(This document is based on the provisions contained in the legislation as of the latest date listed below.)

| Prepared By: The Professional Staff of the Appropriations Subcommittee on Transportation, Tourism, and Economic |
| :--- | :--- |
| Development |


| ANALYST | STAFF DIRECTOR | REFERENCE | ACTION |
| :---: | :---: | :---: | :---: |
| 1. Proctor | Vickers | TR | Fav/CS |
| 2. Wells | Hrdlicka | ATD | Recommend: Favorable |
| 3. |  | AP |  |

# Please see Section IX. for Additional Information: 

COMMITTEE SUBSTITUTE - Substantial Changes

## I. Summary:

CS/SB 1178 defines digital license plate and creates a digital license plate pilot program administered by the Department of Highway Safety and Motor Vehicles (DHSMV) to evaluate the designs, concepts, and technologies of digital license plates for use in this state.

Further, effective July 1, 2023, the bill authorizes the DHSMV to allow use of digital license plates, subject to the laws of Florida applicable to a physical license plate, in place of the current physical license plate. However, the purchaser of a digital license plate must first obtain a physical license plate from the DHSMV before obtaining a digital license plate directly from a digital license plate provider.

The bill provides that a digital license plate owner is not subject to the penalties for failure to display a validation sticker if the vehicle is operated in compliance with law and any rules adopted by the DHSMV governing the placement of digital license plates and registration renewal.

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

The bill has an effective date, except as otherwise expressly provided, of July 1, 2022.

## II. Present Situation:

All vehicles required to be licensed in Florida generally must display an assigned license plate on the rear of the vehicle. No license plates other than those furnished by the state may be used. ${ }^{1}$

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. ${ }^{2}$ 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. ${ }^{3}$

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. ${ }^{4}$
- Specialty license plates: ${ }^{5}$ Specialty license plates generate revenue for various colleges, universities, charities, causes, and civic organizations.
- Personalized prestige license plates: ${ }^{6}$ 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.

Current state law sets out design requirements for license plates. License plates must be:

- Made of metal specially treated with a retro reflection material, as specified by the DHSMV, designed to increase nighttime visibility and legibility; ${ }^{7}$
- At least 6 inches wide and not less than 12 inches in length; ${ }^{8}$
- Imprinted with a combination of bold letters and numerals or numerals, not to exceed seven digits, to identify the license plate number; and

[^0]- Imprinted with the word "Florida" at the top and the county name designation, the state motto designation, the state slogan designation, or other words as required or allowed by law. ${ }^{9}$

A license plate issued for a for-hire vehicle 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. ${ }^{10}$

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. ${ }^{11}$ Validation stickers must also be treated with a retro reflection material, be a size as specified by the DHSMV, and must adhere to the license plate. ${ }^{12}$

## 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. ${ }^{13}$ 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. ${ }^{14}$

ReviverMX, Inc. (Reviver) and Airplate appear to currently be the only manufacturers of a digital license plate product in the United States. Currently, two states allow digital license plates for use by the public, California and Arizona. ${ }^{15}$ The digital license plates are purchased through participating resellers or the plate manufacturer and are not available through the states' agencies. ${ }^{16}$ The manufacturer determines the plate's cost and the states do not receive any proceeds from sales. ${ }^{17}$ It is expected that Texas, Maryland, North Carolina, Pennsylvania, Ohio, Michigan and Georgia are also looking into the feasibility of allowing digital license plates. ${ }^{18}$

[^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. ${ }^{19}$ Approximatively 4,000 vehicles are equipped with Rplates in California and Arizona. ${ }^{20}$

According to Reviver, the Rplates have the functionality to be used by some businesses as minibillboards 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. ${ }^{21}$

Purchasers of the Reviver Rplates incur two costs; the price of the screen itself (plus installation for the Reviver Rplate Pro) and the annual service plan. The basic Reviver Rplate is powered by a five year battery and is $\$ 899$ or $\$ 19.95$ per month with a 48 month agreement, and both purchase options require an additional $\$ 55$ annual service plan; and the Reviver Rplate Pro is $\$ 1049$ ( $\$ 999$ plus $\$ 150$ installation fee) or $\$ 24.95$ per month with a 48 month agreement, and both purchase options require an additional $\$ 75$ annual service plan. The Reviver Rplate Pro is wired to a vehicle's power source and provides additional options such as telematics through a built in GPS system. ${ }^{22}$

