Bedford’s Transport Asset Management Plan

January 2011
1 Introduction

1.1 Asset management is a tactical approach that identifies the optimal allocation of resources for the management, operation, preservation and enhancement of the highway infrastructure to meet the needs of current and future customers.

1.1 The production of Bedford’s Transport Asset Management Plan (TAMP) forms an integral part of the Local Transport Plan. The purpose of the TAMP is to set out current practices and systems being applied to the management of the transport asset. Whilst many of the working practices relating to good asset management are already in place, the TAMP will formally incorporate overarching transportation strategies to maximise the benefits to the community, leading to better value for money and efficiency savings in service delivery.

2 National Context and legislation

2.1 The preparation of a TAMP is not a statutory requirement from the Government but their preparation is encouraged as representing best practice.

3 Local Context

3.1 Transport asset management is a way of running the ‘business’ of operating a highways and transportation network. The TAMP has been guided by the corporate objectives of the Council, as outlined in the Bedford Sustainable Community Strategy and the Local Transport Plan. The relationships between these higher order objectives and asset management activity will be set out comprehensively in the TAMP. The comprehensive approach to asset management represented by the TAMP will help to ensure that the road safety implications of asset management are also thoroughly addressed.

3.2 The TAMP will be produced by BBC officers following the County Surveyors Society (CSS) national guidance document ‘Framework for Highway Asset Management’ and will form part of the Council’s wider asset management strategy. Progress will be overseen by the Council’s Asset Management working group.

4 Vision, Key Aims and Approach

The key aims of the TAMP can be summarised as follows:

i) Maintain an accurate, up to date comprehensive inventory of all transport assets (e.g. ‘highways’ assets such as roads, gullies and street lights, plus ‘Transport’ assets such as bus stops, traffic signals, car parking signs, cycle facilities and pedestrian crossings.)
ii) Supplement the inventory with performance data (e.g. x km of road requires structural maintenance, or x% of bus stops provide suitable timetable information and real time provision)

iii) Provide a compendium of performance targets to support the Sustainable Communities Strategy, the Local Transport Plan and Environment and Sustainable Communities Directorate service plans.

iv) Provide tools to enable prioritisation of programmes of work to take into account whole life costs of asset management. Use these tools to produce annual programmes of work to meet strategy aims and improve performance to meet targets.

v) Apply risk management to refine programmes of work.

vi) Provide sources of information to meet the Council’s statutory responsibilities on valuation of assets.

5 Inventory and Condition

5.1 Bedford Borough Council’s transport network consists of nearly 800 km of Highway. Highway inventory and condition data has been developed and used for a number of years. This has enabled needs based budgets to be allocated and priorities selected using objective data. The need to produce detailed valuations and life cycle plans has provided the opportunity to re-evaluate current data. This analysis has enabled deficiencies and gaps to be identified.

6 Performance Levels

6.1 Levels of service describe the quality of services provided by transport assets for the benefit of customers. They are indicators that reflect the Council’s broader goals. Levels of service reflect in measurable terms how BBC, as the highway authority, engages with customers and responds to their needs. The levels of service provided also reflect the legal framework that applies to highways.

6.2 Levels of service can be categorised as either:

- Condition assessment: preservation of the asset’s physical integrity;
- Demand aspirations: the service delivered by the asset in terms of its use.

(Demand aspirations describe the non-condition related performance requirements of each asset. These can relate to safety, availability, accessibility etc. Such measures recognise that assets provide a service to customers by enabling them to travel).
7 Performance Targets
7.1 The TAMP itself will not set performance targets, but will take account of performance targets contained within the LTP and elsewhere to determine programme priorities.

8 Programmes of Work
8.1 Like all Highway Authorities, BBC is facing continued demands on its budgets. A prioritisation methodology is required to ensure expenditure maximises benefits against Council objectives. Currently, budgets are allocated to each asset using inventory data and historic spend, which is refined each year to deliver condition targets and meet public expectations. The TAMP will provide more developed processes which will enable the competing needs of each asset to be considered as part of the development of programmes of work.

8.2 As performance levels are developed, long term work plans and expenditure forecasts can be produced to inform long term budgetary decisions.

