

Wednesday, March 23, 2016

## CN continues safety innovation program with technology investments

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CN's Track Evaluation System Train hosted RailTEC students from the University of Illinois at Urbana-Champaign when it was in Champaign, Ill., this past February.

*UIUC RailTEC*

**CN has launched its third year of the Safety Innovation Program, which is part of the railroad's broader safety agenda that is focused on enhancing the safety of operations and making the company the safest railway in North America.**

"For the third year in a row, we're stepping up our efforts to leverage new technology to bolster our Safety Management System that is designed

to minimize risk and continually reduce accidents and injuries," said Jim Vena, CN executive vice-president and chief operating officer. "Our general approach is to develop more lines of defense against accidents. Our 2016 program, which supplements our ongoing investments in track infrastructure maintenance and safety culture, brings the total applied to the Safety Innovation Program to CA\$67 million (US\$51 million) since 2014."

The 2016 portion will involve spending CA\$28 million (US\$22 million) on a series of initiatives, including the installation of new Wayside Inspection Systems at additional locations specifically identified as a result of CN's corridor risk assessment program; the acquisition of additional hi-rail trucks that measure track geometric parameters, such as rail gauge and cross level and predictive analytics and data management initiatives to assess mechanical trends and identify opportunities for pre-emptive maintenance work, as well as give engineering forces a better understanding of track health so that they can prioritize maintenance and capital programs.

A major step in upgrading CN's detection technology was the completion in 2015 of a new track evaluation system car that was upgraded with the latest technology for assessing track geometry, identifying missing and broken track components through optical imaging, as well as objectively evaluating tie condition. CN also employs outside contractors who conduct ultrasonic technology inspections to detect internal rail defects that are not visible.

CN has increased the number of wayside inspection detectors on its network by more than 30 percent in the past decade and increased the number of wheel impact load detectors by 60 percent over the same period. CN has also doubled the frequency of ultrasonic flaw detection over the past 10 years.

"The application of new technologies to detect and prevent mechanical and engineering flaws is a key part of our safety mindset," noted Vena. "This approach and rigorous safety processes and the continued strengthening of our safety culture are integral to our unwavering commitment to safety."