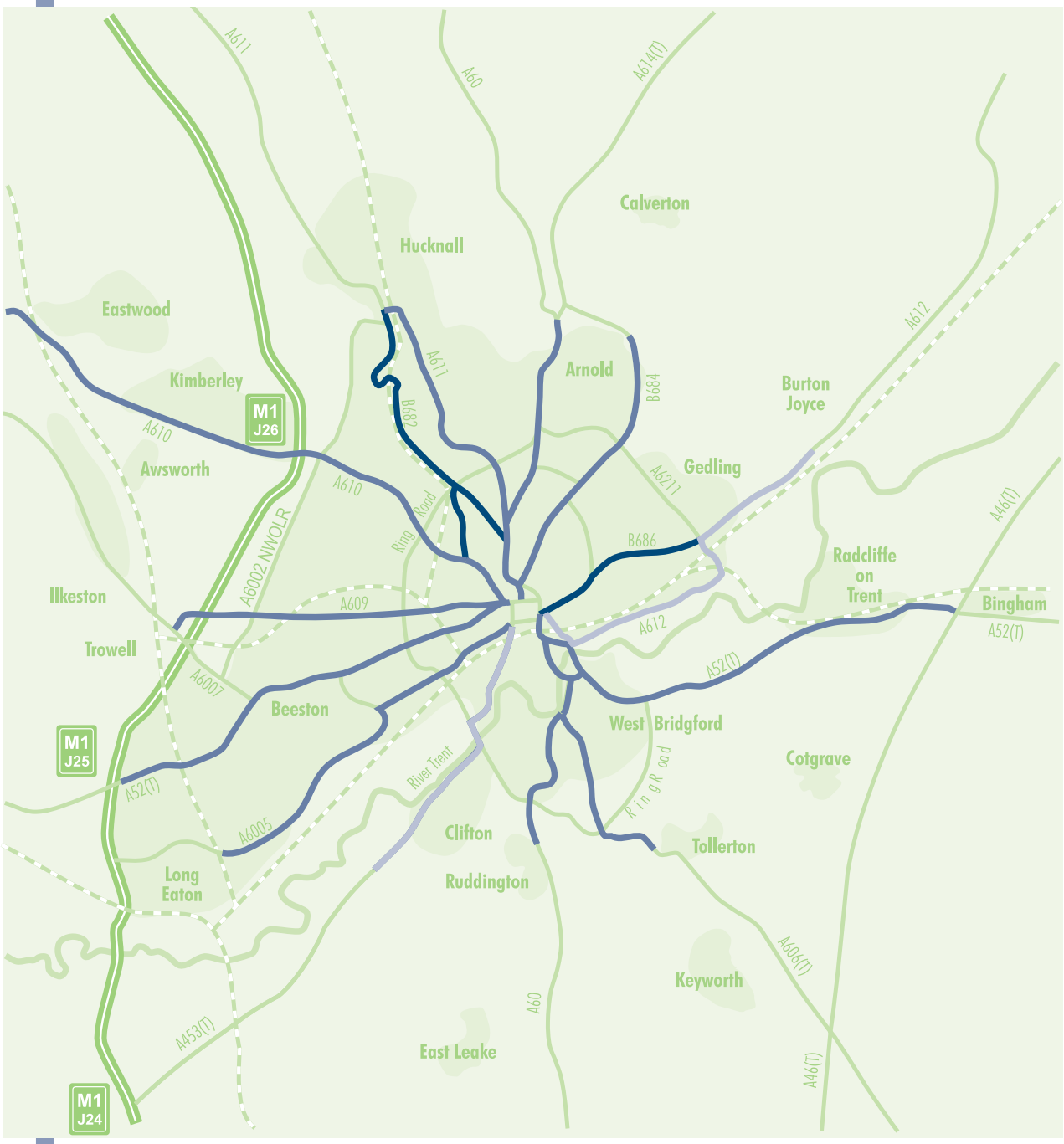
One response to congestion has been peak period spreading. Motorists alter their journey times, either earlier or later, to attempt to avoid morning peak hour congestion.

This is illustrated in Table 21 below and Figure 33.

Table 21 a.m. Peak Period Traffic Flows into the Inner Traffic Area

Time Period	1987 Flow*	1999 Flow*	% Change
07.00-08.00	11010	13272	+20.5
08.00-09.00	17680	17594	-0.5
09.00-09.30	6280	7162	+14.0
07.00-09.30	34970	38028	+8.7
07.00-10.00	40280	44058	+9.4

*October, Monday to Friday average inbound flows



≤14mph
14-18mph
18-22mph

N

Figure 31

Greater Nottingham am peak period inbound journey speeds, 1999

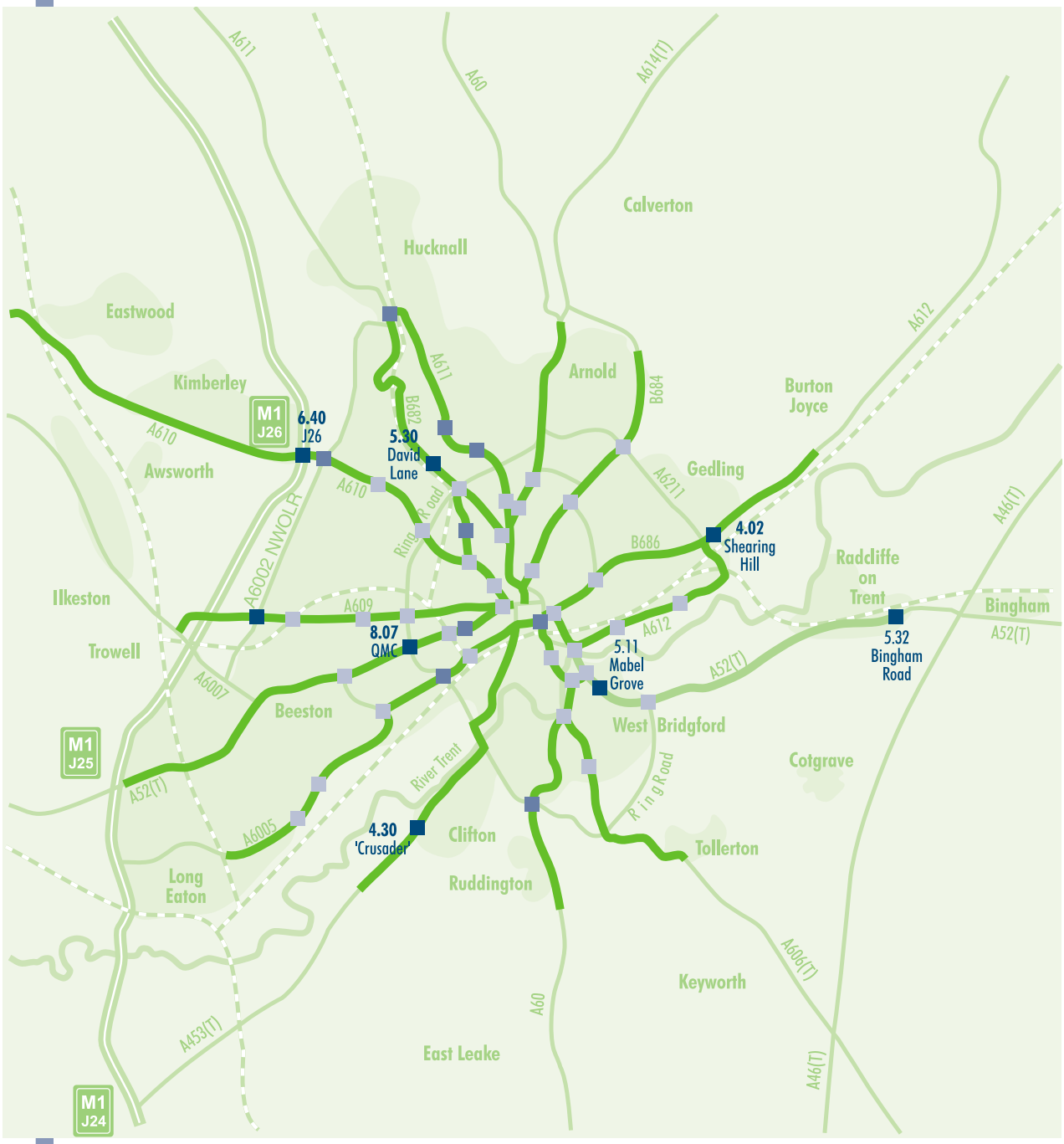


Figure 32

Greater Nottingham am peak period inbound junction delays, 1999

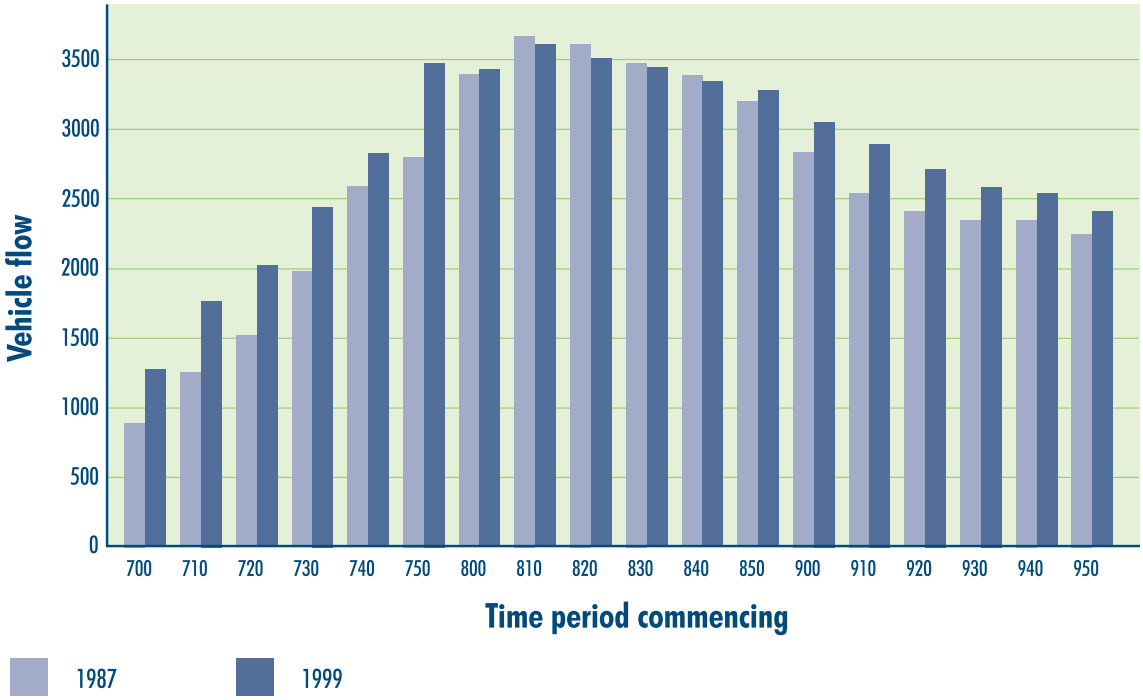


Figure 33

Inner Traffic Area Cordon
am peak period inbound traffic

Whilst the morning peak hour (08:00-09:00) flows into the Inner Traffic Area have remained virtually unchanged, the 07:00 to 08:00 and 09:00 to 09:30 flows have increased by 20.5% and 14.0% respectively. This clearly indicates that morning inbound journeys are spreading out of the peak period.

7.2.2 Modal share

One of the key indicators will be modal share. Until 1998 modal share was monitored comprehensively only once per decade through the National Population Census and only for journeys to work. Current latest information is based on 1991 Census; the next Census is due 2001 and the results are not anticipated before 2003. Clearly this timescale was too long to enable short to medium term trends and impacts of the Plan strategy to be monitored and identified.

As a result, an annual multi-modal cordon survey is now undertaken on the major radial routes into Nottingham's Inner Traffic Area. The first survey was carried out in 1998. Table 22 indicates the "trend" between the first three years. In future years the quality and accuracy of bus occupancy data will be enhanced by using electronic ticketing data supplied by local bus operators.

The difference between the three years' data are considered insignificant and do not allow conclusions to be formed about trends other than the position being relatively stable.

Table 22 Multi Modal Cordon Survey Results 1998-2000

am Peak Period (07.00-10.00)
Inbound Personal Motorised Transport into the Nottingham Inner Traffic Area 1998 - 2000

	Total People Movements			Car Modal Share			Car Average Occupancy			Bus/Minibus Modal Share			Motor Cycle Modal Share		
Radial Route and Location	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**	**1998**	**1999**	**2000**
A6011 Lady Bay Bridge	3600	3500	3500	98.3	98.3	98.3	1.24	1.22	1.24	1.1	1.1	1.1	0.6	0.6	0.6
A60(S) Trent Bridge	12200	12750	13150	62.5	65.3	64.2	1.27	1.29	1.29	37.0	34.1	35.5	0.5	0.6	0.3
A453 Clifton Lane	8200	7900	8050	70.6	73.9	73.4	1.25	1.24	1.19	28.9	25.6	26.0	0.5	0.5	0.6
A6005 Abbey Bridge	4400	3500	3950	80.8	80.4	76.4	1.28	1.29	1.24	18.2	18.6	22.6	1.0	1.0	1.0
A6200 Derby Road	6600	6900	6300	60.1	62.1	55.8	1.24	1.25	1.28	39.5	37.6	43.9	0.4	0.3	0.3
A609 Wollaton Road	5500	5450	5550	66.8	69.0	65.2	1.31	1.35	1.25	32.4	30.3	33.8	0.8	0.7	1.0
B690 Aspley Lane	2500	2650	2650	67.3	66.1	62.3	1.36	1.36	1.31	32.2	33.4	37.3	0.5	0.5	0.4
A610 Nuthall Road	5400	6000	5650	69.9	69.8	70.2	1.32	1.29	1.22	29.6	29.4	29.1	0.5	0.8	0.7
B682 Vernon Road	3900	4500	3950	53.4	47.8	58.1	1.35	1.35	1.35	46.0	50.8	41.3	0.6	1.4	0.6
A611 Hucknall Road	4300	4250	4200	66.4	61.2	60.7	1.32	1.38	1.27	33.0	38.4	38.5	0.6	0.4	0.8
A60(N) Mansfield Road	6300	5550	6100	67.6	67.0	63.4	1.27	1.21	1.28	32.0	32.6	36.1	0.4	0.4	0.5
B684 Woodborough Road	5700	5050	5100	78.8	79.5	82.8	1.29	1.15	1.29	20.7	19.9	16.6	0.5	0.6	0.6
B686 Carlton Road	6400	5600	5750	63.0	61.9	59.0	1.51	1.26	1.24	36.3	37.4	40.3	0.7	0.7	0.7
A612 Manvers Street	3200	3700	2550	91.3	91.5	89.1	1.29	1.19	1.22	8.1	7.8	10.2	0.6	0.7	0.7
Total/Weighted Average	**78200**	**77300**	**76450**	**69.4**	**69.3**	**68.3**	**1.29**	**1.25**	**1.26**	**30.1**	**30.1**	**31.1**	**0.5**	**0.6**	**0.6**

Note: Analysis excludes HGVs and Light Goods Vehicles

In order to help inform the monitoring of LTPs in the East Midlands and to continue the joint working which has benefited the region, it is suggested that a co-ordinated exercise to benchmark and monitor travel patterns be undertaken. It is proposed to undertake a travel survey using a common format, as far as possible, for the Nottingham, Leicester and Derby Travel to Work Areas, which will seek information about actual travel behaviour.

Travel to work, school, shopping and leisure will be included, together with some qualitative questions seeking opinions on transport issues. By undertaking the survey on a joint basis, travel patterns in much of the sub area will be capable of being compared with the National Travel Survey. It should provide a useful tool to review progress towards meeting the various objectives and targets of the authorities' Plans on a comparative basis.

The surveys and mechanisms for monitoring will be developed in close partnership with DETR. Through use of existing Citizen's Panels and other established Council consultation mechanisms, it is envisaged that representative samples will be met by the survey and, subject to resources, the exercise will be repeated at appropriate intervals to feed into the Progress Monitoring Reports.

7.2.3 Road Safety

A Monitoring Of Greater Nottingham Area

In 1999, 3331 people were injured or killed in reported road injury accidents in the Greater Nottingham conurbation. This figure has remained remarkably stable since 1979 when records were systematically recorded. In the corresponding period the traffic growth has been over 40%. These figures clearly demonstrate that in overall terms, safety is increasing per vehicle kilometre travelled. However, the trend conceals very large changes which are occurring in mode of travel and severity of injuries sustained.

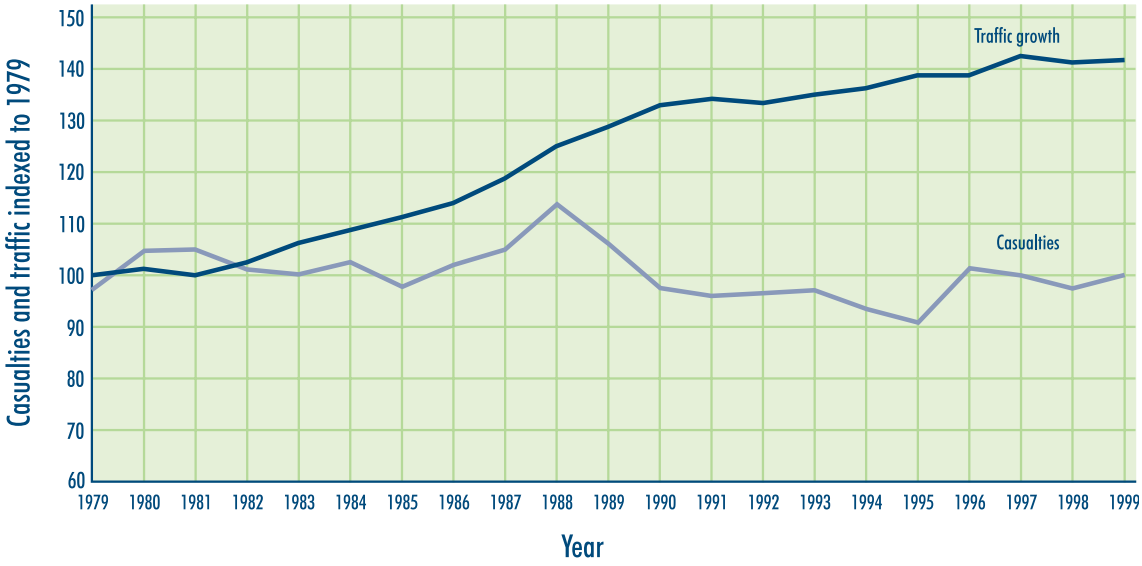


Figure 34

Casualty trends and traffic growth in Greater Nottingham Local Transport Plan area

Figure 35 shows the 64% increase in car and taxi casualties compared to corresponding decreases for most other modes of transport, especially motorcycles. The reductions are not an indication of improved safety for these groups, but reflect the decline of use of these modes of transport.

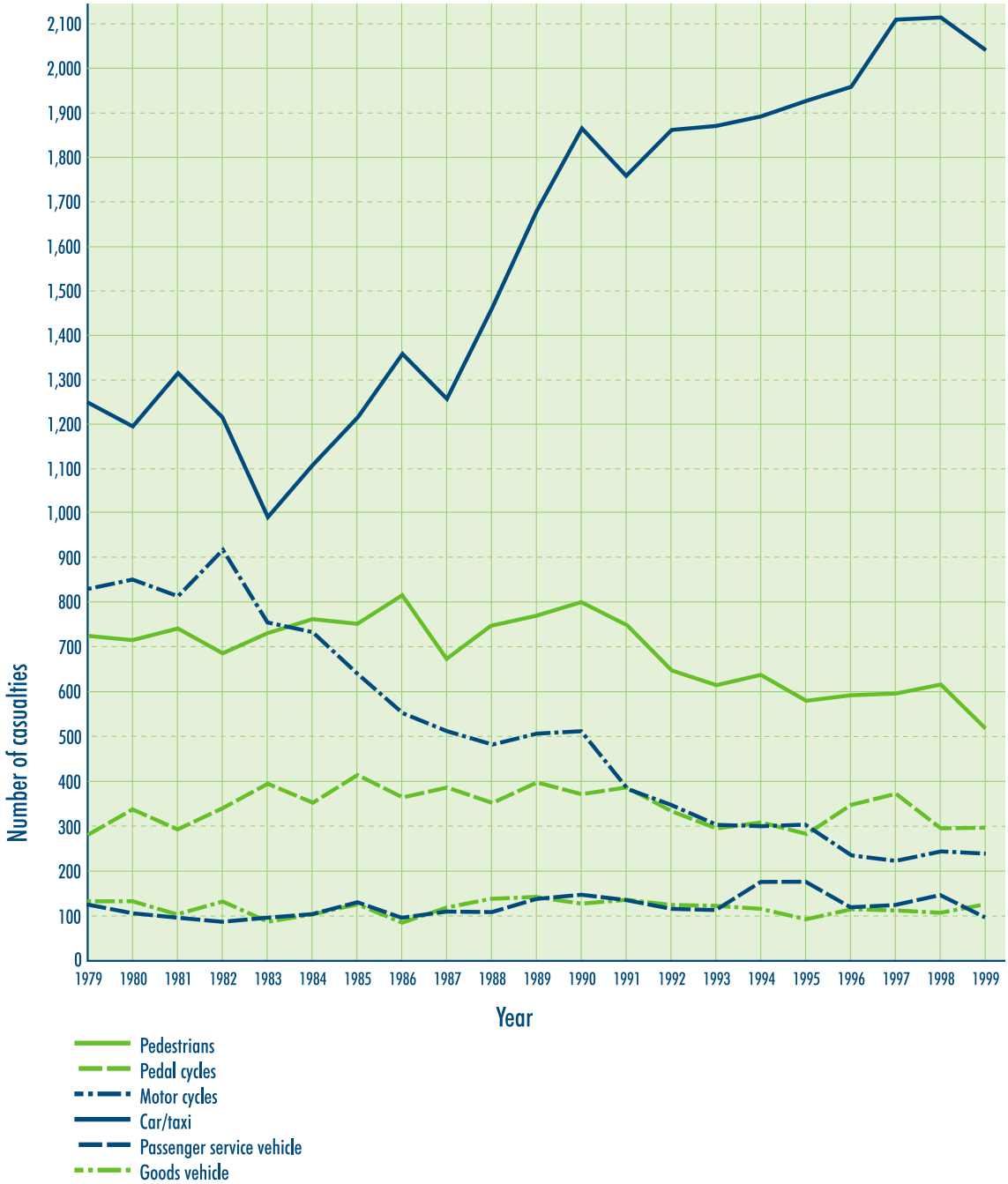


Figure 35

Casualties by mode of travel in Greater Nottingham

Fatal and serious casualties have fallen dramatically for all modes of transport since 1979 and the trend demonstrates that the demanding 40% target reduction by 2010 is achievable. A corresponding decline is also noticeable for child fatal and serious casualties, (see figure 37). Slight casualties have increased by 14% since 1979, mostly attributable to the phenomenal rise in car and taxi casualties. This trend in demonstrated in figure 38.

