Legislative Analysis



DIGITAL LICENSE PLATE PRINTING METHODS

Phone: (517) 373-8080 http://www.house.mi.gov/hfa

House Bill 5568 as introduced Sponsor: Rep. Tim Sneller Committee: Transportation

Analysis available at http://www.legislature.mi.gov

Complete to 3-8-22

SUMMARY:

House Bill 5568 would amend the Michigan Vehicle Code to require the Department of State to use, no later than October 1, 2022, 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 retroflective sheeting material that is printed digitally and then laminated to an aluminum substrate.

In addition, the code now provides that a registration plate issued by the department cannot be renewed 10 years after its date of issuance. Under the bill, beginning October 1, 2022, a registration plate could not be renewed *eight* years after the date it was issued.

MCL 257.224

FISCAL IMPACT:

The bill would result in a substantial increase in annual costs to the Department of State (DOS). In late 2018, DOS conducted an examination of license plate production costs in partnership with a leading digital license plate vendor to compare the current costs of producing embossed license plates with producing digital printed plates, also known as flat plates. (A digital printed plate is distinguished from a "digital registration plate," as provided under subsection (6) of the bill, which utilizes an electronic display to present a plate's alpha-numerics among other images.) The examination considered cost factors such as raw material (aluminum), labor, imaging material, equipment maintenance, inventorying, shipping, specialty plates, among other factors. The cost estimates are presented in the table below.

In 2018, DOS estimated the cost to produce the standard Michigan license plate to be \$1.69 per plate. The cost to produce specialty license plates is higher. Including the cost of specialty plates, the average per-plate production cost in Michigan was \$1.75. DOS would likely have the option to pay the full equipment cost of a new digital printer, approximately \$1.5 million, at the outset or distribute the initial equipment costs over a seven-year period. The estimated cost of producing a digitally printed plate without the initial \$1.5 million initial printer capital cost embedded is \$2.04 and is presented in the table below as Digital Printed A. The estimated cost with the cost of a printer distributed over a seven-year period is \$2.15 and is presented as Digital Printed B. Total cost and cost increase estimates below

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assume an annual plate production of 1,968,000 which is based on the total number of plates produced in Fiscal Year 2016-17. Annual plate production does not vary significantly from year to year.

License Plate Production Cost Comparison

Type	One-Time Capital Cost	Cost Per Plate	Total Annual Cost	Annual Cost Increase
Embossed (Existing)	\$0	\$1.75	\$3,444,000	-
Digital Printed A	\$1,500,000	\$2.04	\$4,015,000	\$571,000
Digital Printed B	\$0	\$2.15	\$4,321,000	\$877,000

A similar cost study conducted by the University of Kentucky in 2017¹ compared costs of embossed and digital license plates and projected a similar cost impact on the state of Kentucky if it changed from embossed plate to digital printed plate production. The study found that Kentucky's current per-plate cost for embossed plates was \$1.79 and estimated the per-plate cost for a flat plate after the initial one-time cost for new equipment to be \$1.96. This cost difference was estimated to result in an annual increase of \$124,000.

Furthermore, the study conducted a survey of other states' per-plate costs and found an average increase in costs for states that use digital printed technology. Thirty-four states responded to the survey, of which 15 used embossed plates, 11 used flat plates, and 7 used a hybrid system of embossed and flat. The study found that, on average, the cost to a state for an embossed plate was \$1.98, a flat plate was \$3.89, and a plate produced under a hybrid system was \$3.08.

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[■] This analysis was prepared by nonpartisan House Fiscal Agency staff for use by House members in their deliberations and does not constitute an official statement of legislative intent.

¹ Keathley, Valerie J.; Martin, Andrew; Kissick, Jerry; Forlines, Gray; and Walton, Jennifer R., "Kentucky Vehicle License Plate Study" (2017). Kentucky Transportation Center Research Report. 1560. https://uknowledge.uky.edu/ktc_researchreports/1560/