



A GUIDE TO MASSACHUSETTS QUESTION 1: EXPANDING THE RIGHT TO REPAIR LAW

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EXECUTIVE SUMMARY

Question 1, dubbed "Right to Repair," would make it easier for independent auto mechanics to access the wireless data systems that are increasingly common in modern cars.

These wireless systems, called vehicle telematics, collect data about your driving habits and share it with the automobile's manufacturer. This data could include driving speeds, brake usage, turning behavior, potholes encountered — even GPS-tracked details about where you travel.

If the ballot question passes, automakers would be required to create a platform for accessing telematics information. Car owners would then be able share their repair-relevant telematics data with independent repair facilities via a smartphone app.

Before deciding how to vote on Question 1, Massachusetts residents should consider the following issues:

While some telematics data is quite sensitive, like your GPS
history, this right-to-repair initiative focuses on data that is
"related to the diagnosis, repair or maintenance of the vehicle."

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 So long as GPS and other privacy-related information is excluded — as it seems to be — concerns about data misuse are greatly diminished. Some risks remain, however, including potential exploitation of the system for remotely updating your car. consider. We also discuss steps the legislature could take, regardless of whether Question 1 passes.

- Ensuring that independent repair shops have broad access to repair-relevant data can promote competition. However, Question 1 is not likely to produce large, near-term benefits for mechanics, as telematics systems are relatively new and don't yet contain large amounts of repair-relevant data.
- The deadlines in this ballot initiative are extremely tight, requiring automakers to design and implement a system for sharing telematics data beginning with model year 2022. More time may be required to meet usability and security needs.
- There are many unanswered questions around this ballot initiative, including: How will the cellphone app operate? And what protections are needed to safeguard data collected by independent shops and automakers?
- If the ballot question passes, the Massachusetts legislature could smooth implementation by settling open questions and establishing an oversight body to track progress.

In the sections that follow, we answer key questions about this right-to-repair ballot initiative, including how it works, its likely impact, and potential risks that voters should

UNDERSTANDING RIGHT TO REPAIR

Don't we already have a right-to-repair law?

Voters overwhelmingly approved a broad right-torepair law in 2012, mostly focused on areas other than telematics. That law allowed independent repair shops to use standard laptops to gain access to onboard diagnostic information without the need for proprietary equipment.

Perhaps more important, the 2012 ballot question established a baseline expectation that car owners and independent repair facilities can access the same diagnostic and repair information available to dealers.

What would the current right-to-repair ballot question do?

Since the 2012 initiative, cars have grown increasingly complex, collecting and transmitting ever more data. Modern cars use wireless telematics to gather vast amounts of information about driving habits and vehicle performance.

If you have a relatively new car, odds are it's constantly using onboard computers, cameras, and GPS systems to gather information about road conditions, driving and braking habits, location, seatbelt use, and more. This data can be sent to manufacturers wirelessly and in real time.

Different automakers collect different types of information, using different (generally proprietary) standards. This makes it difficult to know the full scope of what is captured and transmitted via telematics.

The current right-to-repair ballot question would expand access to telematics systems. It requires manufacturers to create a platform for sharing telematics data, and calls for the development of cellphone apps allowing car owners to see their own telematics data or share with their mechanic

If manufacturers fail to comply with the requirements, or if independent repair shops find their

access to telematics data unduly limited, the ballot question also provides a stronger legal remedy in the form of civil penalties and fines.

These new requirements would apply to cars produced for model year 2022 and beyond.

How will car repairs work if this ballot question passes?

Let's say you buy a 2022 Chevrolet Malibu. Along with the keys, the dealer will give you a notice about the telematics system in your car, as well as details about the apps you can use to share that data.

Then, when it comes time to take your Malibu for service, you'll decide whether to visit a Chevrolet dealer or an independent mechanic. Should you decide to use an independent shop, you can grant them access to your repair-relevant telematics data via the mobile app — not indefinitely but for a time-frame you determine.

If you have a strong relationship with an independent mechanic, you could potentially opt to give the shop real-time, ongoing access to your telematics data so it can track things such as brake wear and send alerts when your car needs maintenance.

KEY VOTING CONSIDERATIONS

There are a number of pivotal issues voters may consider when determining whether to support or oppose Question 1. As with any new law, there is a fair amount of uncertainty about the prospects, risks, and unintended consequences.

Do independent repair shops need this ballot question to access telematics data?

Legally, independent repair shops may already have the right to access repair-relevant telematics data under the terms of the earlier right-to-repair law.

That law says explicitly that "telematics diagnostic and repair information that is provided to dealers" is subject to the same sharing and fair access requirements as other onboard diagnostic information.

