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# The Transport Options



## Option generation

A list of options was required to overcome the issues and challenges that were identified in the previous section. A list of options and sub options were derived in a number of ways:

- Through a literature review of existing documents
- Through a number of studies
- A review of best practice
- By using the Peterborough Transportation Model (PTM) to identify where transport interventions would be required to accommodate the growth set out in the Core Strategy
- Consultation with the Transport Partnership, interested parties and stakeholders (concluding with the workshop held on the 1 April 2009)

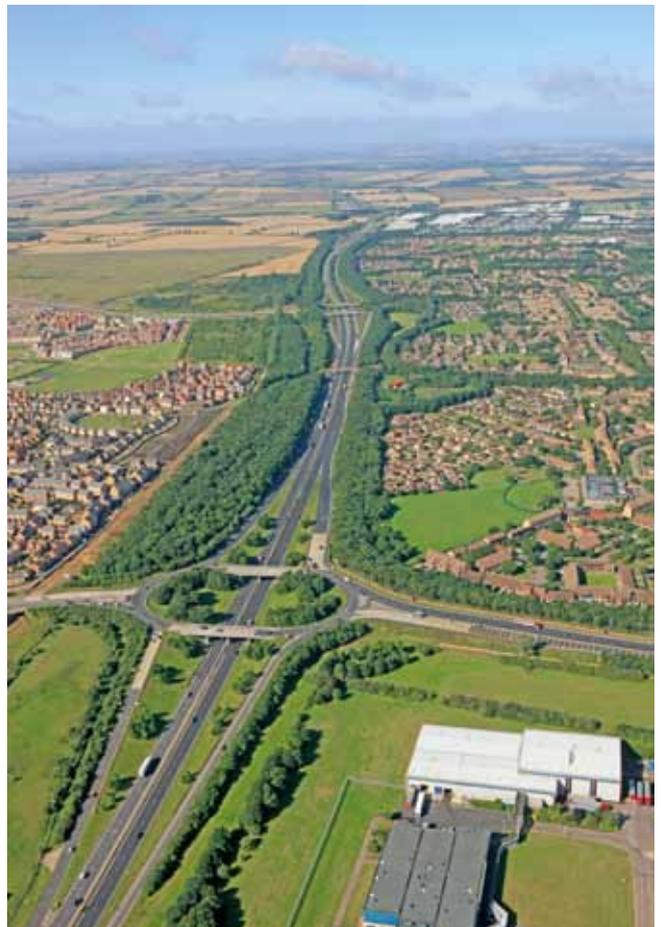


Table 4 below outlines the mode of transport that the issue and the challenge best relates to and the high level option available as an intervention.

**Table 4: Transport issues, challenges and options**

Mode	Transport Issue	Transport Challenge	Option	
Smarter Choices	Reduce the adverse impacts of transport on climate change	Reduce the need to travel by fossil fuel vehicles hence reducing forecast emissions in greenhouse gases	Smarter Choices Reduce the need to travel by fossil fuelled car	
	Increase in population will increase traffic and thus increase in pollution			
Walk/Cycle	Cycling network disjointed and focused on radial routes	Improve cycling/walking opportunities	Pedestrian/cycle route improvements	
	Walking trips are made more complex by features such as River Nene, railway lines, dual carriageways and roundabouts	Reduce both physical and psychological barriers to sustainable transport modes	Pedestrian/cycle crossings	
	Most roads create both psychological and physical barriers to pedestrian movement with limited at-grade crossings			
Public Transport Information	Public transport information	Improve public transport information	Travel information and interchange	
	Poor interchange between the city's bus and railway station	Improve surface access and interchange arrangements at and between all modes of travel	Interchange improvements	
	Lack of integration between taxi, private hire vehicles (PHV) and the public transport network		Park and Ride	
	Lack of public transport provision in some areas. Orbital bus routes around the city centre can result in correspondingly long journey times for orbital movements	Improve public transport opportunity/coverage	Enhanced Transit Systems	
	Poor bus punctuality		Other bus service improvements	
	Poor bus frequency			
	Rural bus services are not as frequent as those for urban areas	Reduce impact of congestion during peak periods on public transport	Bus priority measures	
Bus reliability is compromised in the peak periods, when buses enter mixed traffic routes closer to the city centre				
Strategic Road Network	The parkway system is nearing capacity, compromising its ability to cater for future growth in trips. In particular Junction 1-2, 4-5 and 32-33	Tackle congestion and improve journey time reliability, particularly along the parkway system	Demand Management & Information Systems	
	Increased traffic congestion reduces journey time reliability	Improve resilience of network to impact of accidents, roadworks and weather	Demand Management & Information Systems	
		Improve journey time reliability for movement of goods and business users	Freight improvements	
		Reduce productivity impacts of congestion by improving journey time reliability and reducing delays	Parkway "congestion hotspot" improvements	
			Trunk road improvements	
Reduce vulnerability of network to terrorist attack and natural disaster	Reduce vulnerability of network to terrorist attack and natural disaster	Demand Management & Information System		

