# Chapter 13: Targets and Nonitoring



# **Chapter 13: Targets and Monitoring**

This chapter sets out the targets for the mandatory and local indicators against which the success of the Local Transport Plan will be judged. These comprise both outcome and output based targets, which the authorities deem to be both ambitious and realistic.

It highlights how the indicators reflect the Shared and Local Priorities for transport, the management of risks associated with achieving such targets, the actions the authorities and partners will take to deliver these outcomes and outputs, and the methodology for their review in the future.

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# **13.1 Background**

The DfT has set 17 mandatory indicators against which the authorities must show progress over the course of the Plan period. These mandatory indicators, together with 17 local indicators set by the authorities, are the measures against which the success of the LTP will be judged.

The 34 indicators for the Plan are strongly focused on achieving outcomes as opposed to outputs, as summarised below:

- **12** of the mandatory indicators and 1 local indicator are '**Key Outcomes**'. These directly measure the achievement of the Shared Priorities.
- The remaining **5** mandatory indicators and **7** of the local indicators are '**Intermediate Outcomes**' which support the key outcome targets.
- The final **9** local indicators are '**Contributory Outputs**' measuring the delivery of schemes that will contribute in turn to the outcomes.

The mandatory and local indicators to be included within the Plan, together with the methodology for their assessment, are set out in Tables 13.1 and 13.2.

Ref:	Indicator	Туре	Methodology and Rationale
BVPI 223	Condition of principal roads	Key outcome	Relates to all 'A' roads across the LTP area, excluding Trunk Roads. SCANNER surveys will be used to survey the whole principal road network each year, one direction only, with the other direction assessed in alternate years, giving 50% coverage in any single year, and 100% coverage every two years. Due to new methodology it will be necessary to review the target when further trend data is available.
BVPI 224a	Condition of non-principal roads	Key outcome	Relates to all roads officially classified as a Class 'B' or 'C' road. SCANNER surveys will be used to survey all 'B' roads each year, but in one direction only, with the other direction assessed in alternate years, giving 50% coverage in any single year, and 100% coverage every two years, with surveys of at least 10% of 'C' roads each year. This data is still outstanding and a provisional target will be set in July 2006 when data is available.
BVPI 224b	Condition of unclassified roads	Key outcome	Based upon a Coarse Visual Inspection (CVI), carried out by walking the route as per DfT guidance. Surveys of 50% of unclassified roads will be undertaken each year, but in one direction only, giving 25% coverage in any single year, and 100% coverage every four years. Linear trajectories have been adopted although variations will take place due to sampling methodology.

#### Table 13.1: Mandatory Indicators Monitoring Methodology and Rationale

Ref:	Indicator	Туре	Methodology and Rationale
BVPI 99x	Total killed or seriously injured	Key outcome	Measured across the whole LTP area with data supplied by the Police, through the STATS 19 returns. This target has been stretched by the authorities, as defined by the DfT guidance.
BVPI 99y	Children killed or seriously injured	Key outcome	Measured across the whole LTP area with data supplied by the Police, through the STATS 19 returns. In terms of the target, whilst it is accepted that we are above the linear trajectory in 2004, due to the small numbers involved, fluctuations can be expected as has been seen in previous years.
BVPI 99z	Total slight casualties	Key outcome	Measured across the whole LTP area with data supplied by the Police, through the STATS 19 returns. The target set is in line with national requirements and whilst not appearing ambitious is considered realistic as the local Police are reviewing reporting methodology due to concerns relating to previous under reporting.
BVPI 102	Local public transport / bus patronage	Key outcome	Figures supplied by the main operators for services across the LTP area and apply to boardings within Greater Nottingham only. A continuation of growth in public transport use is anticipated to continue over the Plan period. There was a step change in public transport use in 2004/5 due to the introduction of NET Line 1. A linear trajectory has been assumed over the remainder of the Plan.
BVPI 104	Satisfaction with local bus services	Intermediate outcome	Based upon BVPI methodology of bus users and supplemented with quarterly surveys of 600 bus users at the main travel centre to provide an indication of progress towards the target in the interim years between BVPI surveys. This target has been stretched by the authorities as defined by the DfT guidance.
BVPI 187	Footway condition	Key outcome	Based upon a Coarse Visual Inspection (CVI), carried out by walking the route.
LTP1	Accessibility of town centres	Key outcome	Relates to the percentage of households within 30 minutes travel time of a town centre by bus, train or tram, with no more than a 400 metre walk to a stop. The travel time includes walking links to and from the stop and any waiting time incurred en route. There are 36 town centres in, or within 5km of Greater Nottingham as defined by the Local Plans. The figures are calculated using Accession software.

Ref:	Indicator	Туре	Methodology and Rationale
LTP2	Change in area wide road traffic mileage	Key outcome	Calculated based upon the DfT's National Road Traffic Survey (NRTS) base 12-hour counts used for A class roads. NRTS counts used for other roads combined with manual and automatic counts carried out by the authorities on a sample of links. All counts grossed up to Annual Average Daily Traffic (AADT) levels using locally derived factors based on urban and rural criteria and then converted to annual vehicle kilometres using known link lengths. The trajectory reflects the outputs from the Greater Nottingham multi-modal transport model.
LTP3	Cycling trips	Intermediate outcome	Surveys are undertaken at 33 points on the Greater Nottingham cycle network between April and October, for one day each month over a nine-hour period. Six sites are measured during the winter months to act as a control. The revised methodology as required by the DfT was implemented in 2005. It is therefore recommended that the target is revised in due course, and probably re-based and a new trajectory set, when a full set of data is available.
LTP4	Mode share of journeys to school	Intermediate outcome	Calculation of the percentage of journeys to school for all pupils at all schools that travel by car, derived from 'Hands-up' classroom surveys. The authorities will seek to incorporate PLASC monitoring of the trends in future years. The targets set are provisional at this stage.
LTP5	Bus punctuality	Intermediate outcome	Relates to the percentage of buses starting a route on time (between 1 minute early and 5 minutes late) and arriving at intermediate timing points on time, together with the average excess waiting time incurred on frequent service routes. Data is collected via quarterly monitoring undertaken by the authorities in the morning peak (08:00 – 10:30) and evening peak (15:00 – 17:30), and additional data provided by the operators through the Punctuality Improvement Plan (PIP) agreement. Under the agreement signed as part of the PIP, monitoring will concentrate on punctuality measured at timing points. Bus operators do not consider it reasonable to be assessed at non-timing points as this could potentially increase journey times. We will continue to discuss this issue with the DfT and amend the methodology accordingly if need be.

Ref:	Indicator	Туре	Methodology and Rationale
LTP6	Changes in peak period traffic flows to urban centres	Key outcome	Automatic counts carried out on main routes into the City Centre (as defined in the Nottingham Local Development Plan), forming the Urban Centre Cordon. Monday to Friday average flows are assessed for 3 weeks in October, excluding school half term week on all major radial routes plus other roads carrying more than 2,000 vehicles per day. The target has been derived from the output of the Greater Nottingham multi-modal model and is in accordance with the DfT guidelines.
LTP7	Average journey time per person, per mile related to person miles travelled	Key outcome	Surveys carried out on all the main radial routes and A6514 Ring Road orbital route in Greater Nottingham. Vehicle occupancies and bus journey times measured in the morning peak period in Spring or Autumn (Tuesday to Thursday 07:00 – 10:00) inbound to the City Centre on the radial routes and in both directions on the Ring Road. Non bus journey time data to be obtained from ITIS data supplied by DfT. Baseline data has been collected for the ten key routes and this is contained in Section 5.8. ITIS data from the DfT is still awaited and will be used to validate the authorities' own surveys. Dialogue will continue with the DfT and the other large urban areas to determine appropriate targets to be set for July 2006.
LTP8	Concentration of Nitrogen Dioxide in AQMAs	Intermediate outcome	Relates to the two designated Air Quality Management Areas in the City Centre and on the Ring Road (QMC), in terms of the number of micrograms of Nitrogen Dioxide per cubic metre The proposed AQMAs identified in Rushcliffe and Broxtowe will be reported on in subsequent APRs

