

Bedford's Network Management Strategy (2011 – 2021)

November 2010



1. Introduction

- 1.1. The Bedford Borough Council Network Management Strategy has been developed to support local and national policies on tackling congestion and disruption on the highway network and meet the Council's statutory obligations as laid out in the Traffic Management Act 2004 (TMA).
- 1.2. The provisions in the TMA aim to provide local Traffic Authorities (LTA) with a stronger focus on tackling congestion, and greater powers to pursue that aim. The TMA provides LTA's with much greater powers to minimise unnecessary disruption caused by poorly planned works. In addition, there are many different strands of work within local authorities, which need to be co-ordinated properly if their collective impact is to be one that delivers visible benefits to the public. These strands of work include not only co-ordination of utility companies' street works and the authority's own road works, but also activities such as managing parking provision, managing provision of public transport, development control policy, activities on the network, for example refuse collection, and planned and unplanned events, all of which can contribute to unnecessary disruption and congestion. It is the planning for and dealing with the effects of all such aspects that the network management strategy is aimed.
- 1.3. However, the TMA is specific in stating that traffic is not only vehicular, but includes pedestrians and cyclists. So the duty must consider the movement of all road users. It is for the Council to develop the duty alongside our existing strategies and policies and not for it to supersede them. Indeed the network management duty is to be applied to the Council's duties not only as a LTA (s121A, Road Traffic Regulation Act) but also as a local highway authority (s1(b), Highways Act 1980) and as a street authority (s49(1), New Roads and Street Works Act 1991). The strategy outlines how the Council (BBC) will meet its duty.

2. National Context and legislation

- 2.1. The TMA makes a vital contribution towards achieving national targets:
 - Reducing congestion on interurban trunk road network, and in large urban areas.
 - To improve air quality.
 - To reduce the number of people killed or seriously injured in Great Britain in road accidents.
 - To improve accessibility to key services.
- 2.2. The primary aim of the TMA is to reduce congestion and disruption on the highway network. The TMA sets out certain responsibilities to assist local traffic authorities to achieve this aim by:

- Promoting better coordination, by the highway authority, of the various works carried out, whether these are authority roadworks, utility streetworks or miscellaneous activities such as placing skips, scaffolds or deposits on the highway.
- Coordination of other activities that may affect the highway network, for example refuse collections, deliveries, school transport and events such as carnivals, concerts, sporting events and fairs.
- Introducing a range of powers to allow utility works to be better controlled
- Allowing certain contraventions of the law, such as parking offences, to be dealt with through Civil Parking Enforcement (CPE), rather than through the criminal process.

2.3. The TMA is in seven sections. These are:

- Part 1 – Traffic Officers.
- Part 2 – Network Management.
- Part 3 – Permit Schemes.
- Part 4 – Street Works.
- Part 5 – Highways and Roads.
- Part 6 – Civil Enforcement of Traffic Contraventions.
- Part 7 – Miscellaneous and General.

2.4. Part 2 of the Act, “*Network Management by Local Authorities*” imposes a network management duty on local traffic authorities to “secure the expeditious movement of traffic on their road network and to facilitate traffic movement on other traffic authorities road networks”. The duty reflects the importance placed nationally on making the best use of the existing highway network with the overriding aim that the network should operate efficiently, without unnecessary delays to all highway users, including pedestrians and cyclists, as well as motorists.

2.5. The duty is not limited to actions only as a local traffic authority and there is a need to consider the duty when exercising any power that can affect the highway network. It therefore extends to the exercise of powers as a highway authority, a street authority and any other power used to regulate or coordinate the uses made of any highway.

2.6. However, it is recognised that the duty is placed alongside all other obligations, objectives and policies and does not take precedence over them.

2.7. The Council will need to demonstrate and provide evidence to the Secretary of State for Transport that it has taken appropriate actions to comply with the requirements of the network management duty. Intervention criteria have been issued by the Department for Transport setting out the minimum criteria it expects to be met, which come under the following headings: -

- Considering the needs of all users.
- Coordinating and planning works and known events.

