National Coalition For Assistive & Rehab Technology

April 15, 2022

Senator Robert Rodriguez, Chair
Senate Business, Labor, and Technology Committee
Colorado General Assembly
Denver, Colorado 80203

Submitted electronically at https://leg.colorado.gov/testimony

Re: OPPOSITION to HB22-1031 "Consumer Repair Bill of Rights Act"

Chair Rodriguez and Committee Members,

The following comments are submitted on behalf of the National Coalition for Assistive and Rehab Technology (NCART) in OPPOSITION to HB22-1031, the Consumer Repair Bill of Rights Act.

We respectfully but strongly request the Senate Business, Labor, and Technology Committee not allow House bill HB22-1031 to move forward in order to avoid creating additional risks, complications, and financial hardships for people with disabilities who use power wheelchairs. While we support pursuing needed changes to improve timely access to wheelchair repairs, this bill does not address the real issues that cause barriers. These issues should be the focus of alternative legislative and regulatory solutions.

Complex Rehab Technology (CRT) power wheelchairs are medical devices provided to people with disabilities and medical conditions based on a specific physician's prescription. These are not products accessed through a retail market. NCART asserts that medical devices like physician-prescribed power wheelchairs are not appropriate for "Right-to-Repair" legislation such as HB22-1031 based on a variety of concerns and problems described below.

As background, NCART is a national association of manufacturers and suppliers of specialized CRT products (individually configured wheelchairs, seating systems, and other adaptive equipment) with members operating over 780 accredited Medicare/Medicaid supplier locations across the country. Our members collectively provide CRT products and related supporting services to hundreds of thousands of children and adults with disabilities in their local communities. We focus on education and advocacy to ensure people with significant disabilities such as ALS, spinal cord injury, cerebral palsy, multiple sclerosis, muscular dystrophy, and traumatic brain injury have adequate access to the medically necessary CRT equipment and supporting services they require and depend on.

We appreciate the opportunity to share our comments outlining why HB22-1031 should not be moved forward by the Committee. The attached document provides additional details and the following is a summary of the primary issues that necessitate our opposition:

1.) This bill may be suitable for retail consumer electronic products such as computers and cell phones, but it is not appropriate for FDA regulated medical devices such as power wheelchairs- Power wheelchairs are complex equipment classified as Class 2 medical devices and regulated by the U.S. Food and Drug Administration (FDA). These are typically prescribed by a physician and clinical team who work together with the user to ensure proper configuration, positioning, and programming to meet the medical and functional needs of the individual. Most power wheelchairs require a prescription and are heavily regulated to ensure consumer safety and protection to avoid serious injury.

2.) This bill would allow anyone to do "complex" repairs, whether qualified or not, leading to negative consequences and safety risks for power wheelchair users- "Basic" power wheelchair repairs that do not affect the safe operation of the wheelchair can, in fact, currently be done by the user or another party. However, due to safety, liability, and warranty issues "complex" repairs are currently limited to only qualified repair entities who are regulated and trained. These current safeguards should be maintained and not compromised.

3.) This bill would eliminate the ability of power wheelchair users to receive reimbursement for repairs from their health insurance plans- Health insurance plans typically only pay for repairs provided by their enrolled suppliers based upon claims submitted with appropriate medical necessity documentation and, if applicable, required prior approval. Should consumers do their own repairs, or obtain repairs from an independent repair center not enrolled with an health insurance plan, they will lose any opportunity to be reimbursed by their insurance for the cost of the repair. Power wheelchair users should not be subject to this financial liability.

4.) This bill does not offer "real" solutions needed to address the repair access problems that power wheelchair users encounter- Power wheelchair users do experience challenges in accessing timely repairs for their equipment. However, these current challenges are due to the inappropriate policies, excessive documentation and prior approval requirements, and insufficient payment rates of federal, state, and commercial insurance plans that fund over 90% of these services. This legislation does nothing to provide changes to resolve these problems.

5.) This bill would compromise important FDA safeguards and reporting systems that are in place to ensure power wheelchair user safety- Power wheelchairs are classified as Class 2 medical devices by the FDA. This legislation mandates that original equipment manufacturers (OEMs) treat any independent repair provider or individual owner the same way as the OEM's authorized network of providers – but without any contractual protections, requirements, or restrictions. There are FDA safety reporting requirements that apply to these medical devices and manufacturers do not have the authority or capacity to oversee a large group of users and independent repair providers to which they are not otherwise contracted.

6.) This bill could jeopardize the manufacturer's warranty coverage that power wheelchair users are protected by- Repairs to power wheelchairs by untrained/unqualified individuals or entities can indeed void the manufacturer's warranty if not done properly. Should this occur, the cost of any parts and labor for needed repairs could be the responsibility of the power wheelchair user.

