



A Toolkit for Structures Asset Management

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Abstract

Maintaining infrastructure is challenging for asset owners, who make complex decisions on investment planning and prioritisation of maintenance spending. The use of tools to analyse data provides a repeatable and auditable evidence base to support decision making. The Structures Asset Management Planning Toolkit allows asset owners to carry out lifecycle planning, works prioritisation and calculates asset value to meet financial reporting obligations. The toolkit is one of the few tools that performs calculations at component level: taking into account external factors (environment, traffic levels, etc.), as well as the condition of other components within a structure to estimate the rate of deterioration. The toolkit includes over 300 deterioration profiles, is widely used in the UK and considered the de-facto standard.

Keywords: asset management, structure, decision support toolkit, life-cycle planning, valuation, whole-life cost, analysis.

1 Introduction

The Structures Asset Management Planning Toolkit (SAMPT), or the Toolkit, is a decision support tool (DST), which is aimed to support bridge engineers and managers in asset management and other related activities, for example, financial planning, prioritisation of needs, lifecycle planning and asset valuation. The toolkit enables what-if scenarios to be analysed, which support the decision maker in identifying the appropriate level of funding required for future maintenance, and in doing so, ensures that the pre-defined performance targets for the structures stock are met.

The SAMPT was developed by Atkins in conjunction with the Chartered Institute of Public Finance and Accountancy (CIPFA), the Department

for Transport (DfT), the UK Bridges board, the Association of Directors of Environment, Economy Planning and Transport (ADEPT) and the Highways Asset Management Finance Information Group (HAMFIG).

The Toolkit was developed primarily for use by local authorities to help them comply with the requirements of the Code of Practice on Local Authority Transport Infrastructure Assets, specifically around balance sheet accounting for their structures assets when reporting into Whole of Government Accounts. The SAMPT remains the only structures valuation tool currently endorsed by CIPFA.

Although initial uptake of the Toolkit has mainly been centred on carrying out valuations, it is also used as a lifecycle planning tool to answer