Chapter 13: The Carlisle Area

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The Area

- 666 Carlisle Transport Programme Area is shown in Figure 16 and includes the City of Carlisle together with the surrounding rural area which includes a number of smaller towns such as Brampton, Dalston, and Longtown. Carlisle is the predominant travel to work area for these smaller towns and is also the largest city in the County. It performs the role of sub-regional centre with a manufacturing, retail and service sector providing employment opportunities for a wider area covering West Cumbria and South West Scotland.
- 667 Carlisle is a major transport gateway and road/rail hub. The major road routes through the area are the M6/A74, A69, A7, A595 and A689. Carlisle is a major hub in the national rail network, where the West Coast Main Line, the Tyne Valley Line, the Settle Carlisle Line, Cumbrian Coast Line and the Nith Valley Line all converge. Carlisle airport is part of the strategic transport network and is considered to have potential for further development.
- City bus services are operated by 668 Stagecoach Cumberland with a number of evening services supported by the County Council. There are however gaps in the service and limited services in the evening and on Sundays. Outside of Carlisle, in the rural areas, many services have been improved or introduced through the Rural Bus Grant. The council also supports a large number of less frequent rural bus services in the areas around Brampton and Bewcastle, Additional schemes supported by the council (and partners) include a community minibus brokerage scheme in Carlisle, a community minibus in Brampton and Voluntary Social Car schemes in parishes throughout the area.
- 669 Cycle facilities have been installed in Carlisle over recent years including designated cycleways/tracks. A number of strategic cycle

- routes also pass through the area. (see Figure 12).
- 670 Within Carlisle, walking to work accounts for some 22% of journeys. The main shopping street is pedestrianised and the pedestrian routes leading from the car parks have pedestrian phases at the signal controlled junctions.
- 671 Generally, parking supply in Carlisle exceeds demand, but the central car parks are well used leading in some cases to queuing for access, which causes additional congestion in the central area. The cost of long stay offstreet parking, assuming a 7 hour stay, is £2.00 per day. Parking duration surveys have indicated that a substantial proportion of the long stay spaces are used by drivers staying 3 hours or less. This would indicate that there is significant over provision of long stay car parking in Carlisle.
- 672 Car ownership figures for Carlisle are similar to the national average (see Figure 3). In 1999 77% of trips to Carlisle were by car and 21% by bus.
- 673 Carlisle is already facing mounting peak hour delays which will worsen as traffic levels rise. Peak period mean journey speeds are between 17% and 60% lower than those in the off peak periods, with the greatest difference on A595 Wigton Road. The traffic growth rate in Carlisle is 2.2% annually and if this continues, by 2005 traffic volumes will be 24% greater than in 1995. Unless action is taken to stem the rise in traffic volumes, queues and delays will increase to unacceptable levels.
- The implementation of SCOOT Urban Traffic Control was completed in 1997/98. All signal controlled junctions in the city are now under SCOOT control, the majority for a period just prior to the morning peak and ending in the early evening. The introduction of SCOOT in Carlisle has provided some measure of relief by improving the co-ordination of traffic signals in the city.

675 A regional employment site exists in the north west part of the city at Kingmoor Park. To realise its full development potential, better access is essential to cope with the demand an extra 3000+ would create. The proposed Carlisle Northern Development Route (CNDR) is significant in this regard and would also remove through traffic from the City and allow re-allocation of road space to take place.

Policy Context and Consultation

- 676 In Spring 1997 an initial travel awareness leaflet was distributed to 54 000 households. The response to this questionnaire was 7.4% and of these, over 90% considered that traffic congestion was a problem in Carlisle. In structured interviews with 1200 visitors to the City Centre, over 85% supported this. As a result of this consultation exercise, a number of potential measures were drawn up.
- 677 A more detailed leaflet proposing a broad range of demand management measures to combat rising traffic levels was drawn up in August 1997. A questionnaire was attached to the leaflet which was distributed to the same number of households contacted earlier in the year. The most popular types of measure were more frequent, reliable and advertised bus services and cycle lanes on the main radial routes. Less popular were proposals to increase parking charges and manage parking supply so as to discourage long stay car commuting.
- 678 The transport proposals for Carlisle evolved from a major review of transportation strategies carried out in 1996. This was based on sustainable development and demand management principles and involved a major modal choice study of the City. This involved attitude surveys and multi-modal modelling to identify a range of schemes and measures that would cap traffic flow levels at 2000 levels by 2005. A number of approaches were tested by forecasting their impact on mode share.
- 679 Subsequent to this, new Government guidance on the approach to transport

appraisal (NATA) was published. A further study, incorporating the new guidelines, was undertaken in 1999. This study re-assessed the proposed transport strategy both with and without the CNDR against a Do-Nothing and an enhanced public transport option. The results confirmed the previously identified transport strategy, together with the CNDR, to be the optimum strategy for Carlisle. A detailed description of the schemes considered, the study methodology and the results/conclusions are contained in "CNDR Study of Multi-Modal Transport Strategy Options, Technical Report".

