| Prepared By: The Professional Staff of the Appropriations Subcommittee on Transportation, Tourism, and EconomicDevelopment |  |  |  |
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| BILL: | SB 862 |  |  |
| INTRODUCER: | Senator Gruters |  |  |
| SUBJECT: | Digital License Plate Pilot Program |  |  |
| DATE: | April 7, 2021 REVISED: |  |  |
| ANALYST | YST STAFF DIRECTOR | REFERENCE | ACTION |
| Proctor | Vickers | TR | Favorable |
| Wells | Hrdlicka | ATD | Pre-meeting |
|  |  | AP |  |

## I. Summary:

SB 862 creates the Digital License Plate Pilot Program within the Department of Highway Safety and Motor Vehicles (DHSMV). The new pilot program authorizes the DHSMV to contract with digital license plate providers and specifies requirements for digital license plates and digital license plate providers. The previous authorization for a pilot program to evaluate the designs, concepts, and technologies for alternative license plates is repealed.

Beginning July 1, 2022, any motor vehicle registered under ch. 320, F.S., must be allowed to be equipped with a digital license in lieu of a physical license plate.

The bill may have an indeterminate, likely insignificant, negative fiscal impact to the DHSMV. See Section V. Fiscal Impact Statement.

The bill takes effect upon becoming a law.

## II. Present Situation:

The DHSMV administers the issuance of motor vehicle license plates as a part of the tag and registration requirements specified in ch. 320, F.S. License plates are issued for a 10-year period and are replaced upon renewal at the end of the 10-year period. The license plate fee for both an original issuance and replacement is $\$ 28.00$, which is deposited in the Highway Safety Operating Trust Fund. ${ }^{1}$ An advance replacement fee of $\$ 2.80$ is applied to the annual vehicle registration and is credited towards the next replacement; the fee is deposited in the Highway Safety Operating Trust Fund. ${ }^{2}$

[^0]Current state law provides for several types of license plates. In addition to plates issued for governmental or business purposes, the DHSMV offers four basic types of plates to the general public:

- Standard Plates: The standard license plate currently comes in three configurations: the county name designation, the state motto designation, or the state slogan designation.
- Specialty License Plates: ${ }^{3}$ Specialty license plates generate revenue for various colleges, universities, charities, causes, and civic organizations.
- Personalized Prestige License Plates: ${ }^{4}$ Personalized license plates allow motorists to define the alpha numeric design (up to seven characters) on a standard plate that must be approved by the DHSMV.
- Special Use License Plates: Certain members of the general public may be eligible to apply for special use license plates if they are able to document their eligibility pursuant to various sections of ch. 320, F.S. This category of plates primarily includes special military license plates as well as plates for the handicapped. Examples include the Purple Heart, National Guard, United States Armed Forces, Pearl Harbor, and Iraqi Freedom plates.

Most license plates are equipped with validation stickers that reflect the period of valid registration, which expire on midnight on the last day of the registration period and are issued upon payment of the proper license tax amount and fees. ${ }^{5}$ Current state law provides that license plates must be made of metal specially treated with a retro-reflection material and must have a specified design that increases nighttime visibility and legibility. ${ }^{6}$

## Digital License Plates

"Aside from the expected changes from a metal plate to a digital screen (including the digital screen, circuitry, a power source, and a housing), the Digital License Plate includes mobile phone technology for over the-air updates, Global Positioning System (GPS), and accelerometers to read when the vehicle is in motion." The mounting bracket typically uses specially shaped "security screws" to prevent unauthorized removal of the plate. If the plate is removed from the bracket, the plate is programmed to display a blank screen. ${ }^{7}$

ReviverMX, Inc. (Reviver) appears to currently be the only manufacturer of a digital license plate product. Currently, two states allow digital license plates for use by the public, California and Arizona. ${ }^{8}$ The digital license plates are purchased from the manufacturer and are not available through the states' agencies. ${ }^{9}$

[^1]
## ReviverMX, Inc.

Reviver is the developer of a platform that integrates a digital license plate and a smart phone app. The company sells two types of digital license plates: the Rplate and the Rplate Pro. Both are legal for sale in California and Arizona. ${ }^{10}$ Approximatively 4,000 vehicles are equipped with Rplates in California and Arizona. ${ }^{11}$ It is expected that Michigan, Texas, and Georgia are preparing to start pilot programs. ${ }^{12}$

According to Reviver by making the license plate a digital screen, Rplate allows people to display their own state-approved messages. It can also display warnings that the car has been stolen or show an Amber or Silver Alert, if a state decides to allow that functionality. Reviver also allows Rplate users to pay their registration fees through Reviver. ${ }^{13}$