## Airplate

Airplate is the developer of a platform that integrates a digital license plate, smart phone app, and a color code HD LED display ring around the digital license plate which indicates the status of the vehicle and the driver, allowing a law enforcement officer to avoid danger from a distance. ${ }^{23}$ The color codes provided on their website are: green which indicates a driver is legal to operate a motor vehicle; yellow which indicate the vehicle registration has expired; red which indicates the driver does not have a legal right to operate a motor vehicle, either through a violation of law or because the driver has a warrant for arrest; amber which indicates a National Amber Alert for a person of interest and missing persons; blue which indicates a restricted license; purple which indicates an emergency signal for those with Alzheimer's or dementia; silver which indicates a missing elderly person; and pink which indicates an autonomous self-driving vehicle or artificial intelligence operated vehicle. ${ }^{24}$

Airplate's digital license plate is designed to initially be used by government fleet-issued vehicles, school buses, day care transportation vehicles, transportation vehicles for senior

[^2]citizens, trucking, and rental car fleets. ${ }^{25}$ At this time there is no pricing information available for the digital license plate.

## Other States

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. ${ }^{26}$

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. ${ }^{27}$

In 2017, Arizona conducted a pilot program to assess and review the use of alternative products for vehicle registration, and as of January 2019 drivers in Arizona were able to purchase a digital license plate for their vehicles. 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 ADOTowned vehicles throughout the state. The ADOT selected vehicles with higher monthly mileage to ensure that plate display devices were adequately exposed to the elements. ${ }^{28}$

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. ${ }^{29}$


## Florida

In 2012, the DHSMV was authorized to implement a pilot program to evaluate designs, concepts, technologies for alternative license plates, and the long-term cost impact to the consumer. The pilot would be limited to license plates used on government-owned motor vehicles. The DHSMV has implemented a pilot program for alternative license plate technologies. Presently, several government vehicles in the DHSMV's Division of Motorist Services fleet are equipped with digital license plates from Reviver and are being evaluated for

[^3]feasibility. The plates are not integrated with the DHSMV's motor vehicle titling and registration systems. ${ }^{30}$

## III. Effect of Proposed Changes:

## Definition of Digital License Plate (Section 1)

The bill amends s. 320.01 , F.S., to provide a definition for digital license plate to mean an electronic display meeting all specifications required by the DHSMV, which must, at a minimum:

- Be designed to display the information required in this chapter to be included on a physical license plate;
- Be designed to be placed on a motor vehicle registered under this chapter in lieu of a physical license plate;
- Be designed to display any other information that the department, in consultation with law enforcement agencies, determines may improve public safety; and
- Have been determined by the Department of Transportation (FDOT) to have a display readable by current toll collection systems and current automated law enforcement automated license plate recognition hardware and software.


## Digital License Plate Pilot Program (Section 2)

The bill amends s. 320.06 , F.S., authorizing the DHSMV to conduct a pilot program to evaluate designs, concepts, technologies for digital license plates that modernize license plates in this state and improve public safety, and the long-term cost impact to the consumer.

At a minimum, any digital license plate designs, concepts, and technologies that the DHSMV investigates the feasibility and use of must include the ability to:

- Display information required to be included on a metal or paper license plate;
- Display safety alerts issued by a governmental entity, such as emergency alerts, Amber Alerts, and Silver Alerts;
- Display static logos, including unique displays for fleet license plates, digital versions of specialty license plates, and special license plates;
- Display the registration status of the motor vehicle to which the plate is affixed;
- Display any other information that the DHSMV, in consultation with law enforcement agencies, determines may improve public safety;
- Be readable by current toll collection systems and current law enforcement automated license plate recognition hardware and software, as determined by the FDOT;
- Connect to the Internet;
- Use a mobile application and to integrate with the DHSMV's information system for the purpose of renewing digital license plate registrations; and
- Add and transfer data at the direction and discretion of the DHSMV.

