

# United States Senate

WASHINGTON, DC 20510

December 19, 2024

Jim D. Farley, Jr.  
President and CEO  
Ford Motor Company  
P.O. Box 6248  
Dearborn, MI 48126

Dear Mr. Farley:

We write regarding our concerns about automakers' fierce opposition to nationwide efforts to secure car owners' right to repair the vehicles they own in the way they choose. We are particularly disturbed by the automakers' hypocrisy with regard to data sharing. The industry has raised concerns about data sharing with independent repair shops to justify opposing right-to-repair, while earning profits from sharing large amounts of personal data with insurance companies.

"Right-to-repair," which refers to consumers' ability to decide who repairs their products,<sup>1</sup> is a foundational component of consumer choice. Robust right-to-repair protections are important to consumers, businesses, and the American agricultural industry. Passage of right-to-repair laws across the country reflects overwhelming consumer preference for right-to-repair protections, despite outsized spending by automakers and other original equipment manufacturers in opposition.<sup>2</sup> More than half of Americans say they do not believe consumers have enough choices when it comes to choosing where they will get something repaired, and 84% say they support a policy that would require manufacturers to make repair information and parts more accessible.<sup>3</sup>

Consumer protection experts have echoed these sentiments, finding that repair restrictions harm consumers by raising prices and preventing timely repairs.<sup>4</sup> Empirical research indicates that car manufacturers have been "leveraging new technological advantages gained through telematics

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<sup>1</sup> U.S. Government Accountability Office, "Vehicle Repair: Information on Evolving Vehicle Technologies and Consumer Choice," March 21, 2024, p. 1, <https://www.gao.gov/assets/d24106633.pdf>.

<sup>2</sup> See, e.g., CBS News, "Massachusetts Voters Approve Ballot Question 1 Expanding 'Right To Repair' Law," November 3, 2020, <https://www.cbsnews.com/boston/news/election-2020-results-massachusetts-question-1-right-to-repair/>; FOX 2 News, "Missouri among states eyeing 'right to repair' laws for farm equipment," February 13, 2023, <https://fox2now.com/news/missouri/11-states-eye-right-to-repair-laws-for-farmequipment/>; PIRG, "Right to Repair," <https://pirg.org/campaigns/right-to-repair/> (listing legislation passed in dozens of states to protect right-to-repair in farm equipment, consumer devices, power wheelchairs, home appliances, and other sectors).

<sup>3</sup> Consumer Reports, "Consumer Reports Survey Finds Americans Overwhelmingly Support the Right to Repair," press release, February 28, 2022, [https://advocacy.consumerreports.org/press\\_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/](https://advocacy.consumerreports.org/press_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/).

<sup>4</sup> Federal Trade Commission, "Nixing the Fix: An FTC Report to Congress on Repair Restrictions," May 2021, p. 38, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

from the cars and software partnerships with large industry players to eliminate parts competition.”<sup>5</sup> Currently, consumers get approximately 70 percent of car parts and services from independent providers, and 30 percent from dealerships.<sup>6</sup> This is because repairs by independent providers are cheaper: customers give independent repair shops good ratings on price (as well as overall satisfaction), while nearly all dealerships receive the worst possible rating for price.<sup>7</sup> Overall, car owners appreciate independent repair shops for their “trustworthiness, reasonable prices, knowledgeable mechanics, and good reputation.”<sup>8</sup> The ability for car owners to repair their vehicles without breaking the bank is particularly important given that Americans buy twice as many used cars as new ones.<sup>9</sup>

By barring the potential use of non-manufacturer replacement parts, such as salvaged parts at independent repair shops, auto manufacturers are able effectively to create product monopolies and inflate repair prices.<sup>10</sup> As this limits options for repair, consumers face a slow and inconvenient process, often having to “surrender their cars . . . for days or weeks to get them fixed.”<sup>11</sup>

Right-to-repair is crucial for independent repair shops and local economies. More than 80 percent of independent repair shops view data access as “the top issue for their business,” surpassing considerations like inflation and technician recruitment and retention, and more than 60 percent “experienced difficulty making routine repairs on a daily or weekly basis” because of automakers’ restrictions.<sup>12</sup> Restrictions currently cost independent repair shops \$3.1 billion each year,<sup>13</sup> a figure poised to increase as car components become increasingly digital.

As the gatekeepers of vehicle parts, equipment, and data, automobile manufacturers have the power to place restrictions on the necessary tools and information for repairs, particularly as cars increasingly incorporate electronic components. This often leaves car owners with no other option than to have their vehicles serviced by official dealerships, entrenching auto manufacturers’ dominance and eliminating competition from independent repair shops.

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<sup>5</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 40, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

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<sup>7</sup> Consumer Reports, “Car Owners Favor Independent Repair Shops,” Benjamin Preston, March 20, 2024, <https://www.consumerreports.org/cars/car-repair-shops/car-repair-shop-survey-chains-dealers-independents-a1071080370/>.

<sup>8</sup> *Id.*

<sup>9</sup> CAR Coalition, “White Paper on the Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, H.R. 6570, 117th Congress,” September 2022, p. 11, <https://carcoalition.com/wp-content/uploads/2020/07/Repair-Act-white-paper-09-13-2022-1.pdf>.

<sup>10</sup> *Id.*

<sup>11</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., Securepairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, p. 15, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aa-pretial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aa-pretial_0.pdf).

<sup>12</sup> Auto Care Association, “Survey: 84% of Independent Repair Shops View Vehicle Data Access as Top Issue for Their Business,” April 10, 2024, <https://www.autocare.org/news/latest-news/details/2024/04/10/survey-84-of-independent-repair-shops-view-vehicle-data-access-as-top-issue-for-their-business>.

<sup>13</sup> *Id.*

## Automakers' Cybersecurity Concerns Are Specious

Auto manufacturers have routinely raised cybersecurity risks as an excuse for opposing right-to-repair, attempting to distract consumers from the fact that “vehicle repair and maintenance services from independent repair shops keeps the cost of service and repair down.”<sup>14</sup> For example, the lobbying group representing automakers recently warned that the federal government should be “concerned about policy and legislative proposals (such as the REPAIR Act) that may expose onboard diagnostic systems to additional vulnerabilities from bad actors, including Foreign Adversaries.”<sup>15</sup> The head of digital policy at Europe’s similar lobbying group has said that “[o]pening the possibility for third parties to trigger safety-critical functions remotely is very concerning.”<sup>16</sup> These cybersecurity concerns are often based on speculative future risks rather than facts. A study by the Federal Trade Commission (FTC) found no evidence to back up the cybersecurity arguments made by manufacturers to limit repair opportunities by independent repair shops, and “no empirical evidence to suggest that independent repair shops are more or less likely than authorized repair shops to compromise or misuse customer data.”<sup>17</sup> According to the FTC, allowing independent repair shops to access diagnostic software and firmware patches, far from jeopardizing security, is consistent with the FTC’s data security guidance.<sup>18</sup> Outside the United States, where automakers have attempted similar strategies to shut down independent repair, a German court just last month ruled against Mercedes-Benz that automakers should not use cybersecurity as an excuse to restrict data access to suppliers.<sup>19</sup>

Cybersecurity experts have forcefully pushed against manufacturers’ fearmongering. Security expert Paul Roberts testified before the House Judiciary Committee in July 2023 that “information covered by right to repair laws is not sensitive or protected, as evidenced by the fact that manufacturers distribute it widely to hundreds, thousands or tens of thousands of repair professionals working on behalf of their authorized providers.”<sup>20</sup> The vast majority of attacks on connected devices, including cars, “exploit software vulnerabilities in embedded software

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<sup>14</sup> VICE, “Auto Industry Has Spent \$25 Million Lobbying Against right-to-repair Ballot Measure,” Matthew Gault, September 29, 2020, <https://www.vice.com/en/article/z3ead3/auto-industry-has-spent-dollar25-million-lobbying-against-right-to-repair-ballot-measure>.

<sup>15</sup> Alliance for Automotive Innovation, “Comments to BIS on Securing the ICTS Supply Chain for Connected Vehicles,” April 30, 2024, p. 10, <https://www.autosinnovate.org/posts/agency-comments/comments-bis-connected-car-anprm>.

<sup>16</sup> Wall Street Journal, “Automakers and Suppliers Spar Over Car Data,” Catherine Stupp, October 24, 2023, <https://www.wsj.com/articles/automakers-and-suppliers-spar-over-car-data-a5e7dbaf>.

<sup>17</sup> Federal Trade Commission, “Prepared Statement of the Federal Trade Commission on Repair Restrictions Before The Judiciary Committee California State Senate,” April 11, 2023, p. 3, [https://www.ftc.gov/system/files/ftc\\_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf](https://www.ftc.gov/system/files/ftc_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf); Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, pp. 24-36, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>18</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 31, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>19</sup> Wall Street Journal, “Courts Side With Auto Suppliers in Clash With Carmakers Over Vehicle Data Access,” Catherine Stupp, October 24, 2024, <https://www.wsj.com/articles/courts-side-with-auto-suppliers-in-clash-with-carmakers-over-vehicle-data-access-96871fdd>.

produced, managed and released by the manufacturer,” meaning that “it is the poor quality of deployed software and the poor state of device security – not the availability of diagnostic and repair tools and information – that fuels cyber attacks on connected devices.”<sup>21</sup>

Auto manufacturers’ opposition to right-to-repair on cybersecurity grounds is at odds with cybersecurity best practices, which have abandoned the practice of “security through obscurity,” recognizing that “secrecy isn’t the same as security.”<sup>22</sup> A cybersecurity approach premised on exclusive access to data by car manufacturers is an example of security through obscurity, which “allows flaws and insecurity in technology to flourish by decreasing the likelihood that they will be identified and repaired, while increasing the likelihood that flaws can and will be exploited by evil-doers.”<sup>23</sup> Further, examples of cyberattacks on moving vehicles that have been utilized to scare policymakers into embracing car manufacturers’ positions have in fact historically “not depended on access to telematics data” of the kind at issue in right-to-repair proposals.<sup>24</sup> Car manufacturers should not hide behind a false dichotomy of cybersecurity and consumer choice in order to avoid their legal obligations to facilitate independent vehicle repair.

### **Auto Manufacturers Share Sensitive Consumer Data with Insurance Companies and Other Third Parties**

Automakers’ own data practices show that their claims around cybersecurity derive from ulterior motives. While carmakers have been fighting tooth and nail against right-to-repair laws that would require them to share vehicle data with consumers and independent repairers, they have simultaneously been sharing large amounts of sensitive consumer data with insurance companies and other third parties for profit — often without clear consumer consent. In fact, some car companies use the threat of increased insurance costs to push consumers to opt into safe driving features, and then use those features to collect and sell the user data. A 2024 investigation revealed that automakers were selling user driving data, such as acceleration and brake patterns, to data brokers.<sup>25</sup> Lawmakers have specifically called out General Motors, Hyundai, and Honda for using deceptive tactics to collect customers’ driving data and then sell it to data brokers.<sup>26</sup> Through these practices, Hyundai was able to make over \$1 million.<sup>27</sup> This information on

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<sup>20</sup> House Judiciary Committee, “Testimony of Paul Roberts, Founder of Secure Repairs, before the House Judiciary Committee, Subcommittee on Courts, Intellectual Property, and the Internet,” July 14, 2023, p. 2, <https://judiciary.house.gov/sites/evo-subsites/republicans-judiciary.house.gov/files/evo-media-document/roberts-testimony-sm.pdf>.

<sup>21</sup> *Id.*, p. 3.

<sup>22</sup> Forbes, “Tilting Against Repair Law, NHTSA Endorses Security Through Obscurity,” Paul F. Roberts, June 21, 2023, <https://www.forbes.com/sites/paulfroberts/2023/06/21/tilting-against-repair-law-nhtsa-endorses-security-through-obscurity/?sh=1510e7e3428b>.

<sup>23</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., Secure Repairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, pp. 10-11, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aa-ai-pretrial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aa-ai-pretrial_0.pdf) (internal citations omitted).

<sup>24</sup> *Id.*

<sup>25</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>26</sup> Boston Herald, “Markey calls for auto data probe,” July 28, 2024, <https://www.bostonherald.com/2024/07/28/markey-calls-for-auto-data-probe/>.

<sup>27</sup> *Id.*

driving patterns obtained by the data brokers was then sold to and used by auto insurers to vastly increase insurance prices.<sup>28</sup>

At least 37 car companies have been identified as a part of the connected vehicle data industry that seeks to monetize such data,<sup>29</sup> but as vehicles become increasingly connected, automotive companies stand to gain greater incentive for collecting and monetizing this data themselves. It is estimated that there will be around 470 million connected vehicles on highways around the world by 2025 and each of these connected vehicles will produce roughly 25 gigabytes of data per hour.<sup>30</sup> This data is expected to be worth up to \$800 billion by 2030.<sup>31</sup> As of 2022, data brokers such as LexisNexis have shared that they have access to “real-world driving behavior” from over 10 million vehicles.<sup>32</sup> Those data brokers’ own marketing materials underscore the sensitive nature of the data that automakers sell, including:

- Last parking location,
- Current geolocation,
- Lock status,
- Ignition status,
- Data on the last trip taken,
- Mileage,
- Vehicle speed,
- Accident events,
- Crashes,
- Odometer status, and
- Use of seatbelts.<sup>33</sup>

Despite the enormous amounts of data collection by car companies from consumers, few of these manufacturers comply with basic security standards.<sup>34</sup>

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<sup>28</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March, 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>29</sup> The Markup, “Who Is Collecting Data from Your Car?,” Jon Keegan and Alfred Ng, July 27, 2022, <https://themarkup.org/the-breakdown/2022/07/27/who-is-collecting-data-from-your-car>.

<sup>30</sup> Netscribes, “The road to profitability: Why automotive data monetization is the next big thing,” Kanika Shukla, March 24, 2023, <https://www.netscribes.com/the-road-to-profitability-why-automotive-data-monetization-is-the-next-big-thing/>.

<sup>31</sup> Capgemini, “Monetizing Vehicle Data: How to fulfill the promise,” September 2020, p. 5, [https://s3.documentcloud.org/documents/22120767/capgeminiinvent\\_vehicledatamonetization\\_pov\\_sep2020.pdf](https://s3.documentcloud.org/documents/22120767/capgeminiinvent_vehicledatamonetization_pov_sep2020.pdf).

<sup>32</sup> LexisNexis Risk Solutions, “LexisNexis Telematics Exchange Celebrates 5-Year Anniversary,” press release, June 28, 2022, <https://risk.lexisnexis.com/about-us/press-room/press-release/20220628-telematics-exchange-5-year-anniversary>.

<sup>33</sup> Caruso Dataplace, “Developer Catalog,” <https://dev.caruso-dataplace.com/api/consumer/page/data-catalog/>; High Mobility, “Auto API Data Categories,” <https://www.high-mobility.com/car-data>.

<sup>34</sup> Mozilla, “It’s Official: Cars Are the Worst Product Category We Have Ever Reviewed for Privacy,” Jen Caltrider, Misha Rykov, and Zoë MacDonald, September 6, 2023, <https://foundation.mozilla.org/en/privacynotincluded/articles/its-official-cars-are-the-worst-product-category-we-have-ever-reviewed-for-privacy/>.

## Conclusion

Right-to-repair laws support consumer choice and prevent automakers from using restrictive repair laws to their financial advantage. It is clear that the motivation behind automotive companies' avoidance of complying with right-to-repair laws is not due to a concern for consumer security or privacy, but instead a hypocritical, profit-driven reaction. This kind of anti-consumer, anti-repair practice must come to an end in all industries. Americans have a right to fix their own technology, farm equipment, and automobiles.

We urge Ford to comply with all right-to-repair laws while protecting consumer privacy interests. We also ask that Ford respond to the following questions by January 6, 2025:

1. How much in direct income and other benefits did Ford receive from car repairs in each of the previous five years, including income derived from repairs at dealerships, authorized dealer networks, and other affiliated locations?
2. What user and driving data do your company's cars collect, and how frequently is this data collected?
3. How do you seek consent from drivers for data sharing?
  - a. What steps must car owners take to access their own data?
4. What user data does your company share with third parties? Please list the third parties with which your company shares data.
5. For each of the third parties listed in Question 4, please detail the specific data that is shared, and the revenue obtained from each data sharing agreement.
6. How does your company protect the data it collects from users?
7. What measures does your company take to protect user privacy, if any?
  - a. If your company de-identifies data it collects from users, how do you protect against the data being re-identified?
8. Please list all data breaches or other cybersecurity incidents involving your company or your company's vehicles in the last five years.
9. How much has your company spent lobbying against right-to-repair measures?
10. Please list the organizations or associations your company is part of that lobby against right-to-repair measures.

