

Date of Hearing: April 16, 2024

ASSEMBLY COMMITTEE ON PRIVACY AND CONSUMER PROTECTION

Rebecca Bauer-Kahan, Chair

AB 3138 (Wilson) – As Amended April 1, 2024

AS PROPOSED TO BE AMENDED

**SUBJECT:** Vehicle identification and registration: alternative devices

**SYNOPSIS**

*In 2013, the Legislature passed and Governor Brown signed SB 806 (Hueso, Ch. 569, Stats. 2013) authorizing the Department of Motor Vehicles (DMV) to establish a pilot program to evaluate the use of alternatives to license plates, registration stickers, and registration cards. At the time, the author sought to facilitate the DMV's ability to explore alternatives to the traditional metal license plate, plastic-coated registration stickers, and paper registration cards in order to improve efficiency and lower the cost of the DMV vehicle registration services.*

*The pilot program was extended three times, and ended on December 31, 2022. The extensions were primarily because of low participation both by companies making the alternative products and by users of the products. Three companies ultimately participated in the pilot: one for a digital plate, one for a vinyl frontal plate, and one for a digital registration card. AB 984 (Wilson; Chap. 746, Stats. 2022) established a permanent program as of January 1, 2023, for the adoption of alternative devices, including digital license plates and registration cards.*

*Since the initiation of the pilot program, privacy, civil liberties, civil justice, and domestic violence victims' advocacy groups raised privacy concerns related to the use of digital technology for digital license plates. Along with general privacy concerns related to allowing vehicle location technology enabled license plates, serious concerns were raised with respect to the safety and security of victims of domestic violence – allowing an abuser to track the location of a victim either without the victim's knowledge or without the victim's ability to disable tracking (either due to technology or due to circumstance) presents a clear risk to these individuals.*

*When AB 984 passed in 2022, it expressly restricted the use of vehicle location technology in digital license plates to fleet vehicles after an agreement was struck between the author, sponsor, and opposition to include a number of privacy protections, including prohibiting the use of vehicle location technology on digital plates placed on personal vehicles. The current bill removes this prohibition.*

*Given that the purchase and use of the GPS-enabled, digital license plates is voluntary and the owner of the plate can enable and disable the vehicle location tracking at any time, for the majority of consumers, this arguably gives them sufficient control over where and under what circumstances to allow the vehicle's location to be tracked. In addition, there does not appear to be a high demand for this type of license plate. Further, one could reasonably determine that allowing digital license plates that include location technology to be installed on privately owned vehicles is unlikely to make a significant difference when it comes to the ability of abusers to exert coercive control over people they are in relationships with or over those who have recently fled. Even without these devices, abusers who are determined to control the movements*

*of their intimate partners will have plenty of other options for doing so, including by purchasing vehicles that are already equipped with similar remote vehicle location technology, placing an inexpensive tracking device somewhere in the car, or tracking them through their smartphones.*

*In order to further protect fleeing survivors from their abusers, committee amendments strengthen the provisions that allow someone fleeing an abuser to disable the vehicle location technology, including ensuring that when a driver disables the vehicle location tracking feature while in the car that it does not require a login or password and that the technology cannot be enabled remotely.*

*This bill is sponsored by digital license plate company, Reviver, and is supported by the Black Chamber of Commerce and the California Police Chiefs Association. The opposition includes a coalition of privacy, criminal justice reform and domestic violence prevention organizations.*

*The bill passed 11-0-4 in the Transportation Committee.*

**SUMMARY:** Allows personal vehicles to be equipped with alternative, digital license plates that include vehicle location technology. In addition, allows alternative, digital license plates to have banner messages along the bottom of the plate. Specifically, **this bill:**