If the DHSMV conducts the pilot program, it must administer the program and allow government-owned motor vehicles to be equipped with a digital license plate in addition to being

[^4]issued a physical license plate. In conducting the pilot program, the DHSMV may contract with digital license plate providers to participate. For each digital license plate provider contracted with, the DHSMV must:

- Select at least two geographic regions (one urban and one rural) of this state and use at least 10 digital license plates in each region.
- Conclude the evaluation of the digital license plate designs, concepts, and technologies must conclude within 6 months after the execution of a contract.
- Make written recommendations to the Governor, the President of the Senate, and the Speaker of the House of Representatives regarding the implementation and use of the digital license plate designs, concepts, and technologies.

The DHSMV is authorized to adopt rules for implementation.

## Digital License Plates (Sections 3 and 4)

Effective July 1, 2023, the bill creates s. 320.08069, F.S., which allows for the use of a digital license plate. It provides that a digital license plate is subject to the laws of Florida applicable to a physical license plate. However, digital license plates will be exempt from s. 320.06(3)(a), F.S., which relates to specific physical characteristics of an aluminum license plate.

The bill authorizes the DHSMV to adopt rules to implement digital license plates.

## Digital License Plate Providers

The bill authorizes the DHSMV to 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. The contract must include provisions governing the protection of personal and motor vehicle registration data obtained by a digital license plate provider in the performance of its services.

A digital license plate provider may not sell or share personal or motor vehicle registration data and may not store, sell, or share geolocation data from the use of a digital license plate. A digital license plate provider that violates this provision is subject to a civil penalty not to exceed $\$ 5,000$ per occurrence.

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

- Maintain an inventory of digital license plates issued in this state by the digital license plate provider;
- 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.


## Digital License Plate Requirements

The bill requires a digital license plate issued to:

- Meet the specifications and requirements adopted in the bill and by the DHSMV;
- 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; and
- Have wireless connectivity capability.

The bill requires the DHSMV to establish procedures for displaying information on a digital license plate, including the following information at a minimum:

- An emergency alert or other public safety alert issued by a governmental entity, including an alert for a missing child or adult.
- A company name or logo and unit number for fleet license plates.
- Digital versions of specialty license plates, special license plates for military service, and special license plates for the Governor and federal and state legislators.
- Other displays that the DHSMV, in consultation with law enforcement agencies, determines are in the interest of public safety.

The DHSMV 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 license plate. The bill amends s. 320.07, F.S., effective July 1, 2023, to provide that a digital license plate owner is not subject to the penalties of s. 320.07 , F.S., for failure to display a validation sticker if the vehicle is operated in compliance with law and any rules adopted by the DHSMV governing the placement of digital license plates and registration renewal.

The DHSMV is also authorized in the bill to allow the use of a digital license plate for electronic toll collection, if such use has been approved by the FDOT or other appropriate tolling authority, or to display a parking permit.

## Digital License Plate Issuance

The bill provides that the DHSMV may allow a motor vehicle registered in this state to be equipped with a digital license plate in lieu of a physical license plate issued under s. 320.06 , F.S. However, the purchaser of a digital license plate must first obtain a physical license plate from the DHSMV before obtaining a digital license plate. Physical license plates must be renewed in accordance with the requirements of s. 320.06, F.S., relating to all fees due on an annual or semiannual basis.

Additionally, the bill requires a consumer who chooses to purchase a digital license plate to pay, in addition to any fees associated with the purchase of a digital license plate, all applicable motor vehicle fees, including any annual use fees associated with any specialty license plate the consumer wishes to display on the digital license plate.

## Effective Date (Section 5)

The bill provides that except as otherwise expressly provided, the bill takes effect July 1, 2022.

## 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. Beginning July 1, 2023, vehicle owners who voluntarily decide to purchase a digital license plate would not purchase the digital license plate from the state.
B. Private Sector Impact:

Reviver appears to currently be the only manufacturer of a digital license plate product that is currently available for purchase by the general public. Any subsequent expansion of availability to any motor vehicle registered under ch. 320, F.S., would have a positive fiscal impact to the company.

