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Senate Bill 379 (as introduced 6-18-19)  
Sponsor: Senator Roger Victory  
Committee: Transportation and Infrastructure

Date Completed: 9-4-19

### **CONTENT**

**The bill would amend Public Act 51 of 1951, the Michigan Transportation Fund law, to do the following:**

- **Require the Department of Transportation to implement a pilot program on the use of organic additives to control ice on certain roads in the State.**
- **Require the Department to submit a report on the pilot program to members of the House of Representatives and the Senate committees with jurisdiction over transportation by December 31, 2022.**

Specifically, the bill would require the Department to implement a pilot program on the use of organic additives to control ice on public roads, highways, and bridges in the State to reduce application of salt and chemicals that contributed to the deterioration of roads and to chloride pollution in lakes, rivers, and groundwater in the State.

At a minimum, the pilot program would have to do the following:

- Identify and use methods to reduce the application of salt and chemicals through expanded use of organic additives, including liquid sugar beet byproducts that promoted surface adhering and reduced the freezing point of applied substances.
- Examine results from expanded use of organic additives, including potential environmental and fiscal impacts.
- Develop best practices and technical guidelines to expand the use of organic additives.
- Convey program information and guidance to local road agencies.
- Use organic additives in at least five test locations, each containing public roads, highways, and bridges that could experience deterioration from application of salt and chemicals and a body of water at high risk of chloride pollution.
- Include collaboration with at least one local road agency.

By December 31, 2022, the Department would have to submit a report on the pilot program to the members of the House of Representatives and Senate committees with jurisdiction over transportation. At a minimum, the report would have to summarize all of the following: a) pilot program activity, b) review results, and c) steps for increasing statewide use of organic additives.

Proposed MCL 247.661a

Legislative Analyst: Tyler VanHuyse

## **FISCAL IMPACT**

The bill would have a minor, negative fiscal impact on the State and no fiscal impact on local units of government. Depending upon the results of the program, the bill could have a substantial, long-term, positive fiscal impact on the State and local units of government.

The bill would require the Department to test the use of organic additives in the salt mixture it uses to control ice on the roads during the winter months. Organic additives, such as GeoMelt®, could reduce the amount of salt needed to combat icy road conditions, reduce salt corrosion on the roadways and on maintenance equipment, and reduce man-hours spent salting roads. Studies have shown that organic additives added to traditional salt mixtures can be extremely efficient and cost-effective at temperatures that are slightly below freezing, but are less efficient and cost-effective in extreme cold, i.e., zero degrees Fahrenheit and below. Any overall cost savings would depend on the severity of the winter months during which it was applied.

There would be some upfront costs. Organic additives are relatively inexpensive, between \$12 to \$15 dollars per ton. Much of the cost in using an organic additive comes from the process of mixing it with salt. Correct application of an organic additive generally includes the addition of several gallons of the mixture per ton of salt and the mixing of the two substances with a special machine that evenly distributes the additive. Organically treated salt should be stored separately from untreated salt. The mixture also should be applied to roads as a preventative measure, before the temperature drops below freezing, in addition to treatment during snow storms and while plowing. Depending upon the number of road miles used for the pilot program, total upfront costs could range between \$25,000 and \$50,000.

Fiscal Analyst: Michael Siracuse

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.