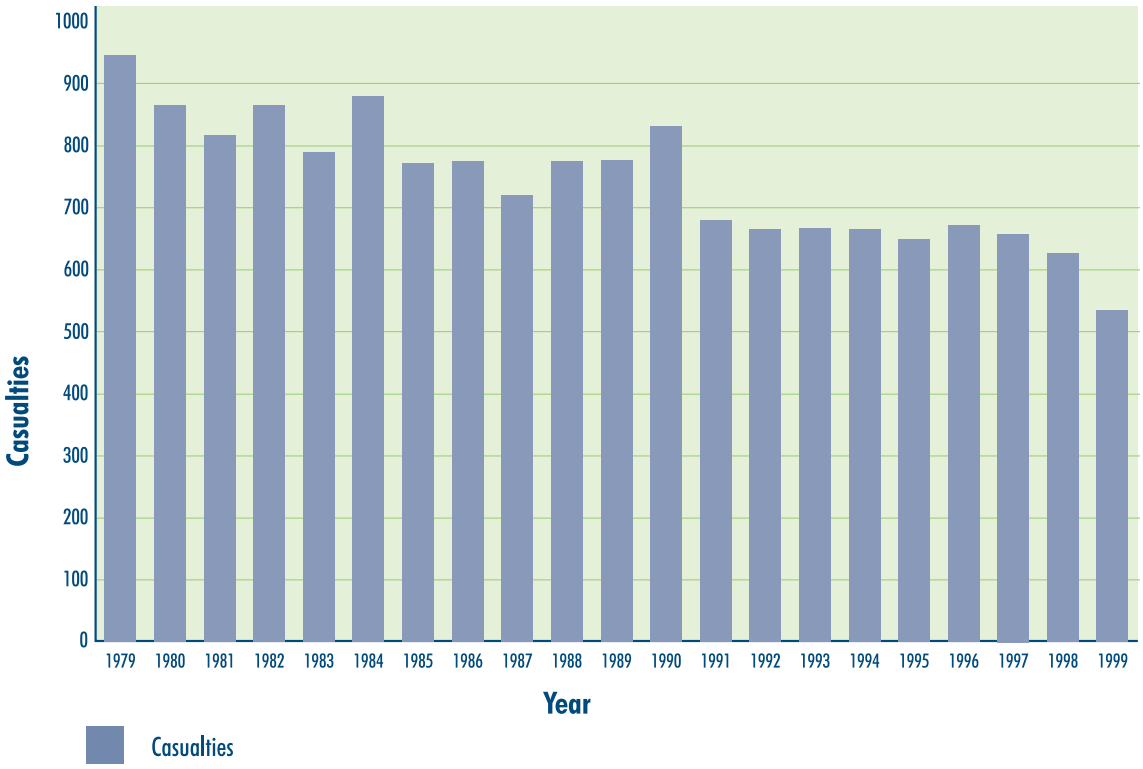


Figure 36

Casualties in Greater Nottingham (killed and seriously injured)

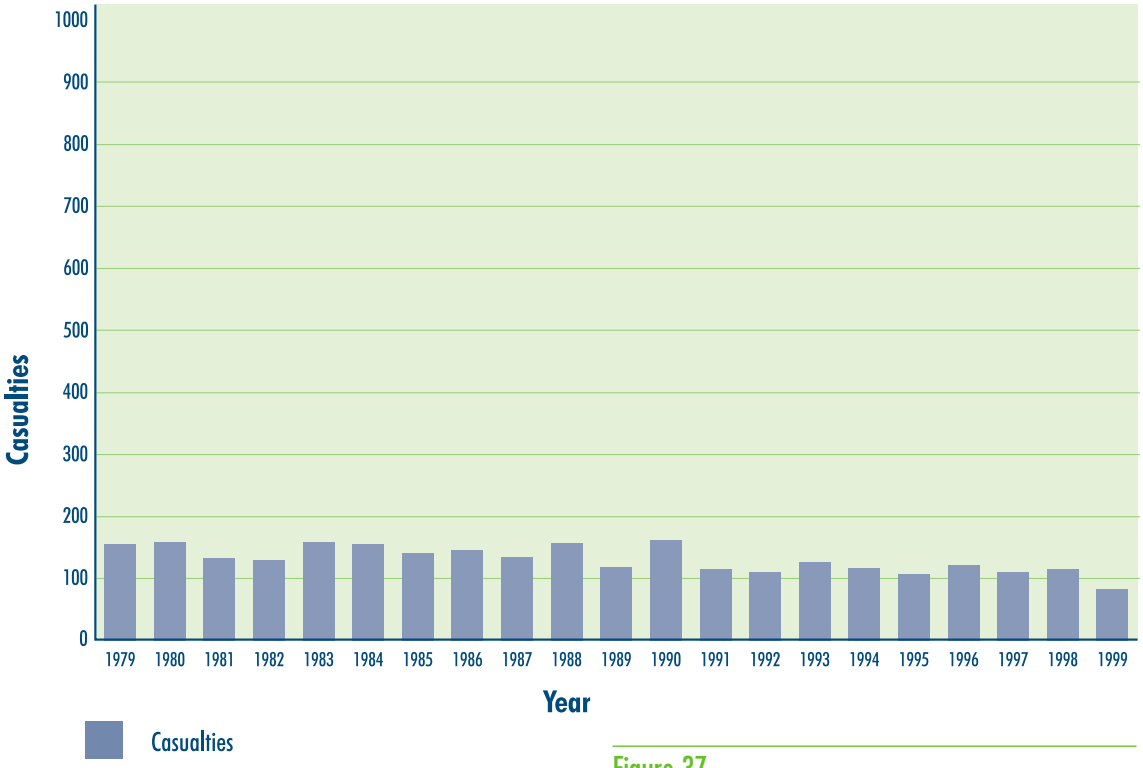


Figure 37

Child casualties in Greater Nottingham

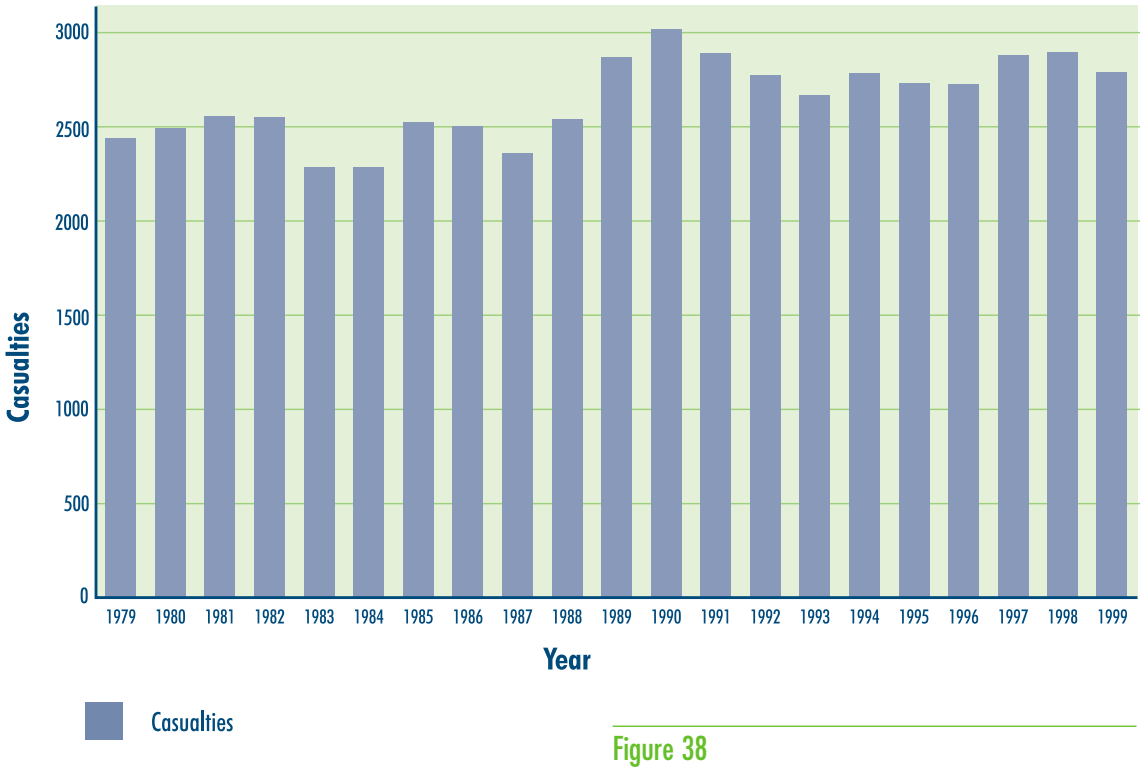


Figure 38

Slight casualties in Greater Nottingham

B City Of Nottingham Monitoring

The City Council has adopted local casualty reduction targets which are more demanding than the national targets. Whilst it adheres to the 40% killed and seriously injured reduction for all casualties, and the 50% reduction for children killed and seriously injured, the City is proposing to reduce slight casualties by 10% irrespective of traffic growth. These targets will be achieved by implementing a road safety strategy which is embodied in a Road Safety Plan produced jointly within a partnership framework. Part of this strategy is the management of vehicle speeds using digital cameras funded through the hypothecation of fixed penalty fines. The project, described in more detail in Chapter 4 will save 236 reported injury accidents in its first two years of operation.

Because of this project the City Council feels it will be able to achieve slightly higher targets than those set by The Government. The 1994-1998 baseline figures, the City Targets for 2010 and the 2005 milestone targets are presented in Table 23 below.

Table 23 Nottingham City Council casualty data and targets

Figure	Killed or Seriously Injured Casualties Casualties	Killed or Seriously Injured Child	Slight Casualties
1994-1998 Baseline	323	59	1451
2005 Milestone	248	42	1367
2010 Target	194	30	1306

The full data table for Nottingham City Council casualty statistics is presented below.

Monitoring of Local Safety Schemes

Nottingham City Council has monitored the accident savings of all Local Safety Schemes implemented since Local Government review in 1998. The results are shown in Table 24. Before this date Nottinghamshire County Council was the Highway Authority. Consequently Local Safety Schemes introduced in the City in the period 1993-1997 have been included in the County monitoring section which follows.

Table 24 Local Safety Scheme accident saving in the city of Nottingham

	Average number of reported injury accidents per annum before scheme implemented				Average number of reported injury accidents per annum after scheme implemented				Predicted accident savings pa	Predicted % savings	Actual % saved pa	Actual % saved
Severity	Fatal	Serious	Slight	All	Fatal	Serious	Slight	All				
All schemes implemented in 1995	1	23	82	106	1	15	63	79	29	27.4	27	25.5
All schemes implemented in 1996	2	19	63	84	3.5	8.5	47.5	60	19	22.6	24.5	29.2
All schemes implemented in 1997	1	14	58	73	0	8	31	39	17	23.3	34	46.6
Total	**4**	**56**	**203**	**263**	**4.5**	**31.5**	**141.5**	**178**	**65**	**73.3**	**85.5**	**101.2**
Average	**1.3**	**18.7**	**67.7**	**87.7**	**1.5**	**10.5**	**47.2**	**59.2**	**21.7**	**24.4**	**28.5**	**33.7**

It should be noted that the predicted savings of schemes (24.4%) is consistently lower than the actual savings (33.7%). This indicates that road safety staff are underestimating the effectiveness of Local Safety Schemes, and that the engineering works are a highly cost effective method of reducing casualties.

Road Safety Engineering Schemes 2000/2001

The 2000/2001 capital budget for Local Safety Schemes within the City is £435,000. This is supplemented by a revenue budget for minor schemes of £55,000. Work on the following schemes shown in Table 25 will be undertaken in the current financial year.

Table 25 Road safety engineering schemes 2000/2001

Scheme	Cost of Scheme (£)	Total Accidents		Predicted Savings		Fyerr on LTP Funding (%)
		All	KSI	All	KSI	
Melbury Road Traffic Calming	135,000	4.2	2.1	1.8	0.9	319
Clifton Estate Traffic Calming[1]	600,000	25.0	7.1	12.5	3.5	185
Stockhill Lane Toucan Crossing[2]	70,000	2.0	0.8	0.7	0.2	120
Digital Speed Cameras[3]	100,000	871.0	174.0	118.0	19.0	5000
Castle Boulevard/Castle Bridge Road Signal Improvement	25,000	3.0	0.5	2.3	0.5	520
Broxtowe Lane/Sherbourne Road Zebra Crossing conspicuity and surface improvements	12,000	2.0	0.5	1.0	0.3	440
Nuthall Road/Broxtowe Lane Signal Modifications	12,000	5.0	0.75	0.5	0.1	240
Gregory Boulevard/Birkin Avenue Junction Improvements	12,000	3.3	0.75	0.6	0.1	270
Victoria Centre Signal Improvement for Pedestrians	10,000	4.4	1.0	0.4	0.1	255
Devon Drive Pelican Crossing conspicuity Improvement	10,000	1.5	0.8	0.5	0.3	365
Lucknow Drive Area Traffic Calming[4]	15,000	1.8	0.8	0.9	0.4	495
Surfacing and lighting Mass Action Plans	40,000	Sites still to be identified				+250
Other minor Local Safety Schemes	12,500	Sites still to be identified				+250

1. £100,000 from Local Safety Scheme block 2000/01. £100,000 from Safer Travel to School block 2000/01, then £200,000 in 2001/02 and 2002/03.
2. Jointly funded with £30,000 contribution from Traffic Management Revenue budget.
3. Contribution to £1.9 million, 2-year pilot project involving the hypothecation of Fine revenue. £200,000 contribution to be provided by the Highways Agency.
4. Contribution to Traffic Management Area Traffic calming Scheme.

In addition to the above schemes, work on the following Safer Routes to School schemes will be undertaken in the 2000/01 financial year.

Scheme	Cost of Scheme (£)	Total Accidents		Predicted Savings		Fyerr on LTP Funding (%)
		All	KSI	All	KSI	
Abbotsford Drive Area Traffic Calming and School Safety Zone	50,000	3.5	1.5	1.75	0.75	300
School Crossing Patrol Sites infrastructure improvements	50,000	Sites still to be identified				n/a

C Nottinghamshire County Council monitoring (LTP Area Excluding the City)

In 1999, 1656 people were reported to the Police as having been killed or injured on Greater Nottingham's roads (excluding those within the City of Nottingham). This is a terrible toll in terms of human loss and suffering, as well as in financial costs and disruption. Table 26 gives a detailed breakdown for 1999 alongside a comparison with the 1994-98 baseline.

Table 26 Casualties by road user group in County part of Greater Nottingham (County and Trunk Roads) - 1999

	1994/98 baseline	1999	actual change	% change
Pedestrians				
killed	6	2	-4	-67%
serious	56	46	-10	-18%
slight	127	99	-28	-22%
all casualties	189	147	-42	-22%
Pedal cyclists				
killed	2	0	-2	-100%
serious	38	17	-21	-55%
slight	108	91	-17	-16%
all casualties	148	108	-40	-27%

	1994/98 baseline	1999	actual change	% change
Two wheeled motor vehicles				
killed	5	5	0	0%
serious	48	57	9	19%
slight	82	89	7	9%
all casualties	135	151	16	12%
Car users				
killed	16	8	-8	-50%
serious	152	139	-13	-9%
slight	934	973	39	4%
all casualties	1102	1120	18	2%
Bus & coach				
killed	0	0	0	0%
serious	2	2	0	0%
slight	35	31	-4	-11%
all casualties	37	33	-4	-11%
Goods vehicles				
killed	1	1	0	0%
serious	11	3	-8	-73%
slight	58	82	24	41%
all casualties	70	86	16	23%
Other vehicles *				
killed	0	0	0	0%
serious	2	4	2	100%
slight	10	7	-3	-30%
all casualties	12	11	-1	-8%
Totals				
killed	30	16	-14	-47%
serious	309	268	-41	-13%
slight	1354	1372	18	1%
all casualties	1693	1656	-37	-2%

* minibus, milk float, ambulance, fire tender, agricultural vehicle, slow moving plant, motor caravan, horse, other motor vehicle, other non motor vehicle

Countywide in 1999 the vast majority of casualties (82%) occurred on County Roads with the remaining 18% occurring on the current Trunk Road network. However, it is interesting to note that 33% of the fatalities occurred on the Trunk Road network , thus emphasising the important contribution of the Highways Agency in achieving the Government's national casualty reduction targets for Killed and Seriously Injured casualties (KSI).

At face value, 1999 was an excellent year, particularly in terms of the 47% reduction in fatalities. However, much of this is due to statistical variation from year to year and, whilst the long-term trend for KSI is downward, it is unlikely that 2000 will be such a good year. Road safety is not simply a problem we can wish away, rather it requires a concerted approach across a wide range of issues and organisations.

Killed and Seriously Injured

Greater Nottingham is dominated by the Nottingham conurbation and its satellite settlements, but does include a large rural area in Rushcliffe. In the rural areas there is a particular problem with KSI on rural links. These can sometimes be difficult to treat with engineering solutions because they tend to be somewhat random in geographic location and circumstance.

More detailed analysis has been undertaken, comparing the proportion of fatalities with the overall level of injury accidents in Nottinghamshire for 1994-98. This has revealed the following statistically significant differences:-

Motorcyclists	7% of accidents	17% of fatalities
Pedestrians	10% of accidents	19% of fatalities
Speed involved	18% of accidents	32% of fatalities
Links (i.e. not junctions)	38% of accidents	56% of fatalities
Driver over 70	5% of accidents	16% of fatalities
Single vehicle	16% of accidents	21% of fatalities
Head-on collisions	5% of accidents	16% of fatalities
Darkness	29% of accidents	45% of fatalities
Rural day	26% of accidents	36% of fatalities
Rural dark	11% of accidents	27% of fatalities

It can be seen from the above that a whole range of action is required to tackle fatalities including ETP and enforcement as well as road safety engineering and effective highway maintenance.

Killed and Seriously Injured Children

Of particular concern to both Nottinghamshire County Council and the Government is the level of KSI for children, particularly child pedestrians. Table 27 gives a detailed breakdown of all child casualties for 1999 alongside a comparison with the 1994-98 baseline.

In 1999, 219 children were killed or injured on Greater Nottingham's roads, of these the following facts are pertinent:

- 12% were killed or seriously injured,
- 32% were pedestrians (32% of whom were on a school journey), and
- 19 % were cyclists (10% of whom were on a school journey).

When these facts are considered in relation to KSI alone, the following picture emerges:

- 48% were pedestrians (23% of whom were on a school journey), and
- 15% were cyclists (none of whom were on a school journey).

It is therefore clear that, in terms of child KSI reduction, great emphasis must be placed on the vulnerable mode of walking. The school journey is clearly important but should not be given undue emphasis at the expense of the whole child environment.

Further analysis of all child casualties Countywide has indicated that boys are at particular risk, with 5-11 year old pedestrian casualties running at twice the level for girls, and the all-age casualty figure for male cyclists being five times that for females. Whilst more boys cycle than girls, the pedestrian casualty figure suggests that that male/female behavioural differences may also have an influence.

Targets for Improvement

The Government has set three challenging road casualty reduction targets which the County Council and its partners fully endorse:

a) A 40% reduction in the 1994-98 average for KSI by 2010,

b) A 50% reduction in the 1994-98 average for child KSI by 2010, and

c) A 10% reduction in the rate for slight casualties calculated as the number of people slightly injured per 100 million vehicle kilometres by 2010.

