



CBC Sudbury Investigative Report on Bridges and Culverts

CBC Sudbury broadcast investigative reports by Megan Thomas and Markus Schwabe on deteriorated bridges and culverts on its show, Morning North, from October 29 to November 1. The four-day series, called Sudbury's Big Fix, was informative and provocative.

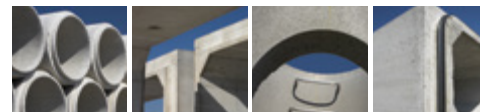
Sudbury's Big Fix began with a look at the state of aging bridges and culverts in the Sudbury area, with the results from a Freedom of Information request. In Ontario there is a legislative requirement for bridges and large culverts with a diameter three metres or greater to be inspected every two years. The inspection must be conducted by, or under the supervision of, a professional engineer. There is no legislation that requires culverts less than three metres in diameter to be inspected. A retired City of Sudbury engineer was interviewed and discussed reactions after a teenager was killed in Sudbury in 2006 when she drove into a crater in the road caused by a collapsed corrugated steel pipe. He said that as a result of the fatality, inspectors became more aware and more vigilant. Gerry Mulhern, P.Eng., Executive Director of the Ontario Concrete Pipe Association, was interviewed for the series, and was recognized for his work examining infrastructure under roads and pushing governments to improve safety systems.

The closure of Highway 535 in April 2012 was reviewed on the program. A sinkhole south of St. Charles caused the highway to be closed for over two weeks. The sinkhole developed as a result of a severely corroded corrugated steel pipe. This sinkhole developed on Friday, April 27 in the early afternoon. Some local residents noticed a hole in the pavement as they drove to St. Charles. A couple of hours later as they were returning they realized that the hole had grown



*CPR Subway – low ranking bridge condition index
Photo courtesy of the CBC*

significantly into “a gaping hole in the road” and phoned the Ontario Provincial Police. The police promptly notified the Ministry of Transportation of Ontario and the highway was closed. The cost of repairs was \$632,000. This culvert had been inspected in June 2008 and July 2010 but there was no immediate call for repairs or replacement. Mulhern speculated if this failure had happened at night instead of in broad daylight there could have been tragic consequences.



The series continued on October 30. Megan Thomas looked at how bridges and culverts are inspected and why those inspections haven't always caught problems. The time taken for each bridge inspection was examined by CBC. The inspections of smaller culverts (with a diameter of less than three metres) was also raised.

Gerry Mulhern reviewed the key elements of Asset Management for CBC.

- What do we own and where is it located?
- What is it worth today?
- What condition is it in and what is its remaining service life?
- What needs to be done?
- How much will it cost?
- When do we need to do something about it?

Asking these six questions can result in very uncomfortable answers for all levels of government.

On October 31, Megan Thomas explained how the condition of a bridge is rated and looked at the bridges that are the worst. She reported that at least a dozen bridges in Greater Sudbury have now exceeded their lifespan and more are reaching that mark. At 83 years of age, the Canadian Pacific Rail Subway is showing unnerving signs of wear, including crumbling concrete, rusting steel and water stains. According to 2012 bridge data obtained by CBC News, a typical bridge is expected to have a lifespan of 50 years. The CPR Subway currently ranks the lowest on what is known as a bridge condition index, a tool used by the province and municipalities as a way to help prioritize repair work. Bridges with a score above 70 are in good shape, while those below 70 need repairs in the next five years.

Scores below 60 indicate the bridge should be fixed in the next construction season.

The CPR Subway earned a score of 34.5 in its last inspection; however it's not first in line to be fixed. The cost to rehabilitate the CPR Subway is pegged at \$2.1 million.

The series concluded on November 1 with CBC's Megan Thomas looking at the cost of Sudbury's Big Fix and the price to pay if it doesn't happen. Megan Thomas stated that 75% of Sudbury's bridges and culverts are in good condition but in Toronto that number drops to 40%. However, the cost to fix the deficient 25% is staggering.

Gerry Mulhern commented on the challenge that MTO is facing with its culverts. "We've got a huge problem here. There are 60,000 culverts underneath highways across Ontario, and a large percentage of them are in need of rehabilitation or replacement; but the government simply doesn't have the funds allocated right now to do what's required to make these roads safe," said Mulhern. He continues to press the province to make sure they are in good working order.

The retired engineer from Sudbury predicted that if sufficient funds are not allocated in the future, bridges will be closed or will have lower load ratings. The series concluded by examining some funding options but recognized that new culverts are not as attractive politically as new arenas.

Ontario Concrete Pipe Association has made Ontario MPPs from the three main political parties aware of the investigative reporting by CBC. OCPA regards this issue primarily as a public safety issue and should not be party political.

Audio to the full series can be found at:

<http://www.cbc.ca/sudbury/features/sudbury-big-fix/>

Morning North is Northern Ontario's premier morning radio program that broadcasts live from Sudbury weekdays from 6 to 8:37 on CBC Radio 1. Morning North is a weekday news and current affairs program hosted by Markus Schwabe. 