According to Neville Boston, founder of Reviver, the Rplates have the functionality to be used by some businesses as mini-billboards to advertise their products or services and to provide public service messages, such as street closure notifications or to show an ad for a city service. However, the Rplate will be able to do so only when the vehicle comes to a stop for four seconds or longer. The license plate number will still appear on the screen when messages appear, but it will be smaller and in the upper right corner of the screen. ${ }^{14,15}$

Rplate installers do not have access to retrieve information from the application and can only input the vehicle identification number (VIN) of the vehicle and serial number of the individual Rplate unit. "The Rconnect application is protected by encryption and standard password authentication for both participants and installers." 16 "Aside from the hardware components related to the physical display of an image, the main technological feature of the Rplate...is that it uses mobile phone technology. When the digital license plate is installed on the mounting bracket, the Rplate...sends a mobile phone signal to [Reviver] to update the digital license plate with the license number assigned by the [state]. ${ }^{17}$ This capability would allow a mobile service provider to triangulate where a vehicle is located, like with any mobile phones, but Reviver would not be able to the same. ${ }^{18}$

Purchasers of the Reviver Rplates incur two costs; the price of the screen itself and the subscription connection service fee. The basic Reviver Rplate is powered by a five year battery and is $\$ 499$ plus $\$ 55$ per year, or $\$ 17.95$ per month with a 36 month agreement; the Reviver Rplate Pro is $\$ 599$ plus $\$ 75$ per year, or $\$ 24.95$ per month with a 36 month agreement. The

[^2]Reviver Rplate Pro is wired to a vehicle's power source and provides additional options such as telematics through its built in GPS system. ${ }^{19}$

## California

In 2013, the California Department of Motor Vehicles (DMV) was authorized to establish a pilot program to assess and review the use of alternative products for vehicle registration currently issued by the DMV (license plates, stickers, tabs, and registration cards). The purpose of the pilot was to allow the DMV to examine the functionality of alternatives to standard registration products and to evaluate the cost-effectiveness and feasibility of implementation. In 2015, the DMV awarded and executed a non-competitive bid contract with Reviver for a digital license plate pilot program. ${ }^{20}$

The implementation of Rplate through the digital license plate pilot program also included a digital license plate mobile application, Rconnect. Rconnect was designed to provide automated services to digital license plate customers, including billing, and to provide access to vehicle telematics, if available. Telematics is a process of using GPS and other measurements to produce intelligence on where the vehicle is and where it has been, the vehicle's speed when driving, driving habits, and other measurements regarding a vehicle's operation. As required by California law, the DMV collected no information regarding the current location or movement of vehicles with digital license plates. ${ }^{21}$

The digital license plate uses existing information technology connections with the DMV through the state's system to enable digital license plate installers in dealers and shops to associate the VIN with the serial number of the Rplate unit. By doing so, the VIN and serial number transmitted by Rconnect would allow for a search of the DMV records to display the correct license plate number on the digital license plate. ${ }^{22}$

The California pilot program became operational in December 2015, with five vehicles. In 2017, the pilot program grew to approximately 85 vehicles. In 2018, participation increased to approximately 1,400 vehicles. The pilot program was projected by California to conclude in July 2020 with participation of approximately 1,500 vehicles. ${ }^{23}$

## Arizona

While drivers in Arizona can now purchase a digital license plate for their vehicles, the state first conducted a pilot program beginning in early 2017. The Arizona Department of Transportation (ADOT) worked with Reviver to administer the pilot to test the functionality, durability, and viability of digital license plates in Arizona's areas with extreme high and low temperatures and to test the ability to operate in areas with low/no cellular connectivity. Arizona's pilot was limited to 10 ADOT-owned vehicles throughout the state. The ADOT selected vehicles with

[^3]higher monthly mileage to ensure that plate display devices were adequately exposed to the elements. ${ }^{24}$

During this pilot project, the ADOT collaborated with the Arizona Department of Public Safety, which performed readability and functionality testing. The pilot found digital license plates:

- Readable from a distance of 100 feet during daylight;
- Readable at night;
- Do not have glare that cause the plates to be difficult to read;
- Continue to operate when disconnected from the power source; and
- Maintain functionality and readability in extreme temperatures. ${ }^{25}$

As of January 2019, the digital license plate program was fully authorized and made available to the public for use as an alternative registration product. Reviver communicates with the ADOT's database through a web service, where the company transmits a specific set of information. Based on that submitted information, the database authenticates whether the customer has valid registration and allows Reviver to indicate that verified owners have a digital license plate. The statewide adoption of the product was at no cost to the state. ${ }^{26}$

## Florida

In 2012, the DHSMV was authorized to implement a pilot program to evaluate designs, concepts, and technologies for alternative license plates. If the DHSMV implemented a pilot program, the purpose would be to investigate the feasibility and use of alternative license plate technologies and the long-term cost impact to the consumer. The pilot would be limited to license plates used on government-owned motor vehicles. While the DHSMV has researched and studied alternative license plates, it has not implemented a pilot program at this time. This was due, in part, to a lack of available and proven technology and the significant cost to purchase a digital license plate. ${ }^{27}$

## III. Effect of Proposed Changes:

Section 1 repeals s. 320.06(5), F.S., related to the current authority of the DHSMV to conduct a pilot program to evaluate the designs, concepts, and technologies for alternative license plates.