Sincerely,



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Elizabeth Warren  
United States Senator



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Josh Hawley  
United States Senator

*Jeffrey A. Merkley*

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United States Senator

# United States Senate

WASHINGTON, DC 20510

December 19, 2024

Mary Barra  
Chair and CEO  
General Motors Company  
P.O. BOX 33170  
Detroit, MI 48232

Dear Mrs. Barra:

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<sup>13</sup> *Id.*

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Auto manufacturers have routinely raised cybersecurity risks as an excuse for opposing right-to-repair, attempting to distract consumers from the fact that “vehicle repair and maintenance services from independent repair shops keeps the cost of service and repair down.”<sup>14</sup> For example, the lobbying group representing automakers recently warned that the federal government should be “concerned about policy and legislative proposals (such as the REPAIR Act) that may expose onboard diagnostic systems to additional vulnerabilities from bad actors, including Foreign Adversaries.”<sup>15</sup> The head of digital policy at Europe’s similar lobbying group has said that “[o]pening the possibility for third parties to trigger safety-critical functions remotely is very concerning.”<sup>16</sup> These cybersecurity concerns are often based on speculative future risks rather than facts. A study by the Federal Trade Commission (FTC) found no evidence to back up the cybersecurity arguments made by manufacturers to limit repair opportunities by independent repair shops, and “no empirical evidence to suggest that independent repair shops are more or less likely than authorized repair shops to compromise or misuse customer data.”<sup>17</sup> According to the FTC, allowing independent repair shops to access diagnostic software and firmware patches, far from jeopardizing security, is consistent with the FTC’s data security guidance.<sup>18</sup> Outside the United States, where automakers have attempted similar strategies to shut down independent repair, a German court just last month ruled against Mercedes-Benz that automakers should not use cybersecurity as an excuse to restrict data access to suppliers.<sup>19</sup>

Cybersecurity experts have forcefully pushed against manufacturers’ fearmongering. Security expert Paul Roberts testified before the House Judiciary Committee in July 2023 that “information covered by right to repair laws is not sensitive or protected, as evidenced by the fact that manufacturers distribute it widely to hundreds, thousands or tens of thousands of repair professionals working on behalf of their authorized providers.”<sup>20</sup> The vast majority of attacks on connected devices, including cars, “exploit software vulnerabilities in embedded software

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<sup>14</sup> VICE, “Auto Industry Has Spent \$25 Million Lobbying Against right-to-repair Ballot Measure,” Matthew Gault, September 29, 2020, <https://www.vice.com/en/article/z3ead3/auto-industry-has-spent-dollar25-million-lobbying-against-right-to-repair-ballot-measure>.

<sup>15</sup> Alliance for Automotive Innovation, “Comments to BIS on Securing the ICTS Supply Chain for Connected Vehicles,” April 30, 2024, p. 10, <https://www.autosinnovate.org/posts/agency-comments/comments-bis-connected-car-anprm>.

<sup>16</sup> Wall Street Journal, “Automakers and Suppliers Spar Over Car Data,” Catherine Stupp, October 24, 2023, <https://www.wsj.com/articles/automakers-and-suppliers-spar-over-car-data-a5e7dbaf>.

<sup>17</sup> Federal Trade Commission, “Prepared Statement of the Federal Trade Commission on Repair Restrictions Before The Judiciary Committee California State Senate,” April 11, 2023, p. 3, [https://www.ftc.gov/system/files/ftc\\_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf](https://www.ftc.gov/system/files/ftc_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf); Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, pp. 24-36, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>18</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 31, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>19</sup> Wall Street Journal, “Courts Side With Auto Suppliers in Clash With Carmakers Over Vehicle Data Access,” Catherine Stupp, October 24, 2024, <https://www.wsj.com/articles/courts-side-with-auto-suppliers-in-clash-with-carmakers-over-vehicle-data-access-96871fdd>.

produced, managed and released by the manufacturer,” meaning that “it is the poor quality of deployed software and the poor state of device security – not the availability of diagnostic and repair tools and information – that fuels cyber attacks on connected devices.”<sup>21</sup>

Auto manufacturers’ opposition to right-to-repair on cybersecurity grounds is at odds with cybersecurity best practices, which have abandoned the practice of “security through obscurity,” recognizing that “secrecy isn’t the same as security.”<sup>22</sup> A cybersecurity approach premised on exclusive access to data by car manufacturers is an example of security through obscurity, which “allows flaws and insecurity in technology to flourish by decreasing the likelihood that they will be identified and repaired, while increasing the likelihood that flaws can and will be exploited by evil-doers.”<sup>23</sup> Further, examples of cyberattacks on moving vehicles that have been utilized to scare policymakers into embracing car manufacturers’ positions have in fact historically “not depended on access to telematics data” of the kind at issue in right-to-repair proposals.<sup>24</sup> Car manufacturers should not hide behind a false dichotomy of cybersecurity and consumer choice in order to avoid their legal obligations to facilitate independent vehicle repair.

### **Auto Manufacturers Share Sensitive Consumer Data with Insurance Companies and Other Third Parties**

Automakers’ own data practices show that their claims around cybersecurity derive from ulterior motives. While carmakers have been fighting tooth and nail against right-to-repair laws that would require them to share vehicle data with consumers and independent repairers, they have simultaneously been sharing large amounts of sensitive consumer data with insurance companies and other third parties for profit — often without clear consumer consent. In fact, some car companies use the threat of increased insurance costs to push consumers to opt into safe driving features, and then use those features to collect and sell the user data. A 2024 investigation revealed that automakers were selling user driving data, such as acceleration and brake patterns, to data brokers.<sup>25</sup> Lawmakers have specifically called out General Motors, Hyundai, and Honda for using deceptive tactics to collect customers’ driving data and then sell it to data brokers.<sup>26</sup> Through these practices, Hyundai was able to make over \$1 million.<sup>27</sup> This information on

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<sup>21</sup> *Id.*, p. 3.

<sup>22</sup> Forbes, “Tilting Against Repair Law, NHTSA Endorses Security Through Obscurity,” Paul F. Roberts, June 21, 2023, <https://www.forbes.com/sites/paulfroberts/2023/06/21/tilting-against-repair-law-nhtsa-endorses-security-through-obscurity/?sh=1510e7e3428b>.

<sup>23</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., Secure Repairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, pp. 10-11, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aa-i-pretrial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aa-i-pretrial_0.pdf) (internal citations omitted).

<sup>24</sup> *Id.*

<sup>25</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>26</sup> Boston Herald, “Markey calls for auto data probe,” July 28, 2024, <https://www.bostonherald.com/2024/07/28/markey-calls-for-auto-data-probe/>.

<sup>27</sup> *Id.*

driving patterns obtained by the data brokers was then sold to and used by auto insurers to vastly increase insurance prices.<sup>28</sup>

At least 37 car companies have been identified as a part of the connected vehicle data industry that seeks to monetize such data,<sup>29</sup> but as vehicles become increasingly connected, automotive companies stand to gain greater incentive for collecting and monetizing this data themselves. It is estimated that there will be around 470 million connected vehicles on highways around the world by 2025 and each of these connected vehicles will produce roughly 25 gigabytes of data per hour.<sup>30</sup> This data is expected to be worth up to \$800 billion by 2030.<sup>31</sup> As of 2022, data brokers such as LexisNexis have shared that they have access to “real-world driving behavior” from over 10 million vehicles.<sup>32</sup> Those data brokers’ own marketing materials underscore the sensitive nature of the data that automakers sell, including:

- Last parking location,
- Current geolocation,
- Lock status,
- Ignition status,
- Data on the last trip taken,
- Mileage,
- Vehicle speed,
- Accident events,
- Crashes,
- Odometer status, and
- Use of seatbelts.<sup>33</sup>

Despite the enormous amounts of data collection by car companies from consumers, few of these manufacturers comply with basic security standards.<sup>34</sup>

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<sup>28</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March, 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>29</sup> The Markup, “Who Is Collecting Data from Your Car?,” Jon Keegan and Alfred Ng, July 27, 2022, <https://themarkup.org/the-breakdown/2022/07/27/who-is-collecting-data-from-your-car>.

<sup>30</sup> Netscribes, “The road to profitability: Why automotive data monetization is the next big thing,” Kanika Shukla, March 24, 2023, <https://www.netscribes.com/the-road-to-profitability-why-automotive-data-monetization-is-the-next-big-thing/>.

<sup>31</sup> Capgemini, “Monetizing Vehicle Data: How to fulfill the promise,” September 2020, p. 5, [https://s3.documentcloud.org/documents/22120767/capgeminiinvent\\_vehicledatamonetization\\_pov\\_sep2020.pdf](https://s3.documentcloud.org/documents/22120767/capgeminiinvent_vehicledatamonetization_pov_sep2020.pdf).

<sup>32</sup> LexisNexis Risk Solutions, “LexisNexis Telematics Exchange Celebrates 5-Year Anniversary,” press release, June 28, 2022, <https://risk.lexisnexis.com/about-us/press-room/press-release/20220628-telematics-exchange-5-year-anniversary>.

<sup>33</sup> Caruso Dataplace, “Developer Catalog,” <https://dev.caruso-dataplace.com/api/consumer/page/data-catalog/>; High Mobility, “Auto API Data Categories,” <https://www.high-mobility.com/car-data>.

<sup>34</sup> Mozilla, “It’s Official: Cars Are the Worst Product Category We Have Ever Reviewed for Privacy,” Jen Caltrider, Misha Rykov, and Zoë MacDonald, September 6, 2023, <https://foundation.mozilla.org/en/privacynotincluded/articles/its-official-cars-are-the-worst-product-category-we-have-ever-reviewed-for-privacy/>.

## Conclusion

Right-to-repair laws support consumer choice and prevent automakers from using restrictive repair laws to their financial advantage. It is clear that the motivation behind automotive companies' avoidance of complying with right-to-repair laws is not due to a concern for consumer security or privacy, but instead a hypocritical, profit-driven reaction. This kind of anti-consumer, anti-repair practice must come to an end in all industries. Americans have a right to fix their own technology, farm equipment, and automobiles.

We urge General Motors to comply with all right-to-repair laws while protecting consumer privacy interests. We also ask that General Motors respond to the following questions by January 6, 2025:

1. How much in direct income and other benefits did General Motors receive from car repairs in each of the previous five years, including income derived from repairs at dealerships, authorized dealer networks, and other affiliated locations?
2. What user and driving data do your company's cars collect, and how frequently is this data collected?
3. How do you seek consent from drivers for data sharing?
  - a. What steps must car owners take to access their own data?
4. What user data does your company share with third parties? Please list the third parties with which your company shares data.
5. For each of the third parties listed in Question 4, please detail the specific data that is shared, and the revenue obtained from each data sharing agreement.
6. How does your company protect the data it collects from users?
7. What measures does your company take to protect user privacy, if any?
  - a. If your company de-identifies data it collects from users, how do you protect against the data being re-identified?
8. Please list all data breaches or other cybersecurity incidents involving your company or your company's vehicles in the last five years.
9. How much has your company spent lobbying against right-to-repair measures?
10. Please list the organizations or associations your company is part of that lobby against right-to-repair measures.

Sincerely,



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Elizabeth Warren  
United States Senator



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Josh Hawley  
United States Senator

*Jeffrey A. Merkley*

Jeffrey A. Merkley  
United States Senator

# United States Senate

WASHINGTON, DC 20510

December 19, 2024

Kazuhiro Takizawa  
President, CEO and Director  
American Honda Motor Co., Inc.  
1919 Torrance Boulevard  
Torrance, CA 90501

Dear Mr. Takizawa:

We write regarding our concerns about automakers' fierce opposition to nationwide efforts to secure car owners' right to repair the vehicles they own in the way they choose. We are particularly disturbed by the automakers' hypocrisy with regard to data sharing. The industry has raised concerns about data sharing with independent repair shops to justify opposing right-to-repair, while earning profits from sharing large amounts of personal data with insurance companies.

"Right-to-repair," which refers to consumers' ability to decide who repairs their products,<sup>1</sup> is a foundational component of consumer choice. Robust right-to-repair protections are important to consumers, businesses, and the American agricultural industry. Passage of right-to-repair laws across the country reflects overwhelming consumer preference for right-to-repair protections, despite outsized spending by automakers and other original equipment manufacturers in opposition.<sup>2</sup> More than half of Americans say they do not believe consumers have enough choices when it comes to choosing where they will get something repaired, and 84% say they support a policy that would require manufacturers to make repair information and parts more accessible.<sup>3</sup>

Consumer protection experts have echoed these sentiments, finding that repair restrictions harm consumers by raising prices and preventing timely repairs.<sup>4</sup> Empirical research indicates that car manufacturers have been "leveraging new technological advantages gained through telematics

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<sup>1</sup> U.S. Government Accountability Office, "Vehicle Repair: Information on Evolving Vehicle Technologies and Consumer Choice," March 21, 2024, p. 1, <https://www.gao.gov/assets/d24106633.pdf>.

<sup>2</sup> See, e.g., CBS News, "Massachusetts Voters Approve Ballot Question 1 Expanding 'Right To Repair' Law," November 3, 2020, <https://www.cbsnews.com/boston/news/election-2020-results-massachusetts-question-1-right-to-repair/>; FOX 2 News, "Missouri among states eyeing 'right to repair' laws for farm equipment," February 13, 2023, <https://fox2now.com/news/missouri/11-states-eye-right-to-repair-laws-for-farmequipment/>; PIRG, "Right to Repair," <https://pirg.org/campaigns/right-to-repair/> (listing legislation passed in dozens of states to protect right-to-repair in farm equipment, consumer devices, power wheelchairs, home appliances, and other sectors).

<sup>3</sup> Consumer Reports, "Consumer Reports Survey Finds Americans Overwhelmingly Support the Right to Repair," press release, February 28, 2022, [https://advocacy.consumerreports.org/press\\_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/](https://advocacy.consumerreports.org/press_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/).

<sup>4</sup> Federal Trade Commission, "Nixing the Fix: An FTC Report to Congress on Repair Restrictions," May 2021, p. 38, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

from the cars and software partnerships with large industry players to eliminate parts competition.”<sup>5</sup> Currently, consumers get approximately 70 percent of car parts and services from independent providers, and 30 percent from dealerships.<sup>6</sup> This is because repairs by independent providers are cheaper: customers give independent repair shops good ratings on price (as well as overall satisfaction), while nearly all dealerships receive the worst possible rating for price.<sup>7</sup> Overall, car owners appreciate independent repair shops for their “trustworthiness, reasonable prices, knowledgeable mechanics, and good reputation.”<sup>8</sup> The ability for car owners to repair their vehicles without breaking the bank is particularly important given that Americans buy twice as many used cars as new ones.<sup>9</sup>

By barring the potential use of non-manufacturer replacement parts, such as salvaged parts at independent repair shops, auto manufacturers are able effectively to create product monopolies and inflate repair prices.<sup>10</sup> As this limits options for repair, consumers face a slow and inconvenient process, often having to “surrender their cars . . . for days or weeks to get them fixed.”<sup>11</sup>

Right-to-repair is crucial for independent repair shops and local economies. More than 80 percent of independent repair shops view data access as “the top issue for their business,” surpassing considerations like inflation and technician recruitment and retention, and more than 60 percent “experienced difficulty making routine repairs on a daily or weekly basis” because of automakers’ restrictions.<sup>12</sup> Restrictions currently cost independent repair shops \$3.1 billion each year,<sup>13</sup> a figure poised to increase as car components become increasingly digital.

As the gatekeepers of vehicle parts, equipment, and data, automobile manufacturers have the power to place restrictions on the necessary tools and information for repairs, particularly as cars increasingly incorporate electronic components. This often leaves car owners with no other option than to have their vehicles serviced by official dealerships, entrenching auto manufacturers’ dominance and eliminating competition from independent repair shops.

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<sup>5</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 40, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>6</sup> CAR Coalition, “White Paper on the Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, H.R. 6570, 117th Congress,” September 2022, p. 12, <https://carcoalition.com/wp-content/uploads/2020/07/Repair-Act-white-paper-09-13-2022-1.pdf>.

<sup>7</sup> Consumer Reports, “Car Owners Favor Independent Repair Shops,” Benjamin Preston, March 20, 2024, <https://www.consumerreports.org/cars/car-repair-shops/car-repair-shop-survey-chains-dealers-independents-a1071080370/>.

<sup>8</sup> *Id.*

<sup>9</sup> CAR Coalition, “White Paper on the Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, H.R. 6570, 117th Congress,” September 2022, p. 11, <https://carcoalition.com/wp-content/uploads/2020/07/Repair-Act-white-paper-09-13-2022-1.pdf>.

