

## I. Summary:

SB 862 deletes the existing authority of the Department of Highway Safety and Motor Vehicles (DHSMV) to conduct a pilot program to evaluate the designs, concepts, and technologies for alternative license plates and, in its place, creates the Digital License Plate Pilot Program within the 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 bill provides that 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 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 ten-year period and are replaced upon renewal at the end of the ten-year period. The license plate fee for both an original issuance and replacement is $\$ 28.00$, which is deposited in the Highway 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, which is deposited in the Highway 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: Specialty license plates generate revenue for various colleges, universities, charities, causes, and civic organizations.
- Personalized Prestige License Plates: Personalized license plates allow motorists to define the alpha numeric design (up to seven characters) on a standard plate that must be approved by 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, Iraqi Freedom, Enduring Freedom, Disabled Veteran ${ }^{3}$ and Paralyzed Veterans of America plates. ${ }^{4}$

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 to be issued upon payment of the proper license tax amount and fees. ${ }^{5,6}$ 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 visibility and legibility. ${ }^{7}$

## 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. ${ }^{8}$

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

[^1]and Arizona. ${ }^{9}$ The digital license plates are purchased from the manufacturer, and are not available through the state's division of motor vehicles. ${ }^{10}$

## ReviverMX, Inc.

Reviver is the developer of a platform that integrates a digital license plate and a smart phone app. They sell two types of digital license plates: the Rplate and the Rplate Pro. Both are legal for sale in California and Arizona. ${ }^{11}$ Approximatively 4,000 vehicles are equipped with Rplates in California and Arizona. ${ }^{12}$

According to Reviver by making the license plate a digital screen, Rplate allows people to display their own (approved) messages and can also warn people that the car it is on 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 digital license plate unit. The Rconnect application is protected by encryption and standard password authentication for both participants and installers. 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. To this end, a mobile telecommunications service provider could be able to triangulate where a vehicle is located, as mobile service providers can today with mobile phones, but Reviver would not be able to. ${ }^{16}$

Purchasers of the Reviver Rplates incur two costs; the price of the screen itself and then the subscription connection service. The basic Reviver Rplate is powered by a five year battery and

[^2]is $\$ 499$ plus $\$ 55$ per year, or $\$ 17.95$ per month with a 36 month agreement, and the Reviver Rplate Pro is $\$ 599$ plus $\$ 75$ per year, or $\$ 24.95$ per month with a 36 month agreement. The Reviver Rplate Pro is wired to a vehicle's power source and provides additional options such as telematics through it's built in GPS system. ${ }^{17}$

## California

In 2013 Governor Brown signed Senate Bill 806 (2013), authorizing the California Department of Motor Vehicles (DMV) 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. ${ }^{18}$

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, speed when driving, driving habits, and other measurements regarding a vehicle's operation. As required by California Vehicle Code Section 4853(c), the DMV collected no information regarding the current location or movement of vehicles with digital license plates. ${ }^{19}$

The digital license plate uses existing information technology connections with the DMV through the Business Partner Automation program to enable digital license plate installers in dealers and shops to associate the VIN with the serial number of the individual digital license plate. 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.

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 is projected by California to conclude with a population of approximately 1,500 vehicles. ${ }^{20}$

## Arizona

The Arizona Department of Transportation (ADOT) is conducting a pilot program, in conjunction with Reviver, which has been active since early 2017. The goal of the pilot program is to test the functionality, durability, and viability of digital license plates in Arizona's areas with extreme high and low temperatures, as well as to test the ability to operate in areas with low/no cellular connectivity. Arizona's pilot is limited to 10 ADOT-owned vehicles throughout

[^3]the state. The ADOT selected vehicles with higher monthly mileage to ensure that plate display devices are adequately exposed to the elements. ${ }^{21}$

During this pilot project, the ADOT collaborated with the Arizona Department of Public Safety, which performed readability and functionality testing. Through this testing, the ADOT has 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. ${ }^{22}$

As of January 2019, the digital license plate program has been fully authorized by the ADOT and the Arizona Department of Public Safety, and been made available to the public for use as an alternative registration product. Reviver communicates with the ADOT's database through a web service, where they transmit a specific set of information. Based on the information submitted, the system authenticates whether the customer has valid registration, and allows Reviver to mark verified owners as having a digital license plate. ${ }^{23}$

## III. Effect of Proposed Changes:

The bill amends s. 320.06(5), F.S., to delete provisions relating to the authority of the DHSMV to conduct a pilot program to evaluate the designs, concepts, and technologies for alternative license plates.

The bill amends s. 320.07 , F.S., to provide that an owner of a digital license plate as defined in s . 320.08069 , F.S., is not subject to the penalties of s. 320.07 , F.S., for failure to display a validation 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.

The bill creates s. 320.08069 , F.S., to provide for the creation of a Digital License Plate Pilot Program (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 bill defines the following terms:

- "Digital license plate" to mean an electronic display that is designed to:
- Display the information required to be included on a physical license plate; and
- Be placed on a motor vehicle registered under this chapter in lieu of a physical license plate.
- "Digital license plate provider" to mean a person or an entity engaged in the business of providing digital license plate hardware and services to motor vehicle owners.