- Gathering information and providing information needs.
 - Incident management and contingency planning.
 - Dealing with traffic growth.
 - Working with all stakeholders.
 - Ensuring parity with others.
- 2.8. The Network Management Strategy considers these issues in detail and proposes actions and performance measures to assist in demonstrating compliance with the duty.
- 2.9. The New Roads and Street Works Act (NRSWA) is the existing legislation under which highway authorities attempt to control the disruption caused by utility companies' street works. The NRSWA dates back to 1991, at which time only a handful of utility companies were permitted to dig up the road. There are now however over 150 utility companies able to conduct street works. The need for these companies to build and maintain networks of infrastructure beneath the street has led to a significant growth in the levels of disruption caused by street works over the last decade.

3. Local Context

- 3.1. The LTP sets out the transport aims and ambitions of a local authority and identifies the key projects, schemes and initiatives necessary to deliver the outcomes which will build sustainable local communities, and strengthen its place shaping role. The Local Transport Plan for Bedford Borough sets out the Transport Goals and Challenges that need to be met to achieve the corporate priorities for transport, which are specifically:
- A - Understand and change travel behaviour and perceptions.
 - B - Prioritise and deliver with limited resources.
- 3.2. The overall LTP approach has been adopted to tackle the Bedford Transport Challenges (shown in Appendix A) which were developed in conjunction with stakeholders at the beginning of the LTP process.
- 3.3. The LTP goals and strategies are based on a central core of meeting the aspirations in the Sustainable Community Strategy.

LTP vision

....to create a transport system in which walking, cycling and public transport are the natural choices of travel for the majority of journeys because they are affordable, healthy, convenient and safe alternatives to the private car....

- 3.4. Each of the eight LTP strategies, including the Network Management Strategy will clearly set out how the actions contained within it impact on the other strategies. The purpose of interlocking strategies is to

consider how delivery of one strategy impacts on another, in order to adopt a balanced approach which considers the needs of all road users.

- 3.5. The Network Management Strategy will outline the details of cross border arrangements that exist with neighbouring authorities as well as the Highways Agency. This will involve ensuring consistency of road hierarchies; Route Management Strategies and Traffic management arrangements at boundaries.

4. Vision, Key Aims and Approach

- 4.1. The Department for Transport has issued guidance on the fulfilment of the Network Management duty. While this guidance implies that there is no requirement on LTAs to develop a specific Network Management Strategy, Bedford Borough Council believes that, by developing such a Strategy, we can better demonstrate our commitment to the *duty* in terms of managing our road network in line with the Council's *vision* for transport as set out by the Local Transport Plan policies.

- 4.2. The Traffic Management Act duty is defined in the Act as:-

“It is the duty of a local traffic authority to manage their road network with a view to achieving, so far as is reasonably practicable having regard to their other obligations, policies and objectives, the following objectives –

- (a) *Securing the expeditious movement of traffic on the authority’s road network; and*
- (b) *Facilitating the expeditious movement of traffic on road networks for which another authority is the traffic authority.”*

- 4.3. The overall aim of the *“expeditious movement of traffic”* implies a network that is working efficiently without unnecessary delay to those travelling on it. But the duty is also qualified in terms of practicability and other responsibilities of the authority. This means that the duty is placed alongside all the other things that an authority has to consider, and it does not take precedence. So, for example, securing the expeditious movement of vehicles should not be at the expense of an authority’s road safety objectives. But the statutory duty reflects the importance placed on making best use of existing road space for the benefit of all road users.

- 4.4. The Network Management Strategy therefore intends to demonstrate effective management of the statutory duties placed upon the Council, while broadening the approach to help deliver the aims and objectives of the Local Transport Plan. It sets out how the Borough Council will deliver the visions of the Sustainable Community Strategy and Local Transport Plan by dealing efficiently with the traffic presented on the network – both now and in the future – and the various activities that

are causing or have the potential to cause congestion or disruption to the movement of traffic.