<sup>10</sup> *Id.*

<sup>11</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., Securepairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, p. 15, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aaai-pretrial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aaai-pretrial_0.pdf).

<sup>12</sup> Auto Care Association, “Survey: 84% of Independent Repair Shops View Vehicle Data Access as Top Issue for Their Business,” April 10, 2024, <https://www.autocare.org/news/latest-news/details/2024/04/10/survey-84-of-independent-repair-shops-view-vehicle-data-access-as-top-issue-for-their-business>.

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<sup>21</sup> *Id.*, p. 3.

<sup>22</sup> Forbes, “Tilting Against Repair Law, NHTSA Endorses Security Through Obscurity,” Paul F. Roberts, June 21, 2023, <https://www.forbes.com/sites/paulfroberts/2023/06/21/tilting-against-repair-law-nhtsa-endorses-security-through-obscurity/?sh=1510e7e3428b>.

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<sup>24</sup> *Id.*

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<sup>26</sup> Boston Herald, “Markey calls for auto data probe,” July 28, 2024, <https://www.bostonherald.com/2024/07/28/markey-calls-for-auto-data-probe/>.

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driving patterns obtained by the data brokers was then sold to and used by auto insurers to vastly increase insurance prices.<sup>28</sup>

At least 37 car companies have been identified as a part of the connected vehicle data industry that seeks to monetize such data,<sup>29</sup> but as vehicles become increasingly connected, automotive companies stand to gain greater incentive for collecting and monetizing this data themselves. It is estimated that there will be around 470 million connected vehicles on highways around the world by 2025 and each of these connected vehicles will produce roughly 25 gigabytes of data per hour.<sup>30</sup> This data is expected to be worth up to \$800 billion by 2030.<sup>31</sup> As of 2022, data brokers such as LexisNexis have shared that they have access to “real-world driving behavior” from over 10 million vehicles.<sup>32</sup> Those data brokers’ own marketing materials underscore the sensitive nature of the data that automakers sell, including:

- Last parking location,
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Despite the enormous amounts of data collection by car companies from consumers, few of these manufacturers comply with basic security standards.<sup>34</sup>

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<sup>28</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March, 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>29</sup> The Markup, “Who Is Collecting Data from Your Car?,” Jon Keegan and Alfred Ng, July 27, 2022, <https://themarkup.org/the-breakdown/2022/07/27/who-is-collecting-data-from-your-car>.

<sup>30</sup> Netscribes, “The road to profitability: Why automotive data monetization is the next big thing,” Kanika Shukla, March 24, 2023, <https://www.netscribes.com/the-road-to-profitability-why-automotive-data-monetization-is-the-next-big-thing/>.

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<sup>32</sup> LexisNexis Risk Solutions, “LexisNexis Telematics Exchange Celebrates 5-Year Anniversary,” press release, June 28, 2022, <https://risk.lexisnexis.com/about-us/press-room/press-release/20220628-telematics-exchange-5-year-anniversary>.

<sup>33</sup> Caruso Dataplace, “Developer Catalog,” <https://dev.caruso-dataplace.com/api/consumer/page/data-catalog/>; High Mobility, “Auto API Data Categories,” <https://www.high-mobility.com/car-data>.

<sup>34</sup> Mozilla, “It’s Official: Cars Are the Worst Product Category We Have Ever Reviewed for Privacy,” Jen Caltrider, Misha Rykov, and Zoë MacDonald, September 6, 2023, <https://foundation.mozilla.org/en/privacynotincluded/articles/its-official-cars-are-the-worst-product-category-we-have-ever-reviewed-for-privacy/>.

## Conclusion

Right-to-repair laws support consumer choice and prevent automakers from using restrictive repair laws to their financial advantage. It is clear that the motivation behind automotive companies' avoidance of complying with right-to-repair laws is not due to a concern for consumer security or privacy, but instead a hypocritical, profit-driven reaction. This kind of anti-consumer, anti-repair practice must come to an end in all industries. Americans have a right to fix their own technology, farm equipment, and automobiles.

We urge Honda to comply with all right-to-repair laws while protecting consumer privacy interests. We also ask that Honda respond to the following questions by January 6, 2025:

1. How much in direct income and other benefits did Honda receive from car repairs in each of the previous five years, including income derived from repairs at dealerships, authorized dealer networks, and other affiliated locations?
2. What user and driving data do your company's cars collect, and how frequently is this data collected?
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5. For each of the third parties listed in Question 4, please detail the specific data that is shared, and the revenue obtained from each data sharing agreement.
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8. Please list all data breaches or other cybersecurity incidents involving your company or your company's vehicles in the last five years.
9. How much has your company spent lobbying against right-to-repair measures?
10. Please list the organizations or associations your company is part of that lobby against right-to-repair measures.

Sincerely,



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Elizabeth Warren  
United States Senator



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Josh Hawley  
United States Senator

*Jeffrey A. Merkley*

Jeffrey A. Merkley  
United States Senator

# United States Senate

WASHINGTON, DC 20510

December 19, 2024

Randy Parker  
CEO  
Hyundai Motor America  
P.O. Box 1430  
Mesa, AZ 85211

Dear Mr. Parker:

We write regarding our concerns about automakers' fierce opposition to nationwide efforts to secure car owners' right to repair the vehicles they own in the way they choose. We are particularly disturbed by the automakers' hypocrisy with regard to data sharing. The industry has raised concerns about data sharing with independent repair shops to justify opposing right-to-repair, while earning profits from sharing large amounts of personal data with insurance companies.

"Right-to-repair," which refers to consumers' ability to decide who repairs their products,<sup>1</sup> is a foundational component of consumer choice. Robust right-to-repair protections are important to consumers, businesses, and the American agricultural industry. Passage of right-to-repair laws across the country reflects overwhelming consumer preference for right-to-repair protections, despite outsized spending by automakers and other original equipment manufacturers in opposition.<sup>2</sup> More than half of Americans say they do not believe consumers have enough choices when it comes to choosing where they will get something repaired, and 84% say they support a policy that would require manufacturers to make repair information and parts more accessible.<sup>3</sup>

Consumer protection experts have echoed these sentiments, finding that repair restrictions harm consumers by raising prices and preventing timely repairs.<sup>4</sup> Empirical research indicates that car manufacturers have been "leveraging new technological advantages gained through telematics

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<sup>1</sup> U.S. Government Accountability Office, "Vehicle Repair: Information on Evolving Vehicle Technologies and Consumer Choice," March 21, 2024, p. 1, <https://www.gao.gov/assets/d24106633.pdf>.

<sup>2</sup> See, e.g., CBS News, "Massachusetts Voters Approve Ballot Question 1 Expanding 'Right To Repair' Law," November 3, 2020, <https://www.cbsnews.com/boston/news/election-2020-results-massachusetts-question-1-right-to-repair/>; FOX 2 News, "Missouri among states eyeing 'right to repair' laws for farm equipment," February 13, 2023, <https://fox2now.com/news/missouri/11-states-eye-right-to-repair-laws-for-farmequipment/>; PIRG, "Right to Repair," <https://pirg.org/campaigns/right-to-repair/> (listing legislation passed in dozens of states to protect right-to-repair in farm equipment, consumer devices, power wheelchairs, home appliances, and other sectors).

<sup>3</sup> Consumer Reports, "Consumer Reports Survey Finds Americans Overwhelmingly Support the Right to Repair," press release, February 28, 2022, [https://advocacy.consumerreports.org/press\\_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/](https://advocacy.consumerreports.org/press_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/).

<sup>4</sup> Federal Trade Commission, "Nixing the Fix: An FTC Report to Congress on Repair Restrictions," May 2021, p. 38, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

from the cars and software partnerships with large industry players to eliminate parts competition.”<sup>5</sup> Currently, consumers get approximately 70 percent of car parts and services from independent providers, and 30 percent from dealerships.<sup>6</sup> This is because repairs by independent providers are cheaper: customers give independent repair shops good ratings on price (as well as overall satisfaction), while nearly all dealerships receive the worst possible rating for price.<sup>7</sup> Overall, car owners appreciate independent repair shops for their “trustworthiness, reasonable prices, knowledgeable mechanics, and good reputation.”<sup>8</sup> The ability for car owners to repair their vehicles without breaking the bank is particularly important given that Americans buy twice as many used cars as new ones.<sup>9</sup>

By barring the potential use of non-manufacturer replacement parts, such as salvaged parts at independent repair shops, auto manufacturers are able effectively to create product monopolies and inflate repair prices.<sup>10</sup> As this limits options for repair, consumers face a slow and inconvenient process, often having to “surrender their cars . . . for days or weeks to get them fixed.”<sup>11</sup>

Right-to-repair is crucial for independent repair shops and local economies. More than 80 percent of independent repair shops view data access as “the top issue for their business,” surpassing considerations like inflation and technician recruitment and retention, and more than 60 percent “experienced difficulty making routine repairs on a daily or weekly basis” because of automakers’ restrictions.<sup>12</sup> Restrictions currently cost independent repair shops \$3.1 billion each year,<sup>13</sup> a figure poised to increase as car components become increasingly digital.

As the gatekeepers of vehicle parts, equipment, and data, automobile manufacturers have the power to place restrictions on the necessary tools and information for repairs, particularly as cars increasingly incorporate electronic components. This often leaves car owners with no other option than to have their vehicles serviced by official dealerships, entrenching auto manufacturers’ dominance and eliminating competition from independent repair shops.

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<sup>5</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 40, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>6</sup> CAR Coalition, “White Paper on the Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, H.R. 6570, 117th Congress,” September 2022, p. 12, <https://carcoalition.com/wp-content/uploads/2020/07/Repair-Act-white-paper-09-13-2022-1.pdf>.

<sup>7</sup> Consumer Reports, “Car Owners Favor Independent Repair Shops,” Benjamin Preston, March 20, 2024, <https://www.consumerreports.org/cars/car-repair-shops/car-repair-shop-survey-chains-dealers-independents-a1071080370/>.

<sup>8</sup> *Id.*

<sup>9</sup> CAR Coalition, “White Paper on the Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, H.R. 6570, 117th Congress,” September 2022, p. 11, <https://carcoalition.com/wp-content/uploads/2020/07/Repair-Act-white-paper-09-13-2022-1.pdf>.

<sup>10</sup> *Id.*

<sup>11</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., Securepairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, p. 15, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aaai-pretrial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aaai-pretrial_0.pdf).

<sup>12</sup> Auto Care Association, “Survey: 84% of Independent Repair Shops View Vehicle Data Access as Top Issue for Their Business,” April 10, 2024, <https://www.autocare.org/news/latest-news/details/2024/04/10/survey-84-of-independent-repair-shops-view-vehicle-data-access-as-top-issue-for-their-business>.

<sup>13</sup> *Id.*

## Automakers' Cybersecurity Concerns Are Specious

Auto manufacturers have routinely raised cybersecurity risks as an excuse for opposing right-to-repair, attempting to distract consumers from the fact that “vehicle repair and maintenance services from independent repair shops keeps the cost of service and repair down.”<sup>14</sup> For example, the lobbying group representing automakers recently warned that the federal government should be “concerned about policy and legislative proposals (such as the REPAIR Act) that may expose onboard diagnostic systems to additional vulnerabilities from bad actors, including Foreign Adversaries.”<sup>15</sup> The head of digital policy at Europe’s similar lobbying group has said that “[o]pening the possibility for third parties to trigger safety-critical functions remotely is very concerning.”<sup>16</sup> These cybersecurity concerns are often based on speculative future risks rather than facts. A study by the Federal Trade Commission (FTC) found no evidence to back up the cybersecurity arguments made by manufacturers to limit repair opportunities by independent repair shops, and “no empirical evidence to suggest that independent repair shops are more or less likely than authorized repair shops to compromise or misuse customer data.”<sup>17</sup> According to the FTC, allowing independent repair shops to access diagnostic software and firmware patches, far from jeopardizing security, is consistent with the FTC’s data security guidance.<sup>18</sup> Outside the United States, where automakers have attempted similar strategies to shut down independent repair, a German court just last month ruled against Mercedes-Benz that automakers should not use cybersecurity as an excuse to restrict data access to suppliers.<sup>19</sup>

Cybersecurity experts have forcefully pushed against manufacturers’ fearmongering. Security expert Paul Roberts testified before the House Judiciary Committee in July 2023 that “information covered by right to repair laws is not sensitive or protected, as evidenced by the fact that manufacturers distribute it widely to hundreds, thousands or tens of thousands of repair professionals working on behalf of their authorized providers.”<sup>20</sup> The vast majority of attacks on connected devices, including cars, “exploit software vulnerabilities in embedded software

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<sup>14</sup> VICE, “Auto Industry Has Spent \$25 Million Lobbying Against right-to-repair Ballot Measure,” Matthew Gault, September 29, 2020, <https://www.vice.com/en/article/z3ead3/auto-industry-has-spent-dollar25-million-lobbying-against-right-to-repair-ballot-measure>.

<sup>15</sup> Alliance for Automotive Innovation, “Comments to BIS on Securing the ICTS Supply Chain for Connected Vehicles,” April 30, 2024, p. 10, <https://www.autosinnovate.org/posts/agency-comments/comments-bis-connected-car-anprm>.

<sup>16</sup> Wall Street Journal, “Automakers and Suppliers Spar Over Car Data,” Catherine Stupp, October 24, 2023, <https://www.wsj.com/articles/automakers-and-suppliers-spar-over-car-data-a5e7dbaf>.

<sup>17</sup> Federal Trade Commission, “Prepared Statement of the Federal Trade Commission on Repair Restrictions Before The Judiciary Committee California State Senate,” April 11, 2023, p. 3, [https://www.ftc.gov/system/files/ftc\\_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf](https://www.ftc.gov/system/files/ftc_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf); Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, pp. 24-36, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>18</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 31, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>19</sup> Wall Street Journal, “Courts Side With Auto Suppliers in Clash With Carmakers Over Vehicle Data Access,” Catherine Stupp, October 24, 2024, <https://www.wsj.com/articles/courts-side-with-auto-suppliers-in-clash-with-carmakers-over-vehicle-data-access-96871fdd>.



produced, managed and released by the manufacturer,” meaning that “it is the poor quality of deployed software and the poor state of device security – not the availability of diagnostic and repair tools and information – that fuels cyber attacks on connected devices.”<sup>21</sup>

Auto manufacturers’ opposition to right-to-repair on cybersecurity grounds is at odds with cybersecurity best practices, which have abandoned the practice of “security through obscurity,” recognizing that “secrecy isn’t the same as security.”<sup>22</sup> A cybersecurity approach premised on exclusive access to data by car manufacturers is an example of security through obscurity, which “allows flaws and insecurity in technology to flourish by decreasing the likelihood that they will be identified and repaired, while increasing the likelihood that flaws can and will be exploited by evil-doers.”<sup>23</sup> Further, examples of cyberattacks on moving vehicles that have been utilized to scare policymakers into embracing car manufacturers’ positions have in fact historically “not depended on access to telematics data” of the kind at issue in right-to-repair proposals.<sup>24</sup> Car manufacturers should not hide behind a false dichotomy of cybersecurity and consumer choice in order to avoid their legal obligations to facilitate independent vehicle repair.

### **Auto Manufacturers Share Sensitive Consumer Data with Insurance Companies and Other Third Parties**

Automakers’ own data practices show that their claims around cybersecurity derive from ulterior motives. While carmakers have been fighting tooth and nail against right-to-repair laws that would require them to share vehicle data with consumers and independent repairers, they have simultaneously been sharing large amounts of sensitive consumer data with insurance companies and other third parties for profit — often without clear consumer consent. In fact, some car companies use the threat of increased insurance costs to push consumers to opt into safe driving features, and then use those features to collect and sell the user data. A 2024 investigation revealed that automakers were selling user driving data, such as acceleration and brake patterns, to data brokers.<sup>25</sup> Lawmakers have specifically called out General Motors, Hyundai, and Honda for using deceptive tactics to collect customers’ driving data and then sell it to data brokers.<sup>26</sup> Through these practices, Hyundai was able to make over \$1 million.<sup>27</sup> This information on

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<sup>20</sup> House Judiciary Committee, “Testimony of Paul Roberts, Founder of Secure Repairs, before the House Judiciary Committee, Subcommittee on Courts, Intellectual Property, and the Internet,” July 14, 2023, p. 2, <https://judiciary.house.gov/sites/evo-subsites/republicans-judiciary.house.gov/files/evo-media-document/roberts-testimony-sm.pdf>.

<sup>21</sup> *Id.*, p. 3.

<sup>22</sup> Forbes, “Tilting Against Repair Law, NHTSA Endorses Security Through Obscurity,” Paul F. Roberts, June 21, 2023, <https://www.forbes.com/sites/paulfroberts/2023/06/21/tilting-against-repair-law-nhtsa-endorses-security-through-obscurity/?sh=1510e7e3428b>.