The 1994-98 average KSI was 339, which implies a target of 203 by 2010, or an annual reduction of around 11 per year. Performance in 1999 was significantly better than this (a reduction of 55), however reliable trends require monitoring over a period of more than one year.

1999 KSI Actual: 284

2000 KSI Target: 316

2005 KSI Target: 260

Table 27 child casualties age 0-15 yrs in County part of Greater Nottingham

	1994-98 baseline				1999				Actual Change				Percentage Change			
	fatal	serious	ksi	slight	fatal	serious	ksi	slight	fatal	serious	ksi	slight	fatal	serious	ksi	slight
All child casualties	2	51	53	180	0	27	27	192	-2	-24	-26	12	-100%	-47.10%	-49.10%	6.70%
Child pedestrians	1	24	25	58	0	13	13	56	-1	-11	-12	-2	-100%	-45.80%	-48.00%	-3.40%
Child pedestrians on a school journey	0	7	7	23	0	3	3	19	0	-4	-4	-4	0%	-57.10%	-57.10%	-17.40%
Child pedal cyclists	1	13	14	42	0	4	4	37	-1	-9	-10	-5	-100%	-69.20%	-71.40%	-11.90%
Child pedal cyclists on a school journey	0	0	0	3	0	0	0	4	0	0	0	1	0%	0%	0%	33.30%
Other child casualties	0	14	14	80	0	10	10	99	0	-4	-4	19	0%	-28.60%	-28.60%	23.80%

The 1994-98 average KSI for children was 53, which implies a target of 27 by 2010, or an annual reduction of around 2 per year. Again, performance in 1999 was significantly better than this (a reduction of 26), but reliable trends will take longer to establish.

1999 Child KSI Actual: 27

2000 Child KSI Target: 49

2005 Child KSI Target: 38

It is understood that definitive guidance on the slight target will be issued by Government in September 2000 and the two authorities will base their targets upon the guidance.

Local Safety Scheme Monitoring

To monitor the effectiveness of Local Safety Schemes, the County Council has continued to analyse their performance. It should be noted that the software involved is currently being upgraded and updated figures will be provided to the Government Office in the Autumn. It can clearly be seen from the historic data in the following Table 28 that the actual savings in treated accidents have exceeded the predicted savings for all years.

Table 28 Local Safety Scheme effectiveness

Year of Implementation	Predicted Annual Savings	Actual Annual Savings
1993	34	63
1994	32	44
1995	22	24
1996	54	64
1997	53	60

In addition, the County Council continues to contribute to the national MOLASSES database of road safety engineering schemes and their before and after monitoring.

Road Safety engineering schemes 2000/01 and 2001/02

The 2000/01 Capital budget for Greater Nottingham is £265,000 and the following programme of schemes in Table 29 has already been identified for implementation in 2000/01 and 2001/02:

Table 29 2000/01 and 2001/02 Programme

Scheme	Cost	Problems/Benefits
Stapleford Town Centre traffic calming	£40,000 carry over	
B683 Oxton Road/Flatts Lane visibility improvement	£10,000	Currently 2.3 PIAs per year (1.6 KSI), mostly restarts, will be reduced to 1.3
A610/M1 J26 full signalisation (provisional)	£150,000	Currently 14.8 PIAs per year (1.6 KSI), mostly shunts, will be reduced to 9.0
B684 Dorket Head cross-roads signals	£145,000	Currently 3.6 PIAs per year (0.8 KSI), will be reduced to 2.1
2000/01 surfacing mass action plan	£30,000	Various locations
Total	£375,000	

In addition, the following schemes are under investigation: lighting mass action plans 2000/01 and 2001/02, surfacing mass action plan 2001/02, and trawls such as urban lengths and rest on red. Again there will also be a programme of smaller scale schemes funded by the County Council's Revenue budget.

7.2.4 Travel Plans

Both Authorities are actively involved in the development and promotion of travel plans, through both the implementation of their own staff travel plans and by promoting and encouraging the uptake of company travel plans by other employers in the plan area.

32 % of organisations with over 200 employees have implemented their own travel plans.

15 commuter planners' club meetings have been held since January 1996 with a regular core membership of 18 organisations, although the meetings are usually attended by over 30 organisations often with overseas visitors. Attendance levels are increasing steadily.

Numbers	Measures Adopted
20	Organisations have carried out a staff travel survey as the basis for their commuter plan
13	Organisations have formally published their travel plan
18	Organisations have provided information on the plan and alternative travel options
17	Organisation has produced green travel information for visitors
9	Organisations are planning to reduce the number of car parking spaces
13	Organisations have introduced a car park permit scheme
10	Have set up a car-sharing scheme

6 Organisations offer discounted public transport tickets

6 Organisations have or are planning to introduce cycle loans

7 Organisations have policies on fleet efficiencies

11 Organisations promote the use of alternative modes for travel at work

9 Organisations offer homeworking/teleworking

9 Organisations providing additional measures to promote sustainable travel

7.2.5 Travel to school

Through the medium of the annual Road Safety Quiz which involves pupils aged 7 to 11 years old in both the City and County Council schools, information has been collected on travel to school behaviour of 45,000 children. The data for Greater Nottingham, which was first collected in 1997/98 and is now collected annually, is indicated in Table 30.

Table 30 Greater Nottingham junior school pupils travel to school

District	Pupils		Walk		Car		Bus	
	98/99	99/00	98/99	99/00	98/99	99/00	98/99	99/00
Nottingham	11184	n/a	68%	n/a	27%	n/a	5%	n/a
Broxtowe	4779	4884	65%	65%	33%	33%	2%	3%
Gedling	4503	4708	64%	64%	33%	33%	3%	3%
Rushcliffe	4346	4556	55%	55%	39%	39%	6%	6%

Through annual collection of this data, trend analysis can be undertaken. Investigations are underway to seek equivalent data for other pupils (aged 11-16). This will be monitored and analysed, and reported in the Annual Progress Reports.

7.2.6 Air quality

The authorities and the district councils within the Plan area are actively engaged in meeting the requirements of the Environment Act 1995. The monitoring of air quality in the Plan area has been undertaken via a number of fixed and mobile stations. Located in Nottingham City Centre is a DETR precision real-time air quality monitoring station, part of the Automatic Urban Network (AUN) for which Nottingham City Council is the local site operator. This information is available on the DETR's website at "www.detr.gov.uk." This station is permanent and monitors 5 pollutants identified in the UK National Air Quality Strategy (NAQS). These are:

- ozone - 50% of UK ozone has its origin overseas; respiratory irritant (now removed from Air Quality Objectives),
- sulphur dioxide - respiratory irritant, 22% of total emissions are from diesels,
- oxides of nitrogen - contribute to acid rain; respiratory irritant,
- carbon monoxide - asphyxiant, reduces mental alertness, and
- particulate matter (PM10) - less than 10 microns, responsible for causing excess deaths among those with pre-existing lung and heart disease.

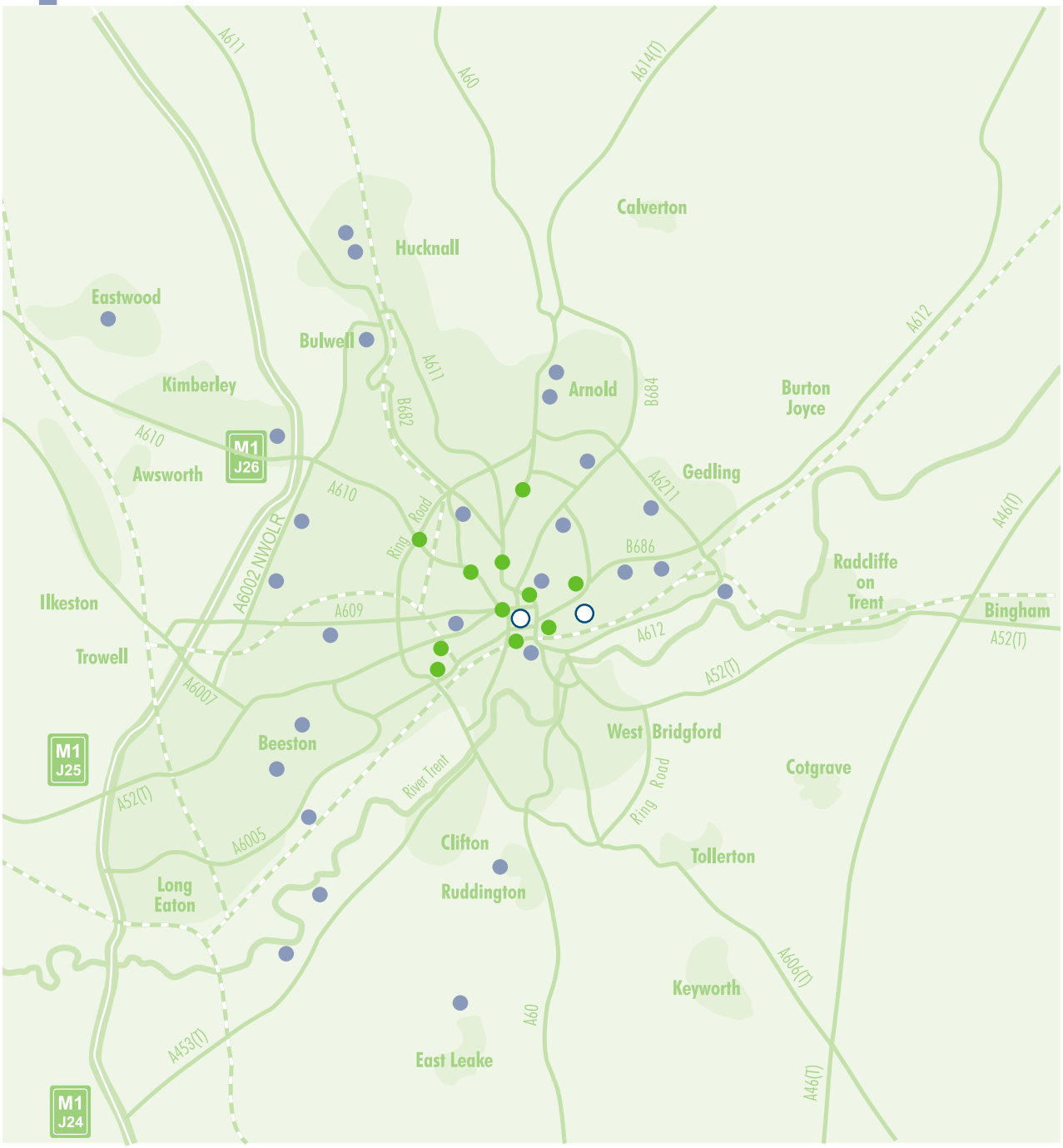
The City also operates a mobile Air Quality Monitoring Station (AQMS) that monitors the above 5 pollutants and three hydrocarbons; benzene, toluene and xylene.

To complement these systems, a total of 11 roadside pollution monitors have been installed in the Greater Nottingham Area. This equipment is linked to the Traffic Control Centre based in Nottingham and enables real-time monitoring to be undertaken of carbon monoxide and nitrogen dioxide, allowing a direct comparison to be made with changes in traffic flows. Figure 39 shows the location of air quality monitoring equipment in the Greater Nottingham LTP area.

Table 31 below indicates the general exceedences above the national air quality objective levels which have been identified in Nottingham through monitoring.

Table 31 AUN Data for 1999

		Number of Exceeds	Days with Exceeds	Maximum Value
PM10 ug/m3				
24 hour mean		0	0	46
annual mean	19	0	-	-
Nitrogen dioxide ug/m3				
1 hour mean		0	0	132
annual mean	44	1	-	-
Sulphur dioxide ug/m3				
15 min. mean		1	1	290
1 hour mean		0	0	197
24 hour mean		0	0	43
Ozone ug/m3				
Running 8 hour mean		53	7	156



- Diffusion tube or dust gauge etc
- Roadside pollution monitor
- Automatic urban network/ Mobile air quality monitoring station

N

Figure 39

Greater Nottingham air quality monitoring

When these results are compared with the relevant Air Quality Objectives, shown in Table 32 below, it can be seen that the objective for nitrogen dioxide (whose main source is from road traffic) is being exceeded.

Table 32 Air Quality Objectives

Pollutant	Concentration	Measured as	Date to be Achieved
PM10	50 ug/m3 not to be exceeded more than 35 times a year	24 hour mean	31/12/2004
	40 ug/m3	Annual mean	31/12/2004
Nitrogen dioxide	200 ug/m3 not to be exceeded more than 18 times a year	1 hour mean	31/12/2005
	40 ug/m3	Annual mean	31/12/2005
Sulphur dioxide	350 ug/m3 not to be exceeded more than 24 times a year	1 hour mean	31/12/2004
	125 ug/m3 not to be exceeded more than 3 times a year	24 hour mean	31/12/2004
	266 ug/m3 not to be exceeded more than 35 times a year	15 minute mean	31/12/2005

An evaluation of the monitored trends, over an albeit relatively short period of time (1996 onwards), shows that the pollutants that are likely to be the subject of the detailed review assessment, monitoring and modelling process prescribed by the Environment Act 1995 are nitrogen dioxide and particles PM10 and sulphur dioxide. Ozone is no longer included as an air quality objective for local authorities because of the significant contribution from remote sources beyond their direct influence.

7.2.7 Pedestrian flows

As part of the continuous monitoring of the City centre, pedestrian flow counts have been undertaken since 1995 with 60 representative locations surveyed regularly in June. Figures shown in the table below represent an average count on a Saturday between the hours of 10.00am and 4.00pm. Selected figures from the surveys are given in Table 33 below.

Table 33 Pedestrian flows in the City centre ('000s)

Year	Clumber Street	Victoria Centre (Main Entrance)	Lister Gate	Friar Lane	Broad Marsh (Main Mall)	Smithy Row	Exchange Walk	Pelham Street
1997	32.52	36.54	32.52	2.28	13.68	19.38	27.12	10.02
1999	38.16	40.74	22.92	4.38	13.53	18.12	31.83	11.25
2000	26.76	35.97	22.65	1.89	14.79	19.98	24.63	13.20

The counts confirm that central locations continue to experience high pedestrian flows of around 35,000 per day with busiest locations being the Victoria Centre main entrance, Exchange Walk, Clumber Street and Lister Gate. Extended pedestrianisation on Pelham Street as well as more attractions in the Hockley area appears to have led to a steady increase in flows in this area.

7.2.8 Cycle network usage

In the late 1980s and early 1990s the Government sponsored the construction of a cycle route network in the southwest quadrant of Greater Nottingham. As part of this work extensive monitoring was undertaken and a 15-point screen-line was established. Unfortunately, due to a lack of resources, no further detailed monitoring was undertaken beyond 1990.

However the survey work was revived in Spring 1998 and the results, on an annual basis, are shown in Table 34. It can be seen that in the period 1990 to 2000 there was an increase of 18.7% in cyclists using the network; this compares favourably with the 11.4% increase at the control point off the network and with the 20.8% decrease nationally. This clearly demonstrates the success of the network to deliver real increases in cycle use.

To further enhance and facilitate cycle monitoring permanent cycle counters have been installed at a number of locations during 1999/2000. These have been installed using former Transport Policies and Programme Package allocations. This ongoing monitoring will allow a much more comprehensive assessment of short term and long term trends to be made and will be fully reported in the first Annual Monitoring Report.

Table 34 Greater Nottingham cycle route network usage trends 1990-2000

	1990 16hr	1998 16hr	1999 16hr	2000 16hr	% Change
Location	**2 Way Flow**	**2 Way Flow**	**2 Way Flow**	**2 Way Flow**	**2000 / 1990**
Clifton Bridge	441	468	458	438	-0.7
Wilford Toll Bridge	666	740	719	709	6.5
Clifton Screenline	**1107**	**1208**	**1177**	**1147**	**3.6**
Welbeck Suspension Bridge	415	688	862	735	77.1
Trent Bridge	459	573	805	704	53.4
Lady Bay Bridge	218	299	292	264	21.1
West Bridgford Screenline	**1092**	**1560**	**1959**	**1703**	**56.0**
Lenton Road (The Park)	94	78	89	78	-17.0
Castle Boulevard	614	653	563	581	-5.4
Canal (adjacent to Castle Boulevard)	57	279	168	269	371.9
City Centre Screenline	**765**	**1010**	**820**	**928**	**21.3**
University (Beeston Lane)	1089	926	874	862	-20.8
University Boulevard	1133	1513	1448	1358	19.9
Canal (Beeston)	68	315	186	240	252.9
Beeston Screenline	**2290**	**2754**	**2508**	**2460**	**7.4**
Middleton Boulevard	331	280	531	429	29.6
Charnock Avenue	246	348	417	355	44.3
Wollaton Road/Faraday Road Junction	476	376	358	467	-1.9

Wollaton Screenline	**1053**	**1004**	**1306**	**1251**	**18.8**
Total	6307	7536	7770	7489	18.7
Daleside Road/Vale Road		388	297	247	
Mansfield Road/Forest Road Junction*	572	552	762	637	11.4
Carlton Road/Porchester Road Junction*		190	258	243	
Alfreton Road*		347	267	340	
National (Great Britain)**					**-20.8**

Notes:

16 hour flow period = 06.00-22.00 hrs

* control point off the main cycle route network

** source: Traffic in Great Britain Quarter 1 2000 data DETR. Based on billion veh.km

7.2.9 Provision for disabled people

The provision of facilities to improve accessibility for people with disabilities in Greater Nottingham will be monitored using the key indicators listed in Table 35 below:

Table 35 Provision for people with disabilities indicators

Indicator	Summer 1998	Summer 1999	Summer 2000
Locations provided with dropped crossings since 1993 (City only)	854	941	1165
Signalised crossings with full impairment provision	62% (total 350)	66% (total 354)	68% (total 364)
Number of raised kerb bus stops	1	59	95+
Buses	total 689	total 700	total 792
DPTAC	76%	80%	99% (783)
Low floor	35%	42%	33% (267)

Year on year reporting of these and further indicators will provide some indication of how the Plan is performing in providing an improved environment of accessibility and mobility.

7.2.10 City Centre Parking

Table 37 summarises the provision of car parking in Nottingham City Centre and related park and ride sites. It can be seen that approximately 41% of the parking stock is in direct local authority control. Through planning controls the City Council can influence an additional 15% of the stock. On-street parking is restricted to one or two hour stay only, and will be subject to charging in due course.

The current charging structure for the major City Council operated City Centre car parks is shown in Table 38. The table also indicates the structure for some of the key private car park operators in the City. The data demonstrates that high long stay commuter car parking charges have been introduced to cover at least 68% of the off-street public car parking stock. It also shows the considerable fiscal incentive to use park and ride facilities rather than City Centre car parking.

The incentive is being reinforced by active measures taken by the City Council to close unauthorised long stay car parks through its planning powers. Overall there could be a reduction of several hundred spaces.

The effect of the charging regime introduced in 1991 (see Figure 40) has been to discourage long stay car parking in the City Centre. The percentage of short/medium/long stay parking acts in the City Council car parks also confirms this as shown in Table 36 below.

Table 36 Fletcher Gate, Broad Marsh and Trinity Square Car Park Ticket Sales

All sites, 1999/00	Short	Medium	Long	Total
	(1-2 hrs)	(3-6 hrs)	(over 6 hrs)	
Number of parking acts	1,010,101	697,257	41,503	1,748,861
% of parking acts	57.7%	39.9%	2.4%	100%

NB excludes Sundays.

It is anticipated that those still undertaking a long stay journey to the City Centre have, and will continue to, use park and ride or other modes of travel where appropriate.