Ref:	Indicator	Туре	Methodology and Rationale
Ц	Single occupant car journeys to work	Intermediate outcome	Relates to all employers with a travel plan in place and is measured by employers through staff travel surveys every October.
L2	Car parking standards	Output	Based upon the percentage of planning permissions granted for non-residential developments complying with car parking standards set out in the Local Development Framework / Local Plan, as monitored by the authorities.
L3	Commuter Travel Plans	Output	Based upon the percentage of employees in Greater Nottingham covered by a Commuter Travel Plan, as monitored by the authorities.
L4	School Travel Plans	Output	Based upon the number of schools adopting a Travel Plan, to be monitored by the authorities.
L5	Bus journey times	Output	Based upon the number of services that have benefited from a 5% reduction in journey time, as timetabled.
L6	Bus reliability	Output	Assessment of the percentage of scheduled services operating based upon data received from the main bus operators.
L7	Accessibility of healthcare	Key outcome	Relates to the percentage of households within 45 minutes travel time of a hospital by bus or tram, with no more than a 400 metre walk to a stop. The travel time includes walking links to and from the stop and any waiting time incurred en route. The indicator applies to the two major hospitals in the LTP area, the QMC and City Hospital. The figures are calculated using Accession software.
L8	Accessibility for the elderly	Output	The take-up of concessionary passes by people aged over 60 as a proportion of the eligible population monitored by the authorities.
L9 (BVPI 103)	Satisfaction with public transport information	Intermediate outcome	Based upon BVPI methodology of bus users and supplemented with quarterly surveys of 600 bus users at the main travel centre to provide an indication of progress towards the target in the interim years between BVPI surveys.
L10 (BVPI 178)	Rights of way which are easy to use	Intermediate outcome	The percentage of footpaths and other rights of way that are easy to use, as defined by standardised BVPI requirement. This involves looking at obstructions such as gates, fences, if the route is in a state of bad repair, if the route is correctly signposted, and the condition of steps and barriers along the route for example.

#### Table 13.2: Local Indicators Monitoring Methodology and Rationale

Ref:	Indicator	Туре	Methodology and Rationale
L11	Accessible bus services	Output	Assessed in terms of services operated entirely by low-floor, easy access vehicles, where all bus stops have raised kerbs and where bus boarders are provided where parking is likely to inhibit use.
L12 (BVPI 165)	Disabled facilities at pedestrian crossings	Output	Assessed in line with BVPI monitoring requirements to calculate the percentage of pedestrian facilities at traffic signal installations (both stand alone and at junctions) which are DDA compliant.
L13	Real time information provision	Output	Based upon the number of services operated with Real Time enabled buses.
L14	Carbon dioxide emissions	Intermediate outcome	This is calculated through the authorities monitoring the total volume of traffic on the Greater Nottingham road network (see LTP2 above) and that on the trunk roads and motorway, as measured by the DfT, broken down into four vehicle types. These figures are multiplied by the DfT's average emission factor for each vehicle type to give an overall volume of CO2 emitted. The methodology adopted was ratified, with minor amendments, by the DfT in April 2005.
L15 (BVPI 106)	Use of brownfield land for housing	Intermediate outcome	Previously developed land is that which is, or was, occupied by a permanent structure and associated fixed surface infrastructure. The authorities will monitor the percentage of new completions on such land.
L16	Perception of safety when using the bus at night	Intermediate outcome	Relates to users who feel safe after 7pm in terms of the bus journey itself, waiting at the stop and accessing the stop, questioned at the main travel centre.
L17	Walking trips	Intermediate outcome	The footfall on the five Primary Pedestrian Routes comprising Arkwright Street, Canning Circus, Hockley/ Goosegate, Station Street and Union Road form the basis for the indicator, which are aggregated together and indexed to allow progress to be evaluated.

# **13.2 Links to Vision and Objectives**

The vision of the Greater Nottingham Partnership for the future development of the conurbation and the seven objectives of the Plan are set out in Chapter 2: Vision and Objectives. These have been reflected in the package of indicators devised to measure the success of the LTP. Tables 13.3 and 13.4 below highlight how the mandatory and local indicators relate to the objectives of the Plan.

#### **Table 13.3: Links between Mandatory Indicators and LTP Objectives**

		Obj	ective	•				
	Indicator	Congestion	Accessibility	Road Safety	Air Quality	Regeneration	Quality of Life	Maintenance
BVPI 223	Condition of principal roads			$\checkmark$				√
BVPI 224a	Condition of non-principal roads			1				1
BVPI 224b	Condition of unclassified roads			$\checkmark$				√
BVPI 99x	Total killed or seriously injured			1				
BVPI 99y	Children killed or seriously injured			1				
BVPI 99z	Total slight casualties			1				
BVPI 102	Local public transport / bus patronage	1	1		$\checkmark$			
<b>BVPI 104</b>	Satisfaction with local bus services	√	1					
BVPI 187	Footway condition			$\checkmark$		$\checkmark$	$\checkmark$	1
LTP1	Accessibility of town centres		1				1	
LTP2	Change in area wide road traffic mileage	1			$\checkmark$			
LTP3	Cycling trips	$\checkmark$	1					
LTP4	Mode share of journeys to school	1	$\checkmark$					
LTP5	Bus punctuality	1	$\checkmark$					
LTP6	Changes in peak period traffic flows to urban centres	1			$\checkmark$			
LTP7	Average journey time per person, per mile related to person miles travelled	1			$\checkmark$			
LTP8	Concentration of Nitrogen Dioxide in AQMAs				1		$\checkmark$	
<b>√</b> = Primary Ir	ndicator $$ = Supporting Indicator							

		Obj	ective	•				
	Indicator	Congestion	Accessibility	Road Safety	Air Quality	Regeneration	Quality of Life	Maintenance
L1	Single occupant car journeys to work	1	$\checkmark$					
L2	Car parking standards	1			$\checkmark$	$\checkmark$		
L3	Commuter travel plans	1						
L4	School travel plans	1		$\checkmark$				
L5	Bus journey times	1						
L6	Bus reliability	1						
L7	Accessibility of healthcare		1				$\checkmark$	
L8	Accessibility for the elderly		1					
L9 (BVPI 103)	Satisfaction with public transport information		1				$\checkmark$	
L10 (BVPI 178)	Rights of way which are easy to use		1				$\checkmark$	
L11	Accessible bus services		1					
L12 (BVPI 165)	Disabled facilities at pedestrian crossings		1	$\checkmark$			$\checkmark$	
L13	Real time information provision		1				$\checkmark$	
L14	Carbon dioxide emissions	$\checkmark$			V			
L15 (BVPI 106)	Use of brownfield land for housing		$\checkmark$			1		
L16	Perception of safety when using the bus at night		$\checkmark$			$\checkmark$	1	
L17	Walking trips	$\checkmark$	1		1	$\checkmark$	$\checkmark$	
✓ = Primary Indica	tor $$ = Supporting Indicator							

#### Table 13.4: Links between Local Indicators and LTP Objectives

# **13.3 Targets**

The authorities have established a series of targets to be achieved in Greater Nottingham over the Plan period for both the mandatory and local indicators. These have been informed by:

- The vision and objectives of the Plan,
- Government guidance concerning minimum and stretched targets,
- The Provisional Planning Guidelines for the Plan period, and
- The database of targets on the LTP network website.

The general principles behind setting the targets have been to maintain performance levels in areas in which the authorities have achieved strongly in LTP1, set more stretching targets for areas where improved performance levels have been identified as a priority, and in terms of new indicators which have not previously been monitored, draw comparisons with similar LTP areas to establish realistic targets.

Tables 13.4 and 13.5 contain the Greater Nottingham LTP2 targets and trajectories – which reflect the programmed levels of investment throughout the Plan period.