1998/99 TPP 680 The settlement prompted a more detailed public consultation on the proposed schemes for the South East (SE) sector and preliminary consultation on the schemes for the City Centre. This consultation was more broadly based, taking the form of leaflets with questionnaires, full page advertisements in the local press, radio adverts, public meetings plus more detailed face to face structured attitude surveys. The overall response was again supportive. The proposals for the SE Sector are due to be completed during 2001/02.

Current Position

- 681 The A595(T) is the main road connection from North-West Cumbria to Scotland via the A74(T) and North-East England via the A69(T). Currently the road passes through the centre of the city resulting in significant delays to this traffic and congestion in the city centre. There is a pressing need to provide an alternative route for this traffic and the LTP will seek to address this through construction of the Carlisle Northern Development Route (CNDR), a new single carriageway route located to the west of the city.
- 682 There is a need to reallocate any additional effective capacity in the network to walking, cycling and buses as part of a wider demand management strategy. This objective is complicated by the fact that all traffic travelling between West Cumbria and Scotland and the North East of England currently has to

pass through Carlisle. Re-allocation of road space on the main routes into Carlisle will increase journey times for this traffic thereby having detrimental economic effect.

- In common with other urban areas, traffic congestion in Carlisle has been increasing in recent years, particularly on the main radial routes at peak periods. This congestion also delays public transport including for example at Caldewgate The result of this growth roundabout. continuing in future years will be increased delays, particularly at critical junctions in the network, which are already operating at or above maximum capacity levels. This will increase noise and air pollution. Increased traffic levels will also result in increased severance along busy corridors and local communities may effectively become separated. This is without any additional pressure that the Kingmoor Park Project will bring in the future and steps need to be taken to avoid restraint on economic development.
- 684 This increased pressure on radial routes will result in more drivers using adjacent residential roads as short cuts. This "rat-running" will clearly have a detrimental effect on affected residential areas.
- 685 A main environmental issue is the use of routes by Heavy Goods Vehicles. This is particularly the case in Dalston where HGV's travelling between the M6 and North west Cumbria use inappropriate non Primary Route Network (PRN) roads as short cuts. The volume and speed of traffic, and particularly HGV's, passing through the village of Warwick Bridge on the A69(T) is also a cause for concern.
- dopted by Cumbria County Council are presented in paragraph 558. The Carlisle area programme will contribute to this by reducing traffic growth and also by implementing schemes drawn from the hazardous locations list. Construction of the CNDR will also reduce accidents as a result of traffic transferring from less safe city centre roads onto the new road.

- do not have access to a car there is a need to ensure that they have access to jobs and facilities. An opportunity exists to improve public transport accessibility for the smaller centres of population outside of the City through the Rural Transport Partnership. There is a need to provide viable alternatives to inter-urban car travel when demand management measures are introduced in Carlisle, and to promote the use of walking and cycling.
- 688 There is a problem of social exclusion in Carlisle, particularly during evenings and weekends when bus services are less frequent or non existent. Walking and cycling are often seen as unattractive due to a number of factors. The high volumes of traffic on the radial routes into Carlisle can be intimidating and produce high noise and air pollution levels. Generally there are insufficient cycle lanes and facilities for pedestrians leading to both modes being perceived as unsafe.
- Currently, changes of transport mode 689 are hampered by a number of factors. The main bus/rail interchange area in Carlisle is alongside a heavily trafficked road with inadequate waiting/pedestrian facilities. Interchange points throughout the area, both bus and rail, require substantial improvements and include lighting, seating, shelters, cycle parking, signing, accessible timetable information and real-time information. Better Ways to School initiatives will play an important role in encouraging mode transfer.
- 690 Carlisle airport currently has no scheduled or charter air services. The area is one of the least well served by air services in the UK although Newcastle, Manchester and Glasgow are within travelling distance. The outcome of the North of England Air Services Study is awaited and it is understood that a regional consultative report will be available by the end of the year. Future development will depend on the outcome of the disposal of the airport by the City Council but it is considered important that any new owner should engage the airport with good quality public transport links. It is anticipated that this would involve bus/minibus and taxis in the first instance.

However, it is also recognised that in the early stages of any increased activity involving the public increased car parking will also be required.

Priorities

- 691 The overall approach to address the above can be summarised as follows:
- Remove unnecessary through traffic from Carlisle, allow re-allocation of road space on the main routes into Carlisle and maximise development opportunities at Kingmoor Park through construction of CNDR.
- Improve accessibility for non car owners by increasing frequency and attractiveness of public transport services and improving walking/cycling facilities and networks.
- Encourage modal transfer from the car through demand management measures including road space reallocation and parking supply/charges.
- Improve the environment by removing unnecessary traffic and encouraging use of environmentally friendly modes of transport.
- Improve safety through the implementation of Engineering Safety Schemes and Better Ways to School proposals.
- Promote integration across all modes by improving interchange facilities and the availability of transport information.
- for the figure 18. Table 22 sets out a priority list of projects with costs. These are shown in Figure 18. Table 22 sets out the importance of the project and how long it might take before it can be implemented. The projects have a variety of inter-related objectives and impacts. These, influenced by the consultation process, have been assessed to produce an integrated programme, which is

presented in Table 26. Table 22 does not include general measures. These are itemised in Table 23, and comprise small scale individual schemes grouped together under appropriate headings. It is considered there is greater flexibility in the funding level of the individual schemes for these measures. Details and justification for the Carlisle Northern Development Route is set out first because it is inextricably linked to the other measures over the five year plan period and is an integral part of the overall strategic and local programme.