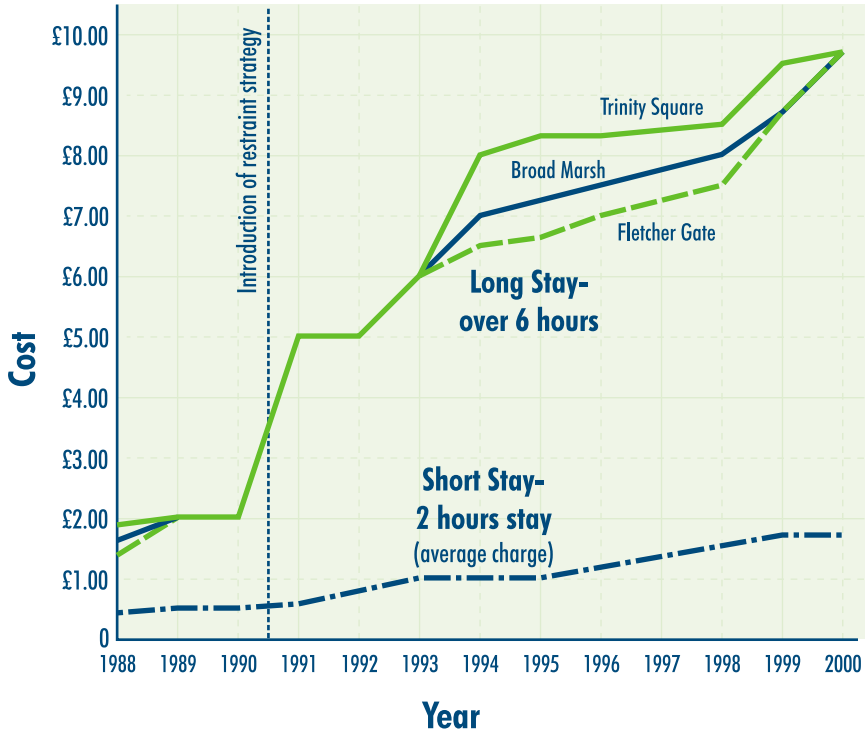


Figure 40

City Centre car park charging regime

Table 37 Nottingham City Centre car parking provision (includes Park and Ride)

Type	Operator	Number of Spaces	% of Stock
Off-street Public	City Council	2740	12%
	Private	6328	26%
	Total	9068	37%
On-street Public	City Council	2700	11%
Off-street PNR	Private	8000	33%
Park and Ride*	City Council	4300	18%
Total		24068	100%

* excludes 360 rail based park and ride spaces

Table 38 Nottingham City Centre off-street public long stay parking charges (includes park and ride)

Location	Number of Spaces	Long Stay Charge
Trinity Square, Broad Marsh and Fletcher Gate (City Council)	2,150	£9.70 (6-9 hours)
Victoria Centre (Old)	1,700	£10.00 (7 hours+)
Victoria Centre (New)	1,050	£10.00 (7 hours+)
Various NCP hours+)	1,500	£8-10.00
Royal Moat House Hotel hours)	600	£10.00 (5-1
Total off-street public parking subject to high long stay parking charges	7,000	(68%)
Other off-street public parking (casual)	3,250 (32%)	£2.50-£4.00 per day £2.35-£6.90 per day (season ticket)
Park and Ride	4,300*	£1.30-£1.60 per day

* excludes 360 rail based park and ride spaces

7.2.11 District Area Parking Provision

The following Table 39 indicates the number of off-street parking spaces available in each of the district areas and includes information relating to the number of spaces for disabled motorists and the number of Shopmobility schemes operating within those areas. Nottingham City Centre car park information is included for comparison.

Table 39 District Car Park Information

District	Total Spaces	Disabled Spaces	Shopmobility Schemes
Nottingham City Centre	9068	207	2
Broxtowe	1357	57	1
Gedling	941	54	1
Rushcliffe	606	14	None
Ashfield (total)	1216	70	None

In Greater Nottingham's district centres parking policies are also being adopted and applied by the Borough Councils to discourage long stay commuter parking.

The parking statistics for the four key districts centres are shown below.

Hucknall (Ashfield) - there are 540 council operated public off-street spaces, of these 65% are intended for short stay parking (4 hours or less). A penalty charge of £50 applies for stays in excess of 4 hours in the short stay spaces.

Arnold (Gedling) - there are 350 council operated public off-street spaces, of these 51% are intended for short stay parking. A penalty charge of £30 applies for stays in excess of 3 hours in the short stay car parks.

Beeston (Broxtowe) - there are 929 council operated public off-street spaces, of these 35% are intended for short stay or Saturday only parking. A penalty charge of £50 applies for stays in excess of 3 hours in the short stay car parks.

West Bridgford (Rushcliffe) - there are 232 council operated public off-street spaces, of these 100% are intended for short stay or Saturday only parking. A penalty charge of £10 applies for stays in excess of 2 hours in the short stay car parks.

7.3 Scheme monitoring

7.3.1 Bus Quality Partnership corridors

Three corridors received improvements through the Bus Quality Partnership (BQP) programme in 1998/1999, these were:

- A60 Mansfield Road/A611Hucknall Road
- A60 Trent Bridge/West Bridgford
- A6200 Derby Road

Before and after studies have been undertaken to evaluate the success of the A60 Mansfield Road and A6200 Derby Road schemes in terms of bus and other motor vehicle traffic journey times and increased bus patronage and the results are presented in Tables 40 and 41 below.

Table 40 A60 Mansfield Road Bus Lanes - before and after survey results

	Bus Average Journey Time		Other Veh. Journey Time		People Movements by Bus	
	Before	After	Before	After	Before	After
Section/Period						
AM Peak Period						
Haydn Road to Hucknall Road	5.15	3.29	4.38	3.39	3050	3460
PM Peak Period						
Hucknall Road to Haydn Road	2.39	2.43	2.20	2.18	3200	3610

Note: all times in minutes.seconds

Table 41 A6200 Derby Road Bus Lanes - before and after survey results

	Bus Average Journey Time		Other Veh. Journey Time		People Movements by Bus	
	Before	After	Before	After	Before	After
Section/Period						
AM Peak Period						
Ring Road to Canning Circus	5.33	5.03	5.16	5.26	1810	1870
PM Peak Period						
Canning Circus to Ring Road	6.18	6.13	8.16	10.21	2590	2700

Note: all times in minutes.seconds

It can be seen that on A60 Mansfield Road significant bus journey timesavings have been made in the morning peak period and bus patronage has increased in both peak periods. From other traffic surveys there is some evidence of other traffic diverting away from Mansfield Road to avoid the bus lane section. Some of this traffic is on residential roads and traffic calming measures are being considered where appropriate. On A6200 Derby Road bus journey timesavings are relatively small, but other vehicle journey times are significantly higher and patronage figures are on an upward trend. Problems have been experienced in the evening

peak period in terms of queuing traffic blocking buses trying to enter the first section of bus lane on the approach to Lenton Boulevard. A further extension of the outbound bus lane on this section is being considered.

The response of the bus operators to the provision of bus lanes on these routes has been promising as the reports below confirm.

7.3.2 Bus operators' reports

Nottingham City Transport

The partnership between the City Council, the City Hospital and ourselves continues to go from strength to strength. July 1999 saw an increase to the services operating through the City Hospital complex. Both patients and staff welcomed this initiative and we have watched passenger's levels increase during the last year. New low floor Solo buses were introduced to these services and we now carry regular wheelchair users. This could not have been achieved without the raised kerbs and the build outs supplied by the City Council on the main corridors serving the hospital grounds.

Our first joint Bus Quality Partnership, the service 12 continues to perform well. The new buses dedicated to this service were certainly welcomed by customers and research has shown that our passengers still put reliability as their top priority. The bus lanes introduced on Derby Road have certainly benefited all services operating along this corridor and drivers of the service 12 have reported savings in time. Average savings of between two and six minutes are still being reported. As with all ventures there are one or two problem areas especially with this corridor. A bottleneck at evening peak exists at Barrack Lane, services are often delayed and some passengers find this extremely frustrating.

Research has also established that passengers would like to see more enforcement of the bus lanes. During the last year Nottingham City Transport and Trent Buses joined forces and hired two policemen for a day. Their brief was to patrol the bus lanes at both peaks and control the parking problems that both companies encounter in the City area off peak. We received very good media attention and for some weeks after the initiative observations revealed that the motorist was adhering to the local traffic orders. Recently however we have noticed abuse beginning to climb and it is our intention to repeat this initiative later in the year.

During the course of the last year we entered our second Bus Quality Partnership and totally upgraded the service 58, which connects Arnold and the City Centre. Dennis Trident low floor buses were purchased and the service was upgraded to operate every 10 minutes throughout the day. Passenger levels have risen by 6% and research has shown that customers have welcomed the changes made. We have entered into a partnership with Sainsbury's in Arnold to produce a shoppers' guide to the town. Twenty thousand leaflets have been distributed to householders and we are currently conducting research to establish how well these were received and what in general customers think of the services offered by both companies. We fully intend to expand this partnership with leaflets being designed for the Castle Boulevard Store and the Beeston store in the forthcoming months.

In the latter part of 1998 we conducted a survey into the usage and attitude across our network of services. Nine areas of Nottingham were selected and street interviews conducted amongst 499; all those interviewed had to use Nottingham City Transport services at least once a week. The report concluded that 60% of those who use the company's services used it on three or more days a week showing a high frequency of use. Shopping dominated bus usage and 94% of all bus users travelled into the City Centre. As with most surveys that we have undertaken the customer wants reliability, ease of use and frequency. Fares were well down the list indicating that our customers do not see this as a key issue. We fully intend to repeat this survey again in 2000 and await the results with interest.

We continue to work very closely with Nottingham Trent University following our highly successful travelcard promotion where 261 staff obtained Easy Rider travelcards and 213 respondents made 1803 trips during the seven day trail, 84 staff completed a user diary and made a total of 629 individual trips. The survey revealed that 93% of all journeys arrived within five minutes of their scheduled arrival time. In fact towards the later part of last year we commissioned a company called Mystery Travellers to examine the services operated. In January this year their Managing Director wrote to the company stating that we had recorded the highest ever departure count of 98%. He further added that this was well within the current guidelines being established by the Traffic Commissioners. At the commencement of the new college term in October we intend to operate buses into the Clifton campus. The University is constructing a new bus turn round and the City Council is providing a shelter for the students, I believe this is another example of working in partnership that will benefit a growing population in Nottingham.

However we have suffered some reliability problems with the redevelopment of Trinity Square and I expect considerable disruption to be caused when the build programme for the tram really gets underway. This build programme will certainly test the infrastructure implemented in the form of bus lanes but we believe that it will stand up to the test.

Customers are very pleased with the new J C Decaux shelters and many have commented on their ability to repair damaged shelters quickly. This can only promote the image of public transport and demonstrate to everyone concerned just how committed we all are to ensuring that Nottingham has a first class public transport system.

We are regularly looking at new initiatives and ways in which we can increase our customer base. A new service Runway 5 has recently been launched between the City and the East Midlands Airport. Following considerable discussion with the airport authorities it was decided to operate this service through the villages rather than the main A453. Not only have we created a service for operational and ancillary staff we have also been able to provide a reliable service because we are not encountering the congestion that is experienced on this major corridor.

We continue to work very closely with the Green Partnership Groups and we are at a very advanced stage with discussions with Trent and Barton Buses for a joint travelcard. We are also working very closely with GNER in order to offer customers a seamless bus/rail ticketing system between Newark Northgate Station and Southwell. This scheme should be launched in July this year. It is hoped that if this trial is successful then further systems will be developed.

Trent and Barton Buses

Our Derby - Long Eaton - Nottingham Rainbow 5 route has continued to grow. Custom has now risen by almost 25% since we introduced uniquely branded easy access buses in October 1998. Modal shift has been measured at over 20% in carefully controlled research conditions, the high profile branding being responsible for first awareness of the service in over 50% of cases.

We have now reached the point where we are planning to invest in even more super low floor buses to extend the Nottingham - Long Eaton frequency to a bus every 6 or 7 minutes, so popular has Rainbow 5 been. We also plan to improve Sunday frequencies, where the market is also showing healthy signs of up-turn.

Our first Bus Quality Partnership, the Cotgrave Connection, was launched in 1996 and immediately grew the market by 10%. We know that bus services, like most other consumer items, have product life cycles and we have accordingly relaunched the "New Cotgrave connection" with super low floor Excels and a new livery, in March this year. We have had to adjust the timetable because of serious delays in the Trent Bridge area and we have pushed the night time buses through to 1.20 am from Nottingham on Friday and Saturday nights. An innovative feature of the New Cotgrave Connection is our "Kids for a Penny" offer, whereby one child can accompany any adult or OAP fare payer for just 1p any time after 9 am on Mondays to Fridays and all day at weekends. This particular area of price sensitivity for families was born out of research. Cotgrave is a comparatively young community with relatively high unemployment and high bus dependency. Nottinghamshire County Council have contributed shelters and Nextbus real-time information to the partnership.

Our next BQP, the Calverton Connection, remarkably, continues to grow. From a base of around 8,000 customers a week four years ago, it now averages 16,750, representing further growth of just over 5% in the past year. New bus lanes on Mansfield Road have helped improve reliability.

Our next product relaunch has been the New Rushcliffe Lines running between Nottingham, Radcliffe-on-Trent, East Bridgford and Bingham. This is a notoriously difficult corridor to serve, in view of its total dependency on Trent Bridge for access to the City, with its inherent traffic nightmares. Nevertheless, complaints about the service are very rare, almost certainly because we have such an excellent team of regular drivers in place. Recent market research indicated that the Rushcliffe Lines were extremely well thought of by their customers and that the drivers provided excellent service. It was clear from the research that there was still more growth to be had, especially in terms of providing easier access buses with buggy zones. People also said that they felt the service to be excellent value for money and 58% of those who regularly use the bus couldn't think of anything that they would do to change the service.

A couple of years ago we had been experiencing overloading problems on the Rushcliffe Line. The provision of duplicate buses is exceptionally expensive at peak, particularly in such horrific traffic and we were concerned about the ultimate impact on fares. We decided to adjust our pricing structure to provide healthy off- peak discounts, in the hope that this would encourage some peak travellers who had the choice to move to less busy times of day.

This worked exceptionally well. Our Supasaver ticket can be bought at no risk since it can be upgraded to the standard return price by simply paying the difference. Our recent research revealed 61 % of the survey sample buying the Supasaver ticket on a regular basis, with 25% regularly exercising the option to upgrade. In that two years we have grown the Rushcliffe Line market by over 15%.

When we interviewed motorists as part of the same exercise we found that our marketing and branding had not been particularly successful and that a number of beneficial features such as Supasaver were not particularly well known. Our New Rushcliffe Lines are therefore branded in a much more high profile manner and we are delivering super low floor, easy access buses with buggy zones, on every journey. In response to the research, we have once again improved Sunday frequencies and at weekends the service is extended right through to 3 am, last bus from Nottingham.

We have been looking seriously at the Sandiacre, Stapleford, Nottingham corridor where a combined 10 minute frequency to Nottingham is provided by our R2 and R4 services. This corridor suffers from severe traffic congestion along Derby Road into the City and although there is irrefutable evidence that bus users have noticed the beneficial effects of the new bus lanes between Queens Medical Centre and the City Centre, there are still horrific delays along the trunk A52 between Bramcote and QMC. Robust bus priorities in this area are seriously needed.

Our research showed a very negative reaction by bus users to traffic calming in Stapleford which is causing discomfort as well as delay and which are measures which are effectively punishing bus users because motorists speed! We are sifting the research to see what improvements we can make to R2 and R4, along much the same lines as the other projects listed above, but the introduction of super low floor buses into the traffic calmed section and the reduced potential for growing the market when so many customers have reported discomfort, give us cause for concern.

In terms of modal shift, it was very interesting to see that amongst the motorists surveyed, real-time information at bus stops was viewed as the most important development that we could offer, and the most likely to influence motorists to switch to bus. This was followed by easy access buses with buggy zones. Both of these developments were seen as being more important to motorists than increasing frequency or reducing fares by 10%. This demonstrates the potential of robust quality partnerships.

The ambitious Rainbow 1 BQP launched last July includes no fewer than four local authorities working together. The Rainbow 1 service is very heavily used and all peak buses are full. However, growth so far has only been around the 3 or 4% mark.

Research into the service has indicated two major problems. Firstly, reliability, and secondly the reluctance of the market to make too many repeat visits into the City (a comparatively long journey). We have decided to address the last point through a series of bargain off-peak discounts, including an “Early Bird” fare for journeys arriving in the City before 8 o’clock. Early Bird offers a 33% discount on the standard return fare. The new Supasaver offers discounts of around 25% to anyone arriving in the City after 9.30 am.

Reliability is a serious problem. Rainbow 1 has been plagued by roadworks since its introduction; at one time there were no fewer than seven consecutive sets of roadworks along a 16 mile section of route at the same time. We feet that there is an opportunity here and that roadworks provide the chance to encourage modal shift if a fast track diversion is available to buses but not to cars.

In such circumstances, rather than suffer reduced frequencies as buses bunch together, it would be possible for frequency enhancements to be built in.

However, there is good news in that the recently introduced bus priority measures in the Kimberley and Nuthall area seem to have had a dramatic effect on reliability, to the extent that a number of customers have contacted us to say how much they appreciate the difference.

On the integration front we now have an arrangement with Midland MainLine for seamless bus/rail ticketing, whereby for a £1 supplementary price, rail travellers have complete freedom of the Trent and Barton bus network. We are at an advanced stage with discussions with Nottingham City Transport for a joint travelcard.

Finally, we have been active on a Company-wide basis in Green Travel initiatives, including a highly successful travel promotion with Nottingham Trent University.

We are only too happy to support the Local Transport Plan and very much welcome the initiatives that are being pursued to improve bus services.

7.3.3 Park and Ride

A comprehensive user survey was undertaken for park and ride services in 1998/1999. This took the form of a self-completion questionnaire covering the four bus-based park and ride sites at Queen's Drive, The Racecourse, The Forest and Phoenix Park. The key findings of the survey were:

- overall there is a high level of customer satisfaction,
- there is a high level of peak use, with around 45% of all users arriving before 9.00 a.m.,
- 51% of respondents were commuting to work,
- 36% were shopping trips,
- approximately 40% of all park and ride users are travelling to the Old Market Square area in the core of Nottingham City Centre,
- 53% of park and ride users originate outside Greater Nottingham, whilst only 9% originate within the City of Nottingham, and
- if park and ride was not available, around one third of users stated that they would use other public transport services instead.

Follow up surveys will be programmed to enable trends to be analysed.

7.4 Highway and Bridge Condition

The City and County Councils undertake Deflectograph surveys of the entire Principal Road Network on an annual basis. This, along with a systematic programme of Coarse Visual Inspections for the remainder of the road network, high speed road monitoring and MARCH and pavement management system monitoring, will enable an accurate position to be established of the condition of the area's roads, and will allow forecasts of road failure "hotspots" to be predicted and dealt with pro-actively.

The data from the National Road Maintenance Condition Survey (NRMCS) confirms that the City and County Principal Road Networks are in poor structural condition. Using the NRMCS data, and based on residual life of less than four years, the City and County are lying 120th and 113th out of 122 national authorities respectively. Figures 41 and 42 illustrate the distribution of residual life for the Principal Road Network according to the survey. Although the information cannot be disaggregated to provide an accurate picture for the County Council roads of the Plan area, it is considered that they are in a similar condition to the County as a whole.

Unfortunately, the latest Deflectograph information was not available at the time of this document going to print. A supplementary document will be submitted at the same time as the Finance Forms later this year.

Principal Road Network Residual Life Distribution based on the national Road maintenance Condition Survey 1999

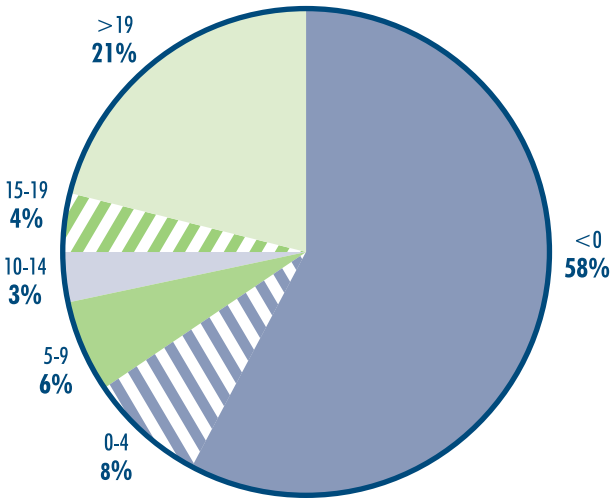


Figure 41

City roads

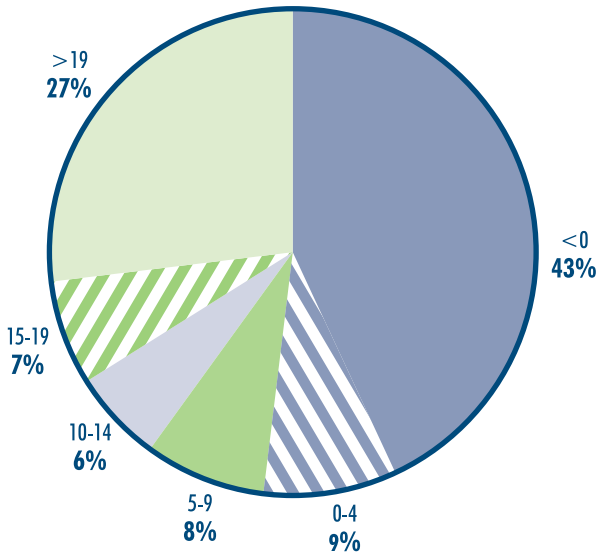


Figure 42

County roads

Highway Structures Monitoring

Tables B1A and B1B indicate the current position relating to highway structures in the City and County areas of Greater Nottingham. As mentioned previously, in line with the LTP guidance notes only those structures of more than 1.5m span are detailed in the statistics for Nottingham City. Nottinghamshire County Council will provide updated statistics based on a minimum span of 1.5m in the Autumn.

Update on Streetlights and Footways - Highway Related Performance Indicators

The relevant performance indicators for Highway Maintenance, including Street Lighting, are given below. The indicators are all influenced by the available works budget, and it can be expected that they will generally improve as funding, both from the LTP and from the revenue budget, is increased. The Best Value Review will also look in depth at current procurement practice and whether there are areas where better value can be obtained. The relevant Best Value Performance Indicator (BVPI) reference is shown in brackets.

