

Department of Legislative Services
Maryland General Assembly
2019 Session

FISCAL AND POLICY NOTE
First Reader

Senate Bill 1033
Finance

(Senator Klausmeier)

Highways - Bridge Realignment - Sound Barriers

This bill requires the State Highway Administration (SHA) to install a sound barrier in an area adjacent to a bridge that is realigned if the adjacent area had a sound barrier before the bridge realignment. The bill must be construed to apply retroactively and must be applied to and interpreted to affect any bridge realignment project completed on or after October 1, 2016.

Fiscal Summary

State Effect: Potential significant increase in Transportation Trust Fund (TTF) expenditures in FY 2020 to address bridge alignment projects already completed. TTF expenditures may increase in future years to install additional sound barriers for future projects; however, any such impact cannot be predicted. Revenues are not affected.

Local Effect: The bill does not directly affect local operations or finances.

Small Business Effect: Minimal.

Analysis

Current Law/Background: SHA is responsible for more than 5,200 miles or approximately 16,800 lane miles of road, 2,500 bridges, 3,500 small stream crossing structures, and 80 miles of sound/noise barriers in the State. It also has responsibility for planning, designing, constructing, and maintaining these roads and bridges to safety and performance standards while considering sociological, ecological, and economic concerns.

The Federal Highway Administration (FHWA) defines a noise barrier as a solid obstruction built between the highway and the homes along a highway to reduce overall noise levels. FHWA advises that effective noise barriers typically reduce noise levels by 5 to 10 decibels, cutting the noise level from highway traffic by as much as one half. For example, a barrier which achieves a 10-decibel reduction can reduce the sound level of a typical tractor trailer pass-by to that of an automobile.

FHWA advises that noise barriers are generally constructed from (1) earth mounds or berms along the road; (2) high, vertical walls; or (3) a combination of earth berms and walls. Earth berms have a natural appearance, are usually more attractive, and reduce noise by approximately three decibels more than vertical walls of the same height. However, earth berms can require a lot of land to construct, especially if they are tall. Walls require less space but are usually limited to eight meters (25 feet) in height for structural and aesthetic reasons.

State Expenditures: SHA reports that it is standard practice for it to fill gaps in noise barrier systems created by and associated with bridge realignment projects, but that it does not necessarily fill gaps that already existed prior to those projects. As a result, the bill may require SHA to install additional sound barriers, although that is unclear.

Because the bill is retroactive, SHA advises that the bill may apply to two existing bridges that were realigned after October 1, 2016 – the Old Harford Road bridge and the Crosby Road bridge. With respect to the Old Harford Road project, SHA reports that the bridge and sound barriers were completely rebuilt; however, residents claim that the new, wider bridge is letting more noise into their neighborhood. For the Crosby Road project, SHA reports that it rebuilt the bridge, but no new sound barriers were erected because SHA’s noise analysis indicated that filling the gap between the old wall and the new bridge did not affect the surrounding noise level. SHA reports that for both of these projects, the gaps that were created by the realignments were closed, but that in both cases there are quadrants around the bridges that do not have sound barriers. If the bill requires SHA to install additional sound barriers to fill in gaps at these two locations, TTF expenditures could exceed \$3.6 million in fiscal 2020. The Department of Legislative Services advises, however, that it is not clear that the bill requires SHA to install additional sound barriers at these two locations; the bill explicitly states that SHA is only required to install a sound barrier in an area adjacent to a bridge that is realigned *if the adjacent area had a sound barrier before the realignment*.

Moving forward, TTF expenditures may increase in future years to install additional sound barriers for other bridge realignment projects that would not otherwise be installed; however, any such impact cannot be predicted.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Maryland Department of Transportation; Federal Highway Administration; Department of Legislative Services

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