Carlisle Northern Development Route

- only major scheme for the Local Transport Plan period 2001/02 to 2006/07 and is a key measure for the strategic transport network (see paragraph 99). PFI funding approval is being considered for the scheme as part of an overall package (see paragraph 688). Appendix 2 contains more detailed information about the potential package. The principle features of the scheme are summarised below.
- existing commercial activity and would provide high quality access to the Kingmoor Park regional employment site. It would complete the strategic route for traffic travelling from/to West Cumbria avoiding the centre of Carlisle. It would thereby facilitate a more acceptable means of introducing a reallocation of road space in the city.
- 695 In 1996 the County Council undertook preliminary design work to enable a preferred line to be selected. Public consultation was undertaken during summer 1996 to determine public opinion on four possible routes for the scheme. The County Council adopted a preferred route in January 1997.

Table 22: Priorities and Costs - Carlisle

Rank	Scheme	Total £000's	County Council Capital £000's	Other Funding Partners	Area Committee Priority	Time to Achieve a Start	
1	City Centre Bus Priority/Stops/Information	120	105		1	A	
2	West Walls Traffic Calming	30	30	-	1	A	
3	English St. Bus/Rail Interchange	400	400	-	1	A	£10
4	Carlisle Rail Station Improvements	110	60	Carlisle City, VT, RTr	1	A	
5	City Centre VMS/Parking Information	150	150	-	1	A	£12
6	Botchergate Environmental Enhancement	220	220		1	В	£14
7	Carlisle Northern Development Route	23354			1	В	1
8	Carlisle Bus Station Improvements	100	100	-	1	D	
9	Brampton Environmental Improvements	550	550	-	2	В	
10	Brampton Rail Station Improvements	40	30	NS. RTr	2	С	
11	Wetheral Rail Station Improvements	31	25	NS, RTr	2	D	
12	Dalston Rail Station Improvements	31	25	FNW. RTr	2	В	
13	Nelson Bridge widening	540	540		2	В	1
14	East Sector Cycle Lanes/Routes	170	170	-	3	A	
15	Active Bus A69 Corridor	80	80	-	3	В	
16	SW Cycle Routes/Lanes	80	80	-	3	В	
17	Park and Ride A69	870	870	-	3	С	
18	Park and Ride A7	870	870	1-	4	D	
19	Bus Priority A7	330	330	-	4	D	
20	Active Bus A7 Corridor	120	120	-	4	D	
21	A7 Red Light Cameras	160	160	-	4	D	
22	North Sector Cycle Routes/Lanes	85	85	-	4	D	
23	Park and Ride A595	970	970	1-	5	D	
24	Bus Priority A595	245	245	-	5	D	
25	Active Bus A595 Corridor	60	60	-	5	D	-

Time to Achieve Start Partners

 $\begin{array}{lll} A &=& up \ to \ 2 \ years \\ C &=& up \ to \ 4 \ years \end{array} & \begin{array}{lll} NS &=& Northern \ Spirit \\ VT &=& Virgin \ Trains \end{array}$

 $\begin{array}{lll} B &=& \text{up to 3 years} \\ D &=& \text{4+ years} \end{array} \qquad \begin{array}{ll} \text{FNW} &=& \text{First North Western} \\ RTr &=& \text{Railtrack} \\ Carlisle \ City \end{array}$

Indicative Outturn Costs

Table 23: Annual Package of Measures

Measure	Annual Spending Range			
Monitoring	5 000 - 10 000			
Danger Reduction Schemes	20 000 - 40 000			
General Minor Works/Maintenance	10 000 - 20 000			
Rural Bus Infrastructure Improvements	25 000 - 50 000			
Better ways to School	25 000 - 50 000			
Total	£85 000 - £170 000			

After the preferred route was chosen, development programme for the Parkhouse Road area and the A74 became clearer. The requirements for access arrangements for the Kingmoor Park Employment site also progressed. During 1998, the County Council working in conjunction a private sector partner, carried out further preliminary design work on an alternative route providing more direct access from M6 Junction 44 to the Kingmoor Park This also sought to provide the best possible access and frontage configuration for development plots on the employment site. Public consultation was again carried out for the northern end of the scheme and the County Council adopted the current preferred route in June 1999 (see Figure 17).

A clear need has been identified for 697 major transport infrastructure provision to and from the Kingmoor Park site. This would in particular allow the movement of people from beyond Carlisle. A significant proportion of the available labour market will be attracted from outside the city. North and West Cumbria are most relevant in this respect and to a lesser extent South West Scotland. Good transport links with Kingmoor Park are crucial for the future success of the project. There is also potential for expansion of rail freight opportunities and the development of passenger rail services is also being considered. Without the provision of a CNDR, future development of the Kingmoor Park site would be constrained and the opportunity for a potential rail freight interchange lost.