- 4.5. The Strategy recognises that network management should form only one element of the Council's transport strategy and that, whilst it is the Council's aim to see an improvement in the efficient use of the network, it should not be at the expense of those with a need to use or work on roads and footways. It is important that our approach to network management recognises these needs and the fact that they can and will have an effect on the network capacity. A pro-active approach to co-ordination will be adopted that will allow the gathering of accurate information on planned works or events, consideration on how best to minimise their impact and agreement (or stipulation if necessary) on optimum timing.
- 4.6. One the key elements in the Network Management Strategy required to support this approach is to define the network based upon the various demands placed upon it. These demands are then translated into a set of standards to allow effective management of the network – for example setting standards for frequency of inspections, standards for repairs of defects and management of road closures. A summary of factors considered in defining the highway network is shown in Appendix B.
- 4.7. The Network Management Strategy also recognises that there are many competing demands placed on the use of the highway network, which must be balanced to ensure that those who wish to legally use the network, are allowed to do so. The demands range from the need to carry out essential maintenance and improvement of highway assets and the statutory right of utility companies to place and maintain their apparatus in the highway, to those who wish to use the highway for leisure or business purposes. The strategy sets out how known events are planned and coordinated to minimise the disruption and impact on the network and the arrangements that are in place to ensure effective liaison with, for example, public transport operators and the freight industry takes place. It goes on to set out how information relating to works and activities is gathered and disseminated.
- 4.8. The following objectives have been set for the Network Management Strategy and have been derived from the TMA and Local Transport Plan:
 - Objective 1 – to meet the statutory Network Management Duty.
 - Objective 2 – meeting the vision to consider the needs of all road users and provide a safe highways network that contributes to the Council's carbon reduction agenda.
 - Objective 3 – Define the Network.
 - Objective 4 – to co-ordinate and plan works and known events.
 - Objective 5 – to gather information and provide information needs.
 - Objective 6 – to develop contingency plans for managing incidents.

- Objective 7 – to have strategies in place to effectively monitor and manage the existing network and provide a framework to attend to future demands.
- Objective 8 – to consult and involve stakeholders and other interested parties to ensure the efficient operation of the road network as a whole.
- Objective 9 – to ensure parity between the local highway authority and others.
- Objective 10 – to monitor and review.

5. Delivery Action Plan

Objective Ref	Objective description	Action
1	Meeting the statutory duty of the Traffic Management Act	<ul style="list-style-type: none"> • Permanent Traffic Manager appointed and in position on 1st April 2009. • Annual report regarding BBC on compliance with the TMA and summary of Performance to be produced in March each year.
2	To consider the needs of all road users, including utilities, when carrying out its network management duty. BBC has to manage the road space for everyone, and make decisions about trade-offs between competing demands according to its policies and the particular circumstances of the part of the network being considered.	<ul style="list-style-type: none"> • Transfer New Roads and Street Works function back in house from Amey. • Recruit NRSWA manager and support staff by Jan 2011 • Noticing on all BBC capital programmed works to commence from 1 April 2011. • Specific operational policies relating to other Local Transport Plan to be developed as part of Network Management Strategy. • Strategies on street lighting and urban traffic management control to be developed as part of Network Management Strategy.

Objective Ref	Objective description	Action
3	Define the road network.	<ul style="list-style-type: none"> • Road hierarchy to be defined as part of NMS as shown in Appendix B. Inputs relating to LTP strategies to generate outputs on highways inspections, response to defects and road works planning. • Traffic sensitive network recently reviewed and agreed by Bedfordshire Highway Authorities and Utilities Committee (HAUC).
4	Coordinate and plan works and known events.	<ul style="list-style-type: none"> • Traffic Manager member of Regional Anglian HAUC group since April 2009. • All BBC capital highways works to be properly noticed in accordance with NRSWA and TMA from April 2011.
5	To gather and provide information.	<ul style="list-style-type: none"> • ELGIN used to co-ordinate works in Bedford Borough. Eton 4 in place as from 1st April 2009. • Roadworks information bulletin published on BBC website from April 2010. • Information bulletin advising members about customer call centre reports and action to be in place by Jan 2011. • Programme of capital programme of highways works to be circulated to Members and BBC Heads of Service. • Working actively with Eastern Region Authorities for the introduction of a Regional Permit Scheme to be in place 1 April 2012 or as soon as possible thereafter.
6	Establish contingency plans for managing incidents.	<ul style="list-style-type: none"> • Update 2006 Highway Incident Contingency Plan by January 2012, and then review annually. • Winter Maintenance Policy and Operational Plan in place and to be reviewed annually
7	Effectively monitor and manage existing network.	<ul style="list-style-type: none"> • Borough Council network of traffic monitoring equipment expanded to include Automatic Number Plate Recognition systems to facilitate origin and destination analysis. • Urban Traffic Management Control strategy to be included as part of Network Management Strategy, including identification of congestion hotspots. • Detailed review of road traffic accident