[^4]The bill provides, that except as provided for under the pilot program, a digital license plate is subject to the laws of this state applicable to a physical license plate; however, digital license plates issued are exempt from s. 320.06(3)(a), F.S. ${ }^{24}$

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. The DHSMV:

- May contract with one or more digital license plate providers for the issuance of digital license plates, including any services related to the issuance of digital license plates;
- May authorize the display of the motor vehicle's validation on each digital license plate in lieu of the validation sticker. The validation must display 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 validation must be displayed in the upper right corner of the digital plate;
- May authorize the use of a digital license plate for electronic toll collection or to display a parking permit;
- 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.
- Shall distribute $\$ 4$ from the sale of each digital license plate to the nonprofit corporation specified under s. 946.504 , F.S., on a quarterly basis. ${ }^{25}$

[^5]The bill provides that a digital license plate issued under the pilot program must:

- 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 digital license plate may display the information in a smaller type size when the motor vehicle is parked; and
- Have wireless connectivity capability.

The bill provides that a digital license plate provider with whom the DHSMV contracts must:

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

The bill provides rulemaking authority to the DHSMV to adopt rules to implement the provision of the pilot program.

The bill takes effect upon becoming 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.
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.

Beginning July 1, 2022, any motor vehicle registered under ch. 320, F.S., must be allowed to be equipped with a digital license plate in lieu of a physical license plate. Therefore, any motor vehicle owner who voluntarily chooses to equip their motor vehicle with a digital license plate would have the increased cost of acquiring a digital license plate, and the recurring cost of maintaining the digital license plate, in addition to current state original and renewal license plate fees.
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. ${ }^{26}$

## VI. Technical Deficiencies:

None.

## VII. Related Issues:

None.

## VIII. Statutes Affected:

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

[^6]
## IX. Additional Information:

A. Committee Substitute - Statement of Changes:
(Summarizing differences between the Committee Substitute and the prior version of the bill.)
None.
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 320.084(1), F.S. The statute provides that an eligible person may receive one free Disabled Veteran license plate, although other taxes apply.
    ${ }^{4}$ Section 320.0845 , F.S. This plate requires payment of the annual license tax in s. 320.08, F.S.
    ${ }^{5}$ Section 320.06(1)(b), F.S.
    ${ }^{6}$ Section 320.06(1)(c), F.S.
    ${ }^{7}$ Section 320.06(3)(a), F.S.
    ${ }^{8}$ State of California Department of Motor Vehicles, Report on Alternative Registration Products Pilot Program, August 2019, https://www.dmv.ca.gov/portal/uploads/2020/04/AlternativeRegistrationProducts.pdf (last visited February 25, 2021).

[^2]:    ${ }^{9}$ 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/.
    ${ }^{10}$ Arizona Department of Transportation, Digital License Plate Program, https://azdot.gov/motor-vehicles/vehicle-services/plates-and-placards/digital-license-plate-program (last visited February 25, 2021).
    ${ }^{11}$ 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.
    ${ }^{12}$ Supra FN 10.
    ${ }^{13} \mathrm{Id}$.
    ${ }^{14}$ 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.
    ${ }^{15}$ State of California Senate, Senate Rules Committee, SB 806 Senate Floor Analysis (2013), Senate Bill 806, p. 4 (September 3, 2013).
    ${ }^{16}$ Supra FN 9.

[^3]:    ${ }^{17}$ Reviver, Shop, https://www.reviver.com/shop/ (last visited February 24, 2021).
    ${ }^{18}$ Supra FN 9.
    ${ }^{19}$ Id.
    ${ }^{20} I d$.

[^4]:    ${ }^{21} I d$.
    ${ }^{22}$ Id .
    ${ }^{23} \mathrm{Id}$.

[^5]:    24 "Registration license plates must be made of metal specially treated with a retroreflection material, as specified by the department. The registration license plate is designed to increase nighttime visibility and legibility and must be at least 6 inches wide and not less than 12 inches in length, unless a plate with reduced dimensions is deemed necessary by the department to accommodate motorcycles, mopeds, or similar smaller vehicles. Validation stickers must also be treated with a retroreflection material, must be of such size as specified by the department, and must adhere to the license plate. The registration license plate must be imprinted with a combination of bold letters and numerals or numerals, not to exceed seven digits, to identify the registration license plate number. The license plate must be imprinted with the word "Florida" at the top and the name of the county in which it is sold, the state motto, or the words "Sunshine State" at the bottom. Apportioned license plates must have the word "Apportioned" at the bottom, and license plates issued for vehicles taxed under s. $320.08(3)(\mathrm{d}),(4)(\mathrm{m})$ or (n), (5)(b) or (c), or (14) must have the word "Restricted" at the bottom. License plates issued for vehicles taxed under s. 320.08 (12) must be imprinted with the word "Florida" at the top and the word "Dealer" at the bottom unless the license plate is a specialty license plate as authorized in s. $\underline{320.08056}$. Manufacturer license plates issued for vehicles taxed under s. 320.08 (12) must be imprinted with the word "Florida" at the top and the word "Manufacturer" at the bottom. License plates issued for vehicles taxed under s. $320.08(5)$ (d) or (e) must be imprinted with the word "Wrecker" at the bottom. Any county may, upon majority vote of the county commission, elect to have the county name removed from the license plates sold in that county. The state motto or the words "Sunshine State" shall be printed in lieu thereof. A license plate issued for a vehicle taxed under s. 320.08 (6) may not be assigned a registration license number, or be issued with any other distinctive character or designation, that distinguishes the motor vehicle as a for-hire motor vehicle."
    ${ }^{25}$ The nonprofit corporation specified under s. 946.504, F.S., is PRIDE.

[^6]:    ${ }^{26}$ Kevin Jacobs, Legislative Affairs Director, Department of Highway Safety and Motor Vehicles, SB 862, February 25, 2021.

