

Quebecers' invention rules the road

Company also designs, tests other gizmos that solve problems on Quebec roads

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You've driven or strolled past the most identifiable member of any road construction crew out there so many times this year and you still haven't been introduced.

Its name is T-RV-7.

It's not a he or a she. It's a cone.

You know the one - round, orange and chubby, with a flat bottom and reflective white and orange stripes.



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laforce0522.jpg

Dotting highways and streets, the cone has become a bellwether of the repair work needed on Quebec's crumbling roads.

Yet that ubiquitous plastic "traffic channelizer," to use the parlance of the industry that employs it, is not as new as you might think.

Just ask Robert Laforce, its creator.

"You're seeing so many of them now because there are so many construction projects," he said in a recent interview over lunch in Montreal, where his company's cones have been multiplying like, well, rabbits.

T-RV-7 was born in a St. Eustache office 10 years ago, to Laforce, a sales agent in the road safety industry, and Serge Daignault, who owned a neighbouring road-marking business.

The two businessmen chatted one day about the hazards of the flat metal signs with diagonal reflective stripes that were the province's regulated standard to buffer roadwork sites at the time.

The vibrations produced by passing vehicles caused the metal signs to move and turn away from vehicle headlights.

A truck rolling over the edge of the sign's cement-laden base at high speed could send it careening through the air like a bullet. And the base mangled the fuel tank and engine under many a car that drove over it.

So Laforce and Daignault teamed up to design a safer traffic barrier.

Inspired by the plastic barrel-shaped obstacles used on highways in the northeastern United States, they made a prototype, tested and adjusted the reflectiveness of the stripes, videotaped a series of crash tests using the metal signs and their plastic cone and, in January 1999, convinced the Quebec Transport Department to ditch the metal sign for good.

Now the cone is the Transport Department's regulated standard, meaning road construction crews aren't allowed to use anything else.

Trafic Innovation Inc., the company Laforce and Daignault started in 1999 to commercialize their design, named its baby B-54Q.

The B was for "balise," or "marker," and 54 harkened to the digits that identified another type of plastic cone used in Ontario. The Q was for Quebec.

When the Transport Department adopted the cone, it re-baptized it T-RV-7.

The T stands for "travaux" and the RV for "repère visuel." It's the seventh model of traffic channelizer to become the standard on provincial roads.

Daignault, 53, bowed out of the firm in 2005 to concentrate on his growing road-marking business.

Laforce, 51, estimates there are 100,000 of the cones channelling traffic in Quebec, including look-alikes made by two rival manufacturers that got into the market a few years ago.

The competitor cones are different in the way they combine the orange and white stripes and the design of their tops, but the rest of the features meet the Transport Department's now-standard specifications.

"It's fun to see that you made an improvement," said Laforce, the son of a baker and a graduate of marketing from HEC Montréal, Université de Montréal's business school.

T-RV-7 stands about the size of a small child at 1.2 metres high and close to 18.5 kilograms. The cone is made of polyethylene. Its base is made from recycled tires.

And T-RV-7 is flexible. The cone recovers its shape after it's been run over, Laforce said. In fact, it can withstand 20 hits at high speed. It lasts about four years. And because it's circular, vehicle headlights can always find the cone's reflective stripes.

The latest fashion trend for the cones is a band of distinctive colour at its base, like sky blue, red, yellow or grey, so the companies that buy them can distinguish which ones are theirs.

Each cone fetches about \$110.

However, Daignault and Laforce won't say how rich T-RV-7 has made them.

"Enough to be comfortable," Daignault said by phone. "But, no, I'm not a millionaire."

The cone started making money for the company around its third birthday. By the age of 4, the cones were on back order.

The market is now saturated, Laforce explained. Still, T-RV-7 has a long life expectancy.

"The T-RV-7 is taller than what we had and also wider, and because of that, it's more visible and more stable," Réal Grégoire, a spokesperson for the Transport Department, said.

"It's because of all these qualities that it's used. It's an innovation that exists only in Quebec."

T-RV-7 hails from do-gooder origins.

Laforce says he has funnelled a sizable portion of the money he made from the cone back into the business, to design and test other gizmos that solve problems on Quebec roads or import solutions from other countries.

The list includes a pivot that Laforce designed to hang street-name signs from traffic lights in an intersection, where they're more prominent than on a post at a street corner. The pivot permits wind resistance.

The signs, which feature giant lettering, are being tested by Montreal's Ville Marie borough at the intersection of University St. and René Lévesque Blvd.

Trafic Innovation has also introduced re-usable speed bumps made from recycled rubber, roundabouts made from recycled rubber and a truck-mounted attenuator, which is a giant shock absorber that attaches to the back of a roadwork truck to decelerate a car that rear-ends it.

Daignault's firm, Techniques Routières Avancées (T.R.A.) Inc., installed "wake-up strips" on the centre double lines dividing traffic on Highway 50 between Mirabel and Lachute just last week. It's the first place where the device to alert drivers who've crossed over the line is being used in the centre of the road.

The company is also installing embedded reflectors on a route south of Acton Vale.

Laforce, he said, "is just like me. We have an interest to develop new things and to improve things in every day life."

Still, Laforce says T-RV-7 is not the centre of his life. He dabbles in everything - be it sailing, amateur boxing, massage therapy and playing guitar - to get as much as he can out of life. He even cut a CD two years ago just to give it a whirl.

"We're on vacation as long as we're on Earth," Laforce said.

"So why not have fun? You won't take the money with you when it's all over."

And long live the cone.

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