



Asset Management Case Study

Local Authority	Durham Council
Region	North East (Northern on the CIPFA valuation carriageway spreadsheet).
Sector	Highways
Theme	Highways Asset Management
Benefits	Investing in data management to enable informed decisions on Highways budget expenditure
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Key Lessons

- Durham's approach to asset management means that the authority is now getting the best from its assets.
- Extending the safe, useful life of items has resulted in excellent value for money.
- The development of an asset management plan provides a stronger business case for the allocation of funds for schemes/repair budgets when up against the more emotive departments such as Social Services or Education.
- Expansion of asset management practices has required a great deal of investment in processes and systems.
- Increased co-operation with other related and adjacent highway authorities has led to an exchange of learning and best practice.

Summary

The main transport assets for Durham, ie carriageways, footways, structures and street lighting, are known and managed according to need to ensure a fit for purpose regime as far as possible. However, there are gaps. Since unification with the seven district councils, the amount of un-adopted and adopted footway under the former District Council's control has yet to be established. As a general rule, in the past the assets have been managed in a loose form of asset management, but not all new assets have been recorded/logged, noting repairs made, or how the process has been carried out. Also, maintenance of some assets e.g. drainage has always been reactive rather than on a life cycle or useful life basis.

Background

Durham has taken a positive and proactive approach to the development of asset management practices by investing in data improvement, developing a Transport Asset Management Plan (TAMP) and targeting specific service improvements. The improvements targeted included; data analysis for traffic modeling, footway trip rates, and the condition of street lighting columns to enable them to make more effective use of budgets. Durham has invested more than £600k per annum in collecting asset data over the last two years. The asset data collection activities have been focused on collecting data that will enable better decisions about where to spend the council's highways budget.

Drivers for Change

All the information from Highways asset management seminars from about 2007 has expounded the ethos of Asset Management. Experience from Australia and New Zealand, and also the move to new accounting rules, means that all highway authorities will need to adopt this approach. The decision of Durham was to embrace this realising if it starts sooner, the process is invariably easier and less problematic than leaving it and having it imposed. It also allowed the true value of the transport asset to be calculated on a real cost basis, not a historical basis, allowing for true comparisons with other Council services areas to be made.

Improvement action

Durham Council's 'Element 2' submission to DfT outlines how it would use the funds to achieve savings available both on energy and extending life span of street lighting assets. The other key area was the development of a footway condition survey methodology with depreciated replacement value (DRC) capability (following CIPFA guidance) before the more recent conception of the footway network survey. See [www.helg.org/asset management](http://www.helg.org/asset%20management). Reward funding of £400,000 was awarded.

All members of the highways sections have been and still are involved in the evolving process to get the most from the asset, both on best and efficient treatment and extending the useful life of the asset. It has been recognised that this makes the decisions on the asset more accountable using a factual, auditable basis.

A data improvement plan has been in place since 2007 which is updated on an annual basis. This details gaps and potential areas the authority needs to address. A typical example was safety fence condition, which has been addressed with the DfT Element 1 funding provided.

A quality assurance process now includes procedures for the provision of information on new assets and on repairs to highway assets for inventory logging and potential use in life cycle planning of assets.

Traffic Modelling

The traffic model is a bespoke system using classified traffic count data from 230 permanent traffic counter loop installations across the 3,700km network of roads. In addition, a microsimulation model has been developed for Durham City.

Footway Management

Durham has invested significantly in the collection and analysis of data for the 3,400km of footways to assist with the management of footway assets. The data has been used to highlight issues, to attract and justify additional funding and to deliver measurable benefits from the additional investment made.

The previous Best Value indicator for footways is no longer required to be calculated or published. This indicator was misleading, certainly in rural counties such as Durham, in that the amount of hierarchy 1 and 2 footway accounted for about 5 per cent of the total footway network. At the time of the bid, there was no other methodology available or being discussed to help with either Asset Management of footways or DRC when required to be produced for accounting purposes.

Street Lighting

Durham County Council is nationally recognised as being a leading exponent of the application of asset management to street lighting. It has been involved in the development of many innovative industry leading initiatives, including the development of TR22, and it is constantly evolving the ways in which it manages the County's lighting asset to provide the best possible combination of service, risk and cost. There were benefits in the testing of columns coming up to their supposed life with the prospect of obtaining a guaranteed additional 5 years of useful service from that column. This saves resources and funds as good columns were not unilaterally removed on the basis of age, but on a condition basis. Durham have also carried out an extension of dimming (and extension of the remote dimming scheme) of lights between certain time periods on selected carriageways with no obvious complaints from motorists nor any increase in accidents or KSI incidents.

Barriers

Due to funding difficulties, Durham was delayed in commencing their improvement work. However, there have been no significant barriers since funding was secured.

Outcomes

There has been increased co-operation with other related and adjacent highway authorities with exchange of practices used. Typical examples are:

- a. Continuation of North of England Counties Highway Asset Valuation (NECHAV) group with expansion of highway topics from valuation issues to more wide ranging topics e.g. back lanes and 100 yard rule
- b. Attendance and presentations of issues relating to Highway at various seminars includes those of the CIPFA HAMP series

Other expected outcomes include

- Improved asset condition
- Reduced costs / Prevention of avoidable expenditure
- A reduction in accidents
- Better management of risk
- Reducing CO₂ and energy usage

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