<sup>23</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., Secure Repairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, pp. 10-11, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aa-i-pretrial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aa-i-pretrial_0.pdf) (internal citations omitted).

<sup>24</sup> *Id.*

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<sup>32</sup> LexisNexis Risk Solutions, “LexisNexis Telematics Exchange Celebrates 5-Year Anniversary,” press release, June 28, 2022, <https://risk.lexisnexis.com/about-us/press-room/press-release/20220628-telematics-exchange-5-year-anniversary>.

<sup>33</sup> Caruso Dataplace, “Developer Catalog,” <https://dev.caruso-dataplace.com/api/consumer/page/data-catalog/>; High Mobility, “Auto API Data Categories,” <https://www.high-mobility.com/car-data>.

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Sincerely,



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Elizabeth Warren  
United States Senator



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Josh Hawley  
United States Senator

*Jeffrey A. Merkley*

Jeffrey A. Merkley  
United States Senator

# United States Senate

WASHINGTON, DC 20510

December 19, 2024

Jérémie Papin  
Chair  
Nissan North America, Inc.  
One Nissan Way  
Franklin, TN 37067

Dear Mr. Papin:

We write regarding our concerns about automakers' fierce opposition to nationwide efforts to secure car owners' right to repair the vehicles they own in the way they choose. We are particularly disturbed by the automakers' hypocrisy with regard to data sharing. The industry has raised concerns about data sharing with independent repair shops to justify opposing right-to-repair, while earning profits from sharing large amounts of personal data with insurance companies.

"Right-to-repair," which refers to consumers' ability to decide who repairs their products,<sup>1</sup> is a foundational component of consumer choice. Robust right-to-repair protections are important to consumers, businesses, and the American agricultural industry. Passage of right-to-repair laws across the country reflects overwhelming consumer preference for right-to-repair protections, despite outsized spending by automakers and other original equipment manufacturers in opposition.<sup>2</sup> More than half of Americans say they do not believe consumers have enough choices when it comes to choosing where they will get something repaired, and 84% say they support a policy that would require manufacturers to make repair information and parts more accessible.<sup>3</sup>

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<sup>1</sup> U.S. Government Accountability Office, "Vehicle Repair: Information on Evolving Vehicle Technologies and Consumer Choice," March 21, 2024, p. 1, <https://www.gao.gov/assets/d24106633.pdf>.

<sup>2</sup> See, e.g., CBS News, "Massachusetts Voters Approve Ballot Question 1 Expanding 'Right To Repair' Law," November 3, 2020, <https://www.cbsnews.com/boston/news/election-2020-results-massachusetts-question-1-right-to-repair/>; FOX 2 News, "Missouri among states eyeing 'right to repair' laws for farm equipment," February 13, 2023, <https://fox2now.com/news/missouri/11-states-eye-right-to-repair-laws-for-farmequipment/>; PIRG, "Right to Repair," <https://pirg.org/campaigns/right-to-repair/> (listing legislation passed in dozens of states to protect right-to-repair in farm equipment, consumer devices, power wheelchairs, home appliances, and other sectors).

<sup>3</sup> Consumer Reports, "Consumer Reports Survey Finds Americans Overwhelmingly Support the Right to Repair," press release, February 28, 2022, [https://advocacy.consumerreports.org/press\\_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/](https://advocacy.consumerreports.org/press_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/).

<sup>4</sup> Federal Trade Commission, "Nixing the Fix: An FTC Report to Congress on Repair Restrictions," May 2021, p. 38, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

from the cars and software partnerships with large industry players to eliminate parts competition.”<sup>5</sup> Currently, consumers get approximately 70 percent of car parts and services from independent providers, and 30 percent from dealerships.<sup>6</sup> This is because repairs by independent providers are cheaper: customers give independent repair shops good ratings on price (as well as overall satisfaction), while nearly all dealerships receive the worst possible rating for price.<sup>7</sup> Overall, car owners appreciate independent repair shops for their “trustworthiness, reasonable prices, knowledgeable mechanics, and good reputation.”<sup>8</sup> The ability for car owners to repair their vehicles without breaking the bank is particularly important given that Americans buy twice as many used cars as new ones.<sup>9</sup>

By barring the potential use of non-manufacturer replacement parts, such as salvaged parts at independent repair shops, auto manufacturers are able effectively to create product monopolies and inflate repair prices.<sup>10</sup> As this limits options for repair, consumers face a slow and inconvenient process, often having to “surrender their cars . . . for days or weeks to get them fixed.”<sup>11</sup>

Right-to-repair is crucial for independent repair shops and local economies. More than 80 percent of independent repair shops view data access as “the top issue for their business,” surpassing considerations like inflation and technician recruitment and retention, and more than 60 percent “experienced difficulty making routine repairs on a daily or weekly basis” because of automakers’ restrictions.<sup>12</sup> Restrictions currently cost independent repair shops \$3.1 billion each year,<sup>13</sup> a figure poised to increase as car components become increasingly digital.

As the gatekeepers of vehicle parts, equipment, and data, automobile manufacturers have the power to place restrictions on the necessary tools and information for repairs, particularly as cars increasingly incorporate electronic components. This often leaves car owners with no other option than to have their vehicles serviced by official dealerships, entrenching auto manufacturers’ dominance and eliminating competition from independent repair shops.

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<sup>5</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 40, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

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<sup>8</sup> *Id.*

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<sup>10</sup> *Id.*

<sup>11</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., Securepairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, p. 15, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aaai-pretrial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aaai-pretrial_0.pdf).

<sup>12</sup> Auto Care Association, “Survey: 84% of Independent Repair Shops View Vehicle Data Access as Top Issue for Their Business,” April 10, 2024, <https://www.autocare.org/news/latest-news/details/2024/04/10/survey-84-of-independent-repair-shops-view-vehicle-data-access-as-top-issue-for-their-business>.

<sup>13</sup> *Id.*

## Automakers' Cybersecurity Concerns Are Specious

Auto manufacturers have routinely raised cybersecurity risks as an excuse for opposing right-to-repair, attempting to distract consumers from the fact that “vehicle repair and maintenance services from independent repair shops keeps the cost of service and repair down.”<sup>14</sup> For example, the lobbying group representing automakers recently warned that the federal government should be “concerned about policy and legislative proposals (such as the REPAIR Act) that may expose onboard diagnostic systems to additional vulnerabilities from bad actors, including Foreign Adversaries.”<sup>15</sup> The head of digital policy at Europe’s similar lobbying group has said that “[o]pening the possibility for third parties to trigger safety-critical functions remotely is very concerning.”<sup>16</sup> These cybersecurity concerns are often based on speculative future risks rather than facts. A study by the Federal Trade Commission (FTC) found no evidence to back up the cybersecurity arguments made by manufacturers to limit repair opportunities by independent repair shops, and “no empirical evidence to suggest that independent repair shops are more or less likely than authorized repair shops to compromise or misuse customer data.”<sup>17</sup> According to the FTC, allowing independent repair shops to access diagnostic software and firmware patches, far from jeopardizing security, is consistent with the FTC’s data security guidance.<sup>18</sup> Outside the United States, where automakers have attempted similar strategies to shut down independent repair, a German court just last month ruled against Mercedes-Benz that automakers should not use cybersecurity as an excuse to restrict data access to suppliers.<sup>19</sup>

Cybersecurity experts have forcefully pushed against manufacturers’ fearmongering. Security expert Paul Roberts testified before the House Judiciary Committee in July 2023 that “information covered by right to repair laws is not sensitive or protected, as evidenced by the fact that manufacturers distribute it widely to hundreds, thousands or tens of thousands of repair professionals working on behalf of their authorized providers.”<sup>20</sup> The vast majority of attacks on connected devices, including cars, “exploit software vulnerabilities in embedded software

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<sup>14</sup> VICE, “Auto Industry Has Spent \$25 Million Lobbying Against right-to-repair Ballot Measure,” Matthew Gault, September 29, 2020, <https://www.vice.com/en/article/z3ead3/auto-industry-has-spent-dollar25-million-lobbying-against-right-to-repair-ballot-measure>.

<sup>15</sup> Alliance for Automotive Innovation, “Comments to BIS on Securing the ICTS Supply Chain for Connected Vehicles,” April 30, 2024, p. 10, <https://www.autosinnovate.org/posts/agency-comments/comments-bis-connected-car-anprm>.

<sup>16</sup> Wall Street Journal, “Automakers and Suppliers Spar Over Car Data,” Catherine Stupp, October 24, 2023, <https://www.wsj.com/articles/automakers-and-suppliers-spar-over-car-data-a5e7dbaf>.

<sup>17</sup> Federal Trade Commission, “Prepared Statement of the Federal Trade Commission on Repair Restrictions Before The Judiciary Committee California State Senate,” April 11, 2023, p. 3, [https://www.ftc.gov/system/files/ftc\\_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf](https://www.ftc.gov/system/files/ftc_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf); Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, pp. 24-36, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>18</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 31, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>19</sup> Wall Street Journal, “Courts Side With Auto Suppliers in Clash With Carmakers Over Vehicle Data Access,” Catherine Stupp, October 24, 2024, <https://www.wsj.com/articles/courts-side-with-auto-suppliers-in-clash-with-carmakers-over-vehicle-data-access-96871fdd>.

produced, managed and released by the manufacturer,” meaning that “it is the poor quality of deployed software and the poor state of device security – not the availability of diagnostic and repair tools and information – that fuels cyber attacks on connected devices.”<sup>21</sup>

Auto manufacturers’ opposition to right-to-repair on cybersecurity grounds is at odds with cybersecurity best practices, which have abandoned the practice of “security through obscurity,” recognizing that “secrecy isn’t the same as security.”<sup>22</sup> A cybersecurity approach premised on exclusive access to data by car manufacturers is an example of security through obscurity, which “allows flaws and insecurity in technology to flourish by decreasing the likelihood that they will be identified and repaired, while increasing the likelihood that flaws can and will be exploited by evil-doers.”<sup>23</sup> Further, examples of cyberattacks on moving vehicles that have been utilized to scare policymakers into embracing car manufacturers’ positions have in fact historically “not depended on access to telematics data” of the kind at issue in right-to-repair proposals.<sup>24</sup> Car manufacturers should not hide behind a false dichotomy of cybersecurity and consumer choice in order to avoid their legal obligations to facilitate independent vehicle repair.

### **Auto Manufacturers Share Sensitive Consumer Data with Insurance Companies and Other Third Parties**

Automakers’ own data practices show that their claims around cybersecurity derive from ulterior motives. While carmakers have been fighting tooth and nail against right-to-repair laws that would require them to share vehicle data with consumers and independent repairers, they have simultaneously been sharing large amounts of sensitive consumer data with insurance companies and other third parties for profit — often without clear consumer consent. In fact, some car companies use the threat of increased insurance costs to push consumers to opt into safe driving features, and then use those features to collect and sell the user data. A 2024 investigation revealed that automakers were selling user driving data, such as acceleration and brake patterns, to data brokers.<sup>25</sup> Lawmakers have specifically called out General Motors, Hyundai, and Honda for using deceptive tactics to collect customers’ driving data and then sell it to data brokers.<sup>26</sup> Through these practices, Hyundai was able to make over \$1 million.<sup>27</sup> This information on

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<sup>20</sup> House Judiciary Committee, “Testimony of Paul Roberts, Founder of Secure Repairs, before the House Judiciary Committee, Subcommittee on Courts, Intellectual Property, and the Internet,” July 14, 2023, p. 2, <https://judiciary.house.gov/sites/evo-subsites/republicans-judiciary.house.gov/files/evo-media-document/roberts-testimony-sm.pdf>.

<sup>21</sup> *Id.*, p. 3.

<sup>22</sup> Forbes, “Tilting Against Repair Law, NHTSA Endorses Security Through Obscurity,” Paul F. Roberts, June 21, 2023, <https://www.forbes.com/sites/paulfroberts/2023/06/21/tilting-against-repair-law-nhtsa-endorses-security-through-obscurity/?sh=1510e7e3428b>.

<sup>23</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., Secure Repairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, pp. 10-11, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aa-ai-pretrial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aa-ai-pretrial_0.pdf) (internal citations omitted).

<sup>24</sup> *Id.*

<sup>25</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>26</sup> Boston Herald, “Markey calls for auto data probe,” July 28, 2024, <https://www.bostonherald.com/2024/07/28/markey-calls-for-auto-data-probe/>.

<sup>27</sup> *Id.*



driving patterns obtained by the data brokers was then sold to and used by auto insurers to vastly increase insurance prices.<sup>28</sup>

At least 37 car companies have been identified as a part of the connected vehicle data industry that seeks to monetize such data,<sup>29</sup> but as vehicles become increasingly connected, automotive companies stand to gain greater incentive for collecting and monetizing this data themselves. It is estimated that there will be around 470 million connected vehicles on highways around the world by 2025 and each of these connected vehicles will produce roughly 25 gigabytes of data per hour.<sup>30</sup> This data is expected to be worth up to \$800 billion by 2030.<sup>31</sup> As of 2022, data brokers such as LexisNexis have shared that they have access to “real-world driving behavior” from over 10 million vehicles.<sup>32</sup> Those data brokers’ own marketing materials underscore the sensitive nature of the data that automakers sell, including:

- Last parking location,
- Current geolocation,
- Lock status,
- Ignition status,
- Data on the last trip taken,
- Mileage,
- Vehicle speed,
- Accident events,
- Crashes,
- Odometer status, and
- Use of seatbelts.<sup>33</sup>

Despite the enormous amounts of data collection by car companies from consumers, few of these manufacturers comply with basic security standards.<sup>34</sup>

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<sup>28</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March, 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>29</sup> The Markup, “Who Is Collecting Data from Your Car?,” Jon Keegan and Alfred Ng, July 27, 2022, <https://themarkup.org/the-breakdown/2022/07/27/who-is-collecting-data-from-your-car>.

<sup>30</sup> Netscribes, “The road to profitability: Why automotive data monetization is the next big thing,” Kanika Shukla, March 24, 2023, <https://www.netscribes.com/the-road-to-profitability-why-automotive-data-monetization-is-the-next-big-thing/>.

<sup>31</sup> Capgemini, “Monetizing Vehicle Data: How to fulfill the promise,” September 2020, p. 5, [https://s3.documentcloud.org/documents/22120767/capgeminiinvent\\_vehicledatamonetization\\_pov\\_sep2020.pdf](https://s3.documentcloud.org/documents/22120767/capgeminiinvent_vehicledatamonetization_pov_sep2020.pdf).

<sup>32</sup> LexisNexis Risk Solutions, “LexisNexis Telematics Exchange Celebrates 5-Year Anniversary,” press release, June 28, 2022, <https://risk.lexisnexis.com/about-us/press-room/press-release/20220628-telematics-exchange-5-year-anniversary>.

<sup>33</sup> Caruso Dataplace, “Developer Catalog,” <https://dev.caruso-dataplace.com/api/consumer/page/data-catalog/>; High Mobility, “Auto API Data Categories,” <https://www.high-mobility.com/car-data>.

<sup>34</sup> Mozilla, “It’s Official: Cars Are the Worst Product Category We Have Ever Reviewed for Privacy,” Jen Caltrider, Misha Rykov, and Zoë MacDonald, September 6, 2023, <https://foundation.mozilla.org/en/privacynotincluded/articles/its-official-cars-are-the-worst-product-category-we-have-ever-reviewed-for-privacy/>.

## Conclusion

Right-to-repair laws support consumer choice and prevent automakers from using restrictive repair laws to their financial advantage. It is clear that the motivation behind automotive companies' avoidance of complying with right-to-repair laws is not due to a concern for consumer security or privacy, but instead a hypocritical, profit-driven reaction. This kind of anti-consumer, anti-repair practice must come to an end in all industries. Americans have a right to fix their own technology, farm equipment, and automobiles.

We urge Nissan to comply with all right-to-repair laws while protecting consumer privacy interests. We also ask that Nissan respond to the following questions by January 6, 2025:

1. How much in direct income and other benefits did Nissan receive from car repairs in each of the previous five years, including income derived from repairs at dealerships, authorized dealer networks, and other affiliated locations?
2. What user and driving data do your company's cars collect, and how frequently is this data collected?
3. How do you seek consent from drivers for data sharing?
  - a. What steps must car owners take to access their own data?
4. What user data does your company share with third parties? Please list the third parties with which your company shares data.
5. For each of the third parties listed in Question 4, please detail the specific data that is shared, and the revenue obtained from each data sharing agreement.
6. How does your company protect the data it collects from users?
7. What measures does your company take to protect user privacy, if any?
  - a. If your company de-identifies data it collects from users, how do you protect against the data being re-identified?
8. Please list all data breaches or other cybersecurity incidents involving your company or your company's vehicles in the last five years.
9. How much has your company spent lobbying against right-to-repair measures?
10. Please list the organizations or associations your company is part of that lobby against right-to-repair measures.