A study has reported on options for construction of a passenger rail station and rail freight access to serve Kingmoor Park development site. The report is currently under consideration by Railtrack. Passenger rail services could be provided from west Eden Valley Cumbria, the Brampton/Wetheral areas by extension of existing services through Carlisle to the new station. The most likely layout for a station would be on a bi-directional or double-track loop to the east of the West Coast Main Line directly across from the Kingmoor marshalling vard. Such a loop would also ease freight movements in and out of private sidings or a modest, shared use, intermodal terminal on the development site. Railtrack are considering possible locations for passing loops on the WCML to improve capacity to accommodate more fast trains and freight traffic. The Council is encouraging Railtrack to locate one of these loops so as to facilitate the construction of freight access and a new passenger station. The construction of the proposed CNDR would assist in the development of a viable intermodal freight terminal at Kingmoor by improving accessibility to the terminal.

699 The CNDR is also a key component in the overall approach to encourage increased use of public transport in Carlisle. It is planned to provide bus lane and bus priority

measures along large sections of the A7 and A595 which will mean increased journey times by car along these routes. The introduction of additional delays along these routes is considered not to be desirable when both of these roads are currently used by the vast majority of traffic that needs to access West Cumbria from Scotland and the North East of England.

700 Improving public transport accessibility in the City includes the provision of bus priority measures along all major radial routes. These measures for example bus lanes, bus gates, bus boarders and priority at signals, require the reallocation of road space from other traffic. Currently, considerable volumes of through traffic between west Cumbria and Scotland and the North East travel via the A595, A7 and A69 in Carlisle. The CNDR would substantially alleviate traffic flows along these routes enabling the implementation of the necessary bus priority measures (see Appendix 2 for the detailed figures). Furthermore, demand management measures to curb car traffic on these routes, to be implemented concurrently with bus priority, would be effective against car trips to the City centre rather than delaying strategic through traffic.

- In determining the preferred transport strategy for Carlisle four options have been evaluated.

 Do-Nothing: Local Plan
 - Do-Nothing: Local Plan development, no demand management, improvement of Kingstown Road/ Kingstown Broadway junction.
- Do-Minimum: Local Plan development, provision of all demand management measures identified in the draft Local Transport Plan.
- Enhanced Public Transport Option: all the Do-Minimum option plus rail service improvements, additional bus lane/priority measures, on-street car parking charges and provision of bus only road connecting

Castle Way to Scotland Road.

- CNDR: Local Plan development, provision of all demand management measures identified in the draft Local Transport Plan, construction of CNDR.
- 701 The CNDR option has been selected as the preferred option following a two stage evaluation process. The first stage assessed the extent to which each of the options was consistent with the government's objectives as set out in the New Approach to Appraisal (NATA) environment, safety, economy, accessibility and integration. The results of this assessment are summarised below:
- Environment the Do-Nothing, Do-Minimum and Enhanced Public Transport Options all have negative environmental impacts due to increased congestion. The CNDR has a positive impact on air quality but negative impacts on landscape, biodiversity and the built environment.
- Safety the Do-Minimum and Enhanced Public Transport options have slight positive impacts on safety due to reductions in traffic. The CNDR option has the greatest positive impact due to re-assignment of traffic onto the safer new road.
- Economy the Do-Nothing, Do-Minimum and Enhanced Public Transport Options all have negative economic impacts due to increased and less reliable journey times. The latter two of these have slight beneficial impacts on regeneration as they improve access to Kingmoor Park. The CNDR option has by far the greatest positive economic impact in terms of journey times and regeneration.
- Accessibility all options, excepting Do-Nothing, reduce

severance with the CNDR giving the greatest benefits. The Enhanced Public Transport Option has the greatest positive impact on social inclusiveness.

- Integration all options, excepting Do-Nothing, have a positive impact on integration due to interchange improvements. The greatest benefits are produced by the Enhanced Public Transport option.
- **702** The second assessment stage involved a more detailed assessment of each option against the individual project objectives. They are to:-
- maximise the development opportunities for the Kingmoor Park Regional Employment Site.
- permit traffic restraint and road space re-allocation in the city centre thereby increasing the attractiveness

- of public transport and cycling.
- assist economic growth by reducing transport costs.
- improve the strategic link between West Cumbria, Scotland and the North East of England.
- enable the development of a major road/rail freight interchange at Kingmoor Park.

703 The Do-Nothing option satisfies none of the project objectives. The Do-Minimum option will improve access to Kingmoor Park, partially meeting the first objective, but does not meet any of the remaining objectives. The Enhanced Public Transport option also improves access to Kingmoor Park but fails to meet the remaining objectives. Only the CDNR option meets all the scheme objectives. The results are presented in Table 24.