	Notes	Source: SCANNER surveys.	45.00% Length of network in the City increased in January 2006	by 8km following the de-trunking of the Ring Road.		Notes	A target and trajectory is not required to be set until the	baseline data is available				Notes	Source: Coarse Visual Inspection	The baseline figure is derived from the 2003/04 and	Z004/05 SURVEYS WINCH EACH ASSESSED 50% OF THE		Notes	Source: Police STATS 19 returns The target represents a 52% reduction from the baseline and a 30% reduction from 2004 and as such is	d target.	Notes	Source: Police STATS 19 returns The target represents a 61% reduction from the beseline The firures are calculated as a 3-way rolling		Notes	Source: Police STATS 19 returns	The target represents a 10% reduction from the baseline.	Notes	Source: Operators returns The target equates to an 8% increase from the baseline The fources for 2003/04 and 2004/05 have been revised	73.900 from those included in previous Annual Progress reports. This is due to tarterations in the monitoring of patronage which now excludes boardings outside of the Greater Notingham area, to comply with DTT requirements.	Notes	Source: Operators returns The decline in bus patronage between 2003/04 and 2004/5 is a result of a channed transfer from bus to tram	63.700 as a result of the implementation of the train, which began operating in March 2004. Patronage of the train is antiopated to reach 10.2 million by 201011.	Notes	Source: BVPI Tri-Annual Surveys of users	N/A Quarterly surveys of 600 bus users at the main travel	centre will be used to provide an indication of progress made in interim vears between Best Value survevs.
	-	Source: SC	b Length of r		.0		A target an	baseline da	1	1		_				15.00% network.		Source: Pc The target baseline ar				o average.		Source: Pc		_		Trom those inc from those inc patronage wh Greater Nottir requirements.		Source: Op The decline	Das a result of the in began operating in Patronage of the tr million by 2010/11.	_	Source: B/	A Quarterly s	centre will
	2010/11		45.00%			2010/11						2010/11		13.00%			2010		317	2010		46	2010		2,524	2010/11			2010/11			2010/11		NP	N/A
	2009/10		48.00%		25.00%	2009/10						2009/10		13.00%		15.50%	2009		340	2009		53	2009		2,550	2009/10		73,600	2009/10		63,600	2009/10		75%	75%
	2008/09		51.00%		26.00%	2008/09						2008/09		14.00%		16.00%	2008		362	2008		61	2008		2,573	2008/09		73,300	2008/09		63,500	2008/09		A/A	N/A
y Data	2007/08		52.00%		26.00%	2007/08						2007/08		14.00%		16.50%	2007		385	2007		8	2007		2,596	2007/08		72,900	2007/08		63,400	2007/08		AN	N/A
Actual and Trajectory Data	2006/07		59.00%		26.00%	2006/07						2006/07		15.00%		17.00%	2006		408	2006		76	2006		2,619	2006/07		72,500	2006/07		63,300	2006/07	1000	69%	69%
Actual an	2005/06		59.00%		27.00%	2005/06						2005/06		15.00%		17.50%	2005		430	2005		84	2005		2,642	2005/06		72,100	2005/06		63,300	2005/06	A/A	AN	NA NA
	2004/05	61.00%	61.00%	27.00%	27.00%	2004/05						2004/05	16.00%	16.00%	18.00%	18.00%	2004	453	453	2004	99	9	2004	2,332	2,665	2004/05	71,700	71,700	2004/05	63,300	63,300	2004/05	N/A	N/A	N/A
-	2003/04	N/A	N/A	N/A	N/A	2003/04						2003/04	N/A	N/A	N/A	N/A	2003	504	504	2003	09	26	2003	2,575	2,688	2003/04	68,500	68,500	2003/04	68,000	68,000	2003/04	64%	64%	64% 64%
											<u> </u>						1994-98	664	664	1994-98	118	118	1994-98	2,805	2,805										
		61.00% Actual Figures	ajectory	27.00% Actual Figures	ajectory		Actual Figures	Trajectory	Actual Figures	Trajectory			16.00% Actual Figures	ajectory	18.00% Actual Figures	ajectory		664 Actual Figures	317 Trajectory		118 Actual Figures	Trajectory		Actual Figures	Trajectory		68,500 Actual Figures	ajectory		68,000 Actual Figures	ajectory		Actual Figures	Trajectory	04% Actual Figures
Value		61.00% Ac	45.00% Tr	27.00% Ac	25.00% Trajectory		Ac	Ē	Ac	F			16.00% Ac	13.00% Trajectory	18.00% Ac	15.00% Trajectory		664 <mark>Ac</mark>	317 Tr		118 Ac	46 Tr		2,805 Ac	2,524 Tr		68,500 Ac	73,900 Trajectory		68,000 <b>A</b>	63,700 Trajectory		64% Ac	75% Tr	75% Tr
Year		2004/05	2010/11	2004/05	2010/11		2005/06	2010/11	2005/06	2010/11			2004/05	2010/11	2004/05	2010/11		1994-98	2010		1994-98	2010		1994-98	2010		2003/04	2010/11		2003/04	2010/11		2003/04	2010/11	2013/04
		Base Data	Target Data	Base Data	Target Data		ase Data	arget Data	Base Data	Target Data			Base Data	Target Data	Base Data	Target Data		Base Data	Farget Data		Base Data	Target Data		Base Data	Target Data		Base Data	Target Data		Base Data	Target Data		Base Data	_	Base Data Target Data
Plan Area				County			City		County						County			Casualties Joint Plan Area			Joint Plan Area			Joint Plan Area			Joint Plan Area			Joint Plan Area					County
Units		Percentage City					Percentage						Percentage City					Casualties			Casualties			Casualties			Thousand passenger			Thousand passenger			Percentage City		
Year Type		Financial					Financial F						Financial					Calendar			Calendar			Calendar (			Financial			Financial			Financial		
	_					(2) Classified,	ncipal,	roads -	BVPI224a		(3) Unclassified		BVPI224b F											<u>.</u>		Thousands of	e. Der	year in the authority							
Core Indicator	Road Condition (1) Principa	need of further BVD1223	investigation)	(upper Brook and													Total killed and	seriously injured casualties -	BVP199(x)	Child killed and	seriously injured casualties -	BVPI99(y)	Total slight	casualties -	BVP199(z)	Total local	public transport passenger patronage in journeys (i target	,	of which	number of bus passenger iournevs -	BVP1102	Satisfaction	with local bus	Services-	BVPI104