Table 42 Maintenance BVPIs

	98/99	99/00	2000/01 Target
P.I.1 - Cost of Highway Maintenance per 100km travelled by vehicles on Principal Roads (BVPI 93)			
City	0.23%	0.56%	0.67%
County		N/A	0.60%
P.I.2 - Percentage of Street Lights not working as planned (BVPI 98)			
City	1%	1.75%	1.5%
County		1.56%	1.4%
P.I.3 - Damage to Roads and Pavements - repairs to dangerous damage carried out within 24 hours (BVPI 105)			
City	95.5%	97.5%	98%
County		97.5%	99%

Heavy Goods Vehicle 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 (AADT) flows indicates that heavy goods vehicle movements represent 6% of total the traffic volumes on the principal road network. Figure 43 indicates heavy goods vehicle flows within the Plan area.

Table B1A City Council Highway Structures

LTP Programme for 2001/2005 – highway structures
Nottingham City Council

BRIDGES LONGER THAN 1.5 METRES SPAN

	Highway Authority City Council	Railtrack	Rail Property Board	British Waterways Board	Other
Total number	138	11	0	0	24
Number still to be assessed for 40t capacity*	24	11	N/A	N/A	4
Number already assessed and found not capable of 40t capacity	5	0	N/A	N/A	0
Number considered to need strengthening	4	9 (prov)	N/A	N/A	0
Number considered to need major structural maintenance	89	N/A	N/A	N/A	N/A

RETAINING WALLS (length quoted in metres) Ownership to be determined

Total length	2000
Length still to be assessed for 40t capacity	2000
Length already assessed and found not capable of 40t capacity	Nil
Length considered to need strengthening	Not Known
Length considered to need major structural maintenance	Not known

* This refers to the carrying capacity of 40 tonnes or 11.5 tonnes per axle

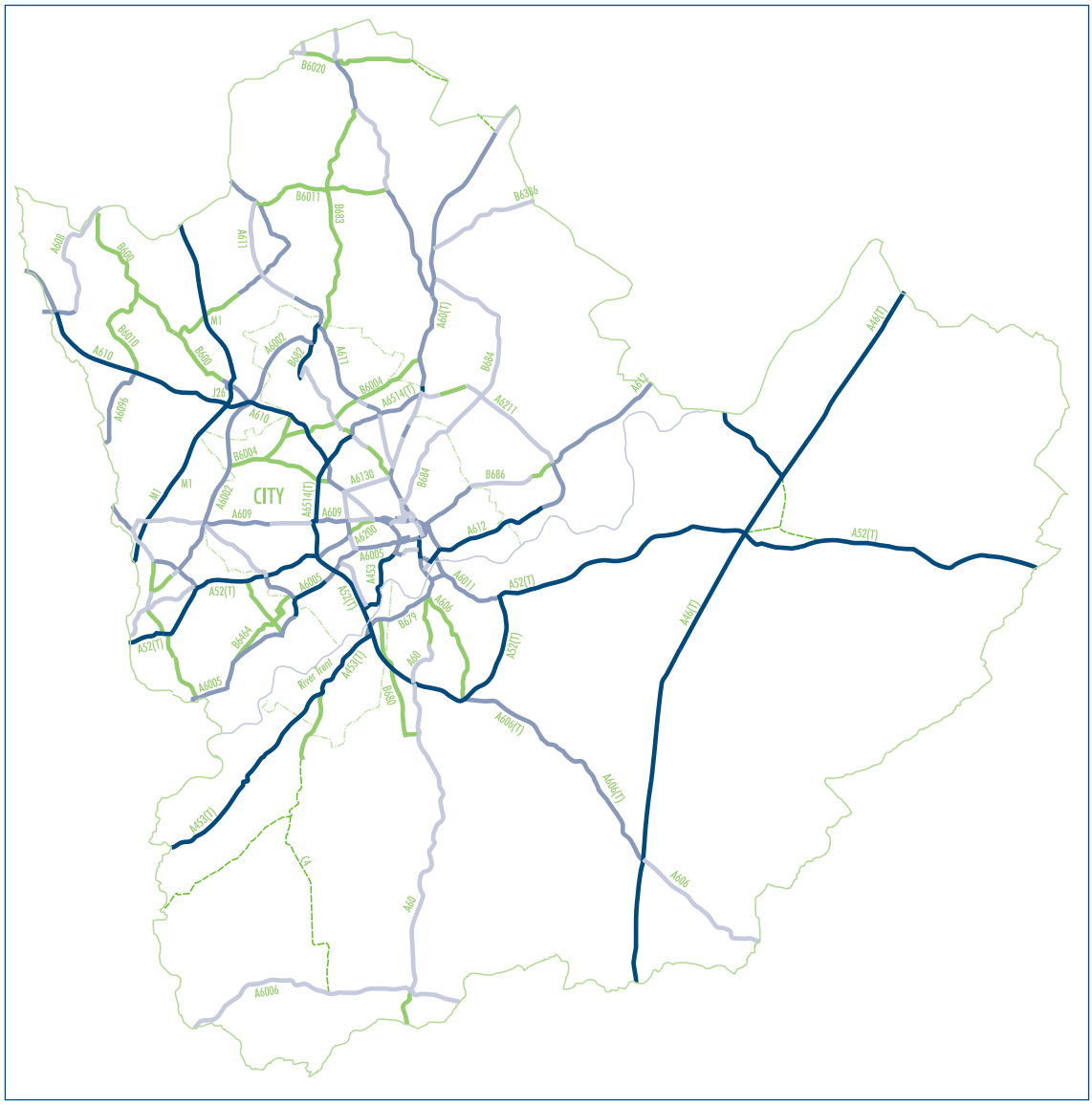
Authorities should provide individual details of all schemes on Primary Route Network and any other schemes over £1m.

	Proposed action#	Proposed start/finish dates	Estimated costs	Owner of structure	On PRN? Yes/No
Bridges					
London Road TSN2/22	Strengthening	2002/3-3004/5	£730,000	City/Railtrack	Yes
Retaining walls					

#Proposed action e.g. strengthening, structural maintenance

Table B1B County Council Highway Structures

LTP Programme for 2001/2005 – highway structures Nottinghamshire County Council					
BRIDGES LONGER THAN 1.0 METRES SPAN					
	Highway Authority County Council	**Railtrack**	**Rail Property Board**	**British Waterways Board**	**Other**
Total number	282	23	1	0	2
Number still to be assessed for 40t capacity*	2	5	1	N/A	0
Number already assessed and found not capable of 40t capacity	22	1	0	N/A	0
Number considered to need strengthening	20	1	0	N/A	0
Number considered to need major structural maintenance	33	N/A	N/A	N/A	N/A
RETAINING WALLS (length quoted in metres)	**Ownership to be determined**				
Total length					
Length still to be assessed for 40t capacity					
Length already assessed and found not capable of 40t capacity					
Length considered to need strengthening					
Length considered to need major structural maintenance					
* This refers to the carrying capacity of 40 tonnes or 11.5 tonnes per axle					
Authorities should provide individual details of all schemes on Primary Route Network and any other schemes over £1m.					
	Proposed action#	**Proposed start/finish dates**	**Estimated costs**	**Owner of structure**	**On PRN? Yes/No**
Bridges					
Retaining walls					
#Proposed action e.g. strengthening, structural maintenance					



flow > 2,000
flow > 1,000 < 2,000
flow > 500 < 1,000
flow < 500
other routes carrying significant through/abnormal load HGV traffic
City Boundary

N

Figure 43

Heavy goods vehicle flows

8 Supporting Information

8.1 Accompanying documents

In support of the Local Transport Plan for Greater Nottingham the following documents are submitted to accompany this bid and are available on request:

- Appraisal Summary Tables.
- Finance Forms.

8.2 Supporting documents

Both authorities have also produced a range of surveys, strategy and policy documents which have been used to inform the development of the Plan and are available for purchase or inspection on request.

Joint City and County Council

- Provisional Local Transport Plan for Greater Nottingham
- Greater Nottingham: Centre of Excellence for Integrated Transport 1999
- Nottinghamshire Structure Plan Review 1996
- Greater Nottingham Bus Quality Partnerships Strategy 1997
- Regional Transport Strategy
- Developer Contributions
- Green Commuter Plans: A Resource Pack for Nottingham's Employers 1995
- Commuter parking in the East Midlands: Time for Change? 1997
- Commuter Planning' Newsletters
- Public Transport in Greater Nottingham 1999

City Council

- Greater Nottingham Local Transport Plan: our Vision, your Views 2000
- New Deal for Transport: Better for Nottingham 1999
- New Deal for Transport: Walking and Cycling Strategy 1999
- City of Nottingham Public Transport Plan 2000
- City of Nottingham Public Transport Information Study 2000
- City of Nottingham Concessionary Fares Scheme Review 1999
- City of Nottingham Local Plan 1997
- City Centre Review Consultation Draft (Summer 2000)
- City 2000: A Mid Term Review 1996
- City Centre Performance Indicators 1998, 1999
- Impacts of commuter plans on employers 1997
- MOSAIC: various documents covering Mobility Management Project, funded by the European Commission under the Transport RTD Programme.
- MOST : various documents covering Mobility Management Strategies Project, funded by the European Commission under the Transport RTD Programme 1999/2000
- Planning for Communities of the Future: A local response 1998
- Area 8 Clifton and Wilford Area Transport Plan 1998
- Area 4 Transport Plan and conference notes 1999
- Area 1 Transport Plan and consultation reports 2000
- Meadows Transport Study 2000
- Nottingham Park and Ride survey 1998
- District Centre customer perception surveys and Performance Indicator Reports:
  - Clifton 1999/2000
  - Sherwood 1999/2000
  - Bulwell 1999/2000
  - Hyson Green1999/2000
- Design Guide for Community Safety in Residential Areas 1998
- 'Changing Times' Draft LA 21 Strategy and Action Programme 1999
- Streetscene in City Centre conservation areas code of practice 1997

County Council

- Greater Nottingham Provisional Local Transport Plan Summary Document
- Ashfield District Local Plan (Second Deposit Draft, May 2000)
- Broxtowe Borough Local Plan (First Deposit Draft, Jan 2000)
- Gedling Borough Local Plan (First Replacement Deposit Draft, Feb 2000)
- Rushcliffe Borough Local Plan (First Deposit Draft, Feb 2000)
- Cycling Strategy 1997
- Your Guide to School Travel Plans 1999
- Nottinghamshire TravelWise Teachers Pack 1998
- The Launch of a Local Agenda 21 Forum for Nottinghamshire : Conference Report 1999
- Hucknall Transport Study 2000
- Public Transport Strategy Review 1999
- Community Transport Review 2000
- Nottinghamshire Agenda 21 - Are we on target? : Conference Report 2000
- Feasibility Study : access to the proposed Ilkeston Station 2000
- Highway Design Guide
- Your Environment, £15million Transport Bonanza Revealed - Nottinghamshire County Council 2000
- Responding to Rio 1997

For further information contact
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Telephone: 0115 9772970
Fax: 0115 9774054
E-mail: kevin.sharman@nottscc.gov.uk

8.3 Organisational structures

Useful planning and transportation contacts at the City Council.

Nottingham City Council Strategic Planning & Transportation (Including Local Transport Plan) Key Contacts

DEVELOPMENT DEPARTMENT
"Lead on strategy formulation, development & prioritisation"
Director, Jane Todd 915 5312

Planning & Transportation
Assistant Director, Adrian Jones 915 5459
email: adrian.jones@nottinghamcity.gov.uk

Planning & Transport Strategy
Fax 915 5483
Service Manager, Sue Flack 915 5462
email:transport.strategy@nottinghamcity.gov.uk

Transport Strategy (incl LTP)
Grant Butterworth 915 5482

NET Environmental Design Approval
Reg Jones 915 5428

Planning (Information)
Diane Fieldhouse, 915 5313

Other contacts:
City Centre Manager: Jane Ellis 915 5263

ENVIRONMENTAL SERVICES
"Lead on implementation, assessment & programme management"

Highway Management
Assistant Director, Dave Hill 915 6507
email: dave.hill@nottinghamcity.gov.uk

Transportation Fax 915 6150
Service Manager (NET), Pat Armstrong 915 6713
Acting Service Manager, David Tole 915 6081
email:david.tole@nottinghamcity.gov.uk

Network Development (incl LTP)
Dave Jones 915 6225

Development Control (Highway Implications)
Rob Hannis 915 6130

Other contacts:
Traffic Management/UTC: Ian Chatfield 915 6083
Road Safety: Stewart Thompson 915 6055
Highway Maintenance: John Tedstone 915 6671
Highway Design: Jim Codrington 915 6165
Pollution Control: John Bonham 915 6400

Useful planning and transportation contacts at the County Council.
Environment Department - Director: Louis Victory 0115 977 4500
Environmental Planning - Assistant Director: Brian Royall 0115 977 4513
Environmental Strategy - Group Manager Steve Calvert 0115 977 4365
Transport Planning - Team Manager Stuart Robertson 0115 977 4533

Appendix A

Road Traffic Reduction Act (1997) Report

Greater Nottingham Area

1. Introduction

This report has been prepared to satisfy the requirements of the Road Traffic Reduction Act (1997) which obliges local authorities to undertake a review of existing traffic and to forecast future levels of traffic. The report covers the Greater Nottingham Local Transport Plan Area (Figure 1), and has been produced jointly between Nottinghamshire County Council and Nottingham City Council.

For many years it has been recognised that action is necessary to reduce the adverse effects of ever increasing road traffic and appropriate strategies have been developed accordingly. Previous successful work on "package" proposals for the Area have been extended to accommodate the wider scope of the Local Transport Plan and Air Quality Plans, and the resulting policies, measures and targets automatically feed into the Road Traffic Reduction Act process.

2. Definition of Road Traffic

Automatic data collection systems have difficulty in identifying some types of buses and, therefore, to avoid affecting the accuracy much of the existing traffic data does not separately identify vehicles constructed or adapted to carry more than eight passengers. Consequently, the Councils usually rely on the definition of road traffic as all "mechanically propelled vehicles." Unless specified to the contrary, such definition is adopted throughout this report.

3. Assessment of Existing Traffic Levels

Traffic data is obtained from a number of sources across the County and the City.

a. 35 Automatic Traffic Count (ATC) sites linked to the Urban Traffic Control System, supplemented by 10 other permanent ATC installations and a further 15 rotating sites,

b. Information from the DETR's National Traffic Census classified by vehicle type, and

c. Scheme specific traffic counts, either classified or unclassified.

Traffic surveys are undertaken using established best working practice and, therefore, the accuracy of data is expected to be within the assumed limits of ±5% for automatic surveys and ±10% for manual surveys at the 95% confidence interval, as set out the DETR's Design Manual for Roads and Bridges (Volume 12, Chapter 6).

Traffic growth on major built-up roads in Greater Nottingham and for Great Britain is shown in Table 1. In the 10 years since 1989 annual average daily flows in the Greater Nottingham Area have increased steadily, with the exception of 1992 and 1998, and rates of growth have been

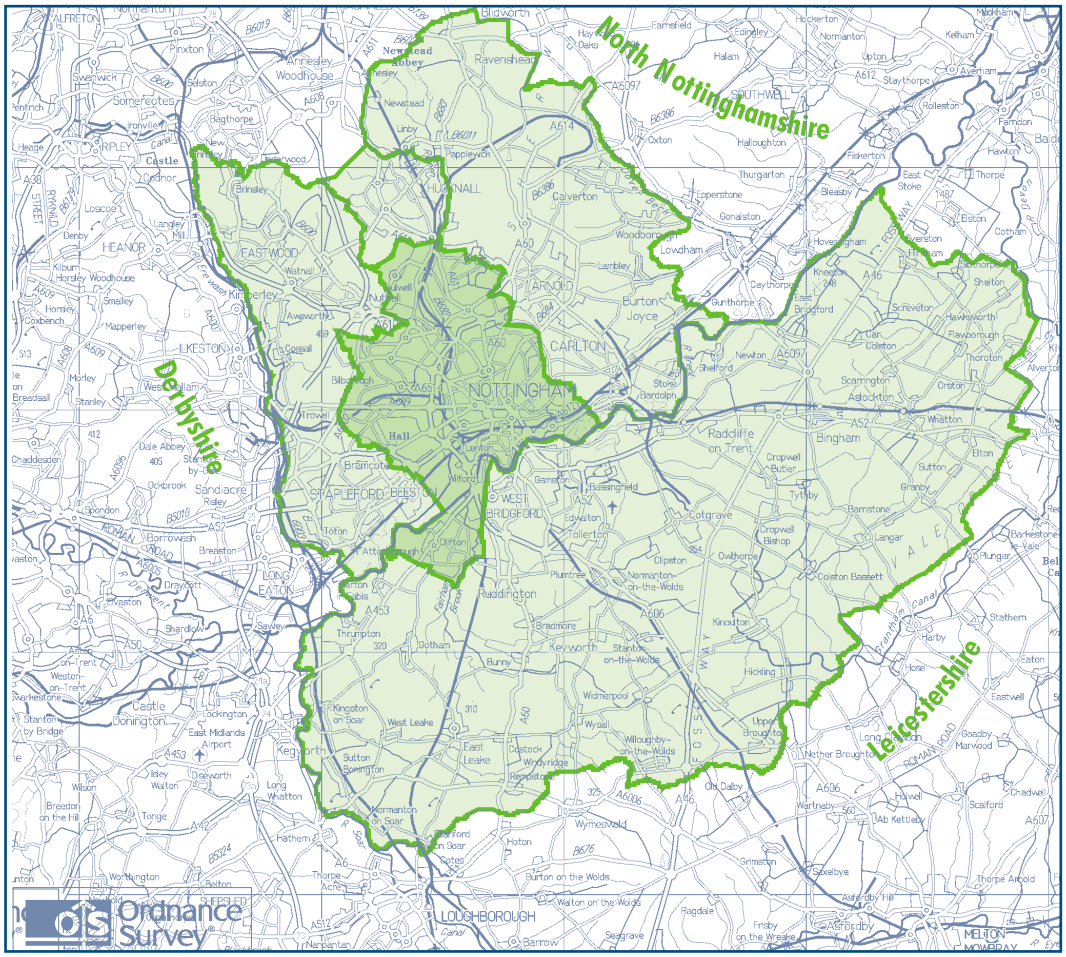


Figure 1

Greater Nottingham Local Transport Plan area

significantly higher than those nationally. Between 1989 and 1999 traffic on major built-up roads in Greater Nottingham has increased by 9.7%, compared to 0.5% nationally over the same period.

Table 1: Growth in annual average daily traffic- Greater Nottingham and Great Britain Major Built up Roads

Index: 1989=100

Year/area	Greater Nottm	GB
1989	100	100
1990	102.9	99.3
1991	103.9	100.5
1992	103.1	100.9
1993	104.7	98.4
1994	106.3	101.1
1995	108.2	99.9
1996	108.3	102.9
1997	110.8	100.8
1998	109.2	99.8
1999	109.7	100.5

To establish a baseline for the purpose of the Road Traffic Reduction Act, a network of main roads, comprising all 'A' and 'B' roads, plus other local roads where strategic traffic may divert, has been established (see Figure 2). The resultant aggregated volumes on the network for 1999 are :-

- Annual Average Daily (Mon - Sun) Traffic (AADT) - 7.324 million veh-kilometres per day.
- Annual Average Weekday (Mon - Fri) Traffic (AAWT) - 9.375 million veh-kilometres per day.

In Greater Nottingham the main concerns are associated with congestion resulting from car borne commuter traffic and, therefore, a key indicator is vehicles entering a cordon around the Inner Traffic Area of the City during the morning peak period (see Table 2). The Inner Traffic Area is shown on Figure 5 on page (A) xiii. The 16 hour traffic flows relating to this cordon are also monitored (see Table 3). Vehicles are classified by four types - cars, motorcycles, goods vehicles and buses.