Table 24 CARLISLE NORTHERN DEVELOPMENT ROUTE Options Appraisal

Project Options Strategy Option		Project S	Overall satisfaction of objectives Commentary					
		(i)	(ii)	(iii)	(iv)	(v)		
1. Do Nothing		NO	NO	NO	NO	NO	No objectives met.	
Do Minimum But a contract of the cont		Partial	NO NO	NO		NO NO	Only one objective partially met. Limited objectives met.	
		Partial		NO				
4.Full CNDR	CNDR only	YES	NO	YES	YES	YES	Four objectives fully met.	
	CNDR combined with LTP strategy measures	YES	YES	YES	YES	YES	Satisfies all stated objectives.	

- In an effort to secure capital funding the Private Finance Initiative (PFI) was first considered in 1997. Preparation of an Outline Business Case (OBC) for an 'Integrated Transport Package for Regeneration in North Cumbria' was begun in 1998. The OBC draws together the case for the CNDR combined with the five year programme of demand management measures for Carlisle. It develops the case for financing these proposals through a mix of PFI and LTP funding, with LTP funding centred on the demand management measures and PFI centred on maintenance of detrunked roads including the parts of the A595 and the A7.
- 705 A first draft of the OBC was submitted to Government Office North West (GONW) in September 1999. The OBC is now being updated to reflect GONW's comments. The financial modelling which forms the basis of the business case continues to be developed and refined.
- 706 Most recently, the latest financial modelling assumptions have been submitted to DETR in London. Feedback on these is expected from DETR at the end of June 2000. Advice is also being taken from the Public Private Partnerships Programme (4Ps) on developing and refining the business case. The Outline Business Case submission is to be made to DETR/Treasury Task Force early in 2001, subject to the LTP settlement letter.
- 707 The County Council has sought to define a PFI project which would be attractive to the private sector and at the same time achieve value for money by transferring risks to the private sector. Construction and maintenance of the CNDR is seen as the core of the PFI project. This would provide a project of sufficient size to attract major contractors and justify their costs of PFI bidding, and would transfer substantial risks on life cycle costs (construction and maintenance) to the private sector contractor.
- 708 In order to improve value for money offered by the PFI, the Council proposes to expand the maintenance responsibilities of the

CNDR contractor. The roads being considered for inclusion are:-

- A7 Carlisle Scottish Border
- A595/A596 Carlisle Workington
- > A595 Thursby Cockermouth
- A594 Cockermouth Maryport
- A689 Carlisle Brampton
- > A6071 Brampton Longtown
- 709 A PFI contract would also ensure that there is ring-fencing of budgets to continue the relatively high standard of maintenance on roads after de-trunking, and that this high standard of maintenance applies to all key approach roads to the Kingmoor Park regeneration area. The "figure of eight" network of roads included in this package will be of assistance in organising efficient winter maintenance. In total, including the CNDR, the maintenance of some 155km of road would come within a possible PFI project.
- 710 The total capital cost of the scheme is estimated at £23.35 million. If the PFI approach were to be taken it would be funded mostly from existing budgets and additional Standard Spending Assessment (SSA), but the Council recognises it may need to find additional funding from its own resources. This amount is currently estimated at around £100,000-£400,000 per annum, depending on interest rates at the time of contract signature. This funding gap occurs mainly because some support is not received until after the end of the concession.
- 711 The programme for the scheme is set out below. It is recognised that under PFI, as opposed to conventional LTP funding, the tendering process would probably take longer and works on site not commence until April 2003 with consequences for the completion date:-

Planning application submission February 2000
Planning consent September/October 2000
Draft Orders January 2001
Public Inquiry and Inspector's Decision July 2002
High Court challenge period October 2002
Works start on site April 2003
Completion December 2004

City Centre Sector (Priority 1)

- 712 It is considered that improvements to the hub of Carlisle's transport system need to follow the work in the South-East Sector to enable effective return journeys by public transport and cycle and to complement the Lanes extension. The main schemes are:-
- Street English Bus/Train Interchange: This includes making Crescent two-way, providing a with-flow bus lane on Devonshire Street and extending the contra-flow bus lane on Lowther Street. This will reduce the volume of traffic in the southern section of English Street and improve the reliability of bus services passing through These scheme includes the city centre. improvements to pedestrian facilities at traffic signal controlled junctions, environmental enhancements in the southern section of English Street and upgrading of waiting facilities for bus users in English Street, Victoria Viaduct and the Crescent. Overall, this will give greater continuity in pedestrian friendly space between the pedestrianised core to the north, shopping shopping/leisure area in Botchergate to the south and the railway station to the southwest, improving accessibility of bus and train services.
- 714 Parking Variable Message Signs (VMS): These will be operated as part of the SCOOT urban traffic management and control system. They will provide drivers approaching the city centre with information on car parking availability and to direct them to vacant spaces. The aim is to reduce the volume of traffic in the city centre by reducing the number of vehicles circulating looking for a parking space.

715 West Walls Traffic Calming: This will deter through traffic along this attractive walking and cycling route which will appeal more as a diversion for vehicles when the Lowther Street bus gate associated with the Lanes Extension goes operational in Autumn 2000.

