

In 1989, the Canadian Strategic Highway Research Program (C-SHRP) launched a national full scale field experiment known as C-LTPP.

Between 1989 and 1992, a total of 24 test sites were constructed within all ten provinces. Each test site contained multiple monitored sections for a total of 65 sections. All of the collected data has been combined into multiple databases, consisting of four major data modules: Descriptive, Historical, Materials and Monitoring.

The overall goal of the C-LTPP project was to "increase pavement life through the development of cost-effective pavement rehabilitation procedures, based upon systematic observation of in-service pavement performance."

The belief was that as the test sections are monitored over time, the underlying mechanism which relates the input factors of design, construction and service conditions to the measured performance will become known. Extension of pavement life and cost reductions for construction and maintaining pavements will result from application of these mechanisms to produce better designs and to devise better maintenance and rehabilitation practices.

In formulating the overall goal of C-LTPP, four distinct objectives were identified:

- Evaluate Canadian practice in the rehabilitation of flexible pavements, and subsequently develop improved methodologies and strategies
- Develop pavement performance prediction models and validate other models or calibrate them to suit Canadian conditions
- Establish common methodologies for long-term pavement evaluation, and provide a national framework for continued pavement research initiatives
- Establish a national pavement database to support the preceding C-LTPP objectives as well as future needs

The largest component of highway pavement programs and budgets will be directed at improved rehabilitation and maintenance for existing pavements, rather than new construction. The C-LTPP program has many rehabilitated test sections containing monitored data several years before rehabilitation, which continued to be monitored until the end of their service lives or until the end of the C-LTPP program in 2009.

The key drivers for establishing the C-LTPP program still exist today, more than 25 years after the initiation of test section monitoring. There is a rich base of information still to be harvested from C-LTPP studies that will aid in improving the performance of pavements. The C-LTPP program will provide benefits and deliver accomplishments for the foreseeable future.