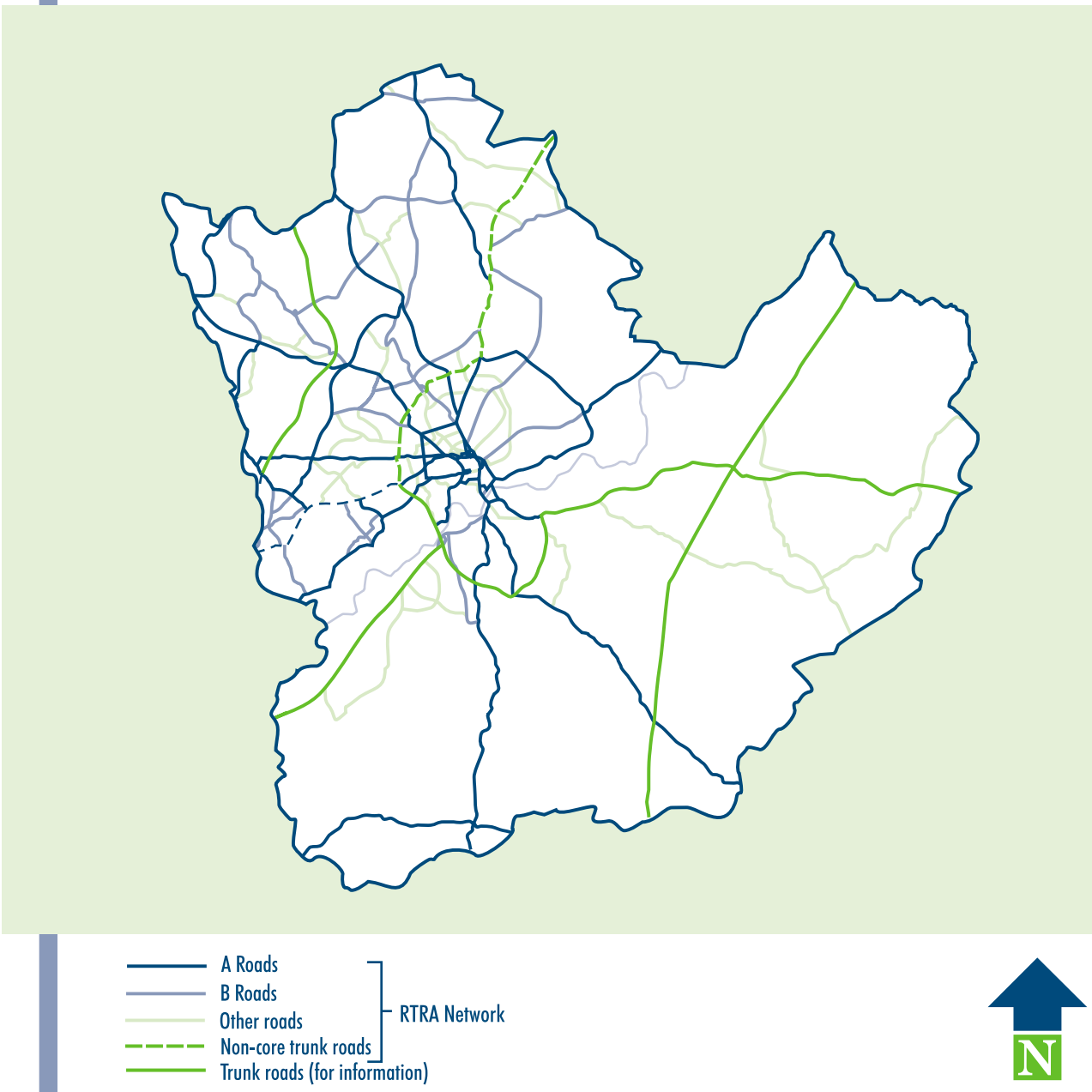


Figure 2

Greater Nottingham Road Traffic Reduction Act Highway Network

Table 2: Inner traffic area October Monday to Friday average inbound morning peak period traffic flows (0700-0930hrs)

Route	Cars	Motorcycles	Goods vehs.	Buses	All motor vehs.
	1999	1999	1999	1999	1999
A60 Mansfield Rd	2662	20	374	67	3123
B684 Woodborough Road	3081	25	462	46	3614
B686 Carlton Road	2524	39	404	47	3014
A6011 Lady Bay Bridge	2324	19	395	12	2750
A60 Trent Bridge	5634	29	489	174	6326
A453 Queens Drive Flyover	1867	17	398	45	2327
A6005 Abbey Street	2021	32	315	29	2397
A6200 Derby Road	2419	14	266	83	2782
A609 Wollaton Road	2374	30	464	52	2920
B690 Aspley Lane	1144	20	209	11	1384
A610 Nuthall Road	2725	29	498	73	3325
B682 Vernon Road	1415	18	342	69	1844
A611 Hucknall Road	1845	29	293	55	2222
Total	**32035**	**321**	**4909**	**763**	**38028**

Table 3: Inner traffic area October Monday to Friday average inbound 16 hour flows (0600-2200hrs)

Route	Cars	Motorcycles	Goods vehs.	Buses	All motor vehs.
	1999	1999	1999	1999	1999
A60 Mansfield Rd	11256	62	1775	365	13458
B684 Woodborough Road	11938	109	1926	254	14227
B686 Carlton Road	9640	82	1773	230	11725
A6011 Lady Bay Bridge	9390	66	2545	55	12056
A60 Trent Bridge	20445	105	2811	920	24281
A453 Queens Drive Flyover	6775	67	1694	205	8741
A6005 Abbey Street	10157	101	1667	152	12077
A6200 Derby Road	12156	74	1814	659	14703
A609 Wollaton Road	9203	106	1849	282	11440
B690 Aspley Lane	4956	83	1028	50	6117
A610 Nuthall Road	10327	141	2106	131	12705
B682 Vernon Road	6564	171	1447	106	8288
A611 Hucknall Road	7829	51	1197	72	9149
Total	**130636**	**1218**	**23632**	**3481**	**158967**

As a further indicator, traffic flows are recorded crossing the four bridges over the River Trent in the Greater Nottingham Area (see Table 4). The A52 Clifton Bridge is on the core trunk road network but has been included to give the total cross-river flow. However, it is not included in any targets relating to local road traffic.

Table 4: Cross- river traffic - Greater Nottingham 16 hour October Monday to Friday average 2 way flows

River crossing	2 Way vehicles 1999
A52(T) Clifton Bridge	85250
A60 Trent Bridge	50650
A6011 Lady Bay Bridge	20800
A6097 Gunthorpe Bridge	19100
Total	175800

4. Strategy for Greater Nottingham

In overall terms the strategy for Greater Nottingham will be delivered through the policies and programmes of both authorities which seek to restrain and reduce traffic growth, whilst at the same time enhancing the vitality and economic development of the conurbation.

The main thrust of the strategy is to cap traffic levels in the City Centre by catering for the demand for trips into the Inner Traffic Area as outlined in the Structure and Local Plans. This will be achieved through a package of measures including:

- Light rail - NET Line One and network extensions,
- Bus - bus quality partnerships and bus priority schemes,
- Park and ride - bus, heavy rail and light rail,
- Heavy rail - Robin Hood Line and development of the South Notts Rail Network (SNRN),
- Travel Demand Management - traffic management, parking policies and travel plans, and
- Travel education - better information and promotion.

Specific proposals, as detailed in the Local Transport Plan are summarised in Table 5.

Table 5 Proposals contributing to a reduction in traffic growth

Proposal	Short term (0-5 yrs)	Medium term (6-10 yrs)	Longer term (11-20 yrs)
NET	Line One	additional lines	further lines
SNRN	-	Phase One	further phases
Bus	bus quality partnerships/ bus priority schemes	bus quality partnerships/ bus priority schemes	bus quality partnerships/ bus priority schemes
Park and ride	Gamston	under review	under review
Travel awareness/ education	ongoing	ongoing	ongoing
Parking policies/ demand management	pricing structures to favour short stay parking, restraint based standards, workplace parking charges (pilot)	as short term as short term workplace parking charges	as short term as short term as medium term
Walking/cycling	on-going programmes	on-going programmes	on-going programmes
Land use policies	on-going, to reduce the need to travel	on-going, to reduce the need to travel	on-going to reduce the need to travel
Reallocation of road space	small scale schemes	larger scale schemes under consideration	larger scale schemes under consideration

Each of the components of the strategy referred to above will have a different relative impact in terms of their contribution towards traffic reduction. Their impacts, both individual and cumulative will depend upon the timing of their introduction and the effectiveness at which they are able to influence modal change. Table 6 indicates how the individual strategy elements may contribute to traffic reduction aspirations over the 'vision' period of the Plan.

Table 6 Impact of proposals on traffic reduction

Proposal	Short term (0-5 yrs)	Medium term (6-10 yrs)	Long term (11-20 yrs)
NET	very large	very large	very large
Robin Hood Line/ SNRN	slight	moderate	moderate
Bus	moderate	moderate	moderate
Park and ride			
- to inner area	slight	moderate	moderate
- to other areas	neutral	neutral	neutral
Parking policies	slight	moderate	large
Travel awareness/ education	slight	moderate	large
Cycling/walking	slight	slight	slight
Land use initiatives	slight	slight	moderate
Reallocation of road space	slight	large	large

The Structure Plan makes provision for major new employment and housing development in the South Nottinghamshire Sub-Areas up to 2011 and, therefore, there is no reason to believe that, unless checked, traffic will not continue to grow at least at national rates. From 1999 to 2011 national forecasts (central estimates) indicate an increase of 21%. Local district projections (TEMPRO factors) indicate an increase of 22%.

For the Greater Nottingham Area improving public transport is a critical element of traffic reduction, underpinning the objectives and strategy of the Plan. The impacts of parking policies will increase over time as the long-term parking charges increase and the number of available spaces decreases, both as a result of public parking policy (on and off-street) and private non-residential parking through development control and workplace parking charges.

If the pilot for workplace parking charges in the City is successful and the concept extended to include retail and leisure trips the opportunity for increasing longer term traffic reduction benefits through rigorous demand management will be significant.

Travel awareness and education will also have a significant role to play in the strategy to reduce traffic and their effects should not be underestimated. With continued and rigorous campaign programmes the aim should be to bring about a cultural sea-change which views unrestrained private car use as anti-social and harmful to the environment.

Whilst other elements of the strategy may not be able to contribute significant levels of traffic reduction, their importance in terms of sending the right messages, complementary to travel awareness initiatives, must not be underplayed, especially in the context of Local Agenda 21.

The position in the City's Central Core, however, is different. The opportunity exists to control precisely the level and nature of motorised vehicle movements into and within this area. This is being achieved through the City's proposed Clear Zone. Significant levels of traffic reduction can be anticipated for the Clear Zone area to occur within the period of the first full Local Transport Plan with access constrained to essential vehicles only (a reduction of around 50% in existing traffic levels).

In the medium/long term, it is believed that if the gains made through the "carrot" of improved public transport are to be sustained, they will need to be accompanied by appropriate "sticks". One of the most effective sticks is likely to be congestion charging, but this is not considered likely to be acceptable in the near future. Whilst workplace parking charges may not, as an isolated policy in the short term, result in significant traffic demand reductions, the additional revenue provided will enable substantial investment in further public transport infrastructure improvements. Consequently, if the vision of actually reducing traffic is to be achieved, serious consideration needs to be given to schemes which reallocate road space to the more favoured modes.

In the short/medium term the strategy is designed to produce the Structure Plan target of reducing the share of motorised person trips by car to the Inner Traffic Area from 73% to 63%. This equates to a reduction of 14% of projected "do minimum" traffic flows in 2011. The anticipated effects of the various components of the strategy are demonstrated in Figure 3. The significant immediate effects of introducing park and ride, NET Line One and developing heavy rail in South Notts are shown on top of the underlying trend of a gradual slowing of traffic growth by the introduction of improvements to bus services, demand management and other measures etc.

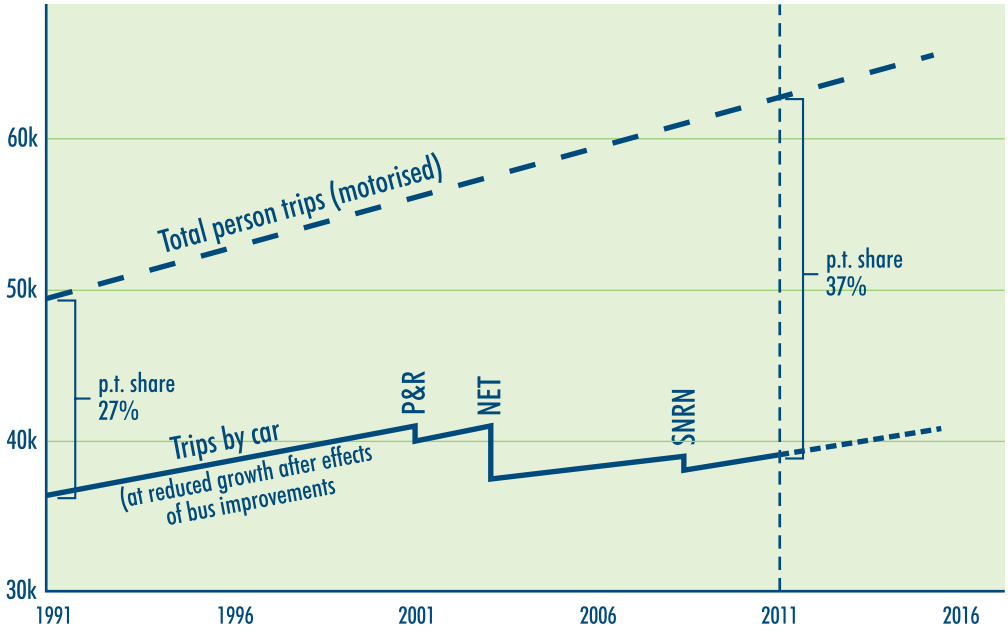


Figure 3

Travel demand trips to the City Inner Traffic area

The longer-term vision for the next 20 years is shown in Figure 4. This is inevitably in broad terms only because of the variable effects of different national policy measures which may apply over this extended period. Nevertheless, as acknowledged by the DETR's report "Tackling Congestion and Pollution" (2000), the biggest impacts will be where it is easier to provide attractive alternatives to the car. For the Greater Nottingham Area, this is in and around the City Centre.

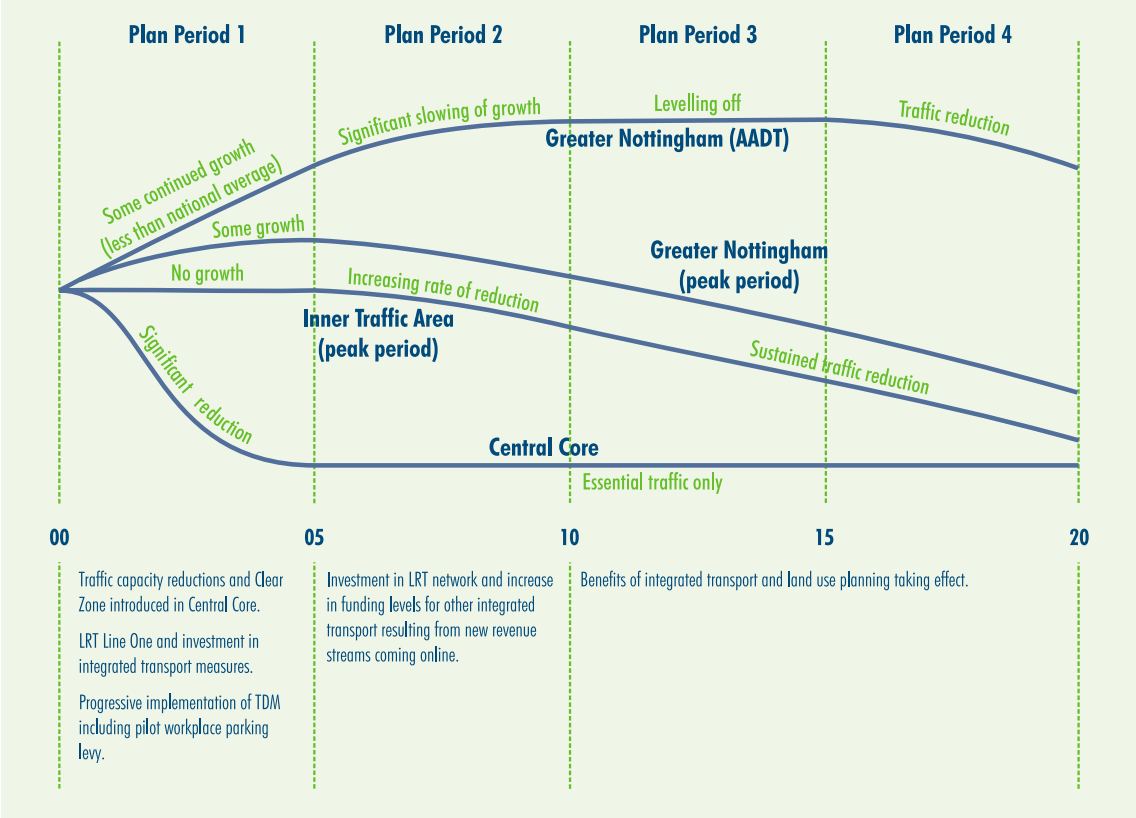


Figure 4

Greater Nottingham traffic reduction strategy

5. Targets

The base for RTRA considerations has been chosen as 1991. This is for two main reasons. Firstly, so that targets relate to previous targets developed for the Structure Plan. And secondly, so that comparisons can be made with past trends over a period where much data already exists. This is particularly important in respect of modal share where there is strong reliance on Census Data, otherwise such data would be very expensive to collect.

For local roads in the Greater Nottingham Area a good proxy for increases in journeys to work is estimated increases in jobs. From the Structure Plan 10% extra jobs are anticipated in the Area from 1991-2011. During this period changes between modes have been estimated, either relating to targets or where appropriate known changes such as patronage of the Robin Hood Line. Effects such as the likely transfer from bus and heavy rail to NET have also been

considered. Taking all these factors into account gives anticipated trips per mode for 1991, 2001 and 2011 (i.e. Census Years), and 2006 to correspond to the end of the Full LTP period as shown in Table 7.

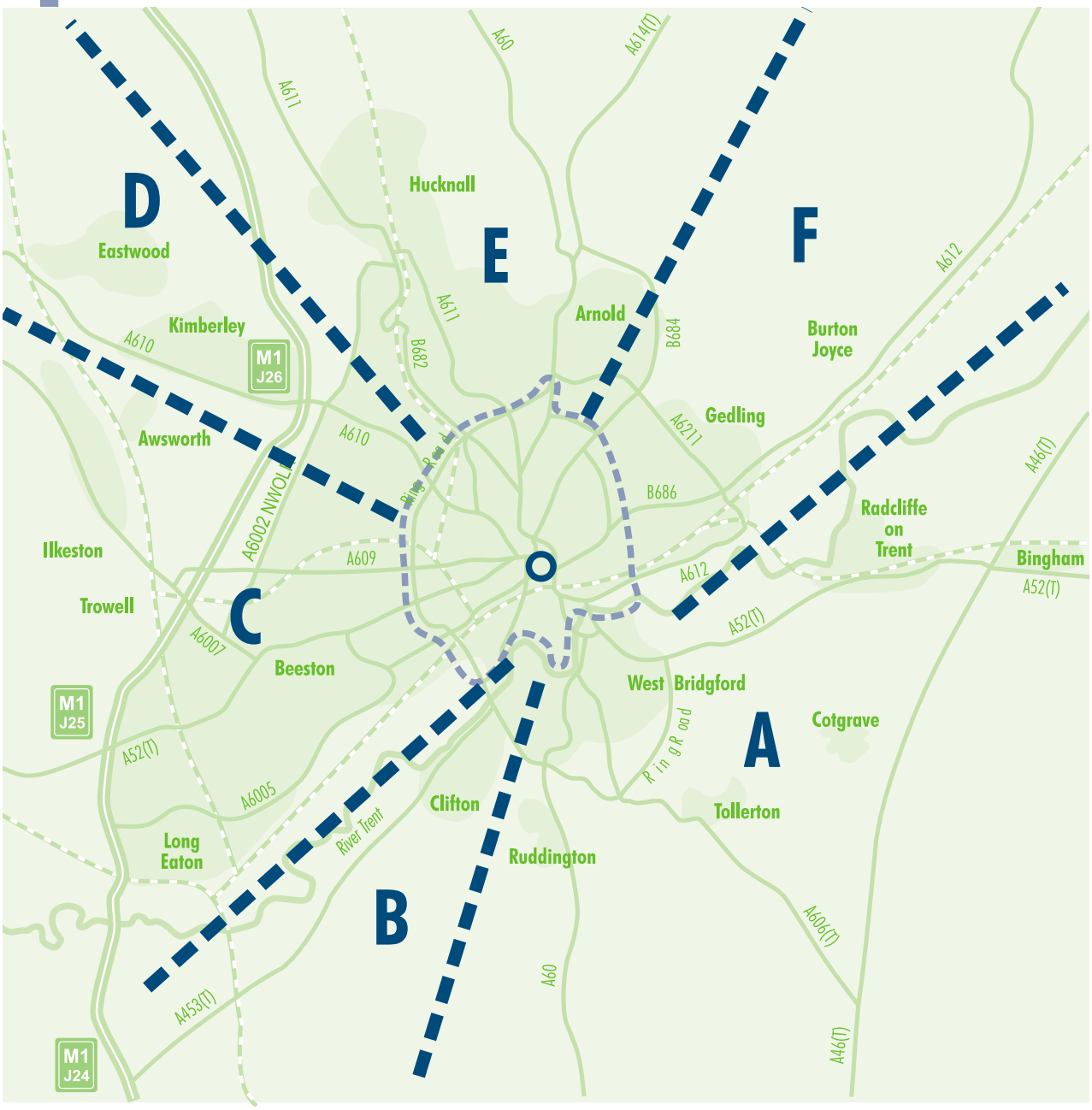
Table 7: Greater Nottingham Area journey to work trips (0700-0930 hrs)

Mode	1991	2001	2006	2011
Bus	46,700	49,800	50,500	54,100
Train	1,800	2,600	2,400	2,400
NET			3,900	5,800
Car Driver	145,900	148,700	148,700	145,600
Car Passenger	19,400	20,300	21,300	22,300
Motorcycle	4,300	4,500	4,700	4,800
Cycle	8,400	9,700	10,000	10,900
Walk	28,600	31,500	32,500	34,300
Total	**255,100**	**267,100**	**274,000**	**280,200**

This analysis indicates that, if the proposed policies and measures are introduced as expected, morning peak period (0700-0930hrs) traffic would continue to grow until the middle of Plan Period 1, would dip again towards the end of the period (mainly due to the introduction of NET Line One), and then reduce similar to 1991 levels by the end of Plan Period 2. On this basis 2 targets have been set for morning peak period traffic:-

- limit traffic growth from 1991 to 2006 to +2%
- restore traffic levels at 2011 to previous 1991 levels.