**Table 13.5: Mandatory Indicators, Targets and Trajectories** 

Footway % c condition - cat BVPI187 and		Year I ype	Units	Plan Area		Year	Value				Actua	Actual and Trajectory Data	tory Data				
	% of the								2003/04	/04 2004/05	5 2005/06	06 2006/07	7 2007/08	2008/09	2009/10	2010/11	Notes
	_	Financial F	Percentage	City	Base Data	2003/04	26%	Actual Figures	26	26% 24%							Source:Coarse visual inspection
	and 2 footway				Target Data	2010/11	16%	Traiectory	26		% 22%	% 21%	6 20%	19%	18%	16%	The baseline figure for the City Council area is derived
	network where			County	Base Data	2003/04	27%	Actual Figures	21	27% 19%							from the 2002/3 and 2003/04 surveys which each
str	structural				Target Data	2010/11	17%	17% Trajectory	2		% 22%	% 21%	% 20%	19%	18%		17% assessed 50% of the network. The subsequent
CO S Ż	maintenance should be considered																trajectories are based upon a 2-year rolling average.
LTP1 - % c	% of households								20	2003 2004	4 2005	2006	6 2007	2008	2009	2010	Notes
ihility of		Colondor 1	Onnontoco C	Inint Dian Aun	Doco Doto	anne	70000	03 00% Actinal Element				ĉ					Courses Accession coffie
	avel own		rercentage	Percentage Joint Plan Area	base Data	9007	93.00%	Actual Figures	<u>-</u>								source: Accession sortware The indicator relates to a total of 36 town centres which have been defined in the Local Plans for Greater
Cel	centre by bus,				Target Data	2010	93.00%	93.00% Trajectory	2	N/A N/A	A/N	A 93.00%	93.00%	93.00%	93.00%	93.00%	93.00% Nottingham, and those within 5km of the LTP area. The
tra wit wa	train or tram with no more than a 400 metre walk to a stop																travel time includes walking links to and from stops and any waiting time incurred en route.
LTP2 - Change									20	2003 2004	4 2005	5 2006	6 2007	2008	2009	2010	Notes
in area wide	0	Calendar N	Million	Joint Plan Area	Base Data	2004	2,933	2,933 Actual Figures	2,926		3						Source: Council monitoring using DfT National Traffic
road traffic mileade			Vehicle Kilometres														Census and locally collected data. The tarnet equiptes to a 6% increase in traffic from the
5			per annum		Target Data	2010	3,109	3,109 Trajectory	2,9	2,929 2,933	3 2,962	2,992	3,021	3,050	3,079		3,109 baseline on the local authority managed road network.
-TP3 - Cycling									20	2	4 2005	5 2006	6 2007	2008	2009	2010	
trips (annualised index)	<u> </u>	Calendar 1	Index based on 2003 = 100	Index based Joint Plan Area on 2003 = 100	Base Data	2003	100	100 Actual Figures	-								
					Target Data	2010	107	107 Trajectory	-	100 101	1 102	103	104	105	106	107	established in 2005. The 2003 and 2004 figures are derived from 12 of these points.
ode	Share of								2003/04	/04 2004/05	5 2005/06	06 2006/07	7 2007/08	2008/09	2009/10	2010/11	Notes
share of jou journeys to (inc school and	journeys by car F (including vans and taxis).	Financial	Percentage	Percentage Joint Plan Area	Base Data	2004/05	29.00%	29.00% Actual Figures	2	N/A 29.00%	%						Source: Council monitoring ('Hands-up' Classroom Surveys)
	excluding car share journeys				Target Data	2010/11	25.00%	25.00% Trajectory	2	N/A 29.00%	% 28.00%	% 28.00%	6 27.00%	26.00%	26.00%	25.00%	Athrough there is no requirement to include a trajectory for mode of travel to school, the authores are confiden in the accuracy of current monitoring arrangements and so will continue to use this methodology as a means of monitoring change.
		đ	ercentage c	percentage of which Car				Actual Figures	2	N/A 29.00%	29						The baseline has been set as 2004/05 as complete data is not available for 2003/04. This is based upon a school
		perce	entage of w	percentage of which Car Share				Actual Figures	2	N/A 0.00%	20						population of 90,000.
		percenta	ige of which	percentage of which Public Transport				Actual Figures	2	N/A 16.00%	20						We will seek to incorporate PLASC monitoring in future years when a robust system of data collection has been
		perc	entage of v	percentage of which Walking				Actual Figures	2	N/A 53.00%	29						established.
		berd	centage of	percentage of which Cycling				Actual Figures	2	N/A 1.00%	20						

Data	2007/08 2008/09 2009/10 2010/11 Notes	Source: Council monitoring / Operators' data The baseline has been energen and as collected in the last numeric of 2005 only and as such is a	93%     94%     95%     95%     provisional figure. None detailed data will be made available invouch the Punctuality improvement Plan (PIP) to be adopted in April 2006.       Rei PIP is to be adopted in April 2006.     Pate of schoold data will be made are of schoold file in April 2006.       95% of services to be within 1 minute early of 5 minute services to be within his time farme by 2014. As a resu of the authorities aliming to achieve this by the end of 2010/11, it is a Stretched Target.	2007/08 2008/09 2009/10 2010/11 Notes		79% 80% 81% 82% provisional figure. More detailed data will be made available through the Punctuality Innovement Plan	(PIP) to be adopted in April 2006. (PIP) to be adopted in April 2006. T0% of services to be within 1 minute early of minute late of scheduled time. The DrT target is for 90% of services to be within this time frame by 2014 and the authorities trajectory is based upon this target.	2007/08 2008/09 2009/10 2010/11 Notes	N/A N/A N/A N/A	2008/00 2000/11	2008/08 2008/10 2019/10	0.69 mins 0.68 mins 0.67 mins 0.67 mins 0.66 mins 10.68 mins 10.68 mins 0.67 mins 0.68 mins 0.67 mins 0.67 mins 0.67 mins 0.67 mins 0.68 mins 0.68 mins 0.69 mins 0.68 mins 0.67 mins 0.68 mins 0.69 mins 0.68	has been set for a year on year increase.	2007 2008 2009 2010 Notes	Source: Council monitoring in October of each year at 34,590         Source: Council monitoring in October of each year at The figure relates to the AM Peak Period (07:00 - 10:00) Mon-Fri average inbound vehicle flow.	2007 2008 2009 2010 Notes	Source: Council monitoring The larget will be determined by July 2006 on receipt of		2007 2008 2009 2010 Notes	Source: Council monitoring CC = City Centre AQMA	CC = 40     CC = 39     CC = 38     CC = 38
Actual and Trajectory Data	/06 2006/07	92%	92%	/06 2006/07		77% 78%		/06 2006/07	N/A N/A N/A	000		0.70 mins		2005 2006	34,590	2005 2006			2005 2006	43 42	43 CC = 41 42 RR = 41
Actu	2004/05 2005/06	92 92	92 6	2004/05 2005/06		77 A/N		2004/05 2005/06	N/A N/A			N/A 0.71 mins		-	34,590 34,590	2004 20			2004 20	о <del>к</del>	N/A CC = 43 RR = 42
	2003/04 200	N/A	e Z	2003/04 200		N/A		2003/04 200	N/A N/A			YN N			34,590 34	2003			2003		<b>A</b> N
		Actual Figures	95% Trajectory		77% Actual Figures	82% Trajectory			N/A Actual Figures N/A Traiectory	f inconfe	atural Fisurea	0.11 mills Actual rigures 0.66 mins Trajectory			34,590 Actual Figures 34,590 Trajectory		Actual Figures	Trajectory		<mark>CC = 43</mark> Actual Figures RR = 42	rajectory
Value		92% A	<b>1</b> 96%		77% A	82% TI					0 71 mine	0.66 mins Trajectory									CC = 38 Trajectory RR = 38
Year		2005/06	2010/11		2005/06	2010/11			2005/06		2005/06	2010/11			2003		2005	2010		2005	2010
		Base Data	Target Data		Base Data	Target Data			Base Data Target Data		Date Date	Target Data			Base Data Target Data		Base Data	Target Data		Base Data	Target Data
Plan Area		<ul> <li>Joint Plan Area</li> </ul>			Percentage Joint Plan Area				Percentage Joint Plan Area		Letter Area				Joint Plan Area		Joint Plan Area			s AQMAs	
e Units		Percentage			Percentage				Percentage		Minutes				Number of vehicles					Micrograms per metre	cubed ( <i>u</i> gm <sup>-3</sup> )
Year Type		n Financial			Financial				Financial						Calendar	~	d Calendar		Ţ	e Calendar	
Definitions	% of buses	starting route on Financial time		% of buses on	time at intermediate timing points	5		% of buses on	time at non- timing points	Averade excess	waiting time on	frequent service routes				Average journey	time per person per mile, related	throughput	Concentration of	nitrogen dioxide in Air Quality	Management Areas (AQMA)
Core Indicator		punctuality indicator												LTP6 - Changes	in peak period traffic flows to urban centres	LTP7 -	Congestion		LTP8 - Air		

