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NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: January 23, 1980

Forwarded to:

Honorable William C. Hennessy Commissioner, New York State Department of Transportation State Campus 1220 Washington Avenue Albany, New York 12232

SAFETY RECOMMENDATION(S)

H - 79 - 48

About 11:05 p.m., June 8, 1979, a Buick sedan, with eight occupants, was westbound on the Grand Central Parkway in New York City. The Buick, while in the acceleration lane of the 188th Street westbound, parkway entrance ramp, passed another westbound vehicle at a high rate of speed. Upon re-entering the parkway through lanes, the Buick veered out of control to the left, vaulted the median guardrail, and collided with three eastbound passenger cars. Two passengers in the Buick and the drivers of two eastbound cars were killed; 10 persons were injured. 1/

The accident site was a six-lane divided highway with a 50-mph speed limit. The opposing lanes were separated by a 10-foot raised grass median that was bordered by an 8-inch barrier-type concrete curbing. A median barrier system of weak post, W-beam guardrail was installed on the top and in the center of the median 4 1/2 feet from the curb face. The design height of the guardrail was 27 inches, but due to a 4- to 6-inch excess accumulation of soil on the median, the height of the guardrail was reduced to 21 to 23 inches. Light poles on the median were about 135 feet apart and were installed on breakaway supports; they were not enclosed by a median guardrail. At each light pole installation on the median, the guardrail terminated and then resumed after an approximate 26-inch gap in which the light pole was installed.

The accident data gathered from all sources revealed that since 1973, in a 3 1/2- to 4-mile segment of the parkway which includes the crash site, there were 32 crossover accidents in which vehicles traveling in opposite directions collided. This figure does not include this accident or property damage accidents

^{1/} For more detailed information read, "Multiple Vehicle Median Barrier Crossover and Collision, Grand Central Parkway, New York, New York, June 8, 1979." (NTSB-HAR-79-8)

occurring in 1977 and 1978 for which data were not available. Of the 32 accidents, 11 were property damage only, and the remaining 21 resulted in 3 fatalities and 43 injuries. Five of the accidents occurred during the first 6 months of 1979.

Although the median and median barrier met established design standards at the time it was constructed, it does not conform with current design standards published in the AASHTO "Guide for Selecting, Locating and Designing Traffic Barriers." Improper placement of barrier guardrail in relation to curbing, insufficient barrier guardrail height, gaps in the barrier guardrail to accommodate breakaway light poles, and excessive vegetation and dirt accumulation on the median were substandard conditions that facilitated rather than deterred errant vehicles from vaulting the median into the opposing lanes. The AASHTO guide suggests that where a barrier system is judged to be substandard, the barrier should be modified or replaced.

Therefore, the National Transportation Safety Board recommends that the New York State Department of Transportation:

Replace substandard median barrier on the Grand Central Parkway with an operational system that conforms to current standards. (Class II, Priority Action) (H-79-48)

KING, Chairman, DRIVER, Vice Chairman, McADAMS, GOLDMAN, and BURSLEY, Members, concurred in the above recommendation.

By: James B. King Chairman