Objective Ref	Objective description	Action
		data completed as part of road safety strategy.
8	Consult and involve stakeholders to ensure efficient operation of the network.	<ul style="list-style-type: none"> Recruit NRSWA manager and transfer function back in house by Jan 2011. Highways and Transport Group undertake annual satisfaction surveys through National Highway Transport surveys, and to regularly engage with Citizens Panel regarding highways issues. Traffic Manager holds regular street works management meetings to discuss and coordinate street works and planned events. NRSWA manager to work with internal departments to raise awareness of network management duty.
9	Ensure parity between the local highway authority and others.	<ul style="list-style-type: none"> Traffic Manager member of Regional Anglian HAUC group since April 2009. All BBC Capital highways works to be properly noticed in accordance with NRSWA and TMA from April 2011.
10	Monitoring and evaluation.	<ul style="list-style-type: none"> Network management Strategy will adopt Local Transport Plan performance indicators, together with Indicators already identified as part of BBC Highways and Transport Service Plan to facilitate monitoring. Further Indicators relating to TMA permit schemes to be adopted as required.

6. Resources and Partnership Working

- 6.1. It is clear that the Borough Council cannot deliver the Network Management objectives alone and we will therefore continue our efforts to maintain and extend close partnership working with a broad range of organisations. The delivery of the Network Management duty and the vision will be achieved through facilitating and engaging with key partners to achieve delivery of the action plan.
- 6.2. The uncertainty over future funding for all highways areas of work means it will be essential to ensure that added value is achieved through ever possible avenue.
- 6.3. Policies and programmes for improving and maintaining the highway network will be developed annually through the Transport Asset Management Planning process to understand the value and liability of the existing asset base and the delivery of the programme will be based upon policies contained within the Network Management Strategy to take account of the needs of all highway users. Particular

emphasis will be placed on carrying out works in such a manner so as to support promoting sustainable modes of transport, such as walking, cycling and passenger transport.

Bedford's Transport Challenges and Goals

Appendix A

Overarching Challenges:	
<p>A. Understand and Change Travel Behaviour and Perceptions</p> <p>B. Prioritise and Deliver with Limited Resources</p>	
Bedford's Goal 1.	A strong local economy, delivering high levels of sustainable growth and employment for the benefit of the Borough's existing and future residents. (In line with National DaSTS* Goal: Support economic growth)
<p>a) Improve the town centre and access to it for all users</p> <p>b) Deliver infrastructure developments / improvements through an agreed programme</p> <p>c) Support the provision of strategic employment sites in the Borough</p> <p>d) Ensure the transport system can meet business and commercial needs and requirements</p> <p>e) Deal with the transport challenge of new developments in a consistent and sustainable way</p> <p>f) Maintain and improve the standard of all Bedford's roads and footways, and plan for adverse conditions</p> <p>g) Understand congestion in the Borough and minimise its growth / reduce its impact</p>	
Bedford's Goal 2.	A natural environment which is valued and enjoyed by all; which encourages biodiversity, reduces emissions and contributes to the development of a low carbon community capable of adapting to the impacts of climate change. (In line with National DaSTS* Goal: Tackle climate change)
<p>a) Develop a strong low carbon network, which encourages modal shift away from single vehicle use, into and within the town and between key facilities</p> <p>b) Promote opportunities and improvements to public transport, including rail</p> <p>c) Reduce the number of children travelling to and from school by car</p>	
Bedford's Goal 3.	Equal access to opportunities for all residents. (In line with National DaSTS* Goal: Promote equality of opportunity)
<p>a) Increase accessibility by non car mode to key services such as education and employment in the urban and rural areas</p> <p>b) Include non car travel considerations in investment and service planning decisions</p>	
Bedford's Goal 4.	A Borough where people live safer (and healthier) lives. (in line with National DaSTS* Goal: Contribute to better safety, security and health)
<p>a) Use active travel to promote and increase healthy life expectancy</p> <p>b) Reduce road risk and reduce casualty levels</p> <p>c) Incorporate personal and road safety into urban design</p> <p>d) Reduce air pollution</p> <p>e) Improve accessibility to essential services</p>	
Bedford's Goal 5.	A healthy natural (and built) environment, which is valued and enjoyed by all, and people feel part of the wider community. (In line with National DaSTS* Goal: Improve quality of life)
<p>a) Reduce the impact of existing transport services and infrastructure on the environment</p> <p>b) Minimise the impact of new transport services and infrastructure</p> <p>c) Improve the quality of transport infrastructure in streetscapes and the urban environment</p> <p>d) Identify and mitigate environmental black spots</p> <p>e) Promote urban design and heritage considerations</p> <p>f) Improve the public face of transport interchanges (e.g. bus station and rail stations)</p> <p>g) Protect the public from transport related noise</p>	