East Sector (Priority 2)

- 716 The measures identified for the east sector are designed to improve facilities for, and encourage the use of public transport. The major schemes identified are as follows:
- 717 A69 Park and Ride Site: This will provide a 400 space site to serve trips in to the City Centre. The site is adjacent to the existing Tesco store, accessed from the A69 Warwick Road/Montgomery Way junction.
- 718 A69 Active Bus/Bus Stops: in order to encourage use of the proposed Park and Ride, as well as existing services. Active Bus facilities will be provided at all signalised junctions along the A69. This will reduce bus journey times. Improvements to bus stops are also proposed to make the existing services more attractive.
- 719 East Sector Cycle Route: a new Cycle Way (Petteril Cycle Way) to follow the river Petteril from Melbourne Park, Botcherby. The scheme will link in with the Scotby cycle route and will cross the Eden at an existing bridge to link with the Cumbria Cycle way in Rickerby Park.

External (Priority 2)

720 Brampton: Environmental Enhancement. This will involve the provision of new footways, pedestrian crossing facilities, cycle parking and improved bus stops, shelters and timetable information

North Sector (Priority 3)

721 Proposed measures in the North Sector are centred on the A7 Kingstown Road which is the only approach to the City Centre

from north of the river Eden. The main schemes are:

- 722 A7 Park and Ride Site: This consists of a 400 space site. The site will be located east of the A7, just south of the M6 junction 44. Once this site is opened, the long stay off street car park at The Sands (297 spaces) will be converted to short stay trips to encourage use of the Park and Ride service.
- 723 Bus Priority: this scheme involves the provision of inbound bus and cycle lanes along about 50% of the A7 between the Park and Ride site and Hardwicke Circus junction The proposed bus/cycle lanes combined with Active Bus and queue relocation proposals, will improve bus journey times significantly thereby encouraging use of both the proposed Park and Ride and existing bus services.
- 724 Red Light Cameras: it is proposed to install red light cameras at the signalised junctions along the A7 Kingstown Road/Scotland Road. Due to high traffic flows some drivers are tempted to proceed through the signals on a red light resulting in a number of accidents.
- 725 Traffic Calming: it is proposed to traffic-calm Briar Bank to remove through traffic. A number of roads in north Stanwix will also be traffic calmed to link with existing traffic calming and allow the introduction of a 20mph zone.

South-West Sector (Priority 4 and 5)

- 726 Measures identified for the southwest sector are primarily designed to encourage the use of public transport and improve safety in residential areas. The main schemes are:
- 727 A595 Park and Ride site: this site will have a total of 450 spaces and will be located east of the A595 and immediately south of the built up area. On opening the Lower Viaduct car park (453 spaces) will be converted from long stay to short stay to

encourage use of the site.

- 728 A595 Bus Priority: this scheme involves provision of inbound bus and cycle lanes along about 1km of the A595. This will improve the journey times of buses relative to cars and encourage use of both the Park and Ride site and the existing bus services.
- 729 Nelson Bridge Widening: the junction of Nelson Bridge with James Street currently acts as a bottle-neck for traffic entering the city centre from the south and west. It is proposed to widen the Nelson Bridge approach in order to provide greater capacity at the junction. A new cycle/ footway bridge parallel to Nelson Bridge is also proposed.

Cycling

- 730 Cycle Routes/Lanes: This will complete the Caldew Cycle Way which will link the Cumbria Cycleway and Etterby Cycle Route.
- 731 Cumbria Cycleway Improvements: West of Carlisle the route will be diverted to pass the King Edward I monument and east of Carlisle it will be diverted to avoid the busy A689 between Carlisle and Brampton. In addition, a further section of cycle track is proposed between Brampton and the train station.

Public Transport

732 The proposals outlined for Carlisle city (bus lanes, active bus etc.) will help to achieve the public transport objectives set out in Chapter 4. In addition to these, a number of infrastructure improvements have been identified for both Carlisle and the rural areas. It is considered more important to address the rural areas as usage is lower and services/facilities are of a lower standard. It is proposed that a programme of enhancement to village bus shelters, seating and information be prepared to establish unmet needs, facility improvements to modern standards and priorities for investment. This work will be

progressed primarily through the Transport Partnership (RTP).

- 733 Within Carlisle, three areas have been identified as requiring infrastructure improvements and are listed below in order of priority:
- Suburban routes comprehensive improvements to lighting, shelter, seating and information,
- City centre comprehensive improvements to lighting, shelter, seating and information,
- Carlisle Bus Station comprehensive improvements to lighting, shelter, seating and information.
- The above measures will increase the attractiveness of bus services and result in modal transfer away from the private car. However, to maximise this and address social exclusion, it will be necessary to improve current service levels by increasing frequency and providing new services. Many services do not currently operational costs, and new services will almost certainly operate at a loss during the initial start up period at the very least. If services are to be improved to match improvements in passenger facilities, a process for the allocation of additional revenue funding to bus service enhancement needs to be established at least as a pump priming exercise.
- 735 Rail usage for trips into Carlisle is currently low. It is proposed to address this issue by upgrading all of the stations within the plan area to meet the requirements of Policy PT31. The work required for the four stations in the Plan area, in order of priority, is presented below:
- Carlisle the station will be subject to maintenance under Railtrack's Station Regeneration Programme in 2000/01 which will include platform gauge and surfacing, fencing, painting, building maintenance and

lighting. The County Council could jointly fund with Railtrack and Virgin Trains improved forecourt interchange, signing and contribute to a CCTV scheme subject to feasibility.

