

**AITPM, SA Branch  
Technical Forum 9/5/07**

**The Austroads Young Professional's Tour of North America  
Andrew Excell**

Andrew Excell accompanied the Austroads group as the DTEI representative on the recent tour of North America, taking in Canada and the north east of the United States, and covering the areas of Asset Management and Road Safety.

One of the major themes to come out of the presentation was that the Canadians took a conscious decision to change from a culture of spending to one of investment and evaluation. In many ways, they have redefined their business from asset builders to asset managers.

This change has not come easily, with the Asset System having cost about \$C30 million to date, with about \$C5 million of that having been 'lost' by going down the wrong path.

The main objective of the system is to measure the amount of service life available or remaining in any given asset, and to measure or predict the effects of a range of differing treatments in order to come up with the most cost-effective strategy.

As with any asset management system, it relies on having a data base of useful and relevant information. Thus, the collection of data is an important and integral part of the process. However, one must be careful not to collect data just for the sake of it, and having collected the data, must be able to sort it and utilise it in an efficient manner.

The Canadians make use of the asset management information to develop a 25 year corridor plan, a 5 year forward plan and a 5 year program level plan. Thus, they use the best information they have available to develop a strategic approach to the development and maintenance of their transport network.

There were some differences across the provinces, with some jurisdictions only collecting road-specific information, while others collected road related data, such as signs and other road side infrastructure.

Although a number of analytical systems were used in different provinces, each mainly followed the format of

- Develop a network master file
- Run an analysis program
- Use a decision tree to predict network benefits
- Develop an annual program of works

There were a number of major principles involved in changing to an asset management culture, including

- Stay strategic – follow the 80/20 principle
- Appoint a senior officer – eg at Director level (or create the position) – to 'drive' the strategic and cultural aspects of the system
- Continually reinforce the cultural changes
- Create expedient and easy to use information systems, and streamline the process where possible

- Acquire historical information and knowledgeable staff
- Develop relevant condition assessment protocols
- Develop clear asset management outputs for the stakeholder(s)
- Develop a decision model to indicate whether to maintain or replace the asset
- Develop a web interface to make using the system as simple as possible
- Ensure that public documents are made available to maintain transparency of the system

Andrew then showed a number of slides to illustrate a variety of road safety aspects that he noted in North America. Some could be considered as being better than our practices in Australia, but in fact many fell considerably short of what we would consider to be 'best practice'.

The most notable feature was their enormously huge and complex freeway systems, catering for extremely large traffic volumes, and in particular, commercial traffic volumes. These components of the road network were usually well maintained, with large advance signage on overhead gantries. However, one could not help thinking that these enormous transport corridors might contribute to a considerable amount of social dislocation, as they completely dominated the landscape and severed communities.

However, at the 'next level down' on the arterial road system, standards varied considerably. Traffic signals were on fixed time cycles, rather than being demand driven and / or phased, guard rail was either non-existent or in poor condition, there was a distinct lack of guide posts and linemarking and signage was in generally poor condition. This, in part, was influenced by the climatic conditions under which they must exist and operate, with the road side conditions being set up to facilitate the use of the snow ploughs.