- 1) Removes the current restriction that only vehicles registered as fleet vehicles can be equipped with digital license plates that include vehicle location technology.
- 2) Requires the device to have the following features:
  - a) Allows the vehicle location technology to be permanently disabled by means of a nonreversible method that ceases all vehicle location functionality and tracking information capabilities.
  - b) Allows the vehicle location technology to be manually disabled and enabled by a driver of the vehicle while that driver is inside the vehicle.
  - c) Manually disabling and enabling the vehicle location technology must be easy for a reasonable person to locate and enable or disable, without requiring access to a remote, online application.
  - d) Manually disabling and enabling the vehicle location technology shall not require a password or any log-in information.
  - e) Once the vehicle location technology is manually disabled from inside the car the only method of re-enabling the technology shall be manually from inside the car. The registered owner of the license plate, the manufacturer, the Department of Motor Vehicles, or any other entity shall not have the capability to re-engage the vehicle location technology through any remote means.
- 3) Removes the requirement that an alternative device display a visual indication that the vehicle location technology is in active use.
- 4) Allows the Department of DMV to authorize digital license plates that allow banner messages to appear on the bottom of the plates.

**EXISTING LAW:**

- 1) Requires the DMV to establish a program authorizing an entity to issue devices as alternatives to conventional license plates, stickers, tabs, and registration cards that meet specified criteria (henceforth, "alternative devices"); and establishes requirements for piloting and adopting new alternative devices. (Veh. Code §§ 4853 and 4854.)
- 2) Prohibits an alternative device from including vehicle location technology, except for fleet vehicles; and requires the DMV to, no later than January 1, 2024, to recall any devices with vehicle location technology that have been issued pursuant to the existing pilot program. (Veh. Code § 4854.)
- 3) Provides that vehicle location technology may be offered for vehicles registered as fleet vehicles, commercial vehicles, and those operating under an occupational license, and that such devices need not be recalled from these vehicles. (Veh. Code § 4854.)
- 4) Requires that vehicle location technology, if any, be capable of being disabled by the user; provide that vehicle location technology, if any, may be capable of being manually disabled by a driver of the vehicle while that driver is in the vehicle; and require that the alternative device display a visual indication that vehicle location technology is in active use. (Veh. Code § 4854.)

**FISCAL EFFECT:** As currently in print, this bill is keyed fiscal.

**COMMENTS:**

1) **Purpose of this bill.** When the original pilot project was expanded statewide in January 2023, several features that were permitted for the alternative devices under the pilot program were removed. Under the pilot program, (1) alternative devices were authorized to use GPS technology for passenger vehicles and (2) plates were permitted to display banners at the bottom, subject to DMV approval. The purpose of this bill is to restore those features.

2) **Author's statement.** According to the author:

AB 3138 will provide consumers with the choice of opting into GPS enabled alternative registration devices, or digital plates while providing levels of privacy protections above and beyond those that exist in current law for comparable GPS enabled products, including cars themselves.

3) **History of digital license plates in California:** In 2013, the Legislature passed and Governor Brown signed SB 806 (Hueso, Ch. 569, Stats. 2013) authorizing the DMV to establish a pilot program to evaluate the use of alternatives to license plates, registration stickers, and registration cards. SB 806 required DMV to complete the pilot by January 1, 2017, and report its findings to the Legislature by July 1, 2018. At the time, the author sought to facilitate the DMV's ability to explore alternatives to the traditional metal license plate, plastic-coated registration stickers, and paper registration cards in order to improve efficiency and lower the cost of the DMV vehicle registration services.

The "Report on Alternative Registration Products Pilot Program" was released by the DMV in 2019. According to the report, "The pilot largely remained at approximately five vehicles from

late 2015 to 2016. In 2017, it rose to approximately 28 vehicles. The pilot participation started to increase rapidly in March 2018 to 1,400 vehicles. For the remainder of the pilot, the participation continued to increase up to approximately 1,500 vehicles.” There were 5 reported instances where law enforcement pulled over a driver with a digital plate believing it was an unauthorized plate, two of which the officer issued a ticket. The DMV reissued memos to law enforcement and the courts about the pilot after these incidents.<sup>1</sup>

The pilot program was extended three times, and ended on December 31, 2022. The extensions were primarily because of low participation both by companies making the alternative products and by users of the products. Three companies ultimately participated in the pilot: one for a digital plate, one for a vinyl frontal plate, and one for a digital registration card. AB 984 (Wilson; Chap. 746, Stats. 2022) established a permanent program as of January 1, 2023, for the adoption of alternative devices, including digital license plates and registration cards. According to the Transportation Committee analysis, Reviver, the sponsor of this bill, was the only company to bid for a digital plate during the pilot program. The plate costs consumers \$599 and the company has begun offering a monthly subscription service for the plate at a cost of nearly \$29 a month.

