

AMERICAN ASSOCIATION OF
STATE HIGHWAY AND
TRANSPORTATION OFFICIALS

AASHTO
THE VOICE OF TRANSPORTATION



CMB | CABLE MEDIAN BARRIER



Innovative Lines of Defense

AS TRAFFIC VOLUMES AND CONGESTION
RISE, THE DEMAND FOR EFFECTIVE MEDIAN
SAFETY FEATURES GROWS HIGHER...

Cable median barriers (CMB) are a life saving, adaptable traffic device ideally suited for use in existing, reconstructed, or new medians to prevent cross-over crashes.

Why CMB? Why Now?

Cable median barriers are one of the most effective safety measures State transportation departments can deploy to protect motorists on today’s congested highways. Across the country, agencies that have installed these barriers report a significant decrease in fatalities and in the severity of cross median crashes. Tests verify these results. When struck, a cable median barrier is more “forgiving” to the motorist. It deflects impact

laterally and reduces the force transmitted to vehicle occupants.

Cable median barriers work as a retrofit on existing, reconstructed, or new medians that are wide and relatively flat. They are also effective on sloped terrain. They generally cost less to install than other barrier systems. Repair and maintenance costs are easily offset by their life saving and injury-reducing benefits.



Fatal Crashes from Cross Median Collisions

	Before CMB	After CMB
NC ¹	4	2
WA ²	4.4	0.4
OH ³	9	0
TX ⁴	47	1

¹Analysis of 203 miles of CMB installations where at least three years of after-installation data was available. Crash-per-year format used for data since before period considered 6-7 years of data and after considered 3-4 years.

²Values represent average annual cross median collisions for 134.75 miles of CMB installed over several years. Annual averages used due to variance in mileage installed from year to year.

³Data gathered from one stretch of high volume rural interstate (I-75 in Butler and Warren Counties, north of Cincinnati), with 3 lanes in each direction, during the study period.

⁴One year fatality data before installation versus 1 year after. Single after-installation fatality involved a vehicle already rolling when it reached and went over the barrier.

TIG's Lead States Team on the project includes DOT representatives who can help you evaluate the use of cable median barrier in your State.

How do I learn more?

AASHTO's Technology Implementation Group – or TIG – is leading the effort to promote appropriate use of cable median barriers.

TIG's Lead States Team on the project includes DOT representatives who can help you evaluate the use of cable median barrier in your State. The team's goal is to develop "best practice" guidelines that include roadway design and maintenance issues as well as CMB evaluations, benefits and challenges. Contact team members for insight, expertise, and advice.

You can also visit www.aashtotig.org to explore cable median barrier research, analysis, program design, installation, and vendors.

Barrier Costs*

Cable Median Barrier
\$130,000-\$300,000 per mile

W-Beam Guardrail
\$250,000-\$600,000 per mile

Precast Concrete Barrier
\$300,000-\$2,700,000 per mile

* Based on Washington State DOT barrier installation costs, including preliminary and construction engineering, storm drainage, environmental mitigation, erosion control, traffic control and sales tax. Upper end of range reflects costs for extensive grading.



CMB systems are available from several vendors, including:



U.S. Generic Low Tension Barrier



Trinity Cable Safety Systems (CASS)



Brifen Safety Fence



Gibraltar Cable Barrier



Nucor Marion U.S. High Tension



Safence

About TIG

Dedicated to sharing high-payoff, market-ready technologies among transportation agencies across the United States, TIG promotes technological advancements in transportation, sponsors technology transfer efforts and encourages implementation of those advancements.

For more information visit
www.aashtotig.org

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