Trajectories
s and
Targets
Indicators,
Local
13.6:
Table

Local Indicator	Definitions	Year Type	Units	Plan Area		Year	Value				Actual and	Actual and Trajectory Data	Data				
<u>i</u>	ators				-											-	
	% of single				1				2003	2004	2005	2006	2007	2008	2009	2010	Notes
occupant car occupant car journeys to work journeys to work	occupant car journeys to worl for employers	Calendar	Percentage	Joint Plan Area	Base Data Target Data	2005 2010	69% A	69% Actual Figures 69% Trajectory	A/N	N/A N/A	69% 69%	%69	%69	%69	%69	69% Th grc	Source: Council monitoring The trajectory has been set in light of anticipated traffic growth of 6% during the course of LTP2 (see indicator
	with travel plans	0														77	LTP2).
rking	% of new non-								2003/04	2004/05	2005/06	2006/07	2007/08 2	2008/09 2	2009/10 2	2010/11	Notes
standards	residential	Financial	Percentage City	City	Base Data	2004/05	100% A	100% Actual Figures	N/A	100%						S	Source: Council monitoring.
	development complying with car parking standards				Target Data	2010/11	<b>L</b> %06<	>90% Trajectory	Ϋ́Z	%06<	%06<	%06<	%06<	%06<	%06<	-90% Th	The car parking standards are set out in the Local Development Framework
er	% of employees								2003	2004	2005	2006	2007	2008	2009	2010	Notes
travel plans	covered by a commuter travel plan	Calendar	Percentage	Percentage Joint Plan Area	Base Data Target Data	2005 2010	15% A	15% Actual Figures 20% Trajectory	N/A N/A	N/A N/A	15% 15%	16%	17%	18%	19%	20% To	Source: Council monitoring Total number of employees in 2005 = 287,000 Employees covered by a travel plan 2005 = 43,000
																	Est. total number of employees in 2010 = 294,000 Employees covered by a travel plan 2010 = 59,500
hool travel	% of schools								2003/04	2004/05	2005/06	2006/07	2007/08 2	2008/09 2	2009/10 2	2010/11	Notes
plans	with an	Financial	Percentage	Percentage Joint Plan Area	Base Data	2004/5	15% A	15% Actual Figures	A/N	15%			ļ				Source: Council monitoring
	approved travel plan				Target Data	2010/11	80%	80% Trajectory	ΝΝ	15%	26%	37%	47%	58%	%69	Pla	The target is based upon 248 schools of the 307 in the Plan area adopting a travel plan.
s journey	Number of								2003/04	2004/05	2005/06	2006/07	2007/08 2	2008/09 2	2009/10 2	2010/11	Notes
times	services with a	Financial	Number of	Joint Plan Area	Base Data	2005/06	<b>V</b>	0 Actual Figures	AN N	N/A	0	-	'	-	-	00   	Source: Bus operators' timetables
	journey times		routes		Target Data	2010/11	2	Trajectory	AN	A/N	0	-	N	m	4	2 B4a	5 based upon a 5% reduction in journey times on tive GO2 routes and the main TrentBarton services.
	% of scheduled								2003/04	2004/05		2006/07	2007/08 2	2008/09 2	2009/10 2	2010/11	Notes
	operating	Financial	Percentage	Percentage Joint Plan Area	Base Data Target Data	2010/11	99.50% A	99.50% Actual Figures 99.50% Trajectory	ANN ANN ANN	N/A N/A	99.60% 99.50%	99.50%	99.50%	9.50%	99.50% 6	99.50% Ba thr nat	Source: busy operators Based upon the reliability of all scheduled services throughout the year. The target corresponds to the rational target set by the Tarfic Commisioners. The baseline figure has been derived from
Accessibility Indicators	cators													_	_	ē	performance in the last quarter of 2005 only.
L7: Accessibility % of households	% of household:	0							2003	2004	2005	2006	2007	2008	2009	2010	Notes
of healthcare	within 45 minutes of	Calendar	Percentage	Percentage Joint Plan Area	Base Data	2006	87% A	87% Actual Figures	N/A	A/N	N/A	87%				S É .	Source: Accession software The indicator applies to the two major hospitals in the
	hospital by bus or tram				Target Data	2010	<b>1</b> %06	90% Trajectory	A/N	N/A	N/A	87%	87%	88%	89%	90% LT inc wa	LTP area, the QMC and Clty Hospital. The fravel time includes walking links to and from bus stops and any waiting time incurred en route.
ity	% of eligible								2003/04	2004/05		2006/07	2007/08 2	2008/09 2	2009/10 2	2010/11	Notes
for the elderly	population	Financial	Percentage	Percentage Joint Plan Area	Base Data	2004/05	62% A	62% Actual Figures	N/A	N/A	62%						Source: Council monitoring
	taking up concessionary fares entitlements				Target Data	2010/11	70%	70% Trajectory	N/A	N/A	62%	64%	66%	67%	%69	70% In cor eliç	The baseline rigure is derived from 83,653 concessionary pass holders aged 60 and over, out of a eligible population of 134,638.
L9: (BV103):	% of users								2003/04	2004/05	2005/06	2006/07	2007/08 2	2008/09 2	2009/10 2	2010/11	Notes
Satisfaction with satisfied with public transport public transport	satistied with public transport	Financial	Percentage	City	Base Data Target Data	2003/04 2009/10	72% A 78% TI	72% Actual Figures 78% Trajectory	72%	N/A	N/A	75%	N/A	N/A	78%		Source: BVPI Tri-Annual Surveys of users Quarterly surveys of 600 bus users at the main travel
information	information			County	Base Data Tarnet Data	2003/04	52% A	52% Actual Figures	52% 52%	N/A	N/A	56%	N/A	N/A	R0%		centre will be used to provide an indication of progress made in interim years between Best Value surveys.
					ומו להו המומ	2110002	• ^/ ^ ^	a jecuri y	77.70	LINI		20.00			~ ^^		

Definitions % of footpaths	Year Type	Units	Plan Area		Year	Value		2003/04	4 2004/05		Actual and Trajectory Data 2005/06 2006/07 2007/08	<b>ory Data</b> 2007/08	2008/09	2009/10	2010/11	Notes
and other rights	Financial	Percentage	Percentage Joint Plan Area	Base Data	2003/04	61% A	61% Actual Figures	61%							S I	Source: Council monitoring
or way which are easy to use by the public	e			Target Data	2010/11	67%	67% Trajectory	61%	% 62%	63%	64%	65%	66%	67%	1 9 9 9	67% The larget is based upon a combined Righls of Way network of 2,646km.
Number of fully								2003/04	4 2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	Notes
accessible bus	Financial	5	Joint Plan Area	Base Data	2005/06	2 A	2 Actual Figures	N/A		2					S	Source: Council monitoring
		services		Target Data	2010/11	<b>L</b> 2	rajectory	NA	A N/A		m	4	Ω	Q	_ ₩ 2	These are defined as services operated entirely by low- floor, easy access vehicles all bus stops have raised kerbs and where bus boarders are provided where parking is likely to inhibit use.
% of crossings								2003/04	4 2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	Notes
with facilities for	Pr Financial	Percentage	Percentage Joint Plan Area	Base Data	2003/04	80% A	80% Actual Figures	80%							S	Source: Council monitoring
disabled people				Target Data	2010/11	<b>1</b> %06	90% Trajectory	80%	<u>%</u> 82%	84%	85%	86%	87%	88%	- 4 80% - 12 - 12 - 12 - 12 - 12 - 12 - 12 - 12	30% The baseline comprises 369 crossings of which 294 have facilities for disabled people, with 201 such crossings in the City and 93 in the County part of the Plan area.
1								2003/04	4 2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	Notes
services where	Financial	Number of	Joint Plan Area	Base Data	2005/06	4 A	4 Actual Figures	N/A							S	source: Council monitoring
		services		Target Data	2010/11	6	9 Trajectory	NA			5	Q	2	œ	<u></u> 0	Existing routes with Real Time enabled buses are Rainbow 4, Rainbow 5, SkyLink and Long Eaton Express.
							-	2003	3 2004	2005	2006	2007	2008	2009	2010	Notes
carbon dioxide	Calendar	Tonnes	Joint Plan Area	Base Data	2004	248.000 A	248.000 Actual Figures	Ň	24							Source: Council monitoring
				Target Data	2010	269,000 Trajectory	rajectory	NA		251,500	255,000	258,500	262,000	265,500	269,000 T th th	269.000 The target equates to an 8% increase and relates to the anticipated 6% increase in traffic on the local authority managed road network and 12% growth on the motoway / trunk road network in the Plan area.
1												-	-		-	
% of residential								2003/04	4 2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	Notes
development on brownfield land	Financial	Percentage	Percentage Joint Plan Area	Base Data Target Data	2003/04 2010/11	89% A	89% Actual Figures 85% Trajectory	89%				85%	85%	85%	85% 85% 85%	Source: Council monitoring 85% Baseline comprises 2.039 completions of which 1,818 were on brownfield land. The target reflects that contained within the Notingham Local Plan.
L16: Perception % of users who								2003/04	4 2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	Notes
of safety when feel safe when using the bus at using the bus at	Financial	Percentage	Percentage Joint Plan Area	Base Data Target Data	2005/06 2010/11	65% A 67% T	65% Actual Figures 67% Trajectory	N/A N/A				66%	66%	67%		Source: Quarterly survey of 600 bus users at the main 67% Itravel centre.
night (after 7pm)	2														<u>t a ⊣</u>	The indicator is based upon perceived safety of the actual journey, waiting for a bus and accessing the stop itself.
Pedestrian flow								2003/04	4 2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	Notes
on the Primary	Financial	Index based City	City	Base Data	2003/04	100	100 Actual Figures	N/A								Source: Council monitoring
Pedestrian Route network		on 2003/5 = 100		Target Data	2010/11	110 T	110 Trajectory	NA	4 100	102	103	105	107	109	10 10 10 10 10 10 10 10 10 10 10 10 10 1	110 The baseline is derived from surveys undertaken between 2003 and 2005 on the five pilot Primary Predestrian Routes. The index represents the aggregated flow of pedestrians on these routes.

