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How Toronto plans to stop parts of Gardiner Expressway from falling onto busy roads

[Alex Nino Gheciu, National Post Staff](#) May 11, 2012 – 7:44 PM ET | Last Updated: May 12, 2012 11:27 AM ET



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Twice this week, small chunks of concrete from the underside of the Gardiner Expressway have fallen onto busy roads. The crumbling highway has left local politicians up in arms, with NDP MP Olivia Chow and councillor Adam Vaughan publicly urging Ottawa and Queen's Park to help the City of Toronto with funding the Gardiner's long-term repair. In the interim, however, various experts are recommending quicker, cheaper ways to keep pieces of the major artery from raining down on commuters. Alex Nino Gheciu takes a look at some of those suggestions, some of which are more likely to be implemented than others.

More frequent inspections

“If enough thorough inspections are done, these things usually can be prevented because you can catch problems like these before they happen,” says transportation engineer Najil Alimam. John Bryson, the city’s manager of structures and expressways, said the city last inspected the Parkside Drive overpass where debris fell from on Thursday “two or three years ago.”

Better drainage

Mr. Bryson noted cracks in the Gardiner are being caused by water and salt penetrating into the concrete. One way to improve that problem would be to improve the expressway’s drainage. “Rip out some of the drains and put some new drains,” says transportation consultant James Alcock. “Water, especially in the winter, is seeping into the structure and eating away at the rebar inside.”

Under the Dome

So if water and snow are to blame, why not prevent water and snow from hitting the roadway in the first place? “Several engineers have proposed putting a glass dome over the road deck on the Expressway,” says Mr. Alcock. “That way the water and snow and ice doesn’t get onto it. The snow and salt is what seeps down and eats away at structure.”

Meshing with Montreal

Paul Gauvreau, professor of bridge engineering at the University of Toronto, recommends taking cues from the way Montreal deals with its infamous ageing infrastructure. “They’ve got wired mesh that’s been anchored into the structure to catch any pieces of concrete that might break away,” he says. “Unless you encase the bottom of the structures with wire mesh, you’re not going to be able to prevent every piece of concrete from falling from the Gardiner.”

Um, nets?

Andy Manahan, executive director of the Residential and Civil Construction Alliance of Ontario, suggests a basic, but perhaps ineffective, solution. “You could probably put nets under the whole thing,” he says. “But when you get a big chunk falling, depending on the weight, that’s probably not going to do too much good.”

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