For the Inner Traffic Area, there is already evidence of holding traffic growth by the success of current policies and measures (see Table 8) and, therefore, reductions in excess of those for the Greater Nottingham Area as a whole would be expected.



Rail lines
Inner traffic area
Central Core

A: A52(E), A606, A60(S)
B: A453
C: A52(W), A6005, A609
D: A610
E: B682, A611, A60(N)
F: B684, B686, A612

N

Figure 5

Greater Nottingham Transport Sectors, Inner Traffic Area and Central Core

Table 8: Inner traffic area October Monday to Friday average inbound morning peak period traffic flows (0700-0930hrs)

Transport Sector	1991	1992	1993	1994	1995	1996	1997	1998	1999
A	8388	8581	8720	8613	9515	9438	9270	9081	9076
B	2101	2195	2244	2033	2405	2403	2359	2560	2327
C	9298	8871	9178	9032	8785	8401	8526	8692	8099
D	4237	4119	4199	4290	3882	4721	4687	4567	4709
E	7700	7873	7913	7945	7747	7310	7531	7400	7189
F	6039	6174	6277	6561	6362	6338	6455	6259	6628
Total	**37763**	**37813**	**38531**	**38474**	**38696**	**38611**	**38828**	**38559**	**38028**
Index	**100.0**	**100.1**	**102.0**	**101.9**	**102.5**	**102.2**	**102.8**	**102.1**	**100.7**

Modal splits for the three "Census" Years are shown in Table 9

Table 9: Greater Nottingham area Modal Split (%)

Mode	1991 Census	2001	2011
Bus	18.3	18.6	19.3
Train	0.7	1.0	0.9
NET	-	-	1.9
Car Drive	57.2	55.7	52.0
Car Passenger	7.6	7.6	8.0
Motorbike	1.7	1.7	1.7
Cycle	3.3	3.6	3.9
Total	**100**	**100**	**100**

Off-peak modal share characteristics are slightly different. For example, more use of bus is anticipated because partners are left at home without access to the family car etc. Also, walking/cycling become more realistic alternatives for the numerous short distance non-work trips. Combining these peak and off-peak characteristics, and the impact of other factors such as land-use policies, parking policies, travel plans etc., the overall estimated impact of policies and measures on modal shift away from the car is:-

Bus	1 - 2 %
Rail	0-1%
NET	1-3%
Walk/Cycle	2-3%
Other	0 - 1%
	4-10% (average 7%)

A shift of 7% of car use at 1991 would mean a reduction in car traffic at 2011 levels of approximately 12%.

It should be noted that Park and Ride has not been included in the analysis for the Greater Nottingham Area as a whole, because of the car trips involved in accessing the site. However, park and ride facilities will contribute to reducing traffic in the Inner Traffic Area of the City.

From the DETR's TEMPRO data from the National Trip End Model, central estimates of traffic growth (1999-2011) in the Greater Nottingham Area are as follows:-

District	Car - Kilometres/day (000)	Mid-Point Growth
City	5299	1.219
Broxtowe	2641	1.163
Gedling	2704	1.174
Rushcliffe	3162	1.303

The weighted average for the Area = 1.218 i.e. + 21.8%.

Anticipating that sufficient funding will be available for measures to achieve the middle of the range of modal shift indicated above, a realistic target for the Greater Nottingham Area up to 2011 is considered to be TEMPRO (average growth) less 12%

= 1.218 x 0.88 = 1.07 = +7%

This means limiting growth to around a third of previous forecasts.

It is clear that the adoption of local transport policies will have a greater impact on traffic reduction for trips into the Inner Traffic Area and the central core than they will for the Greater Nottingham Area as a whole. It is essential that local policies are reinforced with nationally set traffic reduction initiatives (both fiscal and regulatory) to ensure that targets can be both realistic and challenging.

6. Summary/discussion

The main elements of the Road Traffic Reduction Act targets are shown in Table 10.

Table 10 Road Traffic Reduction Act targets- Greater Nottingham

	Plan period 1	Plan period 2	Plan period 3	Plan period 4
National central estimate	+9%	+8%	+8%	+6%
TEMPRO central estimate	+9%	+8%	+8%	+6%
Greater Nottingham area (AADT)	+7%	Nil	-5%	
Greater Nottingham Area (peak period)	+2%	-2%	-5%	-5%
Inner Traffic Area (peak period)	Nil	-5%	-5%	-5%
Central core (daytime)	Reduced to essential vehicles only			

In the short to medium term it is unrealistic to expect overall traffic levels in the Plan area to actually reduce. This is not through any lack of desire, but a realistic assessment of the scale of the problems and the tools likely to be available to tackle them. Sufficient funding may not be available; some of the measures will require pilots, new legislation, etc. which makes them relatively long term and some of the policies such as travel awareness and land-use initiatives take a considerable time for their impacts to develop. Consequently, the vision for the Greater Nottingham area, is that in the short/medium term traffic growth will be slowed, but still significant, over the following 10 years traffic growth will be halted, thereafter an actual decrease in traffic may be possible.

In line with this pattern of growth, an interim target for the end of the Plan period (2006) has been set of limiting traffic growth in the Greater Nottingham area to +5%.

To achieve this vision depends on numerous factors, many of which, such as national policy, e.g. fuel duty, levels of funding etc., are not within local control. The medium/longer term will also depend to a large degree on what happens in the short/medium term and, therefore, changes to targets may be required in due course. It should also be noted that current work has relied heavily on modal share data from the 1991 census, supplemented by an annual modal share survey at the Inner Traffic Area cordon. New data from the 2001 census will be available and ready to review to feed into the 2006/10 Plan. Data quality could also be enhanced by more attitudinal survey work, analysis of journey purpose at the Inner Traffic Area cordon and studies of trip rates from residential areas.

Contacts

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Appendix B

Ashfield District Council suppporting statement

Ashfield District lies to the north of Nottingham City and comprises the towns of Hucknall, Kirkby in Ashfield and Sutton in Ashfield and surrounding rural areas including the settlements of Jacksdale, Selston and Underwood.

The M1 passes through the area and Junction 27 lies within the District. The A38 and the A611 also serve the area to Mansfield. The Robin Hood Line serves the District with three stations at Hucknall, Kirkby and Sutton Parkway.

The District comprises two travel to work areas, Hucknall being part of the Nottingham area and the remainder of the District within the Alfreton/Ashfield travel to work area.

Ashfield Local Plan and Local Plan Review Second Deposit

The Ashfield Local Plan was adopted in December 1995 and provides policies for development within the District to 2001. In April 1999 the Ashfield Local Plan Review was placed on formal deposit for the receipt of objections. After considering objections made, the Council have made proposed changes to the Plan which were placed on deposit in the Ashfield Local Plan Review Second Deposit in April 2000. This plan review covers the period to 2011 and proposes substantial areas of development for housing, employment and shopping which are expected to influence travel patterns both within and outside the District.

The Local Plan Review Second Deposit contains underlying objectives to:

- minimise the need to travel by ensuring new development is well related to existing urban areas,
- ensure new development is accessible to public transport,
- improve accessibility to town centres,
- encourage the provision of safe routes for pedestrians and cyclists, including travel to schools, and
- provide safe and convenient access for disadvantaged groups, particularly the disabled.

Overall the plan has been subject to environmental appraisal to promote the concept of sustainability.

Location of development

The Nottinghamshire Structure Plan Review requires the Hucknall part of Ashfield to provide land 1991-2011 to accommodate 3000 dwellings and 70 Hectares of employment. While this has involved proposals to build on the fringes of Hucknall, within Green Belt land, sites have been identified which relate to both the town centre of Hucknall and the Transport Corridor Nottingham to Hucknall which carries the Robin Hood Line and proposed Nottingham Express Transit.

Developer contributions to integrated transport

The District Council has been working in conjunction with other South Nottinghamshire Districts, the County and City Councils to prepare Joint Supplementary Planning Guidance for developer contributions on transport measures arising from Structure Plan Policy 5/4. The Ashfield Local Plan Review Second Deposit includes policy TR6 which identifies the types of development expected to contribute to schemes within the transport corridor. The Local Transport Plan will be expected to provide further detailed guidance concerning schemes to be funded (in whole or in part) from such contributions.

Major road schemes

The Local Plan Review Second Deposit Policy TR5 identifies the Hucknall Inner Relief Road as a major road scheme for which land is safeguarded. The District Council regards the scheme as an integral part of a transport strategy to achieve major pedestrian and environmental benefits to the town centre and supports its early implementation as part of a wider scheme, subject to further consultation. The proposed route also provides important links from the town centre to the Robin Hood Line Station, NET terminus and major retail, employment and high density residential developments at the former Hucknall Colliery site. The District supports the mobility management study undertaken by the County Council and included in the plan.

Pedestrian enhancements

The Ashfield Local Plan Review includes a proposal for the pedestrianisation of Hucknall Market Place and High Street. This scheme is part of a continuing policy of the Council to provide a traffic free shopping environment in town centres, as already undertaken at Sutton in Ashfield and Kirkby in Ashfield. The scheme at Hucknall is part of a wider strategy in the town to improve pedestrian links to the station and NET terminus and to achieve an improvement to town centre facilities in line with Structure Plan Policies 5/1 and 13/4.

Outside of the town centres the Council fully supports a policy of improving pedestrian links between new developments and the wider area. The Local Plan Review Second Deposit has identified new development sites that are, in most cases, within walking distance of town centre or public transport facilities. Footpath improvements have also been undertaken to provide better access to the countryside.

The Council is aware of the need to provide a safe environment for people with limited mobility. Policy TR3 of the Local Plan Review Second Deposit requires all planning proposals, where the public would be expected to enjoy access, to be considered in relation to the quality and safety of access facilities. In town centre pedestrian schemes full provision is made to ensure easy access within the town for people with limited mobility.

Safer routes to schools are important and the Council supports the County Council policy to provide such routes. Where new developments are proposed the Council will ensure that routes to local schools are considered as part of the layout proposals.

Bus Quality Partnership

The Council supports the concept of the Bus Quality Partnership scheme to provide improvements to public transport. In particular the creation of bus lanes and other bus priority measures from Hucknall into the City and the improvement of passenger facilities and timetable information is considered essential and should be implemented as new housing development is constructed.

Nottingham Express Transit

The proposed Nottingham Express Transit Tram system is planned to terminate at Hucknall Station by 2003. The Council fully supports the provision of this new addition to public transport facilities. The Council has raised objections to the proposal from Gedling Borough Council that the NET system should be extended north of Hucknall, pending formal consideration of the need for development in this locality and considered against the wider issue of expansion of the NET network within the whole Nottingham conurbation. Any proposed extension of the line north of Hucknall to serve major development is therefore considered premature.

Community transport

The Council has supported the provision of a new Community transport mini bus service in partnership with Kirkby Volunteer Centre. This “Section 22” operation provides a weekly service bus from the rural parts of the District to local town centres. Section 19 “Group travel” is also undertaken for registered groups. The Council is keen to expand such opportunities to serve the more disadvantaged areas of the District.

Car parking

In the Ashfield Local Plan Review Second Deposit the Council has introduced revised interim parking standards, prepared by the County Council, to reflect policies of sustainable development. The new standards represent, in most cases, a reduction in previous requirements and the setting of "maximum" levels of provision.

The District Council is responsible for the management of public car parks. In recent years a charging policy has been introduced on a number of "short stay" shopper car parks to cover the operational costs of their provision and maintenance. The Council is also aware of the need to provide longer stay parking facilities for those who work in town centres. Lower "all day" tariffs are charged where appropriate although free long stay car parks still exist.

The Council support the "Secured Car Parks" scheme to ensure safe car parking and has an objective to provide at least one such car park in the District by end 2000.

Town Centre Management & CCTV

The Council supports the concept of Town Centre Management as a means to improve the quality and promotion of town centres. Local partnerships are considered to play an important role in town centre management and the Council wishes to facilitate this process to ensure that future management of the town centres lies with the local business community to ensure continued support. Following a detailed assessment, by consultants, of the Hucknall & Kirkby in Ashfield town centres the District Council has resolved to pursue the appointment of a Town Centre Manager, subject to financial resources.

The Council wishes to provide a safe environment and is undertaking a programme of CCTV installation in all three town centres during 2000. CCTV will be connected to the central control room at Mansfield Civic Centre which will monitor all cameras within Ashfield, including those currently installed at the Robin Hood Line Stations.

Cycling strategy

The Council supports the need to provide a safe environment for cyclists. In partnership with the County Council a number of cycling routes have been identified and provided in recent years. New developments will be expected to take account of the needs of cyclists and where possible cycle routes will be provided linking new development to town centres and transport facilities. New schemes will be identified in partnership with the County Council and implemented through the Local Transport Plan.

Air Quality

The Council is represented on the Nottinghamshire Air Quality Steering Group. The Environmental Health Section is currently preparing air quality assessments throughout the District, based on monitoring and modelling pollutant concentrations likely to arise from traffic, to ensure the national targets for air quality are achieved by 2005.

Taxi licensing

The Council currently provides for approximately 58 licensed taxis that operate from seven taxi ranks located at Sutton (3), Huthwaite, Kirkby and Hucknall (2). Taxi parking spaces are also included at Robin Hood Line Stations within the District. Taxis are considered to be an important element of local transport provision and facilities for taxis are improved, where possible, in town centre schemes. New developments such as shopping and leisure facilities will be expected to provide taxi parking spaces.

Concessionary fares

In conjunction with the County Council, Ashfield District Council administrates a concessionary fare scheme, which is targeted to improve access to public transport facilities for those with disadvantaged mobility and the elderly.

Broxtowe Borough Council supporting statement

Comments on strategy

Broxtowe Borough Council endorses the general strategy of the Greater Nottingham Local Transport Plan and wishes to add emphasis to the importance of the following:

(a) measures which will achieve better accessibility to, and within, the district centres with the object of reinforcing their function as centres of commercial, employment and social activity, and thereby reducing the propensity to travel elsewhere.

(b) measures which will encourage modal shift from private to public transport on main journeys, eg:

- park and ride facilities in strategically appropriate locations;
- extension of NET into the borough;
- provision of new railway stations and services under the GNARDS programme;
- bus improvements generally including quality and provision of services, waiting facilities, and
- information/promotion.

(c) measures which will defend residential streets from through traffic by the clear definition of a network of roads for "through" traffic and corresponding traffic management measures to reduce traffic levels and speeds elsewhere.

(d) measures which will enable the transfer of freight from road to rail, specifically through the provision of direct access to Toton Sidings from the A52/M1.

Relationship to the development plan

The Broxtowe Local Plan was adopted in 1994 and is currently being reviewed to cater for development needs for the period 2001-2011. This plan was placed on public deposit in January 2000, when the Council's preferences for new development sites were identified. The most significant of the new development sites is a large mixed use area involving business park (25 hectares) and other employment land (13 hectares) alongside 750 houses and new local facilities, located north of Nuthall on the west side of the M1 motorway. This new development is within the area served by the Nottingham-Eastwood public transport corridor in accord with the principles established by Structure Plan policies 1/2 and 5/2 in particular. Therefore the Borough Council supports all appropriate measures which could assist public transport efficiency and traffic movement along this corridor. These measures include the extension of the NET (Nottingham Express Transit) from the committed Line 1 spur terminus at Phoenix Park further west along the corridor, and the provision of additional park-and-ride opportunities west of the Nuthall roundabout.

A further 300 houses and another large employment area (16 hectares) have been allocated in the Local Plan on other sites related to the Nottingham-Eastwood public transport corridor.

No development allocations have been made by the plan on the Nottingham-Trowell public transport corridor, although it is recognised that some public transport and traffic improvements should take place to assist movement along this corridor. The designation in the plan of land for new railway stations at Trowell and Ilkeston or ancillary works in line with the GNARDS local rail network proposals will contribute to improvements on this corridor.

In the south of the borough, development allocations total some 320 houses related to the A52 corridor, and 460 houses (and 9 hectares of employment) related to the A6005 corridor. Both of these corridors therefore should be the subject of improvements to public transport to encourage modal shift, and improve other types of movement where appropriate.

The Broxtowe Local Plan Review Deposit Draft proposes that contributions towards transport measures will be sought from developers, as stated in Policy T1. This policy allows contributions to be in the form of provision of necessary infrastructure, or of financial contribution towards the provision and maintenance of public transport infrastructure, service improvements or facilities elsewhere within the locality. The Council will however wish to ensure that resources generated from the accommodation of further development in Broxtowe will be used for compensating improvements to transportation measures, including improved access to the borough's towns and employment centres, in benefit of local people.

Other policies in the Broxtowe Local Plan, both as adopted in 1994 and in the Deposit Draft of the review (2000), support transport initiatives listed in the Local Transport Plan. These include policies for improvements to bus facilities (T2), for park and ride facilities (T4), for the GNARDS local rail network proposals (T5), for the Nottingham Express Transit (T6) and for routes and facilities for cycling (T7, T8) and for pedestrians (T9). (The numbers in brackets are the relevant policy references in the Broxtowe Local Plan Review Deposit Draft 2000). The local plan also reflects (in Policy T10) the road schemes likely to take place in its ten-year period and include a policy (T11) about parking provision and a policy (T12) about facilities for people with limited mobility.

Through these various policies, which will be carefully monitored to ensure their implementation and effectiveness, the Broxtowe Local Plan will complement and assist the progress of the Greater Nottingham Local Transport Plan.

Comments on schemes and priorities

The Borough Council generally endorses the schemes listed in the Local Transport Plan and looks forward to collaborative working to identify specific priorities.

The Council would wish to speed up the process of identifying detailed measures needed in the town centres. For this reason, the Council has offered assistance to undertake the work required for the proposed Mobility Management Action Areas for each of the borough's four main centres, to ensure that not only Beeston is considered within the plan period.

The Council also particularly wishes to express support for the consideration of future extensions of the Nottingham Express Transit system into the borough, both in South Broxtowe and along the Nottingham-Eastwood corridor and a further examination of the potential for direct access to Toton Sidings from the A52/M1.

Parking issues

The Council recognises the work that has been done on parking policy so far, but would prefer to see more emphasis put on dealing with the issue of the likely spill-over effect just beyond the city boundary, in the event of the introduction of workplace parking charging.

The Council provides free off-street parking as part of a strategy to enhance the vitality of local shopping centres. It has invested heavily to obtain secure car parking awards in its main multi-storey car park and is investing in CCTV to cover other car parks. This forms part of its crime reduction strategy. In addition secure cycle lockers have been provided in several locations within the borough during the last year.

In Beeston the secure car park, bus station (also council owned) and taxi ranks are adjacent to one another and as indicated elsewhere in this statement the proposed Mobility Management Action Plans will examine, and develop further, links of this nature which improve efficiency of movement and access within district centres.

Concessionary fares scheme

A concessionary bus pass scheme is provided in partnership with the County Council. In addition the Council offers pensioners the option of £17 of public transport tokens.

Taxis

In taxi licensing matters the Council has rigorous standards, which are enforced. Discussions with operators have led to provision of extra ranks in locations proposed by trade representatives.

Air quality monitoring

The Council is an active member of the Nottinghamshire Air Quality Steering Group. Further studies are being carried out along the M1 corridor to ascertain current air quality and assess future trends. Whilst the air quality standards are likely to be met in most areas of the borough, the Council still believes that emphasis needs to be placed on the general approach of traffic.

Gedling Borough Council supporting statement

Introduction

The Borough of Gedling comprises the north-eastern suburbs of Greater Nottingham as well as a number of outlying villages located around the urban fringe. The suburbs are linked to the City Centre by a number of radial roads. The City Centre provides significant employment, retail, education, transport, services and leisure opportunities for the Greater Nottingham region and therefore influences journeys undertaken by the Borough's residents. Over half of Gedling's workforce travel to the City for work. (Source 1991 Census). This contributes to considerable congestion on radial routes into the City at peak travel times. Passenger train facilities in the Borough are limited with currently only three stations with infrequent services in the south connecting into the City.

Gedling Borough Council supports measures to reduce congestion in the area and influence choice away from the use of the private car.

Gedling Borough Local Plan

Gedling Borough Council, through the replacement of its currently adopted local plan is ensuring effective integration between land-use and transportation issues. The First Replacement Gedling Borough Local Plan completed a six month consultation phase in January 1999 and the plan has now progressed to the formal deposit stage. A series of aims and objectives have been set out in the First Replacement Gedling Borough Local Plan to provide clarity in the Council's long term intentions for land use and transportation. The aims and objectives under-pin the specific polices and proposals in the plan.

Under aims for access the First Replacement Gedling Borough Local Plan proposes to:-

a) encourage the reduction of road congestion and improve highway safety,

b) reduce the growth in the number and distance of journeys by car,

c) develop transport corridors from the City to outlying areas to allow for convenient and attractive public transport, and

d) ensure that district centres, local centres and employment sites are accessible by a good choice of public transport.

All of the aims, objectives and policies in the First Replacement Gedling Borough Local Plan have been subject to sustainability testing, through environmental appraisal of the plan, to ensure that they are compatible with Government policy to promote sustainable development and to contribute to reducing CO2 emissions nationally.