### **13.3.1 Evidence Targets are Ambitious and Achievable**

The authorities have a strong track record in integrated transport delivery. The targets contained within the Plan aim to build upon this and are highly challenging, based on the highest level of improvement realistically achievable from the investment planned during the LTP period.

The targets have been devised with reference to:

- **National trends**: The growth in traffic and decline in public transport use, together with other national trends such as increasing car ownership are pertinent issues which have been factored into the development of local targets.
- **Past trends**: Over the course of LTP1, significant progress was made against a number of targets. Where this local progress was reflected nationally, such as in terms of road safety performance, the authorities have sought to build upon this success and stretch the targets over the LTP2 period. Where local targets have bucked national trends, such as increasing public transport patronage and limiting traffic growth, more modest targets have been set.
- **Surveys and monitoring**: The authorities undertake extensive monitoring of the road network, Personal Travel Surveys, Perception surveys to understand how and why people travel in the way they do, and have also factored in other Council wide survey findings, such as MORI surveys and the 'Citizens Panel' findings.
- **Comparison with other authorities**: The authorities have sought to benchmark themselves against other authorities in devising the targets within the Plan, most notably Derby and Leicester who form the remainder of the Three Cities group, and also the Core Cities network of authorities which share similar transport characteristics.
- Local priorities: The priorities of local residents has played a significant part in the development of the targets also, in terms of where residents feel the greatest investment is needed. This does not necessarily accord to current or past areas of poorest performance but has been factored into the process.
- Wider context: Consideration has been given to changes in future land use patterns across the conurbation in devising the targets. The Building Schools for the Future Initiative for example will see the closure of a number of schools and the concentration of resources at fewer locations. This will obviously have consequences for related indicators and has been factored in accordingly.
- **Risks**: Details of the risks associated with achieving the targets are set out below and have been taken into account in the development of future trajectories.

#### **Stretched Targets**

The authorities have set three 'stretched' targets according to DfT guidelines. These comprise the number of people killed or seriously injured (BVPI 99x), satisfaction with local bus services (BVPI 104) and bus punctuality (LTP5).

The safety of roads across Greater Nottingham has been improving for a number of years and the Councils seek to build upon this trend and stretch the KSI target from the minimum set by the Government. The figure below indicates the trajectory against which this will be achieved:



#### Figure 13.1: Number of People Killed or Seriously Injured Stretched Target

The authorities have stretched the bus punctuality target within the Plan on the basis that the 95% threshold for the percentage of buses starting their routes on time will be met by the end of the Plan period, ahead of the 2014/15 national targets, whilst the average excess waiting time for frequent services is envisaged to improve each year.

#### **Other Challenging Targets**

Greater Nottingham has a strong baseline position to build upon when it comes to assessing the use of public transport and growth in traffic across the Plan area. As a result of significant improvements made over the course of LTP1, the baseline position for the authorities is significantly higher than many comparable areas.

In addition, the target to limit growth in traffic to 6% over the course of the Plan period is set against a national estimated increase of between 23% and 29% from 2000 to 2010<sup>1</sup>, while an 8% increase in public transport usage in Greater Nottingham over the Plan period is ambitious in light of a decline nationally outside London of 5% since 2000/1. Figure 13.2 below highlights the comparison in public transport use in Greater Nottingham with national trends. Figure 13.3 highlights comparisons in terms of traffic growth.

<sup>1</sup> Transport Statistics Great Britain 2005 (Table 7.5); DfT, October 2005

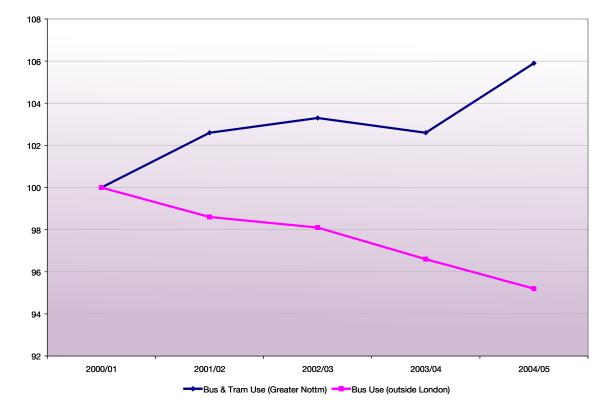
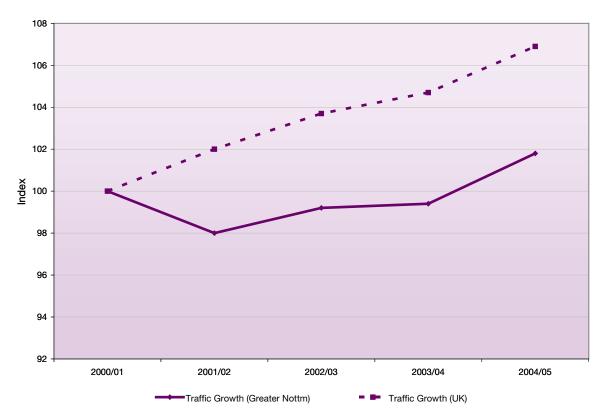


Figure 13.2: Public Transport Growth in Greater Nottingham and the UK





#### **13.3.2 Monitoring and Review of Targets**

The methodology for monitoring the indicators within the Plan is set out in Tables 13.1 and 13.2. The authorities have taken every effort to ensure the data used to set the baseline figures are accurate and that future monitoring procedures are robust.

A review of the targets included in the LTP will be carried out throughout the Plan period to constantly ensure they are sufficiently ambitious and realistic. It should be noted that the targets have been set based on one year's data for a number of the indicators and these will be reviewed in light of trend data as and when it becomes available. This will be done through the Annual Progress Report process.

# **13.4 Actions to Achieve Targets**

The ability of the authorities to deliver the targets within the Plan will be dependent upon close working with partners, both in terms of the general public and stakeholders, and the implementation of a robust package of measures identified to provide value for money and effective contributions to the Plan objectives.

The authorities have drawn up a balanced package of measures that sit within the wider framework for transport and the Greater Nottingham vision as a whole. These measures are set out in Chapter 12: Implementation Programme and will be delivered on the basis of lessons learnt from past experience and in the sharing of best practice with other authorities, examples of which are set out in Section 4.1.

#### **13.4.1 Actions to Tackle Congestion**

The actions the authorities will undertake to address the issue of congestion in Greater Nottingham are focused upon improving transport choice, making better use of existing infrastructure and the enforcement of a complementary parking policy and are discussed in detail in Chapter 5. While specific areas of investment will address particular targets contained within the Plan, the area wide change in road traffic (**LTP2**) will be addressed through the whole series of measures set out within the Programme.

The development of bus priority schemes and provision of other infrastructure such as new shelters and raised kerbs will ensure bus services become more attractive and thus encourage greater use and improve satisfaction (**BVPI 102, BVPI 104**). These areas of intervention together with the introduction of decriminalised bus lane and traffic enforcement will also address bus journey times and reliability indicators within the Plan (**L5, L6**).

