



Senate Fiscal Agency
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BILL ANALYSIS



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Senate Bill 374 (as reported without amendment)
Sponsor: Senator Wayne Schmidt
Committee: Transportation

Date Completed: 6-12-17

RATIONALE

Currently, Michigan license plates are manufactured with the use of an embossing technique that stamps out the plate number and letter configuration. The end result is plates with raised (embossed) alphanumeric characters. In the late 1990s, a digital printing process was introduced. This involves transferring the letters and numbers onto a license plate by either thermal transfer ribbons or an inkjet printer, which results in a "flat" plate. Many people believe that the digital process would provide an economic benefit to the State as well as position Michigan at the forefront of the autonomous vehicle movement. Therefore, it has been suggested that Michigan switch from the embossed printing process to the digital printing technology.

CONTENT

The bill would amend the Michigan Vehicle Code to require the Department of State to use a digital printing method to create all standard design registration plates.

The Department must offer a standard design registration plate that complies with the requirements of the Code. The standard design plate must be of a common color scheme and design that is made of fully reflectorized material and must be clearly visible at night.

Under the bill, no later than January 1, 2018, the Department would have to use a digital printing method to create all standard design registration plates. "Digital printing method" would mean a method of creating a registration plate using a retroreflective sheeting material that is printed using UV-curable inkjet technology to achieve the highest quality and speed of printing.

MCL 257.224

ARGUMENTS

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

Supporting Argument

Producing license plates through a digital printing method would streamline the process and potentially reduce costs in the long term. Moreover, switching to the digital printing process would bring Michigan in line with 21st century technology, particularly with respect to autonomous vehicle technology. Michigan is considered a leader in automotive research, development, and production, and legislation recently has been enacted to accommodate the automated vehicle industry and keep the State at the forefront. Considering the recent advancements in autonomous vehicle technology, the next-generation printing method would allow license plates to incorporate technology necessary for autonomous vehicles.

Response: Because the automated vehicle technology is new and developing quickly, it is not yet known what part license plates are going to play. Before incurring the upfront capital and

infrastructure expenses, the State would need to ensure that the digital printing technology would maximize use of the license plates in terms of integrating them with the autonomous vehicle technology. Making the change at this time would be premature.

Supporting Argument

The digital printing process would mean increased production. Michigan State Industries (MSI) currently produces 20 plates per minute. The thermal transfer digital technology could produce between 30 and 40 plates per minute and the inkjet printers could print 100 plates per minute. Additionally, although the license plate distribution process is determined by the Department and is independent of the manufacturing process, digital printing could streamline the inventory and distribution process. Both production and inventory are areas in which switching to the digital printing process would result in cost savings.

Response: The current plate production speed and capacity with the embossed technology has not been an issue for the Department or MSI. The Department currently uses a just-in-time process for specialty and personalized plates, which allows for lower inventory levels, and the digital process would not change that. The time frame under which plates are distributed also would be unaffected because the printers are not located in the Department branch offices and would not be in the future.

Opposing Argument

Switching to the digital printing process would result in increased costs for the Department. In 2013, the Department compiled a legislative report comparing the embossed and digital printing processes. Based on cost comparisons from other states that use digital printing, the Department determined that the average flat plate price would be \$2.81, compared to \$1.69 for the embossed plates, an increase of approximately 66%. Based on an average 2.5 million plates manufactured each year, the Department would see increased annual production costs of \$2.8 million. The Department does not generate a profit from the actual production and distribution of license plates because any revenue comes from vehicle registration fees. Switching to the digital printing process would increase costs without increasing revenue.

Also, the per-plate costs do not include the estimated \$1.8 million in upfront costs that would be incurred for the equipment, installation, and training. In addition, the digital technology would require \$50,000 to \$80,000 of annual maintenance, compared to the current embossed system that requires about \$10,000.

Response: According to testimony from 3M, a company that produces digital license plate printers, when the Department compiled its report, it did not look at states that are comparable in demographics and size to Michigan. Considering states that are similar, the average cost of the flat plates would be \$2.00 per plate, or roughly \$.15 to \$.30 more than the per plate cost of embossed plates.

Additionally, because the flat plates are thinner than the embossed plates, there would be lower inventory, aluminum, and postage costs.

Opposing Argument

Michigan State Industries employs prisoners at the Gus Harrison Correctional Facility to produce the license plates for the Department. Streamlining the production process could mean that fewer people would be needed, which would reduce the number of inmates given this opportunity to learn this skill. Also, many current and future inmates might not qualify to train on and operate the new digital printing technology because they are restricted from using computers and gaining access to the internet.

Response: Although some of the software components and other digital technology that go into the flat plates are web-based, in other states that limit offenders' web and computer access, the inmates do not have access to the internet.

Legislative Analyst: Stephen Jackson

FISCAL IMPACT

The bill would have a significant fiscal impact on the Department of State. The Department estimates the total costs to implement the proposed requirement at \$4.8 million. The figure is based on an average of 2.5 million new or reissued license plates annually.

The bill would create an estimated initial cost of \$1.8 million to purchase the new hardware that would be needed to produce license plates using a digital printing method, as the bill would require. Additionally, the bill would raise the per-plate manufacturing cost by 66%, according to the Department. (Current costs are an estimated \$1.80 per plate versus an estimated cost of \$3.00 per plate under the proposed legislation.) This would increase the production costs for the Department by an estimated \$3.0 million annually.

The bill would have no fiscal impact on local government.

Fiscal Analyst: Joe Carrasco

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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.