#### 4) **AB 984 (Wilson; Chap. 746, Stats. 2022).**

When AB 984 was before this Committee on concurrence in 2022, it expressly restricted the use of vehicle location technology in digital license plates to fleet vehicles. This Committee’s analysis of that bill explained an agreement struck between the author, sponsor, and opposition to include a number of privacy protections. That analysis stated:

Since the initiation of the pilot program, several bills have been considered by this Legislature that have sought to make permanent the authorization of an alternative device program. Generally speaking, these bills have faced vehement opposition from privacy, civil liberties, civil justice, and domestic violence victims’ advocacy groups due to potential privacy concerns that arise from the use of digital technology for this purpose. Among the products tested during the pilot program were GPS-enabled digital license plates that allowed individuals to locate their vehicles, which raised significant concerns with respect to geolocation tracking by the DMV and/or law enforcement. Additionally, this product raised concerns with respect to the safety and security of victims of domestic violence – allowing an abuser to track the location of a victim either without the victim’s knowledge or without the victim’s ability to disable tracking (either due to technology or due to circumstance) presents a clear risk to these individuals. The lack of sufficient, explicit privacy protections in previous bills concerning this topic also surfaced concerns that data collected by providers of alternative devices would be sold or shared, or otherwise used for purposes other than the strict provision of the service requested.

After negotiating with the opposition coalition, the author and sponsor agreed to the following specific privacy protections:

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<sup>1</sup> *Report to the Legislature of the State of California on Alternative Registration Products Pilot Program - October 2013 through June 2019*, California Department of Motor Vehicles (August 2019)  
<https://www.dmv.ca.gov/portal/uploads/2020/04/AlternativeRegistrationProducts.pdf>.

- A prohibition on equipping an alternative device with vehicle location technology, except in the case of registered fleet vehicles, commercial vehicles, or those operating under an occupational license.

The bill before this Committee removes that limitation and instead allows any vehicle to be equipped with a digital license plate that includes vehicle location technology information that is provided to a remote device, such as a smartphone, through an app.

- Requirements that, if vehicle location technology is included under the aforementioned circumstances, it is capable of being disabled by the user, may be manually disabled by the driver of the vehicle while the driver is in the vehicle, and displays a visual indication that it is in active use.

The bill before this Committee strengthens the requirement that the technology must be capable of being permanently disabled by means of a nonreversible method that ceases all vehicle location functionality and tracking information capabilities. In addition, it requires that the functionality must be able to be disabled and enabled by the driver inside the car.

However, this bill removes the requirement that the device display a visual indication that the location technology is in active use.

The following protections contained in AB 984 remain in place:

- A prohibition on employer use of an alternative device to monitor employees outside of work hours, and unless the monitoring is strictly necessary for the performance of the employee's duties; a prohibition on retaliating against an employee for removing or disabling an alternative device's monitoring capabilities outside of work hours; and a requirement that an employer provide an employee with a notice stating that monitoring will occur before conducting any monitoring with an alternative device, including specified information.
- A requirement that an entity seeking approval to issue an alternative device or electronic vehicle registration card submit a business plan for the device to the DMV for approval that includes, among other things, information technology security, privacy, and cybersecurity evaluations and measures to protect against access to information and the device, and procedures to comply with applicable privacy and security requirements, including, but not limited to, the California Consumer Privacy Act.
- A prohibition on a provider of the device sharing or selling the information obtained to provide the device, or any other information obtained by virtue of contracting with the DMV to provide the device, including information collected by the device itself; and a prohibition on the use of that information for any purpose other than as strictly necessary to provide the device and show proof of vehicle registration.
- A requirement that information transmitted between the device, the DMV, and the provider, as well as any mobile application required for the device, including storage, be encrypted and protected to the highest reasonable security standards broadly available.
- A prohibition on the DMV directly receiving or retaining from an alternative device or the provider of the alternative device any electronic information regarding the movement, location, or use of a vehicle or person with an alternative device.