- Brampton the station was subject to maintenance under Railtrack's Station Regeneration Programme in 1998/99. In the future the County Council could assist in funding provision of improved car parking, provision of better real-time information in partnership with the train operator, cycle parking and access to the town.
- Dalston the station was subject to maintenance under Railtrack's Station Regeneration Programme in 1998/99. The Council could assist in funding the provision of better realtime information in partnership with the train operator, cycle parking, better signing to the station, car parking and CCTV.
- Wetheral the station was subject to maintenance under Railtrack's Station Regeneration Programme in 1997/98. In the future the Council could assist in funding the funding of better real-time information in partnership with the train operator, car interchange, cycle parking, signing and CCTV.
- 736 Taxis are an important part of an integrated public transport system and are a flexible means of bridging the gap between private and public transport. For all of the measures proposed in the Carlisle LTP, care will be taken to avoid or minimise any negative impacts on taxi services. Where bus lanes are provided, the feasibility of allowing taxis to use these will be investigated.

Maintenance

737 For each year of the Plan period an item has been included under the heading of maintenance. This is to carry out minor improvements not identified through Engineering Safety Schemes. This will include measures such as provision of footway, kerbing, dropped kerbs, parking laybys bus

shelters etc.

Parking

As mentioned above there will be a reduction of long stay (over 6 hours) commuter and private non-residential parking to coincide with improvements to alternative modes of travel.

Table 25 Public Parking Supply: Carlisle

CITY CENTRE/EDGE OF CENTRE	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
LONG STAY								
Off-Street Long Stay Spaces	1788	1788	1788	1673*	1220*	1220	1220	1220
Edge of Centre On-Street Spaces for Long stay Use	4056	1585	1060	600	600	600	600	600
Total Long Stay Spaces	5844	3373	2848	2273	1820	1820	1820	1820
SHORT STAY								2020
Off-Street Short Stay Spaces	1123	1099	1099	1214*	1667*	1667	1667	1667
On-Street Short Stay (<2hrs.)	474	2945	3470	3930	3930	3930	3930	3930
Total Short Stay Spaces	1597	4044	4569	5144	5597	5597	5597	5597
PRIVATE						-		
Private Operated Spaces	596	596	796	996	996	996	996	996
CITY CENTRE/EDGE OF CENTRE TOTAL SPACES AVAILABLE	8037	8013	8213	8413	8413	8413	8431	8413
Park and Ride Spaces	0	0	0	500	950	1250	1250	1250

 Long Stay Car Parks (Sands and Paddy's Market) converted to Short Stay, Short Stay Car Park (Upper Viaduct) converted to Long Stay

To date, four large Residents' Parking Zones have been introduced in Carlisle with the conversion of some 3000 spaces from long stay to 2 hours maximum for non-residents. The zones are all around the edge of the City Centre, near major schools and colleges, and major factories. Parking within the zones is now no longer a problem for residents as commuters have had to make alternative provision for parking or travel. There have not been problems with commuter parking being displaced to streets just outside the zones with the exception of Denton Holme. To rectify problems here it is proposed to convert the short stay car part at Upper Viaduct to long stay.

739 Public off-street parking in Carlisle city centre currently amounts to some 2900 spaces in multi-storey and ground level car parks. A further 600 spaces are made available by private operators. Table 25 sets

this information in context by showing the changes in long stay, short stay, private car spaces that have occurred over the last two years and the effect on supply of introducing Park and Ride long stay sites by 2005.

740 In 1999/2000 the over 6 hours long stay parking charges in the City Council off-street car parks were increased from the previous £1.70 to £2.00. In 2000/01 it is anticipated that those will rise by above inflation to £2.50 and in 2002/3 to £3.00. As the proposed Park and Ride sites and other measures are introduced it is understood that the City Council will keep the charges under review and adjusted to encourage the use of alternative modes.

741 The City Council, with County Council support, will discuss the charging policy on private car parks with the owners and if necessary, powers contained in the "Control of Off-Street Parking Order 1978" will be used to ensure an integrated charging policy throughout the City.

742 The County Council are considering seeking powers under the Road Traffic Act 1991 to decriminalise on-street parking in Carlisle District (see Chapter 9). The County Council is also considering the desirability and practicality of both congestion and workplace charging.

Five Year Programme

The area transport programme for Carlisle has been divided into six sectors comprising five city and one external. It is intended that a package of integrated schemes and measures be implemented on a sector by sector basis. This will allow each sector to receive a comprehensive treatment in each year, and the contribution of each sector towards the overall transport targets to be assessed. The SE sector proposals will be completed in 2000/2001. The proposed phasing of measures relates to the construction period for the Carlisle Northern Development Route and consequent reallocation of road space on the two main radial routes for bus priority and cycle schemes. The spending profile is set out in Table 26.