* DaSTS = Delivering a Sustainable Transport System

Inputs used to generate Road Network Hierarchy Appendix B

The table below shows categorisation levels employed in defining the network

Input	Gold	Silver	Bronze
Traffic flows	More than 1000 vehicles per hour per lane	Between 500 and 1000 vehicles per hour per lane	Less than 500 vehicles per hour per lane
Public Transport	More than 15 buses per hour route used by Park and Ride buses	Between 5 and 15 buses per hour	Less than 5 buses per hour
HGV Flow	More than 25% HGVs	Between 10% and 25% HGVs	Less than 10% HGVs
Freight strategy network definition	Primary Routes	Secondary Routes	Remainder
Cycle Routes	Part of strategic network as defined in cycle strategy	On carriageway cycle lanes present	Off carriageway cycle lanes present
Pedestrian Flows	More than 600 per hour	Between 300 and 600 per hour	Less than 300 per hour
Winter Maintenance	Winter maintenance Priority 0 salting routes	Winter maintenance Priority 1 salting routes	Winter maintenance priority 2 salting routes
Traffic Congestion	Peak hour average speed less than 10mph hour	Peak hour average speed between 10 and 20 mph	Remainder
Traffic Sensitivity	Existing defined High Traffic Sensitivity (Blue routes)	Existing defined Medium Traffic Sensitivity (Red/Yellow routes)	
Emergency Services key route	High Priority routes specified by emergency services	Medium Priority routes specified by emergency services	
Road Safety Strategy	More than an average of 3 recorded injury accidents per km/year where highway network factors were a relevant factor	More than an average of 1 recorded injury accidents per km/year where highway network factors were a relevant factor	Cluster sites with more than 3 recorded injury accidents per km/year
Community Infrastructure	Main access route to school or health / medical centre	Main access route to school	Main access route to community centre or sheltered housing
Town Centre	Within defined area	District shopping centre	
River or Rail crossing	All urban on principle road	All urban	All rural
Night time economy	N/A	High density of night time economy establishments	N/A
Local employment density	Major industrial estates or key routes to employment centres	Significant density of business or industrial units	

Input	Gold	Silver	Bronze
School transport	More than 10 school transport services	Between 5 and 10 school transport services	Less than 5 school transport services
Identified safer route to school	N/A	All	N/A

Network management outputs from Road Hierarchy Network definition

The defined strategy outputs for each classification of road is shown below

Input	Gold	Silver	Bronze
Highways inspections	Monthly inspections	6 -monthly inspections	Annual inspections
Defect classifications in Network Maintenance Plan	Defects classified as high risk - category1 response	Defects classified as category 2(high) or category 1 response	All non emergency defects classed as low risk category 2
Network Management Duty	Working hours for planned works generally restricted to overnight working only	Working hours for planned works generally restricted to off-peak, overnight or week-end working	Working hours determined depending upon nature of works
Winter Maintenance	Winter maintenance Priority 0 salting routes	Winter maintenance Priority 1 salting routes	Winter maintenance Priority 2 & 3 salting routes
Parking restriction enforcement	High profile enforcement	High profile enforcement during peak hours	Routine enforcement
Street lighting Strategy	Light zones defined as E3 or E4 in lighting policy	Light zones defined as E3 or E4 in lighting policy	Light zones defined as E1 or E2 in lighting policy
Traffic Signal Maintenance	2 hour response to signal faults as defined in UTMC strategy	24 hour response to signal faults as defined in UTMC strategy	48 hour response to signal faults as defined in UTMC strategy