The bill may have a positive fiscal impact to Airplate when their plate is ready to enter the market for purchase by the general public.
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. ${ }^{31}$ Costs may not be known until after July 1, 2023, when the DHSMV may allow use of digital license plates.

In addition, if the DHSMV chooses to conduct a pilot program to evaluate designs, concepts, technologies for digital license plates that modernize license plates in this state and improve public safety, and the long-term cost impact to the consumer, there may be additional negative fiscal impacts.

## VI. Technical Deficiencies:

None.

## VII. Related Issues:

None.

## VIII. Statutes Affected:

This bill substantially amends the following sections of the Florida Statutes: 320.01, 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.)
CS by Transportation on February 2, 2022:
The CS defines digital license plate and creates a digital license plate pilot program administered by the DHSMV to evaluate the designs, concepts, and technologies of digital license plates for use in this state. In addition, effective July 1, 2023, the CS allows for the use of a digital license plate in place of a physical license plate.

## B. Amendments:

None.

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

[^5]
[^0]:    ${ }^{1}$ Section 316.605(1), F.S.
    ${ }^{2}$ Sections 320.06 and 320.0607 , F.S.
    ${ }^{3}$ Section 320.06(1)(b)1., F.S.
    ${ }^{4}$ Section $320.06(3)($ a), F.S. 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, in which case the state motto or state slogan will be printed on those plates. Other plates require different words on the bottom half of the plate, such as "approrioned" for apportioned vehicles; "restricted" for specially taxed vehicles; "dealer" for dealer vehicles; "manufacturer" for manufacturer vehicles; and "wrecker" for wrecker vehicles.
    ${ }^{5}$ Section 320.08058, F.S.
    ${ }^{6}$ Section 320.0805, F.S.
    ${ }^{7}$ Section 320.06(3)(a), F.S.
    ${ }^{8}$ Smaller plates are allowed when deemed necessary by the DHSMV to accommodate motorcycles, mopeds, or similar smaller vehicles.

[^1]:    ${ }^{9}$ Section 320.06(3)(a), F.S.
    ${ }^{10} \mathrm{Id}$.
    ${ }^{11}$ Sections 320.06(1)(b) and (c), F.S.
    ${ }^{12}$ Section 320.06(3)(a), F.S..
    ${ }^{13}$ 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 February 11, 2022).
    ${ }^{14}$ Ibid.
    ${ }^{15}$ 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 February 11, 2022).
    ${ }^{16}$ 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 11, 2022).
    ${ }^{17}$ Ibid.
    ${ }^{18}$ Department of Highway Safety and Motor Vehicles, 2022 Legislative Bill Analysis for SB 1178, (January 13, 2022), p. 3 (on file in the Senate Committee on Transportation).

[^2]:    ${ }^{19}$ 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 February 11, 2022).
    ${ }^{20}$ California Department of Motor Vehicles, Report on Alternative Registration Products Pilot Program, at 9-10.
    ${ }^{21}$ 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 February 11, 2022).
    ${ }^{22}$ Reviver, Shop, https://www.reviver.com/shop/ (last visited February 11, 2022).
    ${ }^{23}$ Theairplate, https://www.theairplate.com/ (last visited January 28, 2022).
    ${ }^{24}$ Ibid.

[^3]:    ${ }^{25}$ Barney Bishop, Representative of Airplate (on file in the Senate Committee on Transportation).
    ${ }^{26}$ California Department of Motor Vehicles, Report on Alternative Registration Products Pilot Program, at 9-10.
    ${ }^{27}$ Ibid. at p. 1.
    ${ }^{28}$ Ibid at p. 14.
    ${ }^{29}$ Ibid at p. 15.

[^4]:    ${ }^{30}$ Department of Highway Safety and Motor Vehicles, 2022 Legislative Bill Analysis for SB 1178, p. 2.

[^5]:    ${ }^{31}$ Department of Highway Safety and Motor Vehicles, 2022 Legislative Bill Analysis for SB 1178, p. 7.