Location of new development

The First Replacement Gedling Borough Local Plan Replacement is consistent with the general strategy of the Nottinghamshire Structure Plan Review where sustainability was also a central issue in the preparation of strategic policies. The County Structure Plan Review (NSPR) requires that the First Replacement Gedling Borough Local Plan must ensure that sites are available to accommodate the allocation of 8000 homes and 70 hectares of employment land up to 2011.

The location of new development is important in reducing the need to travel, promoting other more sustainable forms of travel and more efficient use of the existing transport network. The majority of land that has been allocated for new housing in the local plan is located on the urban fringe of Nottingham and Hucknall and within existing transport corridors, in accordance with central and strategic aims to promote sustainable development. In order to provide a range and choice of sites other sites have been chosen where they occur on existing urban fringes and in the most sustainable settlements.

Policies for new major development in the local plan require adequate access by a range of transport choice and provision to be made in the layout for facilities giving priority to, and allowing penetration by buses, cyclists and pedestrians.

Major road schemes

The first Replacement Gedling Borough Local Plan deposit draft allocated approximately 1400 dwellings at the former Gedling Colliery site, together with an element of employment land. This site represents an opportunity for the redevelopment of previously used land adjacent to the existing urban area in accordance with strategic planning objectives. As part of the process of considering redevelopment of the former Gedling Colliery site the Borough Council and County Council jointly commissioned consultants to undertake a strategic review of the Gedling Bypass which passes through the site. The strategic review concluded that the full Bypass (i.e. from Victoria Road in the south to Arno Vale Road in the north) does not appear to accord with current national and local transport strategy. However the review goes on to state that a relief road, (similar to the middle section of the full Bypass, i.e. between Burton Road and Arnold Lane), would permit environmental improvements in Gedling Village and would not contravene the local and national integrated transport strategy. The review also concluded that to accommodate a development of approximately 1400 dwellings on the colliery site such a relief road would be a requirement. Land is therefore safeguarded for the route of a relief road between Burton Road and the proposed colliery site in the First Replacement Gedling Borough Local Plan. The remainder of the full Bypass (i.e. sections north and south) is unlikely to be progressed in the lifetime of the First Replacement Gedling Borough Local Plan and has therefore not been indicated on the Local Plan proposals map. It is the intention of the County Council to formally review the feasibility of the full Gedling Bypass. Gedling Borough Council supports an early formal review of the full Bypass which will provide timely clarification of the status of the Bypass in the on-going consideration of the First Replacement Gedling Borough Local Plan. However, until such time a this review is complete the County Council wish to safeguard the full Bypass scheme in accordance with the Nottingham Structure Plan Review and have accordingly raised a holding objection to the Local Plan.

Developer contributions to integrated transport measures

Gedling Borough Council has been working with the County and City Councils in the development of Supplementary Planning Guidance for 'Development Contributions To Integrated Transport Measures' which supports Nottinghamshire Structure Plan Review Policy 5/4. The First Replacement Gedling Borough Local Plan includes policy T1 which will facilitate the implementation of the supplementary planning guidance. Gedling Borough Council looks to the Local Transport Plan for identification of the schemes to which developer contributions will be sought including associated costing and timescales.

Bus Quality Partnership

In order to contribute to the reduction in existing levels of traffic congestion particularly on routes into the city centre, Gedling Borough Council supports the implementation of Bus Quality Partnership schemes including bus lanes, bus priority measures and associated park and ride facilities. Bus Quality Partnership schemes identified for Mansfield Road, Woodborough Road, Carlton Road, Daleside Road and the Ring Road are of particular relevance to Gedling Borough.

Park and ride

In support of the LTP the First Replacement Gedling Borough Local Plan identifies park and ride sites Leapool Island, Gedling Colliery and land North of Hucknall. The Borough Council will expect the feasibility study referred to in the LTP to be progressed in the immediate future so that the First Replacement Gedling Borough Local Plan and the LTP can fully complement one another.

Rail and NET

Although rail services within the Borough are limited, the Robin Hood rail service was opened in 1993 and connects Newstead to the City. Gedling Borough Council would support the extension of the line. The Nottingham Express Transit (NET) system to link the City Centre with the northern part of the Greater Nottingham conurbation was given Government approval in November 1998. Gedling Borough Council supports the extension of the line northwards.

Car parking

In September 1998 Gedling Borough Council adopted the Interim Parking Standards prepared by Nottinghamshire County Council to reflect their polices on sustainable development and have incorporated these into the Deposit Draft of the First Replacement Gedling Borough Local Plan.

In 1999 Gedling Borough Council approved the principle of implementing a work place parking levy in Gedling. This is in line with the City Council's approved strategy. Receipts from parking levies can be put towards improving public transport initiatives within the Borough.

Cycling strategy

Gedling Borough Council's Cycling Strategy was adopted in September 1997. In partnership with the County Council a number of the schemes identified in the Strategy have been progressed. These schemes have either been funded by Gedling Borough Council or joint funded by the County Council. Some schemes have been provided through negotiation as part of development proposals. Schemes will continue to be pursued and implemented as set out in the Borough Council's Cycling Strategy and as identified in the LTP with the priority on completing routes within the urban area and those that could link with proposed development areas in the forthcoming local plan

Commuter plan

Gedling Borough Council is committed to the production and adoption of a Commuter Plan for the Council. A travel to work survey of staff has been completed and the results will feed in to the next stage of the Commuter Plan preparation. The Council has already implemented initiatives such as the provision of pool bikes, cycling mileage allowance, secure cycle store and work place showers. Following on from the adoption of a Commuter Plan for the Council, it is intended to approach other main local employers with a view to assisting them in preparing their own commuter plans.

Shopmobility and disabled access

A successful 'shopmobility' scheme has been operating in Arnold town centre since January 1995 and its popularity continues. The environment improvement scheme in the town centre has also achieved level access to most shops with in the improvement area.

Improvements for pedestrians

Re-surfacing and lighting improvements to a pedestrianised area of Arnold town centre has recently taken place and improves conditions for pedestrians.

A scheme to encourage walking to school has been launched by the Borough Council. Footpath and lighting improvements have been installed by the Richard Bonnington School and a walking bus project has been commenced.

Policy T6 of the Review Local Plan requires that new development does not have a detrimental effect on pedestrian convenience, safety, patterns of movements and the needs of people with impaired mobility.

Air quality strategy

Gedling Borough Council is represented on the Nottinghamshire Air Quality Steering Group. The Environmental Services Section of the Council is currently preparing air quality assessments throughout the borough to ensure that National targets for air quality are achieved by 2005.

Taxi licensing

The Borough currently maintains approximately 500 licensed taxis which operate from three ranks located at Arnold Town Centre and at the District Centres of Carlton and Netherfield. This form of transport provides a service for those without their own private transport facilities.

Concessionary fares

In conjunction with the County Council, Gedling Borough Council administrates a concessionary fares scheme which is targeted to improve access to public transport facilities for those with disadvantaged mobility and the elderly.

Rushcliffe Borough Council supporting statement

Introduction

The Borough Council endorses the vision, as set out in the 2000/01 provisional LTP, of sustainable communities, access for all, and an integrated transport and land use planning framework. It supports joint working towards this by local authorities through the LTP which is the main delivery mechanism for transport related investment; any amendments to the programme should be made as a part of this process with additional information and consultation.

Current Local Plan

The current local plan was adopted in June 1996 and is at present under review to take account of the Structure Plan Review (November 1996). It concentrates new development in and around existing built up areas, to reduce the need to travel and increase the efficiency of use of existing infrastructure. In addition, there are specific policies / 'statements of intent' to promote the use and further development of public transport, and promote facilities for pedestrians, cyclists and those with impaired mobility. The potential of the Borough's watercourses for freight transportation is explicitly protected by policy. The Local Plan also supports a number of road improvement schemes in the Borough to relieve the environmental impacts on local communities of high traffic levels and HGV use.

Local Plan Review

The Local Plan Review was placed on deposit in Spring 2000 and resulted in over 7500 representations, made by 3100 individuals. A major area of concern is the current inadequacy of the road and public transport systems and the additional pressure these face from new development. The Deposit Draft Plan includes a more integrated approach to transport management based around provision of public and non-motorised transport infrastructure, and demand management measures in line with government guidance (PPG13) and Structure Plan Review. An Interim Transport Planning Statement prepared by the County Council will set the framework for developer contributions to a package of measures within strategic transport sectors.

The Structure Plan housing allocation directs the one third of new development in the South Notts sub region into Rushcliffe Borough, on the basis that this will be supported by additional transport infrastructure, including major road improvements, to make this level of development feasible in an otherwise largely rural borough. However, all these road schemes - A52 Radcliffe on Trent bypass, A46 dualling, A453 improvements, and new Trent crossing - have been either shelved completely or put back beyond the Local Plan period. The Local

Transport Plan should push for the reinstatement of schemes to improve the A46 and A52, or should plan for suitable alternative improvements and the swift progression of the A453 multi-modal study and implementation of its findings. It should recognise their importance in a comprehensive approach to the accessibility problems of this part of the County.

Given the dispersed rural nature of the Borough, lack of access to transport (public or private) is a significant barrier to economic and social inclusion. For these and environmental reasons reduction of travel will be a major consideration in the revised Local Plan; this will be achieved in part by the location of development close to public transport infrastructure and the close relation of residential and employment land uses. Traffic is undoubtedly the main contributor to pollution within Rushcliffe. Location of new development will be influenced by the ongoing review and assessment of air quality within the District. Following completion of the assessment, a local strategy will be developed to ensure Rushcliffe meets National Air Quality Strategy objectives.

However, the Greater Nottingham area will continue to act as a major employment centre and result in problems of commuter traffic congestion. The Local Plan Review will support specific measures to improve this situation, including bus lanes, bus priority measures and park and ride facilities. Bus measures are particularly important through West Bridgford to reduce traffic impact on current residents which will otherwise only continue to escalate.

Park and ride services may help to alleviate commuter congestion as part of a wider strategy. However, the approaches to West Bridgford are already so congested that attracting users from the wider area may be problematic. The LTP should, therefore, investigate the feasibility of park and ride sites, including Gamston; in particular the possibility of a 'park and rail' development in association with the proposed new settlement at RAF Newton. The local plan review will support sites for park and ride where agreed between the Borough and County Council.

In conjunction with this, the Borough Council wishes to see improved commuter services on the Nottingham-Grantham line serving Radcliffe and Bingham (and Newton) and will support bids made by the County for RPP funding to further this aim.

The Borough Council supports the principle of a Parkway train station on the main line to London in the vicinity of Ratcliffe on Soar power station. A planning application has now been received for this proposal and is being considered by the Council.

Policies are included to obtain financial contributions from developers for public transport improvements (in line with the County's structure plan policy and forthcoming ITPS). These improvements may take the form of infrastructure and/or revenue contributions. The LTP should clearly identify the proposed projects, their costings and timescales in each of the public transport corridors for which contributions will be sought in order to ensure the integration and delivery of public transport measures in new development.

This local plan review also incorporates interim revised parking standards and will refer to maximum parking provision in line with PPG 13, to be implemented through development control.

On major residential sites, design briefs will co-ordinate and prioritise public and non-motorised transport. These will have regard to County Council parking standards, but will also allow flexible and innovative approaches to parking requirements and road layouts in residential areas to allow 'pedestrian friendly' higher density developments. Where appropriate, 'Home Zone' principles will be built into the design of new residential areas. A Home Zone is being developed for the Lady Bay area in conjunction with the County Council.

The Plan currently supports joint working through Quality partnerships to deliver quality public transport services and will continue to work with partners to extend services to new development areas to provide real modal choice from the outset.

Taxi licensing

The Borough has maintained around 300 licensed mini-cab drivers over a number of years; these contribute to mobility for those without private transport. Policy regarding location of taxi ranks is under review in collaboration with the County Council. The implications of the Disability Discrimination Act are also currently being monitored by the Council, which will introduce any changes as required.

Concessionary fares

Rushcliffe Borough Council runs and funds a concessionary fares scheme jointly with the County Council to improve access to public transport for those with mobility difficulties. The overall policy is consistent across districts, and eligibility and targetting are monitored jointly with the County. Presently, the scheme benefits the elderly and recipients of certain disability benefits.

Commuter plans

The Borough Council is currently investigating the potential for a commuter plan including a car sharing scheme for its employees. The feasibility of plans for local firms and residents will also be investigated through the Agenda 21 forum in order to maximise local residents' involvement in and ownership of schemes. Similar plans for residential areas will also be investigated.

Parking

Although the Council does not have a published policy in respect of off-street parking, it has for many years followed an informal policy of opportunity purchasing in the main commercial centres, when the possibility arose to expand the parking facilities for the overall benefit of the main shopping centres. This resulted in an expansion of facilities in Radcliffe on Trent in 1996; also in West Bridgford in 1989/90 where parking charges were then introduced in 1991 to ensure availability for shoppers and prevent all-day parking by the non-shopping public. There is currently a 10 pence charge for up to two hours parking in the town, and £10 for longer periods. Although charging has not been expanded beyond the West Bridgford area the Council will continue to review car park usage to ensure that the well being of the commercial centres is not compromised.

Cycling strategy (inc. safe routes to school)

The Borough Council has had an approved Cycling Strategy in place since 1995, focussing on improving key links between West Bridgford/City Centre and the outer areas of Rushcliffe, to facilitate both journey-to-work and recreational cycling. So far, all but two of the original 12 proposals are either in place or programmed. The County Council has now established a cycle working group for Rushcliffe and a programme of cycle routes are listed in the Local Transport Plan; it is hoped that this will extend the initiatives started by the Borough to further routes, particularly roadside routes. The Highways Agency has also recently implemented several schemes contained in the Borough's strategy, along the A52, and it is hoped that other Borough Strategy proposals, along the A52 between Lings Bar and Nottingham Knight will be taken up. School Travel Plans are also being developed in the Borough in discussion with local community groups. The Council supports schemes which will enhance the safety and accessibility of cycling, in particular for young people at school.

Walking strategy

Many of the principles and routes provided through the cycling strategy apply equally to walkers, who may make full use of facilities provided. There is, however, a need to focus specifically on avoidance of noise and air pollution for walking commuters in urban areas and on journeys to schools, shops etc, by focussing on key routes, preferably off-road or on quieter streets with appropriate lighting. Town Centre schemes in the Borough are increasingly focussed on pedestrian needs by either traffic reduction as in West Bridgford or by improved paving and amenities as in Radcliffe on Trent, Bingham, Keyworth , East Leake and West Bridgford. Further attention is needed to specific safety and amenity aspects of walker's needs in a general context, beginning with safety at road junctions.

Disabled access & shopmobility

The centres within Rushcliffe are not of a sufficient size to sustain shopmobility or community transport schemes. However, this is an issue which is kept under review through the NOMADS (Nottinghamshire Access Officers) consultation group.

Environmental improvements

These are selected from a pool of schemes reviewed every 3 years. Where appropriate, environmental schemes include consultation and consideration of mobility and access issues. A number of the larger schemes focus on improving village and town centres which will stimulate local use of these areas with knock on reductions in travel for shopping and other services, and an improved quality environment for public transport. Where schemes impact on the public highway, consultations are carried out with the County Council.

The joint West Bridgford town centre regeneration scheme was recently completed and is intended to reduce traffic congestion, improve the pedestrian and shopping environment, improve disabled vehicular access and allow bus services to function effectively.

A joint scheme is currently planned to develop a Home Zone in the Lady Bay area; the Council supports this initiative and will look to apply similar schemes or principles to new developments, and other housing areas.

Community safety strategy

This strategy aims to 'improve the quality of life of the community ...by reducing the level of crime and disorder' and in particular aims to ensure that people can feel safe walking the streets, and that children are safe playing near their homes and travelling to school. Specific action plans - working with partners including the Police and the County Council - also deal with pedal cycle theft, car crime, and quality of life issues including road safety and speeding, fear of crime and environmental crime such as graffiti which impacts on people's fear of crime in public places.

Appendix C

Bid for Centre of Excellence status

Introduction

For many years the authorities have recognised that action is necessary to reduce the adverse effects of ever increasing road traffic and appropriate strategies to encourage use of alternatives to the car have been developed. The Greater Nottingham Area was one of the first to receive funding support for an integrated "Package" as introduced in 1994 by the previous Transport Policies and Programme system. Consequently, the authorities were well placed to fully take on board Government advice contained in the Transport White Paper.

Elements of transport integration

Building onto this solid foundation, the Greater Nottingham approach has focused on four main elements of integration:-

(i) Quality Corridors for Bus, Rail and NET:

- improvements to 7 corridors are already in place and a further 7 are to be developed over the next few years,
- service enhancements have been made to the successful "Robin Hood Line" passenger railway, and there are ambitious plans to develop other parts of the suburban rail network, and
- work has now commenced on Line One of the "Nottingham Express Transit" tram system, which will interchange with the Robin Hood Line and be integrated with bus feeder services.

(ii) Interchange

- over 500 new high quality bus shelters and 200 timetable / lighting poles have been provided at bus stops and further improvements are planned,
- high quality Park and Ride sites, bus and rail based, already provide over 5000 parking spaces,
- six high quality Park and Ride sites are programmed, five along Line One of NET, and a new bus based facility at Gamston, and
- a new "state of the art" bus and coach station is planned to link with NET at Broad Marsh.

(iii) Information and marketing

- progress has been made on a comprehensive transport information system being developed in association with the TravelWise Centre, including a web site,

- future development of telephone hot-lines, and IT links relating to real time information, enhanced ticketing are planned, and
- bespoke travel and timetable information is produced to complement that provided by the operators.

(iv) Land use and commuter planning

- the authorities' progress in developing commuter planning, influencing over 40 employers / 50,000 staff, is nationally recognised,
- planning decisions have influenced siting of development to sustainable locations and obtained developer contributions for public transport facilities, and
- progressive parking charges and restraint-based parking standards have been used to discourage car borne commuting.

Other areas of excellence

In addition to satisfying the criteria for bus, rail, parking, public transport interchange, public transport information and travel plans, the authorities have an excellent track record in road safety matters, and, for many years, have taken a leading role in developing cycling facilities.

Spreading good practice

Several good outlets to spread good practice, e.g. TravelWise Centre, regional and local authority groupings, already exist. In addition, the authorities are prepared to accept invitations to conferences, seminars etc and contribute to the preparation of good practice guides etc. The authorities anticipate requiring £20k for 12 months (£10k per authority) for such promotional activities.

Indicators and monitoring

The Local Transport Plan for Greater Nottingham includes a number of targets relating to improving the modal share of walking, cycling and public transport. In particular, a target has been set for bus punctuality. Further targets are included for reducing traffic growth and for reducing road casualties. All the targets are accompanied by a strong monitoring regime and, where appropriate, Best Value assessments.

A brochure highlighting the authorities' integration activities has been produced in support of the bid and is to be used as the basis for consultation and dissemination.

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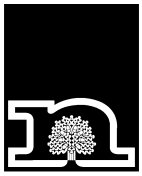
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Abbreviations

AADT	Annual Average Daily Traffic
AQMA	Air Quality Management Areas
AQMS	Air Quality Monitoring Station
ATC	Automatic Traffic Counter
AUN	Automatic Urban Network
BQP	Bus Quality Partnership
BVPI	Best Value Performance Indicators
CCTV	Closed Circuit Television
CDP	Charging Development Partnership
CNG	Compressed Natural Gas
CPRE	Council for the Protection of Rural England
CPZ	Controlled Parking Zone
CTL	Central Trains Limited
CVI	Coarse Visual Inspection
DETR	Department of the Environment Transport and the Regions
ECMC	East Coast Main Line
EMDA	East Midlands Development Agency
EMRLGA	East Midlands Region Local Government Association
FQP	Freight Quality Partnership
GOEM	Government Office for the East Midlands
GPS	Global Positioning Satellite
HGV	Heavy Goods Vehicle
IHT	Institute of Highways and Transportation
KSI	Killed and Seriously Injured (casualties)
LA21	Local Agenda 21
LPG	Liquefied Petroleum Gas
LTP	Local Transport Plan
MMAA	Mobility Management Action Areas
MML	Midland Main Line
MOST	(European Mobility Management Project)
NAQS	National Air Quality Strategy
NATA	New Approach To Appraisal
NET	Nottingham Express Transit
NMS	Network Management Statement (Railtrack)
NRMCS	National Road Maintenance Condition Survey
NTP	Nottingham Transport Partnership
PHV	Private Hire Vehicles
PMS	Pavement Management System
PPG	Planning Policy Guidance
PRN	Principal Road Network
PSR	Public Service Requirement
PTI 2000	Public Transport Information 2000 project
PTW	Powered Two Wheelers
RoSPA	Royal Society for the Prevention of Accidents
RPP	Rail Passenger Partnership
RQP	Rail Quality Partnership
SCA	Supplementary Credit Approval
SCOOT	Split Cycle and Offset Optimisation Technique
SNRN	South Nottinghamshire Rail Network
SPG	Supplementary Planning Guidance
SRB	Single Regeneration Budget
SSRA	Shadow Strategic Rail Authority
STEPS	(County Council Commuter/Travel Plan)
TPP	Transport Policies and Programme
UTMC	Urban Traffic Management Centre
VMS	Variable Message Sign
WPL	Workplace Parking Levy



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