Mode	Transport Issue	Transport Challenge	Option
Highways and Parking	Car park accesses can be the focal point of congestion on the network	Reduce congestion on approaches to city centre car parks	Reduce the need to travel by car Smarter Choices
	Circulating traffic looking for car parking can increase congestion	Reduce circulating traffic	Car Park Guidance Systems
	Growth agenda will further accelerate traffic growth across the authority	Ensure transport capacity to accommodate growth agenda	Development accesses
	Increased traffic congestion will jeopardise growth agenda		Other highway improvements
	Increase in population will increase traffic and thus increase pollution	Continue the downward trend in both nitrogen dioxide and particles beyond 2015, particularly in the context of the growth agenda	Reduce the need to travel by car Smarter Choices Smarter Vehicles
	The negative effect of transport to the environment	Through traffic removed from city centre	City centre improvements
		Improve the urban landscape and environment	Traffic management – reduce traffic flow in sensitive areas
		Improve air quality and reduce noise	
	Increased traffic congestion affects journey time reliability	Improve journey time reliability, particularly along the parkway system	Reduce the need to travel by car – Smarter Choices, Demand Management & Information Systems and improve highway
	Road casualties amongst male drivers in the 17 to 25 year age range form a significant proportion of the total road traffic casualties	Secure improved road safety	Traffic management – education
	Road safety quick wins have been delivered. Challenge in tackling more difficult accident problems, and traffic flow will continue to grow		Traffic management
	Air quality and noise issues		
	General safety concerns	Reduce fear of crime	Improve public transport, walk and cycle
Reduce vulnerability of network to terrorist attack and natural disaster		Demand Management & Information Systems	
Health	Health related problems due to inactivity	Improve cycling/walking opportunities	Pedestrian/cycle route improvements
	Health related problems due to transport emissions and noise	Improve air quality and reduce noise	Smarter Choices
		Encourage the use of low emission vehicles	

#### Definitions for information in Table 4

Smarter Choices in Table 4 refers to the technique of encouraging car drivers onto more Sustainable Travel Modes (STM), such as public transport, cycling and walking through a combination of travel information and judicious improvements to these STM.

Smarter Vehicles refers to vehicles with reduced emissions achieved through improved engine efficiency, hybrid technology, alternative fuels and electric vehicles. Estimates suggest that the electric vehicles could reduce CO<sub>2</sub> emissions by up to 40 per cent over the whole life of a vehicle on the current mix of electricity generation.

*"Smarter Choices refers to the technique of encouraging car drivers onto more Sustainable Travel Modes"*

## Sub options

For each option shown in Table 4 a further exercise was carried out in order to determine more detailed transport interventions that should be considered as a sub option to the high level options. This was undertaken by:

- Identifying what measures have been successful in Peterborough in the past
- Identifying options put forward during the consultation
- Review of best practice literature
- Discussions with other authorities

A list of the transport interventions (sub options) was compiled and can be seen in Table 5 below.



**Table 5:** Transport options and sub options

Mode	Options	Sub Options
Smarter Choices	Smarter Choices – reduce the need to travel by fossil fuelled car	Travel plans (school, business, residential and village/rural)
		Travelchoice Centres (district centres)
		Social marketing/research
		New technology (advances in technology and best practice)
		Travelchoice website
		Integrated land use planning
		Smarter Vehicles
		Electric car charging points
		Park and Share (encourage drivers to share lifts before driving into Peterborough)
Walking and Cycling/Health	Pedestrian/cycle route improvement	Strategic Walking Network expansion and consolidation
		Cycle hub
		Park and Cycle
		Quiet Lanes in rural areas
		Footpaths between rural villages
		Primary Cycle Network (PCN) expansion
		Expansion of pedestrian areas
	Pedestrian/cycle crossings	Bourges Boulevard footbridge/pedestrian crossing
		PCN crossing improvements
		London Road river bridge phase 3
		South Bank railway and river footbridges
		Crescent Bridge pedestrian and cycle bridge
Public Transport	Travel information and interchange	Real Time Passenger Information (RTPI – linked to UTMIC, audio and other emerging technology)
		New bus station integrated with railway station
		Travelchoice Centre
		Integrated transport hub
		Disability Discrimination Act (DDA) link between bus and railway station
	Park and Ride	Park and Ride – southern
		Park and Ride – northern
		Park and Ride – eastern
	Enhanced Transit System	Rapid transit
		Extended Primary Public Transport Corridor (PPTC)
		Innovative ticketing measures (including smartcard)
		Minimum 10min frequency and additional core network