The Plan's strong focus on investment in public transport and initiatives to improve the management of the existing network will influence the average journey time per person mile (**LTP7**). Although the target will be a corridor specific measure, all initiatives to reduce traffic growth will contribute towards influencing journey time.

The role of implementing maximum parking standards (L2) in terms of new developments and

parking policies that discourage commuter parking, will be central to influencing peak period traffic flows to the urban centre (**LTP6**) and the number of single car occupant journeys to work (**L1**). Through the development of new Park and Ride schemes, the volume of car based journeys at peak periods will also be reduced.

The authorities have dedicated members of staff employed to encourage the take up of travel plans for both work places and schools (**L3, L4**). The role these travel plans play in addressing congestion as a whole is recognised as part of the 'Smarter Choices' approach to changing travel behaviour, and resources will be allocated through the Plan for incentives to ensure the adoption of such plans.

School Travel Plan take up will in turn influence the ability of the authorities to meet the mode of travel to school target to increase the proportion of children travelling by non-car modes (**LTP4**). Safer routes to school schemes and general investment in walking and cycling facilities will also be pertinent to achieving this target.

#### **13.4.2 Actions to Deliver Accessibility**

Greater Nottingham has a well developed public transport network and experiences high levels of accessibility as measured by the Government's accessibility indicators. Through further bus service developments (both commercial and supported), and investment in interchanges, maintaining high accessibility levels to town centres and increasing accessibility to main hospital sites, which are the selected priority indicators for the Plan, will be possible (**LTP1, L7**). This will be complemented by the confirmation of the town centre focused Local Accessibility Transport Studies (formerly MMAAs) that seek to improve access to local goods and services through infrastructural improvements.

The provision of both printed and electronic forms of public transport information is another important area through which the Plan aims to increase the accessibility of public transport services (**L9, L13**). The production of location specific information guides, installation of electronic displays at bus stops and fitting of buses with real time enabled technology, increase the ease of use of services and public satisfaction. Similarly the use of such information on service provision plus discounts at retail outlets supported through the supply of new smartcards will encourage the take-up of concessionary fares passes for the elderly (**L8**).

The final element in increasing the accessibility of public transport will be through the implementation of raised kerbs and investment in low floor buses to permit access for the mobility impaired to services across the network (**L11**).

Encouraging walking and cycling plays an important role in the overall accessibility of the Plan area. Works will be undertaken to provide new disabled facilities at existing crossings and incorporated into all new junctions (**L12**), the Rights of Way network will be opened up and improved as set out in the ROWIP (**L10**), while the cycle network will be extended and upgraded through the provision of new on-road and off-road cycle lanes to encourage both commuter and leisure use (**LTP3**). As well as the investment in cycle infrastructure, cycle training, promotion and information will be provided to generate greater use and accessibility of the network.

#### **13.4.3 Actions to Improve Safety**

The programme of schemes the authorities will undertake to ensure the stretched KSI road safety target is met will involve site specific works, local area wide improvements coupled with the continuation of camera safety partnership activities and marketing and awareness raising initiatives.

Specific actions to address the number of KSIs (**BVPI 99x**) will include the use of speed management techniques, including safety cameras, together with road safety education. The Nottingham Nightlife Project, focusing on road safety issues and the evening economy, is anticipated to be particularly effective in this respect.

The implementation of safer routes to school, school safety zones and traffic calming in residential areas will have the biggest influence on meeting the child casualty reduction target (**BVPI 99y**), while improvements in highway engineering, safety audits and education and awareness will contribute towards reducing the number of slight casualties (**BVPI 99z**).

### **13.4.4 Actions to Improve Air Quality**

Restraining the total volume of traffic is the predominant action through which the volume of carbon dioxide emissions in Greater Nottingham will be managed (**L14**). As highlighted above, this will be through the extensive improvement in alternatives to car use, a comprehensive programme of policies focusing on demand restraint such as parking provision, and the better management of the existing network.

This final area of action is particularly relevant in terms of reducing exceedences in Air Quality Management Areas (**LTP8**), where improved management of the road network through traffic signal control, co-ordination of street works and enforcement of stationary and moving traffic offences. Furthermore, the authorities will seek to work closely with bus operators to encourage continued investment in the bus fleet to promote the use of cleaner vehicles across the Plan area.

#### **13.4.5 Actions to Support Regeneration**

The target to ensure the development of brownfield land for housing is predominantly a land use planning issue (**L15**). However, due to the close correlation between land use planning and transport the authorities will focus investment in the development of Primary Pedestrian Routes to open up previously unattractive sites for redevelopment for housing, create high quality public spaces within which people want to live, and utilise accessibility planning techniques to highlight brownfield sites most accessible by public transport provision. Investment in local highway improvements and upgrading of cycle infrastructure will also contribute to meeting the objective.

#### **13.4.6 Actions to Enhance the Quality of Life**

The quality of life targets in the Plan focus on improving the perception of safety when using the bus at night and increasing the levels of walking.

As the perception of safety is based upon each element of using the bus – accessing the stop, waiting at the stop and on the bus itself – each element will be tackled to improve the overall impression (**L16**). Firstly, a comprehensive programme of lighting maintenance will be undertaken across the Plan area and new provision made where appropriate to increase perceptions of safety in accessing stops. At the stops, a further programme of lighting and CCTV provision is anticipated to increase security; CCTV provision is also being rolled out across the bus fleets used by the operators. Finally, further investment is envisaged in the development of integrated ticketing and pre-paid tickets to reduce the need to carry money around to pay for bus fares, and thereby reduce the associated risks.

With regards to encouraging walking (**L17**), investment in the Primary Pedestrian Route network through the provision of new direct pedestrian crossings, paving, lighting and street furniture, will encourage activity, while greater pedestrian priority in the City Centre will further reduce the barriers to walking.

## **13.4.7 Actions to Deliver Efficient Maintenance**

Maintenance of the carriageway and footway will be significant areas of investment over the Plan period. Efforts to improve the condition of the Principal Road Network (**BVPI 223**), the Non-Principal Road Network (**BVPI 224a**), and Unclassified Roads (**BVPI 224b**) will be achieved through a programme of works based upon need in terms of an assessment of existing road condition and prioritised in consultation with local people.

In order to prioritise works the strategic importance of the route, the frequency of bus services, relationship to other strategies and schemes are also factored into focusing action in specific areas.

Actions to improve footway condition (**BVPI 187**) will follow the same principals of prioritising locations by need and importance of the footway in terms of footfall along with input from the local community.

## **13.5 Risks and Management of Risks**

This section summarises the risks faced by the authorities in achieving the targets set out for the five years of the Plan and how these risks will be managed. The targets have been grouped by Plan objectives as many of the risks involved apply to a number of indicators with the same overall objective.

## **13.5.1 Congestion Targets Risks**

The national trend over LTP1 has been for increases in traffic volumes and there is a risk that national factors such as a deferral of tax increases on fuel will stimulate further increases (**LTP2, LTP6, LTP7**). Between 2000 and 2004, the authorities' policies succeeded in limiting the increase in traffic to below 2% in total. The comprehensive plans for the second LTP period – improving alternatives, promoting modal shift and demand restraint – are designed to address

that risk and to continue Greater Nottingham's recent record of bucking the national trend and limiting traffic growth.

Continued traffic growth would have implications for increasing public transport patronage as it would also reduce service attractiveness and increase operator costs thereby generating above-inflation fare increases. Furthermore, the operation of bus services is not directly undertaken by the authorities, but by the bus operators. Therefore the authorities have limited powers over service frequencies, reliability and fares for example (**BVPI 102, BVPI 104, LTP5, L5, L6**).

The authorities' plans will comprehensively address this by limiting parking, restraining traffic growth, and promoting modal shift to minimise congestion, and improving bus priority to beat whatever congestion still remains. There are also well-established partnerships in place with the operators through the Punctuality Improvement Plan (PIP), thereby ensuring the maximum alignment of positive outcomes for all parties and that the authorities targets of increasing patronage and satisfaction are met as far as is practicable.

