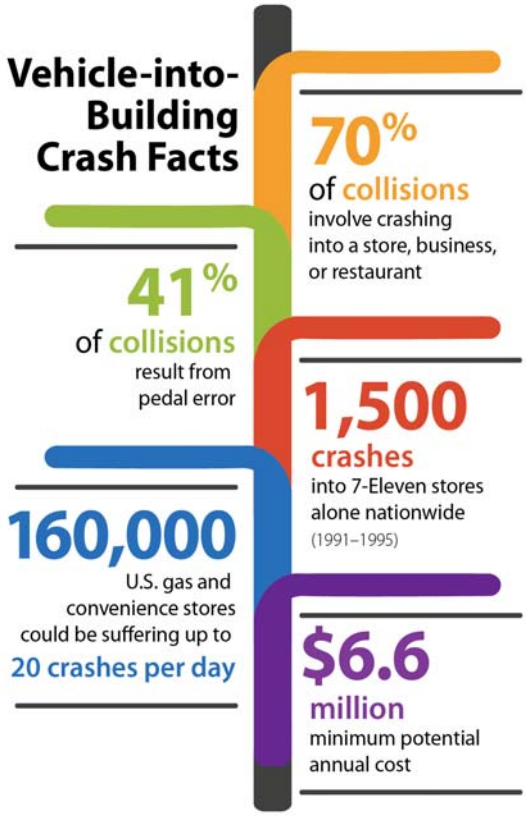
Parking Is a Full-Time Job

JULY 25, 2013

Testing Standards Can Help Prevent Low-Speed Crashes into Buildings



Convenience stores are so-named because there's one on every corner. You dash in, get what you need, and dash out. But the next time you run by for a quart of milk, you might want to be more careful when parking.

Vehicle-into-building crashes happen more frequently than you might think. And they occur most often when a driver is entering or leaving a parking space facing a building. Experts at the Texas A&M Transportation Institute (TTI) and the Storefront Safety Council say preliminary research indicates that 70 percent of such collisions involve crashing into a convenience store, restaurant or other business.

"There are approximately 160,000 gas and convenience stores in the United States," says **Robert Reiter**, co-founder of the Storefront Safety Council and consultant for Blockaides, Inc. "Our early research shows as many as 20 crashes per day into convenience stores could be happening. That's 7,300 incursions annually, and that means 7,300 incidents potentially causing injuries, even fatalities."

But with protective devices—barriers specifically designed to prevent slow-moving vehicles from crashing into a storefront—these crashes don't have to happen. Beyond the obvious human costs saved, a conservative estimate based on numbers from the National Safety Council puts the societal cost at $6.6 million.

"One tragic aspect of these storefront crashes is that they're preventable," explains TTI Assistant Agency Director **Dean Alberson**. Alberson manages TTI's Crashworthy Structures Program and, along with Reiter, co-chairs the ASTM International working group looking at a test standard for low-speed vehicle crashes. "Store owners are implementing these protective devices on their own, without any real guidance, but many of them are failing due to lack of a proven standard for testing their stopping power."

As Alberson notes, some business owners have installed commercially available devices intended to stop such incursions but without first testing their efficacy. As a result, many devices fail to prevent incursions.

Note the failed bollard in the foreground of this storefront crash. Had the device been properly selected and installed following a qualified testing standard, this crash might have been prevented. Photo courtesy Missoulian.com.

Alberson knows a little something about developing testing standards to prevent similar, higher-speed vehicle-into-building crashes. In 2008, he led the team that developed the ASTM F2656-07 testing standard currently used by the U.S. State Department to help protect American embassies and other facilities abroad from vehicular crashes.

"We have the expertise and facilities needed to codify the new standard for storefront crashes," says Alberson. "We'll be conducting tests for manufacturers who want to prove their products meet the new ASTM standard we're currently developing."

Reiter sees these potential research dollars as an investment with a guaranteed return. "Once we've determined the appropriate standard, architects, engineers and owners can confidently select devices to prevent these crashes. The result will be saved lives, fewer injuries, and reduced societal costs. Add to that the property damages incurred by business owners and their insurance companies, and it's a no-brainer."

Filed Under: News Tagged With: ASTM International, Crashworthy Structures Program, Dean Alberson, National Safety Council, vehicle-into-building crashes

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