- A requirement that data exchanged between the DMV and the device, or the provider of the device, is limited to that data necessary to display evidence of registration compliance.
- A clarification that the use of an alternative device is optional and that users must affirmatively opt in to using the alternative device instead of a conventional license plate, sticker, tab, or registration card.
- A requirement that the DMV adopt regulations to carry out the program that include, among other things, standards necessary for the safe use of alternative devices, data sharing, privacy, and security protocols pursuant to California’s constitutional right to privacy and other applicable privacy laws, and requirements to ensure that both registered and non-registered users are aware of GPS capability and usage if applicable and that registered users can deactivate the function.

5) **Analysis.** This bill includes three primary provisions:

1. Allowing the license plates to display personalized banner messages along the bottom of the digital plates.
2. Allowing the devices on personal vehicles to be equipped with remote vehicle location technology.
3. Removing the requirement that an indicator in the car alert the driver that the location technology is activated.

Considerations related to allowing the banners on the bottom of the devices are primarily the purview of the Transportation Committee and concerns about that policy are discussed at length in this analysis. Under the purview of this Committee is the potential privacy risks associated with allowing the remote vehicle location technology.

Given that this bill proposes to remove an important privacy protection—the restriction on the use of vehicle location technology—included in AB 984, which was enacted just over one year ago, there a number of issues for this Committee to consider. Chief among them, is one year enough time to determine that the prohibition against enabling vehicle location technology on personal vehicles was overly restrictive and unnecessary?

According to Reviver, the data gathered by the digital plates is encrypted and securely transferred to Reviver’s cloud platform. In addition, they note, “Both the device and the platform authenticate themselves using banking-standard PKI X509 techniques before any communication can proceed.” In addition, the sponsor points out that the owner of the plate has the choice to allow for vehicle location tracking or they can easily disable it from inside the car.

However, despite these assertions of security, according to a *Vice* article, in 2022, shortly after the passage of AB 984, a team of security researchers managed to hack into Reviver’s system and gain “super administrative access,” which allowed them to track the physical GPS location

of all Reviver customers and change the text at the bottom of the license plate that was designed for personalized messages.<sup>2</sup>

Not to diminish the serious cybersecurity weaknesses related to Reviver's technology that were highlighted in the *Vice* article, a review of the blog posted by the security researchers shows that they found serious cybersecurity vulnerabilities related to Kia, Honda, Infiniti, Nissan, Acura, Mercedes-Benz, Hyundai, Genesis, BMW, Rolls Royce, Ferrari, Ford, Spireon, Porsche, Toyota, Jaguar, Land Rover and SiriusXM connected vehicle services.<sup>3</sup> Clearly, the security of both the data and the remote capabilities related to many automobiles should raise significant concerns for consumers and policymakers.

Given that the purchase and use of the GPS-enabled digital license plates are voluntary and the owner of the plate can enable and disable the vehicle location tracking at any time, for the majority of consumers, this arguably gives them sufficient control over where and under what circumstances to allow the vehicle's location to be tracked.

Whether authorizing these alternative devices creates an unacceptable risk for intimate partner violence survivors who could be tracked by their abuser through these devices is an important issue worthy of serious consideration. Arguably, being able to disable the location technology when someone is fleeing an abuser is a vital protection for someone in that position. However, it is in the realm of possibility that for those people who are still living with an abuser or for LGBTQ young people who are seeking outside support and cannot safely disclose their sexual or gender identity, concerning gaps remain. Turning off and on the technology in order to shield where they are going could result in red flags for parents or abusers who are closely monitoring the location data and know that the car was being used by the individual during a certain time and the location information is not available. These gaps could in fact lead to an escalation of abuse and control, rather than helping to shield the individual. A coalition of opponents to the bill, including the California Partnership to End Domestic Violence and the Electronic Frontier Foundation share this concern. They note:

People who abuse have no incentive to let their partner know their car has become a tracking device, so survivors of domestic violence may not even be aware that the person who abuses them has access to their location, including driving to domestic violence shelters. Even if they are aware of the GPS tracking capabilities, people who suffer abuse may have no choice but to allow this tracking because they may not know how to disable the tracker and doing so could put them at risk of further violence.