Sincerely,



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Elizabeth Warren  
United States Senator



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Josh Hawley  
United States Senator

*Jeffrey A. Merkley*

Jeffrey A. Merkley  
United States Senator

# United States Senate

WASHINGTON, DC 20510

December 19, 2024

Antonio Filosa  
COO  
Stellantis North America  
800 Chrysler Drive  
Auburn Hills, MI 48326

Dear Mr. Filosa:

We write regarding our concerns about automakers' fierce opposition to nationwide efforts to secure car owners' right to repair the vehicles they own in the way they choose. We are particularly disturbed by the automakers' hypocrisy with regard to data sharing. The industry has raised concerns about data sharing with independent repair shops to justify opposing right-to-repair, while earning profits from sharing large amounts of personal data with insurance companies.

"Right-to-repair," which refers to consumers' ability to decide who repairs their products,<sup>1</sup> is a foundational component of consumer choice. Robust right-to-repair protections are important to consumers, businesses, and the American agricultural industry. Passage of right-to-repair laws across the country reflects overwhelming consumer preference for right-to-repair protections, despite outsized spending by automakers and other original equipment manufacturers in opposition.<sup>2</sup> More than half of Americans say they do not believe consumers have enough choices when it comes to choosing where they will get something repaired, and 84% say they support a policy that would require manufacturers to make repair information and parts more accessible.<sup>3</sup>

Consumer protection experts have echoed these sentiments, finding that repair restrictions harm consumers by raising prices and preventing timely repairs.<sup>4</sup> Empirical research indicates that car manufacturers have been "leveraging new technological advantages gained through telematics from the cars and software partnerships with large industry players to eliminate parts

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<sup>2</sup> See, e.g., CBS News, "Massachusetts Voters Approve Ballot Question 1 Expanding 'Right To Repair' Law," November 3, 2020, <https://www.cbsnews.com/boston/news/election-2020-results-massachusetts-question-1-right-to-repair/>; FOX 2 News, "Missouri among states eyeing 'right to repair' laws for farm equipment," February 13, 2023, <https://fox2now.com/news/missouri/11-states-eye-right-to-repair-laws-for-farmequipment/>; PIRG, "Right to Repair," <https://pirg.org/campaigns/right-to-repair/> (listing legislation passed in dozens of states to protect right-to-repair in farm equipment, consumer devices, power wheelchairs, home appliances, and other sectors).

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<sup>14</sup> VICE, “Auto Industry Has Spent \$25 Million Lobbying Against right-to-repair Ballot Measure,” Matthew Gault, September 29, 2020, <https://www.vice.com/en/article/z3ead3/auto-industry-has-spent-dollar25-million-lobbying-against-right-to-repair-ballot-measure>.

<sup>15</sup> Alliance for Automotive Innovation, “Comments to BIS on Securing the ICTS Supply Chain for Connected Vehicles,” April 30, 2024, p. 10, <https://www.autosinnovate.org/posts/agency-comments/comments-bis-connected-car-anprm>.

<sup>16</sup> Wall Street Journal, “Automakers and Suppliers Spar Over Car Data,” Catherine Stupp, October 24, 2023, <https://www.wsj.com/articles/automakers-and-suppliers-spar-over-car-data-a5e7dbaf>.

<sup>17</sup> Federal Trade Commission, “Prepared Statement of the Federal Trade Commission on Repair Restrictions Before The Judiciary Committee California State Senate,” April 11, 2023, p. 3, [https://www.ftc.gov/system/files/ftc\\_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf](https://www.ftc.gov/system/files/ftc_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf); Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, pp. 24-36, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>18</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 31, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>19</sup> Wall Street Journal, “Courts Side With Auto Suppliers in Clash With Carmakers Over Vehicle Data Access,” Catherine Stupp, October 24, 2024, <https://www.wsj.com/articles/courts-side-with-auto-suppliers-in-clash-with-carmakers-over-vehicle-data-access-96871fdd>.

<sup>20</sup> House Judiciary Committee, “Testimony of Paul Roberts, Founder of Secure Repairs, before the House Judiciary Committee, Subcommittee on Courts, Intellectual Property, and the Internet,” July 14, 2023, p. 2, <https://judiciary.house.gov/sites/evo-subsites/republicans-judiciary.house.gov/files/evo-media-document/roberts->

connected devices, including cars, “exploit software vulnerabilities in embedded software produced, managed and released by the manufacturer,” meaning that “it is the poor quality of deployed software and the poor state of device security – not the availability of diagnostic and repair tools and information – that fuels cyber attacks on connected devices.”<sup>21</sup>

Auto manufacturers’ opposition to right-to-repair on cybersecurity grounds is at odds with cybersecurity best practices, which have abandoned the practice of “security through obscurity,” recognizing that “secrecy isn’t the same as security.”<sup>22</sup> A cybersecurity approach premised on exclusive access to data by car manufacturers is an example of security through obscurity, which “allows flaws and insecurity in technology to flourish by decreasing the likelihood that they will be identified and repaired, while increasing the likelihood that flaws can and will be exploited by evil-doers.”<sup>23</sup> Further, examples of cyberattacks on moving vehicles that have been utilized to scare policymakers into embracing car manufacturers’ positions have in fact historically “not depended on access to telematics data” of the kind at issue in right-to-repair proposals.<sup>24</sup> Car manufacturers should not hide behind a false dichotomy of cybersecurity and consumer choice in order to avoid their legal obligations to facilitate independent vehicle repair.

### **Auto Manufacturers Share Sensitive Consumer Data with Insurance Companies and Other Third Parties**

Automakers’ own data practices show that their claims around cybersecurity derive from ulterior motives. While carmakers have been fighting tooth and nail against right-to-repair laws that would require them to share vehicle data with consumers and independent repairers, they have simultaneously been sharing large amounts of sensitive consumer data with insurance companies and other third parties for profit — often without clear consumer consent. In fact, some car companies use the threat of increased insurance costs to push consumers to opt into safe driving features, and then use those features to collect and sell the user data. A 2024 investigation revealed that automakers were selling user driving data, such as acceleration and brake patterns, to data brokers.<sup>25</sup> Lawmakers have specifically called out General Motors, Hyundai, and Honda for using deceptive tactics to collect customers’ driving data and then sell it to data brokers.<sup>26</sup> Through these practices, Hyundai was able to make over \$1 million.<sup>27</sup> This information on

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<sup>21</sup> *Id.*, p. 3.

<sup>22</sup> Forbes, “Tilting Against Repair Law, NHTSA Endorses Security Through Obscurity,” Paul F. Roberts, June 21, 2023, <https://www.forbes.com/sites/paulfroberts/2023/06/21/tilting-against-repair-law-nhtsa-endorses-security-through-obscurity/?sh=1510e7e3428b>.

<sup>23</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., SecureRepairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, pp. 10-11, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aai-pretrial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aai-pretrial_0.pdf) (internal citations omitted).

<sup>24</sup> *Id.*

<sup>25</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>26</sup> Boston Herald, “Markey calls for auto data probe,” July 28, 2024, <https://www.bostonherald.com/2024/07/28/markey-calls-for-auto-data-probe/>.

<sup>27</sup> *Id.*

driving patterns obtained by the data brokers was then sold to and used by auto insurers to vastly increase insurance prices.<sup>28</sup>

At least 37 car companies have been identified as a part of the connected vehicle data industry that seeks to monetize such data,<sup>29</sup> but as vehicles become increasingly connected, automotive companies stand to gain greater incentive for collecting and monetizing this data themselves. It is estimated that there will be around 470 million connected vehicles on highways around the world by 2025 and each of these connected vehicles will produce roughly 25 gigabytes of data per hour.<sup>30</sup> This data is expected to be worth up to \$800 billion by 2030.<sup>31</sup> As of 2022, data brokers such as LexisNexis have shared that they have access to “real-world driving behavior” from over 10 million vehicles.<sup>32</sup> Those data brokers’ own marketing materials underscore the sensitive nature of the data that automakers sell, including:

- Last parking location,
- Current geolocation,
- Lock status,
- Ignition status,
- Data on the last trip taken,
- Mileage,
- Vehicle speed,
- Accident events,
- Crashes,
- Odometer status, and
- Use of seatbelts.<sup>33</sup>

Despite the enormous amounts of data collection by car companies from consumers, few of these manufacturers comply with basic security standards.<sup>34</sup>

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<sup>28</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March, 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>29</sup> The Markup, “Who Is Collecting Data from Your Car?,” Jon Keegan and Alfred Ng, July 27, 2022, <https://themarkup.org/the-breakdown/2022/07/27/who-is-collecting-data-from-your-car>.

<sup>30</sup> Netscribes, “The road to profitability: Why automotive data monetization is the next big thing,” Kanika Shukla, March 24, 2023, <https://www.netscribes.com/the-road-to-profitability-why-automotive-data-monetization-is-the-next-big-thing/>.

<sup>31</sup> Capgemini, “Monetizing Vehicle Data: How to fulfill the promise,” September 2020, p. 5, [https://s3.documentcloud.org/documents/22120767/capgeminiinvent\\_vehicledatamonetization\\_pov\\_sep2020.pdf](https://s3.documentcloud.org/documents/22120767/capgeminiinvent_vehicledatamonetization_pov_sep2020.pdf).

<sup>32</sup> LexisNexis Risk Solutions, “LexisNexis Telematics Exchange Celebrates 5-Year Anniversary,” press release, June 28, 2022, <https://risk.lexisnexis.com/about-us/press-room/press-release/20220628-telematics-exchange-5-year-anniversary>.

<sup>33</sup> Caruso Dataplace, “Developer Catalog,” <https://dev.caruso-dataplace.com/api/consumer/page/data-catalog/>; High Mobility, “Auto API Data Categories,” <https://www.high-mobility.com/car-data>.

<sup>34</sup> Mozilla, “It’s Official: Cars Are the Worst Product Category We Have Ever Reviewed for Privacy,” Jen Caltrider, Misha Rykov, and Zoë MacDonald, September 6, 2023, <https://foundation.mozilla.org/en/privacynotincluded/articles/its-official-cars-are-the-worst-product-category-we-have-ever-reviewed-for-privacy/>.



## Conclusion

Right-to-repair laws support consumer choice and prevent automakers from using restrictive repair laws to their financial advantage. It is clear that the motivation behind automotive companies' avoidance of complying with right-to-repair laws is not due to a concern for consumer security or privacy, but instead a hypocritical, profit-driven reaction. This kind of anti-consumer, anti-repair practice must come to an end in all industries. Americans have a right to fix their own technology, farm equipment, and automobiles.

We urge Stellantis to comply with all right-to-repair laws while protecting consumer privacy interests. We also ask that Stellantis respond to the following questions by January 6, 2025:

1. How much in direct income and other benefits did Stellantis receive from car repairs in each of the previous five years, including income derived from repairs at dealerships, authorized dealer networks, and other affiliated locations?
2. What user and driving data do your company's cars collect, and how frequently is this data collected?
3. How do you seek consent from drivers for data sharing?
  - a. What steps must car owners take to access their own data?
4. What user data does your company share with third parties? Please list the third parties with which your company shares data.
5. For each of the third parties listed in Question 4, please detail the specific data that is shared, and the revenue obtained from each data sharing agreement.
6. How does your company protect the data it collects from users?
7. What measures does your company take to protect user privacy, if any?
  - a. If your company de-identifies data it collects from users, how do you protect against the data being re-identified?
8. Please list all data breaches or other cybersecurity incidents involving your company or your company's vehicles in the last five years.
9. How much has your company spent lobbying against right-to-repair measures?
10. Please list the organizations or associations your company is part of that lobby against right-to-repair measures.

Sincerely,



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Elizabeth Warren  
United States Senator



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Josh Hawley  
United States Senator

*Jeffrey A. Merkley*

Jeffrey A. Merkley  
United States Senator

# United States Senate

WASHINGTON, DC 20510

December 19, 2024

Tadashi “Tady” Yoshida  
Chairman and CEO  
Subaru of America, Inc.  
One Subaru Drive  
Camden, NJ 08103

Dear Mr. Yoshida:

We write regarding our concerns about automakers’ fierce opposition to nationwide efforts to secure car owners’ right to repair the vehicles they own in the way they choose. We are particularly disturbed by the automakers’ hypocrisy with regard to data sharing. The industry has raised concerns about data sharing with independent repair shops to justify opposing right-to-repair, while earning profits from sharing large amounts of personal data with insurance companies.

“Right-to-repair,” which refers to consumers’ ability to decide who repairs their products,<sup>1</sup> is a foundational component of consumer choice. Robust right-to-repair protections are important to consumers, businesses, and the American agricultural industry. Passage of right-to-repair laws across the country reflects overwhelming consumer preference for right-to-repair protections, despite outsized spending by automakers and other original equipment manufacturers in opposition.<sup>2</sup> More than half of Americans say they do not believe consumers have enough choices when it comes to choosing where they will get something repaired, and 84% say they support a policy that would require manufacturers to make repair information and parts more accessible.<sup>3</sup>

Consumer protection experts have echoed these sentiments, finding that repair restrictions harm consumers by raising prices and preventing timely repairs.<sup>4</sup> Empirical research indicates that car manufacturers have been “leveraging new technological advantages gained through telematics from the cars and software partnerships with large industry players to eliminate parts

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<sup>1</sup> U.S. Government Accountability Office, “Vehicle Repair: Information on Evolving Vehicle Technologies and Consumer Choice,” March 21, 2024, p. 1, <https://www.gao.gov/assets/d24106633.pdf>.

<sup>2</sup> See, e.g., CBS News, “Massachusetts Voters Approve Ballot Question 1 Expanding ‘Right To Repair’ Law,” November 3, 2020, <https://www.cbsnews.com/boston/news/election-2020-results-massachusetts-question-1-right-to-repair/>; FOX 2 News, “Missouri among states eyeing ‘right to repair’ laws for farm equipment,” February 13, 2023, <https://fox2now.com/news/missouri/11-states-eye-right-to-repair-laws-for-farmequipment/>; PIRG, “Right to Repair,” <https://pirg.org/campaigns/right-to-repair/> (listing legislation passed in dozens of states to protect right-to-repair in farm equipment, consumer devices, power wheelchairs, home appliances, and other sectors).

<sup>3</sup> Consumer Reports, “Consumer Reports Survey Finds Americans Overwhelmingly Support the Right to Repair,” press release, February 28, 2022, [https://advocacy.consumerreports.org/press\\_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/](https://advocacy.consumerreports.org/press_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/).

<sup>4</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 38, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

competition.”<sup>5</sup> Currently, consumers get approximately 70 percent of car parts and services from independent providers, and 30 percent from dealerships.<sup>6</sup> This is because repairs by independent providers are cheaper: customers give independent repair shops good ratings on price (as well as overall satisfaction), while nearly all dealerships receive the worst possible rating for price.<sup>7</sup> Overall, car owners appreciate independent repair shops for their “trustworthiness, reasonable prices, knowledgeable mechanics, and good reputation.”<sup>8</sup> The ability for car owners to repair their vehicles without breaking the bank is particularly important given that Americans buy twice as many used cars as new ones.<sup>9</sup>

By barring the potential use of non-manufacturer replacement parts, such as salvaged parts at independent repair shops, auto manufacturers are able effectively to create product monopolies and inflate repair prices.<sup>10</sup> As this limits options for repair, consumers face a slow and inconvenient process, often having to “surrender their cars . . . for days or weeks to get them fixed.”<sup>11</sup>

Right-to-repair is crucial for independent repair shops and local economies. More than 80 percent of independent repair shops view data access as “the top issue for their business,” surpassing considerations like inflation and technician recruitment and retention, and more than 60 percent “experienced difficulty making routine repairs on a daily or weekly basis” because of automakers’ restrictions.<sup>12</sup> Restrictions currently cost independent repair shops \$3.1 billion each year,<sup>13</sup> a figure poised to increase as car components become increasingly digital.

As the gatekeepers of vehicle parts, equipment, and data, automobile manufacturers have the power to place restrictions on the necessary tools and information for repairs, particularly as cars increasingly incorporate electronic components. This often leaves car owners with no other option than to have their vehicles serviced by official dealerships, entrenching auto manufacturers’ dominance and eliminating competition from independent repair shops.