8.3 Maintenance lifecycle plans will be prepared for individual sets of assets, taking account of best practice in maintenance techniques and expected performance for various treatments. The lifecycle plans incorporate Whole Life Costing, enabling budget needs to be identified and compared against current funding allocations. The TAMP will include lifecycle plans for each of the following 14 transport assets:
- Carriageways;
- Footways and Cycleway;
- Highway structures;
- Highway surface water drainage;
- Verges and landscaped areas;
- Highway lighting
- Road signs;
- Road markings and studs;
- Traffic control systems;
- Safety fencing;
- Winter service;
- Vehicle Activated Signs;
- Variable message signs;
- Bus stops.

9 Risk Management
9.1 Risk is inherent when dealing with the transport assets and needs to be managed appropriately. Risks generally fall into two types; strategic and operational.
9.2 The strategic risks are those risks that affect Bedford Borough Council’s ability to deliver its core objectives. They can typically be dependent on budgets, legislation or customer influences.

9.3 Operational risks are those encountered day to day and tend to involve the service delivery on the ground.

9.4 The TAMP will use the Council’s JCAD risk assessment matrix, which involves identifying both the likelihood and the impact, to redefine and fine tune programmes of work. The primary objectives of this part of the process will be to:

- Ensure that schemes within the capital programme are affordable and where possible minimise demands upon revenue budgets.
- Ensure that the Councils statutory responsibilities are being met through the programme of works.
- Ensure that the programme follows and supports the policies contained within the Network Management Strategy.
- Ensure that risks relating to insurance claims against the Council are minimised.

10 Valuation of Assets

10.1 The Whole of Government Accounts return requires that highway assets are valued and are contained within the authority’s accounts. The TAMP facilitates this process. Assets are valued according to their Gross Replacement Cost, which is how much it would cost to build equivalent assets to current standards now. Bedford Borough Council’s transport asset valuation as at June 2009 is in the order of £1.3 billion. The TAMP will enable better models for deterioration to be developed, providing a more realistic value of the asset consumption.

10.2 Asset valuation places the value of highway assets in context with other Bedford Borough Council assets. It also helps to make the case for appropriate levels of maintenance funding. The TAMP will also provide the opportunity to identify the revenue budgets required to ensure that this increasing stock of assets can be effectively maintained.

11 Monitoring, Review and Improvement - Annual Updates

11.1 The TAMP creates a clear plan of action, extending into the future, around which activity is organised. The plan is developed, updated and rolled forward annually, linking into the Council’s service and financial planning systems, with review processes driven by performance monitoring. On an annual basis it presents an opportunity to identify and address new challenges, facilitates decision-making on priorities and clearly communicates those priorities.

11.2 The programmes generated through the TAMP will reflect the budgetary decisions taken through the Medium Term Financial Plan. For future years,
the TAMP will enable the Council to identify where services fall short of current best practice, and to align budgets based on better information on requirements, agreed service levels and acceptable risks.

### Delivery Action Plan

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| 1   | Ensure access to an up to date Asset Register:  
  • Develop a process to keep the Asset Register up to date  
  • Ensure that condition data is included in the Asset Register |
| 2   | Develop a tool which uses the following elements to produce prioritised schemes for inclusion in the programme of work:  
  • Service levels provision (LTP strategies)  
  • Asset Condition  
  • Performance Targets  
  • Budget  
  • Better links between maintenance and improvement schemes |
| 3   | Complete reviews of the Asset Register, concentrating on the key assets |
| 4   | Determine target levels of service for each asset. |
| 5   | Annually, update TAMP for changes in asset quantities/values and revise plans as required in line with budget revisions |
| 6   | Introduce Advanced Asset Management, including:  
  • Continuing reviews of Asset Register concentrating on lower value assets  
  • Prioritisation of performance gaps to be closed (where current level of service falls below the target set)  
  • Development of life cycle asset maintenance plans, concentrating on key assets and areas with performance gaps first  
  • Determine the optimal regime for the operation of the network  
  • Incorporate risk management processes for programmes  
  • Predict asset failure/degeneration modes and assess best value options for repair or replacement  
  • Develop budgetary analysis methods, Whole Life Costing etc.  
  • Establish a process for evaluating improvement projects including review of outcomes in comparison with anticipated benefits  
  • Robust links with Highways Development Control e.g. providing evidenced data on Condition assessment and Demand aspirations (para 6.2) to help determine appropriate level of developer contributions. |