The opponents rightly highlight the dangers of adding yet one more piece of tracking technology to automobiles, even if installing the digital license plates on cars is voluntary and the devices did not prove to be terribly popular during the pilot project.

However, one could reasonably determine that allowing digital license plates that include location technology to be installed on privately owned vehicles is unlikely to make a significant difference when it comes to the ability of abusers to exert coercive control over people they are

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<sup>2</sup> Cox, Joseph, "Location of All of California's New Digital License Plates," *Motherboard Tech by Vice* (Jan. 9, 2023) <https://www.vice.com/en/article/wxn9vx/researchers-track-reviver-digital-license-plate-gps-location>.

<sup>3</sup> *Web Hackers vs. The Auto Industry: Critical Vulnerabilities in Ferrari, BMW, Rolls Royce, Porsche, and More* (Jan. 3, 2023) <https://samcurry.net/web-hackers-vs-the-auto-industry/>.

in relationships with or over those who have recently fled. Even without these devices, abusers who are determined to control the movements of their intimate partners will have plenty of other options for doing so, including by purchasing vehicles that are already equipped with similar remote vehicle location technology, placing an inexpensive tracking device somewhere in the car, or tracking them through their smartphones.

**6) Larger policy questions.** The concerns raised by the opposition, and the multitude of options available for tracking someone's movements, leads to larger policy considerations that would benefit from additional attention. With the proliferation of surveillance and tracking technology, including built in vehicle location technology, tracking devices that can easily be concealed in a car or in someone's belongings, in home and public surveillance cameras, automated license plate recognition tools, not to mention the ability to track someone using the smartphones that are virtually universal, at what point has surveillance gone too far? Should Californians simply accept the complete loss of privacy as people move through their lives in public and private spaces?

Much like the focus that is being placed on the impact of social media, advancement in artificial technology, and the collection and sale of personal information for profit, constant surveillance by private individuals, businesses, and government has a profound impact on Californians' lives. Rather than considering the risks of one device or technological advancement at a time, at some point, it might behoove the Legislature, and this Committee in particular, to explore the larger surveillance policy questions, including the dangers associated with the unchecked proliferation of surveillance tools and their impact on Californians' privacy rights, especially for those who are at risk of abuse.

**7) Proposed Committee amendments.** In order to strengthen the provisions that allow someone fleeing an abuser to disable the vehicle location technology, the Committee suggests the following amendments:

4854. (a) The department shall establish a program authorizing an entity to issue devices as alternatives to the conventional license plates, stickers, tabs, and registration cards authorized by this code, subject to all of the following requirements:

(1) The alternative device is subject to the approval of the department, in consultation with the Department of the California Highway Patrol, and shall not be used in lieu of a device issued by the Department of Motor Vehicles until that approval has been granted.

(2) An alternate device shall not include vehicle location technology, unless the vehicle location technology complies with the requirements of this section and has all of the following features:

(A) The vehicle location technology shall be capable of being permanently disabled by means of a nonreversible method that ceases all vehicle location functionality and tracking information capabilities.

(B) (i) The vehicle location technology shall be capable of being manually disabled and enabled by a driver of the vehicle while that driver is inside the vehicle.

***(ii) The method of manually disabling and enabling the vehicle location technology shall be prominently located and easy to disable and enable, without requiring access to a remote, online application.***



*(iii) The method of manually disabling and enabling the vehicle location technology shall not require a password or any log-in information.*

*(iv) Once the vehicle location technology is manually disabled from inside the car the only method of re-enabling the technology shall be manual from inside the car. The registered owner of the license plate, the manufacturer, the Department of Motor Vehicles, or any other entity shall not have the capability to re-engage the vehicle location technology through any remote means.*

6) **Related legislation.** AB 3139 (Weber, 2024) requires a vehicle manufacturer to separate access to remote vehicle technology from a vehicle no later than two days after receiving a separation request from a survivor of intimate partner violence. That bill is currently pending before this Committee.

SB 1000 (Ashby and Rubio, 2024) commencing January 1, 2026, requires an account manager, as defined, to deny an abuser, as defined, access to a connected device commencing no later than 2 days after a device protection request is submitted to the account manager by a victim of that abuser, and would set forth the requirements for a victim to submit a device protection request. That bill is currently pending before the Senate Judiciary Committee.