Section 2 amends s. 320.07, F.S., to provide that an owner of a digital license plate is not subject to the penalties for failure to display a validation sticker if the vehicle was operated in compliance with ch. 320 , F.S., and any rules adopted by the DHSMV governing the placement of digital license plates and registration renewal.

Section 3 creates s. 320.08069 , F.S., to create a Digital License Plate Pilot Program within the DHSMV. The purpose of the pilot program is to evaluate the design, concepts, and technologies available for digital license plates and to determine the feasibility of digital license plates. The

[^4]DHSMV is allowed to contract with one or more digital license plate providers ${ }^{28}$ for the issuance of digital license plates, including any services related to the issuance of digital license plates.

Beginning July 1, 2021, the DHSMV must administer the pilot program and limit it to installation and use of digital license plates on government-owned motor vehicles as described in s. 320.0655 , F.S. These vehicles include any motor vehicle owned or exclusively operated by the state or by any county, municipality, or other governmental entity and any motor vehicle owned and exclusively operated by a volunteer fire department.

By July 1, 2022, the DHSMV must allow a motor vehicle registered under ch. 320, F.S., to be equipped with a digital license plate in lieu of a physical license plate.

A digital license plate is defined as an electronic display designed to display the same required information for a physical license plate and be plated on a registered motor vehicle in lieu of a physical license plate. Except as otherwise provided under the pilot program, a digital license plate is subject to the same laws of this state applicable to a physical license plate. The bill requires a digital license plate issued under the pilot program to:

- Meet the specifications and requirements adopted under the pilot program;
- Include the same information required to be included on a physical license plate and legibly display that information at all times and in all light conditions (however, the information may be displayed in a smaller type size when the motor vehicle is parked); and
- Have wireless connectivity capability.

Digital license plates issued are exempt from physical requirements such as being made of metal specially treated with a retro-reflection material and having a specified design that increases nighttime visibility and legibility. ${ }^{29}$ The DHSMV can allow the display of the motor vehicle's validation in the upper right corner of the digital license plate in lieu of the physical validation sticker. The validation display must include the owner's birth month, the license plate number, and the year of expiration or appropriate renewal period if the owner is not a natural person.

The DHSMV may establish procedures for displaying the following information on a digital license plate:

- An emergency alert or other public safety alert issued by a governmental entity, including an alert pursuant to s. 937.021, F.S.;
- Static logo displays, including unique displays for fleet license plates, digital versions of specialty license plates, and special license plates for the Governor and federal and state legislators; and
- Other displays that the DHMSV, in consultation with law enforcement agencies, determines are in the interest of public safety.

The DHSMV is also allowed to authorize the use of a digital license plate for electronic toll collection or to display a parking permit.

[^5]From the sale of each digital license plate, the DHSMV must distribute $\$ 4$ to the nonprofit corporation specified under s. 946.504 , F.S., on a quarterly basis. ${ }^{30}$

The bill requires a digital license plate provider with whom the DHSMV contracts to:

- Maintain an inventory of the digital license plates issued by the provider in this state;
- Make a digital version of each specialty license plate authorized by the DHSMV available;
- Promptly update validation display to reflect the current registration period for the motor vehicle, if authorized to display the validation in lieu of a validation sticker; and
- Upon request of the DHSMV, suspend the validation display or indicate on the plate that the registration for the motor vehicle has expired.

The bill authorizes the DHSMV to adopt rules to implement the pilot program.
The bill takes effect upon becoming a law.

## IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.
B. Public Records/Open Meetings Issues:

None.
C. Trust Funds Restrictions:

None.
D. State Tax or Fee Increases:

None.
E. Other Constitutional Issues:

None identified.

## V. Fiscal Impact Statement:

## A. Tax/Fee Issues:

None. The bill does not increase or change fees for registration of motor vehicles. Vehicle owners who voluntarily decide to purchase a digital license plate, as allowed beginning July 1, 2022, would purchase the plate directly from the digital license plate provider.

[^6]
## B. Private Sector Impact:

Reviver appears to currently be the only manufacturer of a digital license plate product. The size and extent of a digital license plate pilot program, and any subsequent expansion to any motor vehicle registered under ch. 320, F.S., beginning July 1, 2022, would have a positive fiscal impact to the company.
C. Government Sector Impact:

The bill may have an indeterminate, likely insignificant, negative fiscal impact to the DHSMV with the expectation being that programming and implementation will be conducted between the vendor and the consumer. The DHSMV does not currently plan on programming connectivity between the proposed digital license plates and the DHSMV systems and will continue with current procedures for original and renewal license plate transactions. ${ }^{31}$

The requirement for the DHSMV to distribute $\$ 4$ from the sale of the digital license plate to PRIDE is unclear. It is expected that the vehicle owner would purchase the digital license plate directly from the digital license plate provider. The bill does not authorize the DHSMV to sell digital license plates.