However, because manufacturers aren't always transparent about the telematics they collect, it can be hard for independent shops to know whether they're missing out on repair-relevant details. And remedies for non-compliance are limited.

More broadly, the large amount of spending and political advocacy surrounding this ballot question suggests there's more to it than just a codification of existing rights.

Over 100 automobile repair shops have joined the campaign in support of Question 1, indicating this is an issue they believe matters significantly to their business. And hefty spending from the "yes" and "no" campaigns suggests both sides see real stakes.

Some telematics data isn't repair-relevant. Would independent shops get access to my **GPS location?**

Telematics systems collect a lot of potentially sensitive information, including from your car's cameras and GPS antenna

But the ballot question seems to preclude the sharing of this more sensitive and non-repair-relevant data. Its sharing requirements refer to "mechanical data," which is defined as "any vehicle-specific data, including telematics system data...used for or otherwise related to the diagnosis, repair or maintenance of the vehicle."

This means repair shops likely won't have access to your location history, your favored gas stations, or your garage door codes, as that isn't repair-relevant. Instead, they'd be able to see information about things like the use of supplemental restraint systems.

A sharper definition of what counts as repair-relevant might have been advisable, as there is some

gray area in the phrase "otherwise related to the diagnosis, repair, or maintenance." For example, do brake shops need telematic information about how frequently drivers slam on their brakes? Maybe not, when they can check the condition of the brakes directly. Then again, it might help identify deeper problems with the way the car is performing.

Specifying exactly which information is and isn't included might have been tricky, though, as telematics data varies between automakers and is highly proprietary. No one really knows the full scope and exact makeup of the data we're talking about.

Still, the current wording seems to rule out the sharing of most sensitive information, including GPS data.

Could independent repair shops misuse the telematics data?

Compared to automakers or dealers, independent repair shops are less likely to have robust IT systems or sophisticated security policies. And that could create new channels for hackers to potentially access your telematics data.

Such risks would be more worrisome if the ballot question authorized the sharing of GPS and other privacy-relevant data. But barring some unexpected legal interpretation, this initiative is limited to repair-relevant information.

And misuse of repair-relevant data doesn't raise nearly the same concerns. Unauthorized access to tire pressure or airbag deployment details wouldn't expose the same kind of personal details as unauthorized access to your GPS-tracked movements.

Moreover, telematics data already involves a real risk of misuse, with or without this ballot question. Automakers are collecting large quantities of telematics data — including about your location — with little transparency or formal oversight, only a voluntary code of conduct.

Is it risky that repair shops will be able to send commands to cars?

Under this ballot question, repair shops will not only be able to read your telematics data but also send commands "if needed for purposes of maintenance, diagnostics and repair."

Two-way communication is sometimes necessary for repair, as when resetting computer codes. And the ballot question specifies that independent repair shops can only send commands when vehicles are undergoing maintenance — or for a time frame agreed to by the owner.

Still, this provision has raised broader concerns about the prospect of hackers remotely taking control of your vehicle, or of buggy upgrades disabling your vehicle while you're driving.

It might have made sense for the ballot question to require some kind of express sign-off from drivers before updates take place.

But the more general issue is that allowing independent mechanics to access telematics data requires changes to automobile security systems that could introduce new vulnerabilities, especially given the narrow timeframe. The National Highway Traffic Safety Administration has said it is "effectively impossible" for automakers to design, test, and implement a secure approach by model year 2022.

If Question 1 passes, the legislature might consider adjusting the implementation dates to allow for a more robust process.

Note, however, that malicious and negligent manipulation of your vehicle would still be illegal under other laws. And the hacking issue transcends this ballot question; it is <u>already a threat</u> and will persist so long as new cars are designed to accept remote commands.

How would the ballot question affect the market for car repairs?

Car repair is a very large, very competitive, and very lucrative industry, which helps explain the big

players and outsize money behind this right-to-repair fight.

Manufacturers and their associated dealers have some key advantages when it comes to car repair, including high levels of trust, a perception of deep expertise, and control over some certification and training programs for mechanics.

By contrast, independent shops often compete on price.

A cat-and-mouse game has developed, where manufacturers and dealers gradually tighten control over repair information, while independents fight to regain access or seek workarounds.

Automakers argue that maintaining control over information helps them uphold standards and preserve product integrity. They note that even dealer-affiliated mechanics don't get access to the full panoply of telematics data.

But while dealers don't get all telematics data, it can be easier for them to access repair-relevant info, and that puts independent shops at a disadvantage — making it harder for them to complete repairs or forcing them to engage in costly trial-and-error.

You can think of this year's right-to-repair ballot question as the latest move in the cat-and-mouse game, an effort by independent mechanics and their allies to close the information gap and ensure that owners have an array of repair options.