With regard enforcing car parking standards within new developments (**L2**), there is continual pressure on local planning authorities to allow some applications to have excessive car-parking because of wider economic benefits. Both authorities will continue to take a robust approach to ensuring that such standards are fully applied in all new non-residential developments, for both transport and social inclusion reasons.

The risks associated with achieving the commuter based and school travel plan targets (**L1**, **L3**, **L4**) are focused on a lack of direct influence over other organisations. Employers are autonomous, and the authorities cannot generally enforce the uptake of commuter travel plans. However, the established co-operative forums, particularly the Commuter Planners' Club, means that Greater Nottingham has effective mechanisms to extend partnership working. In addition, while schools are becoming increasingly independant, collaborative working with the authorities will assist the co-ordinated implementation of Travel Plans with other schools initiatives.

#### **13.5.2 Accessibility Targets Risks**

Congestion within Greater Nottingham also has consequences for the authorities achieving the accessibility indicators related to journey time (**LTP1, L7**) as it reduces the speed of public transport, increasing operating costs and thus threatens the commercial viability of services.

The accessibility of public transport in terms of physically accessible services (**L11**) is subject to all aspects (low-floor vehicles, raised kerbs and bus boarders where required) being provided at all times. Such an exacting standard cannot be exceeded, but contains the potential to be marred by only one element falling short of 100% delivery. Collaborative working through the Greater Nottingham Bus Quality Partnership will help to ensure co-ordinated delivery of all elements.

Accessibility for the elderly based upon the take-up of concessionary fares passes (L8) will be subject to the appropriate marketing of the scheme on behalf of the authorities and the actual

willingness of the eligible population to apply for such a pass. It is felt though, that by offering an attractive financial saving through implementing discounts at retail outlets using the same smartcard, will ensure take-up levels reach those anticipated.

Provision for the disabled is reflected in the percentage of crossings with disabled facilities indicator (**L12**). By adopting a systematic approach to installing these facilities the authorities expect to achieve the target subject to no changes in funding allocations.

Information provision is an important aspect of accessibility (**L10, L13**). Real-time information systems are still in development, and reliability, which is crucial to ensure public confidence and acceptability, remains a risk. The authorities have therefore undertaken trials of different systems, including liaison with other authorities – particularly Leicester and Derby City Councils. This has enabled the authorities to identify the most effective system for Greater Nottingham, and to have confidence that it is deliverable as planned.

Greater Nottingham faces a clear risk in halting the long-term decline in cycling due to the prevalent trend nationally for a number of years (**LTP3**). In addition the increasing volumes of traffic and the contemporary 'car-culture' mitigate against increasing cycling. However the authorities believe that their careful package of hard and soft measures provides the right combination to increase cycling in Greater Nottingham. Included in this is the ease of which the rights of way network can be used (**L10**).

In terms of encouraging more children to travel to school by more sustainable modes, due to the many pressures faced by these institutions, the encouragement of more sustainable forms of travel is often given insufficient priority, whilst independent schools are outside the authorities' control, and their co-operation is entirely at their discretion (**LTP4**).

The authorities' school travel advisers will offer full encouragement and support to increase the sustainable accessibility of all schools through the implementation of school travel plans, safer routes to school schemes and other marketing initiatives, and will stress the mutual benefits of sustainable travel, including pupils being healthier, more alert and more attentive to the schools themselves.

#### **13.5.3 Road Safety Targets Risks**

The biggest risk in meeting the stretched road safety targets (**BVPI 99x, BVPI 99y**) is down to the fact that the ultimate responsibility for safe behaviour lies with individual road users, and the authorities cannot control the behaviour of every road user in every situation on every occasion. However, the authorities can and will be very proactive in taking all reasonable measures within the budget available to give safety a high priority and to address causes of danger and produce safe road conditions, through both infrastructure and marketing initiatives.

With regards to the slight casualties indicator (**BVPI 99z**), the Police supply the figures and their accuracy of monitoring is outside the authorities control. If the approach to the collection of these statistics is altered it could introduce disparities in the data. Much of the reduction in the total number of KSIs will be by reducing the number of collisions, but there will be some

instances in which the collision will still occur but at lower speed and with less serious effect – so sometimes accidents that previously would have been a KSI will now instead be slight – influencing the slight casualties indicator.

#### **13.5.4 Air Quality Targets Risks**

The success of meeting the air quality targets set out in the Plan is directly related to the ability of the authorities to reduce congestion and overall volume of traffic (**LTP8, L14**). It is also dependent on continued improvements in vehicle engine technology to reduce emissions, which is beyond the control of the authorities. The City and County Councils will continue to support the bus operators in their investment in new low-emission vehicles.

The ability to reduce the volume of carbon dioxide emissions locally will be hampered by the proportion of the emissions associated with the motorway and trunk road traffic over which the authorities do not have control.

#### **13.5.5 Regeneration Targets Risks**

The development of brownfield land is the indicator most closely associated with regeneration (**L15**). Brownfield land can have much larger clearance and clean-up costs compared to greenfield developments, which is a disincentive to developers. Furthermore, as the most economically viable land is redeveloped, the more marginal land is left that is less attractive to external investors.

To address this, the authorities will continue to open up areas for investment via the provision of new public transport services, access roads and other infrastructure schemes such as the Primary Pedestrian Routes network and the Gedling Transport Improvement Scheme, to make hard to reach development sites more viable.

#### **13.5.6 Quality of Life Targets Risks**

People's perceptions of safety are subjective, and can be influenced by factors other than transport outside the authorities' control such as media reporting of crime. As a result, improving perceptions of safety (especially when using the bus) is a multi-faceted problem requiring action from a diverse range of areas (**L16**). A recent MORI survey for the City Council concluded that nearly 70% of residents do not feel safe in the City Centre at night<sup>2</sup>.

'Respect for Transport' was formed to combat this issue in 2004 which includes representatives from the City and County Councils, NCT, NET, JCDecaux (shelter provision company), the Police and the GNTP. Its goal is to jointly develop and promote safe and sociable behaviour on public transport through a programme of work designed for each partner to meet a series of individual pledges. Comprehensive provision of well-lit, top quality bus stops, the general high quality of buses, and the widespread introduction of CCTV will create a reassuring environment for bus travel.

<sup>2</sup> Nottingham City Council Residents Survey 2005; MORI, December 2005.

The target to increase walking on the Primary Pedestrian Routes (**L17**) relates to the Accessibility, Regeneration and Quality of Life objectives of the Plan. The biggest risk to achieving this is that walking has been in long-term decline throughout the UK for decades; achieving any increase will be very challenging. Moreover, whether or not to walk for any journey is a matter of individual choice, which is ultimately outside the authorities' control. As well as investment in the Primary Pedestrian Routes network, the authorities will address this by strong promotion of the health benefits of walking through close co-operation with the Primary Care Trusts and extensive marketing via the Big Wheel initiative.

#### **13.5.7 Maintenance Targets Risks**

With regard the risks associated with achieving the maintenance targets (**BVPI 223, BVPI 224a**), it must be noted that there have been some initial teething problems nationally with the SCANNER type surveys, and it is still uncertain that they provide satisfactory results. This will consequently impact upon the authorities ability to achieve the targets set if the annual surveys fluctuate or if the baseline is unrepresentive of the actual situation.

The targets are also based on predicted allocations, and on steady state traffic volumes. The effect of traffic increases will be taken into account in the process of drawing up the Asset Management Plans, at which point trajectories may need amending.

Detailed Visual Inspections (DVI), the method by which footway condition and unclassified roads are monitored (**BVPI 187, BVPI 224b**) is inherently prone to subjectivity. This tends to compromise the ability to compare different authorities, and may even lead to variations within an authority if the inspection personnel change from one year to another.

It should also be noted that in the authorities quest to deliver value for money, short-term solutions to maintenance problems are avoided were possible and a more robust, longer-term approach taken to limit disruption, maximise best value and where possible, combine maintenance schemes with the implementation of other infrastructure schemes.