Mode	Options	Sub Options
Public Transport	Other bus service enhancements	Electric city centre bus
		Improve rural bus service (demand responsive service)
		Improve orbital bus network
		Improve cross boundary bus service
		Extend timetable of bus services at evenings and weekends
	Other forms of public transport	Pedicabs/Rickshaws
		Water based Park and Ride
	Transport	Water Bus
Light Rapid Transit (LRT)		
Cable cars		
Bus priority	Bus priority measures	
Railway	Passenger and freight	Peterborough station enhancement
		Level crossing closures/enhancements (Woodcroft and Foxcovert Lane)
		Additional stations (Werrington and Walton)
		Joint line (Peterborough to Spalding) freight option
		Rail freight improvements
		Link between Railworld and the East Coast Main Line (ECML)
		Nene Valley Railway upgrade to install new track for commuter service
Freight	Freight improvements	Freight logistics – Quality Partnership
		Hybrid or rail transshipment
		Consider wider use of river for transport
		Heavy Goods Vehicle (HGV) lane
Strategic Road Network	Trunk road improvements	A47 dualling between A1 and Sutton
		A1 Wittering Junction Improvement
	Parkway “congestion hotspot” improvements	A1/A605 Oundle Road (Alwalton) junction improvement
		A1139 Fletton Parkway Junction 17 (A1(M)) – Junction 1 widening
		A1139 Fletton Parkway Junction 1 to 2 widening
		A1139 Fletton Parkway Junction 2 improvements
		A1139 Fletton Parkway Junction 3 improvements
		A1139 Fletton Parkway Junction 3 to 3a widening
		A1139 Fletton Parkway Junction 3a improvements
		A1139 Fletton Parkway Junction 4 improvements
		Frank Perkins Parkway Junction 4 to 5 widening and junction improvements
		A1260 Nene Parkway Junction Stage 2 Junction 15 (A47) improvements
		A47/A15 Lincoln Road Junction 18 improvements
		A47/A15 Paston Parkway Junction 20 improvements (above A1073 scheme)
		A15 Paston Parkway Junction 21 improvements
		Dualling of A15 Paston Parkway between Junction 22 and Ginton roundabout (Junction 23)
		A15 Junction 23 improvements including public transport priority
		A1260 Nene Parkway Junction 32 to 33 widening (within carriageway)
		A1260 Nene Parkway Junction 33 improvements

Mode	Options	Sub Options
Highways and Parkings	Demand Management & Information Systems	Consider car park strategy
		Consider potential for High Occupancy Vehicle (HoV) lanes (Longthorpe Parkway)
		Consider potential for no car lanes
		Consider potential for green lanes (no cars except low emission)
		Automated Traffic Management (ATM)
		Variable Message Signs (VMS)
		Car park demand management
	City centre improvements	Crescent Bridge/Bourges Boulevard improvements
		Rivergate Gyratory improvements
		Other improvements
		East Embankment – Boongate dualling
		East Embankment – Fengate capacity improvements
		East Embankment – slip road
	Other highway improvements	Dualling A15 Glinton bypass between B1524 (Deepings) and Junction 23
		A605 Stanground bypass dualling – eastern end
		Junction 68 Stanground fire station roundabout improvements with public transport priority
	Development accesses	Norwood access
		A1073 dualling Norwood to A47
		Eastern Industries access
		Parnwell Way dualling (as part of Eastern Industries) between Junction 8 and Junction 70
	Traffic management	Education
		Reduce traffic speeds
		Reduce traffic flows in sensitive areas

Table 5 was used to provide information for:

- Assessments
- Delivering the high level Long Term Transport Strategy (LTTS)
- Further consultation (including Local Transport Plan 3 (LTP3) consultation)

More information on the variety of methods that will be taken forward in the next five years can be found in the LTP3 strategy in Section 9 of this document.

The next section describes how the full list of options shown in Table 5 underwent a series of assessments to determine whether they were appropriate to meet the vision, priorities and goals of the LTTS and LTP3.