744 Some proposals for 2001-2006 for the Cumbria section of Hadrian's Wall resulted from the consultation on the Hadrian's Wall Transport Study (see paragraph 42) and will be candidates for funding from the annual package of measures (see Table 23). These include:-

- An advisory one way access coach route scheme for Birdoswald
- A comprehensive review of all direction signing to attractions
- "Green point interactive information interchanges" at Gilsland, Bowness on Solway and possibly Burgh-by—

sands

- A review of speed limits along the B6318 and the Brampton to Gilsland Road (C1025)
- An investigation into the options for opening Gilsland Station
- The Consideration of parking charges at Birdoswald car park to help subsidise Hadrian's Wall bus service

Implementation

Targets

Realistic targets for each of the key local indicators have been determined with reference to national strategy targets where relevant (air quality, cycle use). The likely effects of the proposals on mode choice have been determined through a multi-modal traffic study, and include the effects of the CNDR. Targets for congestion related delay have been chosen so as to be consistent with the traffic reduction targets set out in the Road Traffic Reduction Act 1997 Report July 2000 which forms Appendix 5 to the Local Transport Plan. Mode share targets for trips to school have been determined with reference to Better Ways to School proposals implemented throughout the county.

Table 26: The Carlisle Area Spending Profile

	County Capital Spending								
	2001/02	2002/03	2003/04	2004/05	2005/06				
Major Scheme									
Carlisle Northern Development Route		5395	11054	6495	410				
Priority Schemes									
City Centre Bus Priority/Stops/Information West Walls Traffic Calming English Street Bus/Rail Interchange Carlisle Rail Station City Centre VMS Parking Information	105 30 400 60 150								
Botchergate Environmental Enhancement Brampton Environmental Improvements Dalston Rail Station Nelson Bridge Widening South-West Sector Cycle Lanes/Routes		220 220 25 100 80	330 440						
East Sector Cycle Lanes/Routes Active Bus A69 Corridor Park and Ride A69			170 80 3	400	467				
*North Sector Cycle Lane/Routes Brampton Rail Station Carlisle Bus Station Improvements Wetheral Station Improvements Active Bus A7 Corridor * Bus Priority A7 Corridor * Park and Ride A7 Red Light Cameras A7			3	85 30 100 25 120 130 400 80	200 467 80				
* Bus Priority A595 Active Bus A595 Corridor * Park and Ride A595					245 60 970				
Annual Package of Measures									
LTP Table 23	170	170	170	170	170				
TOTAL	915	6210	12250	8035	3069				

All figures £k are indicative outturn costs.

Note

* The start date and spend profile of these schemes are dependent on the CNDR opening date.

- 745 The proposed targets are:-
- Annual rate of traffic growth to 2006 of 0% (see the Road Traffic Reduction Act 1997 Report at Appendix 5).
- Double the current mode share of cycling to 2%.
- Increase the mode share of bus trips (including park and ride) to 25% from 18%.
- Increase the number of people walking into the city centre by 400 per day.
- Reduce the proportion of car trips to secondary schools by 10%.
- Reduce the proportion of car trips to primary schools by 5%.
- Increase the proportion of cycle trips to both primary and secondary schools by 2%.
- Maintain delays per person at their current level or below over the five year Plan period.
- Achieve average peak hour bus speeds of not less than 60% of average off peak speeds.
- Achieve the air pollution levels set out in the Air Quality Regulations 1997.
- It is anticipated that the above targets will only be met if all the LTP resources are implemented over the five year plan period.

Performance Indicators

746 The effectiveness of the Carlisle programme will be monitored using the following proposed performance indicators:-

- traffic counts in the city centre, mode share of car, bus, cycle and walk trips into the city centre,
- mode share of trips to school,
- > congestion related delays, and
- air quality measured by the presence of PM10 and NO_x.
- 747 Currently unclassified traffic flow data is collected at two permanent automatic counter sites on the A595(T) just to the west of the city boundary and on the A7 Eden Bridge just to the north of the centre of the city. The A7 Eden Bridge counter will be converted to a classified site capable of counting cars, HGV's, buses and cycles. With the addition of four additional classified sites, an inner cordon will be formed. Whilst traffic passing through the inner cordon will not strictly be a measure of trips to the city centre it will be a sufficiently close approximation to determine traffic growth into the city centre. New automatic traffic counter sites are being considered on the outskirts of the city so that, together with the A595 Garden Village site, an outer cordon can be formed. This will allow traffic growth into the city to be determined.
- 748 Car mode share data will be available from the inner and outer cordon traffic counter sites. The inner cordon sites will also provide data on cycle trips which will be supplemented by temporary automatic counts on designated cycle ways not on the main highway. Information on bus trips into Carlisle will be obtained from the local bus operator (Stagecoach). Information on trips by rail will be obtained from the CAPRI database. The number of walking trips into the city centre will be determined by carrying out regular pedestrian surveys on the main pedestrian routes. From the above sources, mode share for trips into Carlisle will be determined for each year in the five year LTP period. The existing mode choice model will be extended 2000 to include during walking.