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<sup>5</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 40, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>6</sup> CAR Coalition, “White Paper on the Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, H.R. 6570, 117th Congress,” September 2022, p. 12, <https://carcoalition.com/wp-content/uploads/2020/07/Repair-Act-white-paper-09-13-2022-1.pdf>.

<sup>7</sup> Consumer Reports, “Car Owners Favor Independent Repair Shops,” Benjamin Preston, March 20, 2024, <https://www.consumerreports.org/cars/car-repair-shops/car-repair-shop-survey-chains-dealers-independents-a1071080370/>.

<sup>8</sup> *Id.*

<sup>9</sup> CAR Coalition, “White Paper on the Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, H.R. 6570, 117th Congress,” September 2022, p. 11, <https://carcoalition.com/wp-content/uploads/2020/07/Repair-Act-white-paper-09-13-2022-1.pdf>.

<sup>10</sup> *Id.*

<sup>11</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., Securepairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, p. 15, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aaai-pretrial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aaai-pretrial_0.pdf).

<sup>12</sup> Auto Care Association, “Survey: 84% of Independent Repair Shops View Vehicle Data Access as Top Issue for Their Business,” April 10, 2024, <https://www.autocare.org/news/latest-news/details/2024/04/10/survey-84-of-independent-repair-shops-view-vehicle-data-access-as-top-issue-for-their-business>.

<sup>13</sup> *Id.*

## Automakers' Cybersecurity Concerns Are Specious

Auto manufacturers have routinely raised cybersecurity risks as an excuse for opposing right-to-repair, attempting to distract consumers from the fact that “vehicle repair and maintenance services from independent repair shops keeps the cost of service and repair down.”<sup>14</sup> For example, the lobbying group representing automakers recently warned that the federal government should be “concerned about policy and legislative proposals (such as the REPAIR Act) that may expose onboard diagnostic systems to additional vulnerabilities from bad actors, including Foreign Adversaries.”<sup>15</sup> The head of digital policy at Europe’s similar lobbying group has said that “[o]pening the possibility for third parties to trigger safety-critical functions remotely is very concerning.”<sup>16</sup> These cybersecurity concerns are often based on speculative future risks rather than facts. A study by the Federal Trade Commission (FTC) found no evidence to back up the cybersecurity arguments made by manufacturers to limit repair opportunities by independent repair shops, and “no empirical evidence to suggest that independent repair shops are more or less likely than authorized repair shops to compromise or misuse customer data.”<sup>17</sup> According to the FTC, allowing independent repair shops to access diagnostic software and firmware patches, far from jeopardizing security, is consistent with the FTC’s data security guidance.<sup>18</sup> Outside the United States, where automakers have attempted similar strategies to shut down independent repair, a German court just last month ruled against Mercedes-Benz that automakers should not use cybersecurity as an excuse to restrict data access to suppliers.<sup>19</sup>

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<sup>24</sup> *Id.*

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<sup>26</sup> Boston Herald, “Markey calls for auto data probe,” July 28, 2024, <https://www.bostonherald.com/2024/07/28/markey-calls-for-auto-data-probe/>.

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driving patterns obtained by the data brokers was then sold to and used by auto insurers to vastly increase insurance prices.<sup>28</sup>

At least 37 car companies have been identified as a part of the connected vehicle data industry that seeks to monetize such data,<sup>29</sup> but as vehicles become increasingly connected, automotive companies stand to gain greater incentive for collecting and monetizing this data themselves. It is estimated that there will be around 470 million connected vehicles on highways around the world by 2025 and each of these connected vehicles will produce roughly 25 gigabytes of data per hour.<sup>30</sup> This data is expected to be worth up to \$800 billion by 2030.<sup>31</sup> As of 2022, data brokers such as LexisNexis have shared that they have access to “real-world driving behavior” from over 10 million vehicles.<sup>32</sup> Those data brokers’ own marketing materials underscore the sensitive nature of the data that automakers sell, including:

- Last parking location,
- Current geolocation,
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- Data on the last trip taken,
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- Crashes,
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- Use of seatbelts.<sup>33</sup>

Despite the enormous amounts of data collection by car companies from consumers, few of these manufacturers comply with basic security standards.<sup>34</sup>

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<sup>28</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March, 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>29</sup> The Markup, “Who Is Collecting Data from Your Car?,” Jon Keegan and Alfred Ng, July 27, 2022, <https://themarkup.org/the-breakdown/2022/07/27/who-is-collecting-data-from-your-car>.

<sup>30</sup> Netscribes, “The road to profitability: Why automotive data monetization is the next big thing,” Kanika Shukla, March 24, 2023, <https://www.netscribes.com/the-road-to-profitability-why-automotive-data-monetization-is-the-next-big-thing/>.

<sup>31</sup> Capgemini, “Monetizing Vehicle Data: How to fulfill the promise,” September 2020, p. 5, [https://s3.documentcloud.org/documents/22120767/capgeminiinvent\\_vehicledatamonetization\\_pov\\_sep2020.pdf](https://s3.documentcloud.org/documents/22120767/capgeminiinvent_vehicledatamonetization_pov_sep2020.pdf).

<sup>32</sup> LexisNexis Risk Solutions, “LexisNexis Telematics Exchange Celebrates 5-Year Anniversary,” press release, June 28, 2022, <https://risk.lexisnexis.com/about-us/press-room/press-release/20220628-telematics-exchange-5-year-anniversary>.

<sup>33</sup> Caruso Dataplace, “Developer Catalog,” <https://dev.caruso-dataplace.com/api/consumer/page/data-catalog/>; High Mobility, “Auto API Data Categories,” <https://www.high-mobility.com/car-data>.

<sup>34</sup> Mozilla, “It’s Official: Cars Are the Worst Product Category We Have Ever Reviewed for Privacy,” Jen Caltrider, Misha Rykov, and Zoë MacDonald, September 6, 2023, <https://foundation.mozilla.org/en/privacynotincluded/articles/its-official-cars-are-the-worst-product-category-we-have-ever-reviewed-for-privacy/>.

## Conclusion

Right-to-repair laws support consumer choice and prevent automakers from using restrictive repair laws to their financial advantage. It is clear that the motivation behind automotive companies' avoidance of complying with right-to-repair laws is not due to a concern for consumer security or privacy, but instead a hypocritical, profit-driven reaction. This kind of anti-consumer, anti-repair practice must come to an end in all industries. Americans have a right to fix their own technology, farm equipment, and automobiles.

We urge Subaru to comply with all right-to-repair laws while protecting consumer privacy interests. We also ask that Subaru respond to the following questions by January 6, 2025:

1. How much in direct income and other benefits did Subaru receive from car repairs in each of the previous five years, including income derived from repairs at dealerships, authorized dealer networks, and other affiliated locations?
2. What user and driving data do your company's cars collect, and how frequently is this data collected?
3. How do you seek consent from drivers for data sharing?
  - a. What steps must car owners take to access their own data?
4. What user data does your company share with third parties? Please list the third parties with which your company shares data.
5. For each of the third parties listed in Question 4, please detail the specific data that is shared, and the revenue obtained from each data sharing agreement.
6. How does your company protect the data it collects from users?
7. What measures does your company take to protect user privacy, if any?
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8. Please list all data breaches or other cybersecurity incidents involving your company or your company's vehicles in the last five years.
9. How much has your company spent lobbying against right-to-repair measures?
10. Please list the organizations or associations your company is part of that lobby against right-to-repair measures.

Sincerely,



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Elizabeth Warren  
United States Senator



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Josh Hawley  
United States Senator



*Jeffrey A. Merkley*

Jeffrey A. Merkley  
United States Senator

# United States Senate

WASHINGTON, DC 20510

December 19, 2024

Elon Musk  
CEO  
Tesla, Inc.  
1 Tesla Road  
Austin, TX 78725

Dear Mr. Musk:

We write regarding our concerns about automakers' fierce opposition to nationwide efforts to secure car owners' right to repair the vehicles they own in the way they choose. We are particularly disturbed by the automakers' hypocrisy with regard to data sharing. The industry has raised concerns about data sharing with independent repair shops to justify opposing right-to-repair, while earning profits from sharing large amounts of personal data with insurance companies.

"Right-to-repair," which refers to consumers' ability to decide who repairs their products,<sup>1</sup> is a foundational component of consumer choice. Robust right-to-repair protections are important to consumers, businesses, and the American agricultural industry. Passage of right-to-repair laws across the country reflects overwhelming consumer preference for right-to-repair protections, despite outsized spending by automakers and other original equipment manufacturers in opposition.<sup>2</sup> More than half of Americans say they do not believe consumers have enough choices when it comes to choosing where they will get something repaired, and 84% say they support a policy that would require manufacturers to make repair information and parts more accessible.<sup>3</sup>

Consumer protection experts have echoed these sentiments, finding that repair restrictions harm consumers by raising prices and preventing timely repairs.<sup>4</sup> Empirical research indicates that car manufacturers have been "leveraging new technological advantages gained through telematics from the cars and software partnerships with large industry players to eliminate parts

<sup>1</sup> U.S. Government Accountability Office, "Vehicle Repair: Information on Evolving Vehicle Technologies and Consumer Choice," March 21, 2024, p. 1, <https://www.gao.gov/assets/d24106633.pdf>.

<sup>2</sup> See, e.g., CBS News, "Massachusetts Voters Approve Ballot Question 1 Expanding 'Right To Repair' Law," November 3, 2020, <https://www.cbsnews.com/boston/news/election-2020-results-massachusetts-question-1-right-to-repair/>; FOX 2 News, "Missouri among states eyeing 'right to repair' laws for farm equipment," February 13, 2023, <https://fox2now.com/news/missouri/11-states-eye-right-to-repair-laws-for-farmequipment/>; PIRG, "Right to Repair," <https://pirg.org/campaigns/right-to-repair/> (listing legislation passed in dozens of states to protect right-to-repair in farm equipment, consumer devices, power wheelchairs, home appliances, and other sectors).

<sup>3</sup> Consumer Reports, "Consumer Reports Survey Finds Americans Overwhelmingly Support the Right to Repair," press release, February 28, 2022, [https://advocacy.consumerreports.org/press\\_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/](https://advocacy.consumerreports.org/press_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/).

<sup>4</sup> Federal Trade Commission, "Nixing the Fix: An FTC Report to Congress on Repair Restrictions," May 2021, p. 38, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

competition.”<sup>5</sup> Currently, consumers get approximately 70 percent of car parts and services from independent providers, and 30 percent from dealerships.<sup>6</sup> This is because repairs by independent providers are cheaper: customers give independent repair shops good ratings on price (as well as overall satisfaction), while nearly all dealerships receive the worst possible rating for price.<sup>7</sup> Overall, car owners appreciate independent repair shops for their “trustworthiness, reasonable prices, knowledgeable mechanics, and good reputation.”<sup>8</sup> The ability for car owners to repair their vehicles without breaking the bank is particularly important given that Americans buy twice as many used cars as new ones.<sup>9</sup>

By barring the potential use of non-manufacturer replacement parts, such as salvaged parts at independent repair shops, auto manufacturers are able effectively to create product monopolies and inflate repair prices.<sup>10</sup> As this limits options for repair, consumers face a slow and inconvenient process, often having to “surrender their cars . . . for days or weeks to get them fixed.”<sup>11</sup>

Right-to-repair is crucial for independent repair shops and local economies. More than 80 percent of independent repair shops view data access as “the top issue for their business,” surpassing considerations like inflation and technician recruitment and retention, and more than 60 percent “experienced difficulty making routine repairs on a daily or weekly basis” because of automakers’ restrictions.<sup>12</sup> Restrictions currently cost independent repair shops \$3.1 billion each year,<sup>13</sup> a figure poised to increase as car components become increasingly digital.

As the gatekeepers of vehicle parts, equipment, and data, automobile manufacturers have the power to place restrictions on the necessary tools and information for repairs, particularly as cars increasingly incorporate electronic components. This often leaves car owners with no other option than to have their vehicles serviced by official dealerships, entrenching auto manufacturers’ dominance and eliminating competition from independent repair shops.

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<sup>5</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 40, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>6</sup> CAR Coalition, “White Paper on the Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, H.R. 6570, 117th Congress,” September 2022, p. 12, <https://carcoalition.com/wp-content/uploads/2020/07/Repair-Act-white-paper-09-13-2022-1.pdf>.

<sup>7</sup> Consumer Reports, “Car Owners Favor Independent Repair Shops,” Benjamin Preston, March 20, 2024, <https://www.consumerreports.org/cars/car-repair-shops/car-repair-shop-survey-chains-dealers-independents-a1071080370/>.

<sup>8</sup> *Id.*

<sup>9</sup> CAR Coalition, “White Paper on the Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, H.R. 6570, 117th Congress,” September 2022, p. 11, <https://carcoalition.com/wp-content/uploads/2020/07/Repair-Act-white-paper-09-13-2022-1.pdf>.

<sup>10</sup> *Id.*

<sup>11</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., Securepairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, p. 15, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aaai-pretrial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aaai-pretrial_0.pdf).

<sup>12</sup> Auto Care Association, “Survey: 84% of Independent Repair Shops View Vehicle Data Access as Top Issue for Their Business,” April 10, 2024, <https://www.autocare.org/news/latest-news/details/2024/04/10/survey-84-of-independent-repair-shops-view-vehicle-data-access-as-top-issue-for-their-business>.

<sup>13</sup> *Id.*

## Automakers' Cybersecurity Concerns Are Specious

Auto manufacturers have routinely raised cybersecurity risks as an excuse for opposing right-to-repair, attempting to distract consumers from the fact that “vehicle repair and maintenance services from independent repair shops keeps the cost of service and repair down.”<sup>14</sup> For example, the lobbying group representing automakers recently warned that the federal government should be “concerned about policy and legislative proposals (such as the REPAIR Act) that may expose onboard diagnostic systems to additional vulnerabilities from bad actors, including Foreign Adversaries.”<sup>15</sup> The head of digital policy at Europe’s similar lobbying group has said that “[o]pening the possibility for third parties to trigger safety-critical functions remotely is very concerning.”<sup>16</sup> These cybersecurity concerns are often based on speculative future risks rather than facts. A study by the Federal Trade Commission (FTC) found no evidence to back up the cybersecurity arguments made by manufacturers to limit repair opportunities by independent repair shops, and “no empirical evidence to suggest that independent repair shops are more or less likely than authorized repair shops to compromise or misuse customer data.”<sup>17</sup> According to the FTC, allowing independent repair shops to access diagnostic software and firmware patches, far from jeopardizing security, is consistent with the FTC’s data security guidance.<sup>18</sup> Outside the United States, where automakers have attempted similar strategies to shut down independent repair, a German court just last month ruled against Mercedes-Benz that automakers should not use cybersecurity as an excuse to restrict data access to suppliers.<sup>19</sup>

Cybersecurity experts have forcefully pushed against manufacturers’ fearmongering. Security expert Paul Roberts testified before the House Judiciary Committee in July 2023 that “information covered by right to repair laws is not sensitive or protected, as evidenced by the fact that manufacturers distribute it widely to hundreds, thousands or tens of thousands of repair professionals working on behalf of their authorized providers.”<sup>20</sup> The vast majority of attacks on

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<sup>14</sup> VICE, “Auto Industry Has Spent \$25 Million Lobbying Against right-to-repair Ballot Measure,” Matthew Gault, September 29, 2020, <https://www.vice.com/en/article/z3ead3/auto-industry-has-spent-dollar25-million-lobbying-against-right-to-repair-ballot-measure>.

<sup>15</sup> Alliance for Automotive Innovation, “Comments to BIS on Securing the ICTS Supply Chain for Connected Vehicles,” April 30, 2024, p. 10, <https://www.autosinnovate.org/posts/agency-comments/comments-bis-connected-car-anprm>.

<sup>16</sup> Wall Street Journal, “Automakers and Suppliers Spar Over Car Data,” Catherine Stupp, October 24, 2023, <https://www.wsj.com/articles/automakers-and-suppliers-spar-over-car-data-a5e7dbaf>.

<sup>17</sup> Federal Trade Commission, “Prepared Statement of the Federal Trade Commission on Repair Restrictions Before The Judiciary Committee California State Senate,” April 11, 2023, p. 3, [https://www.ftc.gov/system/files/ftc\\_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf](https://www.ftc.gov/system/files/ftc_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf); Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, pp. 24-36, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>18</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 31, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>19</sup> Wall Street Journal, “Courts Side With Auto Suppliers in Clash With Carmakers Over Vehicle Data Access,” Catherine Stupp, October 24, 2024, <https://www.wsj.com/articles/courts-side-with-auto-suppliers-in-clash-with-carmakers-over-vehicle-data-access-96871fdd>.