SB 1394 (Min, 2024) requires a vehicle manufacturer to terminate a person's access to remote vehicle technology upon a completed request from a driver who establishes legal possession of the vehicle or a domestic violence restraining order naming the person whose access is sought to be terminated. The bill would prohibit a vehicle manufacturer from charging a fee to a driver for completing their request to terminate a person's access to remote vehicle technology. That bill is pending before the Senate Judiciary Committee.

AB 984 (Wilson, Chap. 746, Stats. 2022) required DMV to establish a program authorizing an entity to issue devices as alternatives to conventional license plates, stickers, tabs, and registration cards that meet specified criteria (henceforth, "alternative devices"); and establishes requirements for piloting and adopting new alternative devices.

AB 2285 (Transportation Committee, Chap. 100, Stats. 2020) extended the sunset on the DMV pilot program evaluating alternatives to license plates, registration stickers, and registration cards from January 1, 2021 to January 1, 2023, amongst other things.

AB 1614 (Gipson, Chap. 319, Stats. 2019) extended the sunset on the DMV pilot program evaluating alternatives to license plates, registration stickers, and registration cards from January 1, 2010 to January 1, 2021.

SB 1387 (Beall, Chap. 520, Stats. 2018) extended the sunset on the DMV pilot program evaluating alternatives to license plates, registration stickers, and registration cards from January 1, 2019 to January 1, 2020.

SB 1399 (Hueso, Chap.155, Stats.2016) extended the sunset on the DMV pilot program evaluating alternatives to license plates, registration stickers, and registration cards to January 1, 2019, and the deadline for DMV to report on the pilot to July 1, 2020.

SB 806 (Hueso, Chap. 569, Stats. 2013) authorized DMV to conduct a pilot program to evaluate alternatives to license plates, registration stickers, and registration cards.

**ARGUMENTS IN SUPPORT:** In support of the bill, the Black Chamber of Commerce writes:

California leads the way in technology and innovation, but as the Legislature works to further our advancement and modernization technologically, the privacy of residents must remain top of mind. AB 3138 – Digital License Plates – will help to do this by improving the parameters around vehicle location technology in alternative devices.

**ARGUMENTS IN OPPOSITION:** In opposition to the bill, a coalition that includes Secure Justice, the ACLU California Action, and the California Partnership to End Domestic Violence argue:

Domestic violence survivors are not the only people put at risk by AB 3138. AB 3138 would jeopardize the safety of someone traveling to California from a state that criminalizes abortions. The person may not be aware that their vehicle or rideshare is recording the drive to a Planned Parenthood clinic – data that could be used as evidence against them. ICE could also use the GPS surveillance technology to track and locate immigrants, as it has done with other location tracking devices. Unsupportive parents of queer youth could use GPS-loaded plates to monitor whether teens are going to local LGBTQI Centers. All these harms of allowing GPS trackers in passenger vehicle digital license plates remain true today. What has changed, however, are additional concerns. Shortly after AB 984 was signed into law, Reviver, the company pushing for GPS-loaded digital license plates in California, experienced an alarming security breach:

“Every vehicle with a Reviver plate could also be tracked by GPS in real-time, and the hackers could change or add any slogan to the plate. Additionally, the security function of the plates that label the car as stolen could be abused, allowing hackers to mislabel the vehicle as stolen at a moment's notice...consumer and commercial tags could be simply deleted by bad actors.”

If the company producing digital license plates for passenger vehicles cannot keep secure the location data collected by its products, its promises that it can protect the sensitive location information for people seeking abortions, LGBTQI teens, immigrants, and survivors of domestic violence ring hollow.

## **REGISTERED SUPPORT / OPPOSITION:**

### **Support**

ReviverMX (Co-Sponsor)  
California Black Chamber of Commerce  
California Police Chiefs Association  
North Bay Landscaping Management

### **Opposition**

ACLU California Action  
Anti Police-terror Project  
California Partnership to End Domestic Violence  
Electronic Frontier Foundation  
National Center for Youth Law

Oakland Privacy  
Privacy Rights Clearinghouse  
Secure Justice

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