Legislative Analysis

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DIGITAL LICENSE PLATE PRINTING METHOD AND DIGITAL PLATES

Senate Bill 374 (S-3) as passed by the Senate
Sponsor: Sen. Wayne Schmidt
House Committee: Transportation and Infrastructure
Senate Committee: Transportation
Complete to 12-10-18

SUMMARY:

Senate Bill 374 would amend the Michigan Vehicle Code to require the Department of State to use, no later than one year after the bill takes effect, 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 using UV-curable ink-jet technology to achieve the highest quality and speed of printing.

Also no later than one year after the effective date of the bill, the department would have to allow a vehicle registrant to display a ***digital registration plate*** instead of the standard design registration plate.

> ***Digital registration plate*** would mean an electronic display that is mounted on the rear of a vehicle in place of a registration plate issued by the Secretary of State.

The bill would take effect 90 days after its enactment.

MCL 257.224

FISCAL IMPACT:

The bill would result in a substantial increase in annual costs to the Department of State (DOS). DOS reports that it 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.

DOS has estimated the cost to produce the standard Pure 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 is $1.75. DOS would likely have the option to pay the full equipment cost of a new digital printer, $1.5 million, at the outset or distribute the initial equipment costs over a 7-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 7-year period is $2.15 and is presented as Digital Printed B. Total cost and cost increase estimates below 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 2017 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.[1] 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 which 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.

The bill would also permit an owner of a vehicle to purchase a "digital registration plate." These plates could be purchased by a vehicle owner at a retailer along with a service subscription, and DOS would serve as a conduit between the customer and the plate manufacturer. The plate manufacturer would then send an image to the plate display electronically through 3G Wi-Fi connection. There would be no production costs with these plates and likely little administrative costs.

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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