## VI. Technical Deficiencies:

None.

## VII. Related Issues:

None.

## VIII. Statutes Affected:

This bill substantially amends the following sections the Florida Statutes: 320.06 and 320.07.
This bill creates section 320.08069 of the Florida Statutes.

## IX. Additional Information:

A. Committee Substitute - Statement of Changes:
(Summarizing differences between the Committee Substitute and the prior version of the bill.)
None.

[^7]B. Amendments:

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.


[^0]:    ${ }^{1}$ Sections 320.06 and 320.0607 , F.S.
    ${ }^{2}$ Section 320.06(1)(b)1., F.S.

[^1]:    ${ }^{3}$ Section 320.08058, F.S.
    ${ }^{4}$ Section 320.0805, F.S.
    ${ }^{5}$ Section 320.06(1)(b) and (c), F.S.
    ${ }^{6}$ Section 320.06(3)(a), F.S.
    ${ }^{7}$ California Department of Motor Vehicles, Report on Alternative Registration Products Pilot Program, at 9-10, August 2019, https://www.dmv.ca.gov/portal/uploads/2020/04/AlternativeRegistrationProducts.pdf (last visited April 3, 2021).
    ${ }^{8}$ Sebastian Blanco, Digital License Plates Coming to Michigan in 2021 after Debut in California, Car and Driver, November 28, 2020, https://www.caranddriver.com/news/a34748524/digital-license-plates-coming-2021/(last visited April 3, 2021).
    ${ }^{9}$ Arizona Department of Transportation, Digital License Plate Program, https://azdot.gov/motor-vehicles/vehicle-services/plates-and-placards/digital-license-plate-program (last visited April 3, 2021).

[^2]:    ${ }^{10}$ Reviver, Reviver Announces Florida Has Filed Legislation Authorizing its Digital License Plates, PR News Wire, February 9, 2021, https://www.prnewswire.com/news-releases/reviverannounces-florida-has-filed-legislation-authorizing-its-digital-license-plates-301224838.html (last visited April 3, 2021).
    ${ }^{11}$ Sebastian Blanco, Digital License Plates Coming to Michigan in 2021 after Debut in California.
    ${ }^{12}$ DHSMV, 2021 Agency Legislative Bill Analysis SB 862, p. 3, March 5, 2021 (on file with the Senate Committee on Transportation).
    ${ }^{13}$ Ibid.
    ${ }^{14}$ Tony Bizjak, California debuts 'digital' license plates. Here's what they'll cost you., Sacbee, May 28, 2018, https://www.sacbee.com/news/local/transportation/back-seat-driver/article211828814.html (last visited April 3, 2021).
    ${ }^{15}$ California Senate, Senate Rules Committee, SB 806 Senate Floor Analysis, p. 4, September 3, 2013, https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill id=201320140SB806 (last visited April 3, 2021).
    ${ }^{16}$ California Department of Motor Vehicles, Report on Alternative Registration Products Pilot Program, at p. 11.
    ${ }^{17}$ Ibid.
    ${ }^{18}$ Ibid at p. 12.

[^3]:    ${ }^{19}$ Reviver, Shop, https://www.reviver.com/shop/ (last visited April 4, 2021).
    ${ }^{20}$ California Department of Motor Vehicles, Report on Alternative Registration Products Pilot Program.
    ${ }^{21}$ Ibid at p. 11.
    ${ }^{22} \mathrm{Id}$.
    ${ }^{23}$ Ibid. at p. 1.

[^4]:    ${ }^{24}$ Ibid. at p. 14.
    ${ }^{25}$ Ibid. at p. 15.
    ${ }^{26}$ Id.
    ${ }^{27}$ DHSMV, 2021 Agency Legislative Bill Analysis SB 862, p. 2.

[^5]:    ${ }^{28}$ The bill defines a digital license plate provider as a person or an entity engaged in the business of providing digital license plate hardware and services to motor vehicle owners.
    ${ }^{29}$ Section 320.06(3)(a), F.S., sets forth these requirements.

[^6]:    ${ }^{30}$ The nonprofit corporation specified under s. 946.504 , F.S., is PRIDE.

[^7]:    ${ }^{31}$ E-mail to Senate Committee on Transportation staff from Kevin Jacobs, Legislative Affairs Director, Department of Highway Safety and Motor Vehicles, SB 862, February 25, 2021 (on file with the Senate Committee on Transportation).