<sup>20</sup> House Judiciary Committee, “Testimony of Paul Roberts, Founder of Secure Repairs, before the House Judiciary Committee, Subcommittee on Courts, Intellectual Property, and the Internet,” July 14, 2023, p. 2,

connected devices, including cars, “exploit software vulnerabilities in embedded software produced, managed and released by the manufacturer,” meaning that “it is the poor quality of deployed software and the poor state of device security – not the availability of diagnostic and repair tools and information – that fuels cyber attacks on connected devices.”<sup>21</sup>

Auto manufacturers’ opposition to right-to-repair on cybersecurity grounds is at odds with cybersecurity best practices, which have abandoned the practice of “security through obscurity,” recognizing that “secrecy isn’t the same as security.”<sup>22</sup> A cybersecurity approach premised on exclusive access to data by car manufacturers is an example of security through obscurity, which “allows flaws and insecurity in technology to flourish by decreasing the likelihood that they will be identified and repaired, while increasing the likelihood that flaws can and will be exploited by evil-doers.”<sup>23</sup> Further, examples of cyberattacks on moving vehicles that have been utilized to scare policymakers into embracing car manufacturers’ positions have in fact historically “not depended on access to telematics data” of the kind at issue in right-to-repair proposals.<sup>24</sup> Car manufacturers should not hide behind a false dichotomy of cybersecurity and consumer choice in order to avoid their legal obligations to facilitate independent vehicle repair.

### **Auto Manufacturers Share Sensitive Consumer Data with Insurance Companies and Other Third Parties**

Automakers’ own data practices show that their claims around cybersecurity derive from ulterior motives. While carmakers have been fighting tooth and nail against right-to-repair laws that would require them to share vehicle data with consumers and independent repairers, they have simultaneously been sharing large amounts of sensitive consumer data with insurance companies and other third parties for profit — often without clear consumer consent. In fact, some car companies use the threat of increased insurance costs to push consumers to opt into safe driving features, and then use those features to collect and sell the user data. A 2024 investigation revealed that automakers were selling user driving data, such as acceleration and brake patterns, to data brokers.<sup>25</sup> Lawmakers have specifically called out General Motors, Hyundai, and Honda for using deceptive tactics to collect customers’ driving data and then sell it to data brokers.<sup>26</sup> Through these practices, Hyundai was able to make over \$1 million.<sup>27</sup> This information on

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<https://judiciary.house.gov/sites/evo-subsites/repUBLICANS-judiciary.house.gov/files/evo-media-document/roberts-testimony-sm.pdf>.

<sup>21</sup> *Id.*, p. 3.

<sup>22</sup> Forbes, “Tilting Against Repair Law, NHTSA Endorses Security Through Obscurity,” Paul F. Roberts, June 21, 2023, <https://www.forbes.com/sites/paulfroberts/2023/06/21/tilting-against-repair-law-nhtsa-endorses-security-through-obscurity/?sh=1510e7e3428b>.

<sup>23</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., SecureRepairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, pp. 10-11, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aa-pretial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aa-pretial_0.pdf) (internal citations omitted).

<sup>24</sup> *Id.*

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Despite the enormous amounts of data collection by car companies from consumers, few of these manufacturers comply with basic security standards.<sup>34</sup>

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<sup>32</sup> LexisNexis Risk Solutions, “LexisNexis Telematics Exchange Celebrates 5-Year Anniversary,” press release, June 28, 2022, <https://risk.lexisnexis.com/about-us/press-room/press-release/20220628-telematics-exchange-5-year-anniversary>.

<sup>33</sup> Caruso Dataplace, “Developer Catalog,” <https://dev.caruso-dataplace.com/api/consumer/page/data-catalog/>; High Mobility, “Auto API Data Categories,” <https://www.high-mobility.com/car-data>.

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## Conclusion

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We urge Tesla to comply with all right-to-repair laws while protecting consumer privacy interests. We also ask that Tesla respond to the following questions by January 6, 2025:

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Sincerely,



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Elizabeth Warren  
United States Senator



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Josh Hawley  
United States Senator

*Jeffrey A. Merkley*

Jeffrey A. Merkley  
United States Senator



# United States Senate

WASHINGTON, DC 20510

December 19, 2024

Tetsuo “Ted” Ogawa  
President and CEO  
Toyota Motor North America, Inc.  
P.O. Box 259001  
Plano, TX 75025

Dear Mr. Ogawa:

We write regarding our concerns about automakers’ fierce opposition to nationwide efforts to secure car owners’ right to repair the vehicles they own in the way they choose. We are particularly disturbed by the automakers’ hypocrisy with regard to data sharing. The industry has raised concerns about data sharing with independent repair shops to justify opposing right-to-repair, while earning profits from sharing large amounts of personal data with insurance companies.

“Right-to-repair,” which refers to consumers’ ability to decide who repairs their products,<sup>1</sup> is a foundational component of consumer choice. Robust right-to-repair protections are important to consumers, businesses, and the American agricultural industry. Passage of right-to-repair laws across the country reflects overwhelming consumer preference for right-to-repair protections, despite outsized spending by automakers and other original equipment manufacturers in opposition.<sup>2</sup> More than half of Americans say they do not believe consumers have enough choices when it comes to choosing where they will get something repaired, and 84% say they support a policy that would require manufacturers to make repair information and parts more accessible.<sup>3</sup>

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<sup>1</sup> U.S. Government Accountability Office, “Vehicle Repair: Information on Evolving Vehicle Technologies and Consumer Choice,” March 21, 2024, p. 1, <https://www.gao.gov/assets/d24106633.pdf>.

<sup>2</sup> See, e.g., CBS News, “Massachusetts Voters Approve Ballot Question 1 Expanding ‘Right To Repair’ Law,” November 3, 2020, <https://www.cbsnews.com/boston/news/election-2020-results-massachusetts-question-1-right-to-repair/>; FOX 2 News, “Missouri among states eyeing ‘right to repair’ laws for farm equipment,” February 13, 2023, <https://fox2now.com/news/missouri/11-states-eye-right-to-repair-laws-for-farmequipment/>; PIRG, “Right to Repair,” <https://pirg.org/campaigns/right-to-repair/> (listing legislation passed in dozens of states to protect right-to-repair in farm equipment, consumer devices, power wheelchairs, home appliances, and other sectors).

<sup>3</sup> Consumer Reports, “Consumer Reports Survey Finds Americans Overwhelmingly Support the Right to Repair,” press release, February 28, 2022, [https://advocacy.consumerreports.org/press\\_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/](https://advocacy.consumerreports.org/press_release/consumer-reports-survey-finds-americans-overwhelmingly-support-the-right-to-repair/).

<sup>4</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 38, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

competition.”<sup>5</sup> Currently, consumers get approximately 70 percent of car parts and services from independent providers, and 30 percent from dealerships.<sup>6</sup> This is because repairs by independent providers are cheaper: customers give independent repair shops good ratings on price (as well as overall satisfaction), while nearly all dealerships receive the worst possible rating for price.<sup>7</sup> Overall, car owners appreciate independent repair shops for their “trustworthiness, reasonable prices, knowledgeable mechanics, and good reputation.”<sup>8</sup> The ability for car owners to repair their vehicles without breaking the bank is particularly important given that Americans buy twice as many used cars as new ones.<sup>9</sup>

By barring the potential use of non-manufacturer replacement parts, such as salvaged parts at independent repair shops, auto manufacturers are able effectively to create product monopolies and inflate repair prices.<sup>10</sup> As this limits options for repair, consumers face a slow and inconvenient process, often having to “surrender their cars . . . for days or weeks to get them fixed.”<sup>11</sup>

Right-to-repair is crucial for independent repair shops and local economies. More than 80 percent of independent repair shops view data access as “the top issue for their business,” surpassing considerations like inflation and technician recruitment and retention, and more than 60 percent “experienced difficulty making routine repairs on a daily or weekly basis” because of automakers’ restrictions.<sup>12</sup> Restrictions currently cost independent repair shops \$3.1 billion each year,<sup>13</sup> a figure poised to increase as car components become increasingly digital.

As the gatekeepers of vehicle parts, equipment, and data, automobile manufacturers have the power to place restrictions on the necessary tools and information for repairs, particularly as cars increasingly incorporate electronic components. This often leaves car owners with no other option than to have their vehicles serviced by official dealerships, entrenching auto manufacturers’ dominance and eliminating competition from independent repair shops.

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<sup>5</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 40, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

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<sup>8</sup> *Id.*

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<sup>10</sup> *Id.*

<sup>11</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., Securepairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, p. 15, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aaai-pretrial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aaai-pretrial_0.pdf).

<sup>12</sup> Auto Care Association, “Survey: 84% of Independent Repair Shops View Vehicle Data Access as Top Issue for Their Business,” April 10, 2024, <https://www.autocare.org/news/latest-news/details/2024/04/10/survey-84-of-independent-repair-shops-view-vehicle-data-access-as-top-issue-for-their-business>.

<sup>13</sup> *Id.*

## Automakers' Cybersecurity Concerns Are Specious

Auto manufacturers have routinely raised cybersecurity risks as an excuse for opposing right-to-repair, attempting to distract consumers from the fact that “vehicle repair and maintenance services from independent repair shops keeps the cost of service and repair down.”<sup>14</sup> For example, the lobbying group representing automakers recently warned that the federal government should be “concerned about policy and legislative proposals (such as the REPAIR Act) that may expose onboard diagnostic systems to additional vulnerabilities from bad actors, including Foreign Adversaries.”<sup>15</sup> The head of digital policy at Europe’s similar lobbying group has said that “[o]pening the possibility for third parties to trigger safety-critical functions remotely is very concerning.”<sup>16</sup> These cybersecurity concerns are often based on speculative future risks rather than facts. A study by the Federal Trade Commission (FTC) found no evidence to back up the cybersecurity arguments made by manufacturers to limit repair opportunities by independent repair shops, and “no empirical evidence to suggest that independent repair shops are more or less likely than authorized repair shops to compromise or misuse customer data.”<sup>17</sup> According to the FTC, allowing independent repair shops to access diagnostic software and firmware patches, far from jeopardizing security, is consistent with the FTC’s data security guidance.<sup>18</sup> Outside the United States, where automakers have attempted similar strategies to shut down independent repair, a German court just last month ruled against Mercedes-Benz that automakers should not use cybersecurity as an excuse to restrict data access to suppliers.<sup>19</sup>

Cybersecurity experts have forcefully pushed against manufacturers’ fearmongering. Security expert Paul Roberts testified before the House Judiciary Committee in July 2023 that “information covered by right to repair laws is not sensitive or protected, as evidenced by the fact that manufacturers distribute it widely to hundreds, thousands or tens of thousands of repair professionals working on behalf of their authorized providers.”<sup>20</sup> The vast majority of attacks on

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<sup>14</sup> VICE, “Auto Industry Has Spent \$25 Million Lobbying Against right-to-repair Ballot Measure,” Matthew Gault, September 29, 2020, <https://www.vice.com/en/article/z3ead3/auto-industry-has-spent-dollar25-million-lobbying-against-right-to-repair-ballot-measure>.

<sup>15</sup> Alliance for Automotive Innovation, “Comments to BIS on Securing the ICTS Supply Chain for Connected Vehicles,” April 30, 2024, p. 10, <https://www.autosinnovate.org/posts/agency-comments/comments-bis-connected-car-anprm>.

<sup>16</sup> Wall Street Journal, “Automakers and Suppliers Spar Over Car Data,” Catherine Stupp, October 24, 2023, <https://www.wsj.com/articles/automakers-and-suppliers-spar-over-car-data-a5e7dbaf>.

<sup>17</sup> Federal Trade Commission, “Prepared Statement of the Federal Trade Commission on Repair Restrictions Before The Judiciary Committee California State Senate,” April 11, 2023, p. 3, [https://www.ftc.gov/system/files/ftc\\_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf](https://www.ftc.gov/system/files/ftc_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf); Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, pp. 24-36, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>18</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 31, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>19</sup> Wall Street Journal, “Courts Side With Auto Suppliers in Clash With Carmakers Over Vehicle Data Access,” Catherine Stupp, October 24, 2024, <https://www.wsj.com/articles/courts-side-with-auto-suppliers-in-clash-with-carmakers-over-vehicle-data-access-96871fdd>.

<sup>20</sup> House Judiciary Committee, “Testimony of Paul Roberts, Founder of Secure Repairs, before the House Judiciary Committee, Subcommittee on Courts, Intellectual Property, and the Internet,” July 14, 2023, p. 2,

connected devices, including cars, “exploit software vulnerabilities in embedded software produced, managed and released by the manufacturer,” meaning that “it is the poor quality of deployed software and the poor state of device security – not the availability of diagnostic and repair tools and information – that fuels cyber attacks on connected devices.”<sup>21</sup>

Auto manufacturers’ opposition to right-to-repair on cybersecurity grounds is at odds with cybersecurity best practices, which have abandoned the practice of “security through obscurity,” recognizing that “secrecy isn’t the same as security.”<sup>22</sup> A cybersecurity approach premised on exclusive access to data by car manufacturers is an example of security through obscurity, which “allows flaws and insecurity in technology to flourish by decreasing the likelihood that they will be identified and repaired, while increasing the likelihood that flaws can and will be exploited by evil-doers.”<sup>23</sup> Further, examples of cyberattacks on moving vehicles that have been utilized to scare policymakers into embracing car manufacturers’ positions have in fact historically “not depended on access to telematics data” of the kind at issue in right-to-repair proposals.<sup>24</sup> Car manufacturers should not hide behind a false dichotomy of cybersecurity and consumer choice in order to avoid their legal obligations to facilitate independent vehicle repair.

### **Auto Manufacturers Share Sensitive Consumer Data with Insurance Companies and Other Third Parties**

Automakers’ own data practices show that their claims around cybersecurity derive from ulterior motives. While carmakers have been fighting tooth and nail against right-to-repair laws that would require them to share vehicle data with consumers and independent repairers, they have simultaneously been sharing large amounts of sensitive consumer data with insurance companies and other third parties for profit — often without clear consumer consent. In fact, some car companies use the threat of increased insurance costs to push consumers to opt into safe driving features, and then use those features to collect and sell the user data. A 2024 investigation revealed that automakers were selling user driving data, such as acceleration and brake patterns, to data brokers.<sup>25</sup> Lawmakers have specifically called out General Motors, Hyundai, and Honda for using deceptive tactics to collect customers’ driving data and then sell it to data brokers.<sup>26</sup> Through these practices, Hyundai was able to make over \$1 million.<sup>27</sup> This information on

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<https://judiciary.house.gov/sites/evo-subsites/repUBLICANS-judiciary.house.gov/files/evo-media-document/roberts-testimony-sm.pdf>.

<sup>21</sup> *Id.*, p. 3.

<sup>22</sup> Forbes, “Tilting Against Repair Law, NHTSA Endorses Security Through Obscurity,” Paul F. Roberts, June 21, 2023, <https://www.forbes.com/sites/paulfroberts/2023/06/21/tilting-against-repair-law-nhtsa-endorses-security-through-obscurity/?sh=1510e7e3428b>.

<sup>23</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., SecureRepairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, pp. 10-11, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aa-pretial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aa-pretial_0.pdf) (internal citations omitted).

<sup>24</sup> *Id.*

<sup>25</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>26</sup> Boston Herald, “Markey calls for auto data probe,” July 28, 2024, <https://www.bostonherald.com/2024/07/28/markey-calls-for-auto-data-probe/>.

<sup>27</sup> *Id.*

driving patterns obtained by the data brokers was then sold to and used by auto insurers to vastly increase insurance prices.<sup>28</sup>

At least 37 car companies have been identified as a part of the connected vehicle data industry that seeks to monetize such data,<sup>29</sup> but as vehicles become increasingly connected, automotive companies stand to gain greater incentive for collecting and monetizing this data themselves. It is estimated that there will be around 470 million connected vehicles on highways around the world by 2025 and each of these connected vehicles will produce roughly 25 gigabytes of data per hour.<sup>30</sup> This data is expected to be worth up to \$800 billion by 2030.<sup>31</sup> As of 2022, data brokers such as LexisNexis have shared that they have access to “real-world driving behavior” from over 10 million vehicles.<sup>32</sup> Those data brokers’ own marketing materials underscore the sensitive nature of the data that automakers sell, including:

- Last parking location,
- Current geolocation,
- Lock status,
- Ignition status,
- Data on the last trip taken,
- Mileage,
- Vehicle speed,
- Accident events,
- Crashes,
- Odometer status, and
- Use of seatbelts.<sup>33</sup>

Despite the enormous amounts of data collection by car companies from consumers, few of these manufacturers comply with basic security standards.<sup>34</sup>

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<sup>28</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March, 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>29</sup> The Markup, “Who Is Collecting Data from Your Car?,” Jon Keegan and Alfred Ng, July 27, 2022, <https://themarkup.org/the-breakdown/2022/07/27/who-is-collecting-data-from-your-car>.