How much this will matter on the ground is unclear. As yet, telematics systems don't seem to contain large amounts of repair-relevant data. And the 2012 right-to-repair question — which arguably provided access to a more substantial cache of repair-relevant information — didn't produce a dramatic shift in employment or wages at Massachusetts repair shops.¹

But Question 1 also has implications for the future, potentially curbing automakers' incentive to move repair information into the telematics system as a way to maintain control.

How would the mobile app for sharing telematics data actually work?

While the mobile app is central to the implementation of this ballot question, it's impossible to know exactly how it would work or what it would look like — as its precise characteristics aren't spelled out.

The text of the ballot question requires automakers to create an underlying platform that enables access to the telematics system.

But the platform itself is just the first step. Vehicle owners will still need a smartphone app to interact with that system.

And beyond stating that the telematics data "shall be directly accessible . . . through a mobile-based application," the ballot question does not specify who will build these apps or how they should operate.

Might this ballot question affect other states or regions?

The 2012 right-to-repair initiative in Massachusetts was a catalyst for broader change. Soon after, automakers agreed to a memorandum of understanding setting similar requirements for the nation.

It's possible the same thing will happen again, with the 2020 sequel setting terms for nationwide standards around telematics data.

However, it's also possible that automakers will resist. One industry group has already asked Congress to establish a <u>five-year national pre-emption period</u>, a move that would effectively block the Massachusetts ballot question.

Short of blocking the initiative, automakers could also find ways to slow its implementation, including through legal challenge or further lobbying at the federal level.

In the most extreme case, automakers could try to avoid compliance by deciding not to sell new cars in Massachusetts. That may seem like a costly move, but consider a company such as Tesla, which has a weak local network and very sophisticated, proprietary telematics.

STEPS TO TAKE AFTER ELECTION DAY

Ballot questions in Massachusetts are just like regular laws, subject to alteration or amendment by the legislature — without having to go back to voters.

If Question 1 passes, and this new right-to-repair initiative becomes law, there are a number of steps the legislature could take to facilitate implementation.

- Eliminate any ambiguity by specifying that only repair-relevant telematics data and not GPS or other sensitive data will be made available to independent repair shops.
- Clarify whether independent repair shops will need to meet any training or licensing requirements in order to gain access to telematics data.
- Require express authorization from car owners for remote updates.
- Authorize an independent group or government agency to set a workable timeframe for implementation and then track compliance, including around the creation of smartphone apps.
- Develop a code of conduct for independent shops, dealers, and auto manufacturers, covering exactly how data is to be stored, shared, and used.
- Organize a coordinated and robust public information campaign to help new car buyers understand their rights and powers vis-a-vis telematics data.

On the other hand, if the ballot question fails, lawmakers might still consider making changes to the existing norms around telematics.

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- Investigate how automakers are gathering, storing, using, and potentially selling telematics data — including whether they are alerting drivers of any data breaches.
- Require dealers and automakers to inform buyers about the extent of data collected through their cars.
- Monitor the amount of repair-relevant information being collected by telematics system.
- Strengthen the recourse process for independent mechanics who are inappropriately blocked from accessing data they are legally entitled to see.

We at the Center for State Policy Analysis do not take a position on Question 1 — or any ballot initiative — but we hope this brief gives voters the information they need to make a sound decision on this complex issue.



CONCLUSION

A yes vote on Question 1 would expand Massachusetts's existing Right to Repair law, ensuring that independent shops can access certain kinds of telematics data collected by today's cars.

While current law may already provide access to some telematics, this ballot initiative would introduce a new approach — allowing car owners to share telematics data with trusted mechanics via a cellphone app.

Telematics data does include some sensitive information, including GPS-pinpointed details about the places you drive. But the ballot question seems to limit sharing to less-sensitive, repair-relevant data — which mitigates the risk of misuse

There remain a number of risks and uncertainties associated with this ballot question, which could be mitigated with timely legislative action.

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In pursuing this analysis, the Center for State Policy Analysis also benefited from conversations with a range of experts and advocates, including: Conor Yunits and Molly Horan, Solomon McCown & Cence; Wayne Weikel, Alliance for Automotive Innovation; Tommy Hickey, Massachusetts Right to Repair Coalition; Chris Cook, Mobile Electronics Association; Ed Davis, Edward Davis Security and Management Consulting; Ray Magliozzi, Car Talk; Sam Kersul, Technet.org. Our findings do not necessarily reflect their positions.

Endnotes

¹ An analysis of the Quarterly Census of Employment and Wages shows a slight acceleration in the number of jobs and average pay after the implementation of the 2012 right-to-repair law — though largely in line with the post-recession trend.