<sup>30</sup> Netscribes, “The road to profitability: Why automotive data monetization is the next big thing,” Kanika Shukla, March 24, 2023, <https://www.netscribes.com/the-road-to-profitability-why-automotive-data-monetization-is-the-next-big-thing/>.

<sup>31</sup> Capgemini, “Monetizing Vehicle Data: How to fulfill the promise,” September 2020, p. 5, [https://s3.documentcloud.org/documents/22120767/capgeminiinvent\\_vehicledatamonetization\\_pov\\_sep2020.pdf](https://s3.documentcloud.org/documents/22120767/capgeminiinvent_vehicledatamonetization_pov_sep2020.pdf).

<sup>32</sup> LexisNexis Risk Solutions, “LexisNexis Telematics Exchange Celebrates 5-Year Anniversary,” press release, June 28, 2022, <https://risk.lexisnexis.com/about-us/press-room/press-release/20220628-telematics-exchange-5-year-anniversary>.

<sup>33</sup> Caruso Dataplace, “Developer Catalog,” <https://dev.caruso-dataplace.com/api/consumer/page/data-catalog/>; High Mobility, “Auto API Data Categories,” <https://www.high-mobility.com/car-data>.

<sup>34</sup> Mozilla, “It’s Official: Cars Are the Worst Product Category We Have Ever Reviewed for Privacy,” Jen Caltrider, Misha Rykov, and Zoë MacDonald, September 6, 2023, <https://foundation.mozilla.org/en/privacynotincluded/articles/its-official-cars-are-the-worst-product-category-we-have-ever-reviewed-for-privacy/>.

## Conclusion

Right-to-repair laws support consumer choice and prevent automakers from using restrictive repair laws to their financial advantage. It is clear that the motivation behind automotive companies' avoidance of complying with right-to-repair laws is not due to a concern for consumer security or privacy, but instead a hypocritical, profit-driven reaction. This kind of anti-consumer, anti-repair practice must come to an end in all industries. Americans have a right to fix their own technology, farm equipment, and automobiles.

We urge Toyota to comply with all right-to-repair laws while protecting consumer privacy interests. We also ask that Toyota respond to the following questions by January 6, 2025:

1. How much in direct income and other benefits did Toyota receive from car repairs in each of the previous five years, including income derived from repairs at dealerships, authorized dealer networks, and other affiliated locations?
2. What user and driving data do your company's cars collect, and how frequently is this data collected?
3. How do you seek consent from drivers for data sharing?
  - a. What steps must car owners take to access their own data?
4. What user data does your company share with third parties? Please list the third parties with which your company shares data.
5. For each of the third parties listed in Question 4, please detail the specific data that is shared, and the revenue obtained from each data sharing agreement.
6. How does your company protect the data it collects from users?
7. What measures does your company take to protect user privacy, if any?
  - a. If your company de-identifies data it collects from users, how do you protect against the data being re-identified?
8. Please list all data breaches or other cybersecurity incidents involving your company or your company's vehicles in the last five years.
9. How much has your company spent lobbying against right-to-repair measures?
10. Please list the organizations or associations your company is part of that lobby against right-to-repair measures.

Sincerely,



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Elizabeth Warren  
United States Senator



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Josh Hawley  
United States Senator

*Jeffrey A. Merkley*

Jeffrey A. Merkley  
United States Senator

# United States Senate

WASHINGTON, DC 20510

December 19, 2024

Kjell Gruner  
President and CEO  
Volkswagen Group of America, Inc.  
1950 Opportunity Way  
Reston, VA 20190

Dear Mr. Gruner:

We write regarding our concerns about automakers' fierce opposition to nationwide efforts to secure car owners' right to repair the vehicles they own in the way they choose. We are particularly disturbed by the automakers' hypocrisy with regard to data sharing. The industry has raised concerns about data sharing with independent repair shops to justify opposing right-to-repair, while earning profits from sharing large amounts of personal data with insurance companies.

"Right-to-repair," which refers to consumers' ability to decide who repairs their products,<sup>1</sup> is a foundational component of consumer choice. Robust right-to-repair protections are important to consumers, businesses, and the American agricultural industry. Passage of right-to-repair laws across the country reflects overwhelming consumer preference for right-to-repair protections, despite outsized spending by automakers and other original equipment manufacturers in opposition.<sup>2</sup> More than half of Americans say they do not believe consumers have enough choices when it comes to choosing where they will get something repaired, and 84% say they support a policy that would require manufacturers to make repair information and parts more accessible.<sup>3</sup>

Consumer protection experts have echoed these sentiments, finding that repair restrictions harm consumers by raising prices and preventing timely repairs.<sup>4</sup> Empirical research indicates that car manufacturers have been "leveraging new technological advantages gained through telematics

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<sup>1</sup> U.S. Government Accountability Office, "Vehicle Repair: Information on Evolving Vehicle Technologies and Consumer Choice," March 21, 2024, p. 1, <https://www.gao.gov/assets/d24106633.pdf>.

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from the cars and software partnerships with large industry players to eliminate parts competition.”<sup>5</sup> Currently, consumers get approximately 70 percent of car parts and services from independent providers, and 30 percent from dealerships.<sup>6</sup> This is because repairs by independent providers are cheaper: customers give independent repair shops good ratings on price (as well as overall satisfaction), while nearly all dealerships receive the worst possible rating for price.<sup>7</sup> Overall, car owners appreciate independent repair shops for their “trustworthiness, reasonable prices, knowledgeable mechanics, and good reputation.”<sup>8</sup> The ability for car owners to repair their vehicles without breaking the bank is particularly important given that Americans buy twice as many used cars as new ones.<sup>9</sup>

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Cybersecurity experts have forcefully pushed against manufacturers’ fearmongering. Security expert Paul Roberts testified before the House Judiciary Committee in July 2023 that “information covered by right to repair laws is not sensitive or protected, as evidenced by the fact that manufacturers distribute it widely to hundreds, thousands or tens of thousands of repair professionals working on behalf of their authorized providers.”<sup>20</sup> The vast majority of attacks on connected devices, including cars, “exploit software vulnerabilities in embedded software

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<sup>14</sup> VICE, “Auto Industry Has Spent \$25 Million Lobbying Against right-to-repair Ballot Measure,” Matthew Gault, September 29, 2020, <https://www.vice.com/en/article/z3ead3/auto-industry-has-spent-dollar25-million-lobbying-against-right-to-repair-ballot-measure>.

<sup>15</sup> Alliance for Automotive Innovation, “Comments to BIS on Securing the ICTS Supply Chain for Connected Vehicles,” April 30, 2024, p. 10, <https://www.autosinnovate.org/posts/agency-comments/comments-bis-connected-car-anprm>.

<sup>16</sup> Wall Street Journal, “Automakers and Suppliers Spar Over Car Data,” Catherine Stupp, October 24, 2023, <https://www.wsj.com/articles/automakers-and-suppliers-spar-over-car-data-a5e7dbaf>.

<sup>17</sup> Federal Trade Commission, “Prepared Statement of the Federal Trade Commission on Repair Restrictions Before The Judiciary Committee California State Senate,” April 11, 2023, p. 3, [https://www.ftc.gov/system/files/ftc\\_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf](https://www.ftc.gov/system/files/ftc_gov/pdf/P194400-Nixing-the-Fix-California-Senate-Judiciary-Committee-Testimony.pdf); Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, pp. 24-36, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>18</sup> Federal Trade Commission, “Nixing the Fix: An FTC Report to Congress on Repair Restrictions,” May 2021, p. 31, [https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing\\_the\\_fix\\_report\\_final\\_5521\\_630pm-508\\_002.pdf](https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf).

<sup>19</sup> Wall Street Journal, “Courts Side With Auto Suppliers in Clash With Carmakers Over Vehicle Data Access,” Catherine Stupp, October 24, 2024, <https://www.wsj.com/articles/courts-side-with-auto-suppliers-in-clash-with-carmakers-over-vehicle-data-access-96871fdd>.

produced, managed and released by the manufacturer,” meaning that “it is the poor quality of deployed software and the poor state of device security – not the availability of diagnostic and repair tools and information – that fuels cyber attacks on connected devices.”<sup>21</sup>

Auto manufacturers’ opposition to right-to-repair on cybersecurity grounds is at odds with cybersecurity best practices, which have abandoned the practice of “security through obscurity,” recognizing that “secrecy isn’t the same as security.”<sup>22</sup> A cybersecurity approach premised on exclusive access to data by car manufacturers is an example of security through obscurity, which “allows flaws and insecurity in technology to flourish by decreasing the likelihood that they will be identified and repaired, while increasing the likelihood that flaws can and will be exploited by evil-doers.”<sup>23</sup> Further, examples of cyberattacks on moving vehicles that have been utilized to scare policymakers into embracing car manufacturers’ positions have in fact historically “not depended on access to telematics data” of the kind at issue in right-to-repair proposals.<sup>24</sup> Car manufacturers should not hide behind a false dichotomy of cybersecurity and consumer choice in order to avoid their legal obligations to facilitate independent vehicle repair.

### **Auto Manufacturers Share Sensitive Consumer Data with Insurance Companies and Other Third Parties**

Automakers’ own data practices show that their claims around cybersecurity derive from ulterior motives. While carmakers have been fighting tooth and nail against right-to-repair laws that would require them to share vehicle data with consumers and independent repairers, they have simultaneously been sharing large amounts of sensitive consumer data with insurance companies and other third parties for profit — often without clear consumer consent. In fact, some car companies use the threat of increased insurance costs to push consumers to opt into safe driving features, and then use those features to collect and sell the user data. A 2024 investigation revealed that automakers were selling user driving data, such as acceleration and brake patterns, to data brokers.<sup>25</sup> Lawmakers have specifically called out General Motors, Hyundai, and Honda for using deceptive tactics to collect customers’ driving data and then sell it to data brokers.<sup>26</sup> Through these practices, Hyundai was able to make over \$1 million.<sup>27</sup> This information on

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<sup>20</sup> House Judiciary Committee, “Testimony of Paul Roberts, Founder of Secure Repairs, before the House Judiciary Committee, Subcommittee on Courts, Intellectual Property, and the Internet,” July 14, 2023, p. 2, <https://judiciary.house.gov/sites/evo-subsites/republicans-judiciary.house.gov/files/evo-media-document/roberts-testimony-sm.pdf>.

<sup>21</sup> *Id.*, p. 3.

<sup>22</sup> Forbes, “Tilting Against Repair Law, NHTSA Endorses Security Through Obscurity,” Paul F. Roberts, June 21, 2023, <https://www.forbes.com/sites/paulfroberts/2023/06/21/tilting-against-repair-law-nhtsa-endorses-security-through-obscurity/?sh=1510e7e3428b>.

<sup>23</sup> Alliance for Automotive Innovation v. Maura Healey, Attorney General of the Commonwealth of Massachusetts, Case No. 1:20-cv-12090-DPW, Brief of iFixit, The Repair Association, U.S. PIRG Education Fund, Inc., Secure Repairs.org, The Electronic Frontier Foundation, and Professor Jonathan Askin as *Amici Curiae* in Support of Defendant, pp. 10-11, June 7, 2021, [https://www.eff.org/files/2021/06/08/brief-ifixit-aa-ai-pretrial\\_0.pdf](https://www.eff.org/files/2021/06/08/brief-ifixit-aa-ai-pretrial_0.pdf) (internal citations omitted).

<sup>24</sup> *Id.*

<sup>25</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>26</sup> Boston Herald, “Markey calls for auto data probe,” July 28, 2024, <https://www.bostonherald.com/2024/07/28/markey-calls-for-auto-data-probe/>.

<sup>27</sup> *Id.*

driving patterns obtained by the data brokers was then sold to and used by auto insurers to vastly increase insurance prices.<sup>28</sup>

At least 37 car companies have been identified as a part of the connected vehicle data industry that seeks to monetize such data,<sup>29</sup> but as vehicles become increasingly connected, automotive companies stand to gain greater incentive for collecting and monetizing this data themselves. It is estimated that there will be around 470 million connected vehicles on highways around the world by 2025 and each of these connected vehicles will produce roughly 25 gigabytes of data per hour.<sup>30</sup> This data is expected to be worth up to \$800 billion by 2030.<sup>31</sup> As of 2022, data brokers such as LexisNexis have shared that they have access to “real-world driving behavior” from over 10 million vehicles.<sup>32</sup> Those data brokers’ own marketing materials underscore the sensitive nature of the data that automakers sell, including:

- Last parking location,
- Current geolocation,
- Lock status,
- Ignition status,
- Data on the last trip taken,
- Mileage,
- Vehicle speed,
- Accident events,
- Crashes,
- Odometer status, and
- Use of seatbelts.<sup>33</sup>

Despite the enormous amounts of data collection by car companies from consumers, few of these manufacturers comply with basic security standards.<sup>34</sup>

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<sup>28</sup> New York Times, “Automakers Are Sharing Consumers’ Driving Behavior With Insurance Companies,” Kashmir Hill, March, 11, 2024, <https://www.nytimes.com/2024/03/11/technology/carmakers-driver-tracking-insurance.html>.

<sup>29</sup> The Markup, “Who Is Collecting Data from Your Car?,” Jon Keegan and Alfred Ng, July 27, 2022, <https://themarkup.org/the-breakdown/2022/07/27/who-is-collecting-data-from-your-car>.

<sup>30</sup> Netscribes, “The road to profitability: Why automotive data monetization is the next big thing,” Kanika Shukla, March 24, 2023, <https://www.netscribes.com/the-road-to-profitability-why-automotive-data-monetization-is-the-next-big-thing/>.

<sup>31</sup> Capgemini, “Monetizing Vehicle Data: How to fulfill the promise,” September 2020, p. 5, [https://s3.documentcloud.org/documents/22120767/capgeminiinvent\\_vehicledatamonetization\\_pov\\_sep2020.pdf](https://s3.documentcloud.org/documents/22120767/capgeminiinvent_vehicledatamonetization_pov_sep2020.pdf).

<sup>32</sup> LexisNexis Risk Solutions, “LexisNexis Telematics Exchange Celebrates 5-Year Anniversary,” press release, June 28, 2022, <https://risk.lexisnexis.com/about-us/press-room/press-release/20220628-telematics-exchange-5-year-anniversary>.

<sup>33</sup> Caruso Dataplace, “Developer Catalog,” <https://dev.caruso-dataplace.com/api/consumer/page/data-catalog/>; High Mobility, “Auto API Data Categories,” <https://www.high-mobility.com/car-data>.

<sup>34</sup> Mozilla, “It’s Official: Cars Are the Worst Product Category We Have Ever Reviewed for Privacy,” Jen Caltrider, Misha Rykov, and Zoë MacDonald, September 6, 2023, <https://foundation.mozilla.org/en/privacynotincluded/articles/its-official-cars-are-the-worst-product-category-we-have-ever-reviewed-for-privacy/>.

## Conclusion

Right-to-repair laws support consumer choice and prevent automakers from using restrictive repair laws to their financial advantage. It is clear that the motivation behind automotive companies' avoidance of complying with right-to-repair laws is not due to a concern for consumer security or privacy, but instead a hypocritical, profit-driven reaction. This kind of anti-consumer, anti-repair practice must come to an end in all industries. Americans have a right to fix their own technology, farm equipment, and automobiles.

We urge Volkswagen to comply with all right-to-repair laws while protecting consumer privacy interests. We also ask that Volkswagen respond to the following questions by January 6, 2025:

1. How much in direct income and other benefits did Volkswagen receive from car repairs in each of the previous five years, including income derived from repairs at dealerships, authorized dealer networks, and other affiliated locations?
2. What user and driving data do your company's cars collect, and how frequently is this data collected?
3. How do you seek consent from drivers for data sharing?
  - a. What steps must car owners take to access their own data?
4. What user data does your company share with third parties? Please list the third parties with which your company shares data.
5. For each of the third parties listed in Question 4, please detail the specific data that is shared, and the revenue obtained from each data sharing agreement.
6. How does your company protect the data it collects from users?
7. What measures does your company take to protect user privacy, if any?
  - a. If your company de-identifies data it collects from users, how do you protect against the data being re-identified?
8. Please list all data breaches or other cybersecurity incidents involving your company or your company's vehicles in the last five years.
9. How much has your company spent lobbying against right-to-repair measures?
10. Please list the organizations or associations your company is part of that lobby against right-to-repair measures.

Sincerely,



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Elizabeth Warren  
United States Senator



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Josh Hawley  
United States Senator

*Jeffrey A. Merkley*

Jeffrey A. Merkley  
United States Senator