Thank you for the considering our comments and strong request that HB22-1031 not be moved forward by the Committee. As stated above, we do support changes in state policies and regulations that will improve timely access to wheelchair repairs, but this legislation does not offer the needed solutions.

NCART and our members have a sincere desire to collaborate with the State and other stakeholders to produce the best outcomes for the people of Colorado with disabilities. We are happy to provide additional information or discussion as needed.

Sincerely,

Donald E. Clayback
Executive Director | NCART
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Enclosure-
Opposition to Colorado Bill HB22-1031 “Consumer Repair Bill of Rights Act”

National Coalition For Assistive & Rehab Technology

Opposition to Colorado Bill HB22-1031 "Consumer Repair Bill of Rights Act"

We respectfully request the Colorado General Assembly not allow Bill HB22-1031 to move forward in order to avoid creating additional risks, complications, and financial hardships for people with disabilities who use power wheelchairs. While we support changes in state policies and regulations that will improve timely access to wheelchair repairs, this legislation does not offer those needed solutions.

Complex Rehab Technology power wheelchairs are medical devices provided to people with disabilities and medical conditions based on a specific physician's prescription. These are not products accessed through a retail market. The National Coalition for Assistive & Rehab Technology (NCART) asserts that medical devices like physician-prescribed power wheelchairs are not appropriate for "Right-to-Repair" legislation such as HB22-1031 based on a variety of concerns and problems described below.

1.) <u>This legislation would create additional risks for people with disabilities who rely on CRT power wheelchairs and the manufacturers who produce them</u>.

Manufacturers offer authorized repair networks to provide consumers with assurance that their products are serviced by properly trained and vetted repair professionals with the necessary skills to safely and reliably repair electronic products. A requirement of many CRT power wheelchair manufacturers is that their authorized dealers must include a RESNA-certified Assistive Technology Professional (ATP) on staff. This certification recognizes demonstrated competence in analyzing the needs of consumers with disabilities and training in the use of selected devices.

CRT power wheelchairs are Class 2 medical devices regulated by the Food and Drug Administration (FDA). Adjustments and repairs to a CRT power wheelchair or its drive control software can have a significant impact on the wheelchair user's positioning and safety. These adjustments and repairs can impact the person's respiratory function, digestive function, circulatory function, and needed skin pressure relief.

CRT power wheelchairs are comprised of complex electronics which require specialized training and sophisticated test instruments to repair safely. Some repairs can be extremely detailed, complicated, and dangerous to anyone without proper training. Power wheelchairs contain unique wiring harnesses, unique connectors, programmable controller systems that enable unique forms of movement by the occupant within the device, not to mention various settings for speed and curb climbing and variable suspension. Establishing an environment that allows untrained individuals without the specialized skills necessary to safely service these complex medical devices exposes individuals to risks and injury.

In light of the medical impact and important safety considerations, CRT power wheelchair manufacturers want their products serviced by professionals who understand the intricacies of their products. These professionals have spent time procuring the knowledge necessary to safely repair these products and return them to consumers without compromising those standards or undermining safety and security. Authorized repair networks not only include training requirements

but also have the technical skills and test instruments to verify that repair parts meet all necessary performance and safety specifications. Within these networks consumers may be protected by warranties or other means of recourse. **The proposed legislation provides no such protections for consumers, repair shops, or manufacturers.**

2.) <u>This legislation ignores national concerns about precedents of "Right-to-Repair" legislation and impact on consumers</u>.

The legislation mandates that original equipment manufacturers (OEMs) treat any independent repair provider or individual owner the same way as the OEM's authorized network providers – but without any contractual protections, requirements, or restrictions. In doing so, the bill places consumers and their data at risk, undermines companies that are part of OEM-authorized networks, and stifles innovation by putting hard-earned intellectual property in the hands of possibly thousands of new entities. It also raises significant questions regarding protecting warranty coverage for consumers and legal recourse for negligent repairs.

Of extreme importance, manufacturers of medical devices are responsible for reporting certain information that could be identified by and gathered by a trained technician. Manufacturers do not have the capacity to oversee a large group of independent repair providers to which they are not otherwise contracted. The legislation also fails to recognize the wide range of repair and refurbishment options that are already currently available to consumers from both OEM-authorized and independent repair sources.

More than 20 state legislatures have already reviewed and considered similar legislation. No bill has passed, however, as states have recognized that legislating repair rules for manufacturers created more issues for consumers than answers.

3.) <u>This legislation does not address the fundamental barriers related to timely access to repair services for users of power wheelchairs. General Assembly action should be redirected to address those issues through other legislation and/or policy actions</u>.

There are indeed real challenges for users of CRT power wheelchairs in accessing timely repairs and services for their equipment. Many of these current challenges stem from poor policies and insufficient payment rates of federal, state, and commercial insurance plans that are estimated to fund 90% of these services. Unfortunately, HB22-1031 does not offer the needed solutions.

The problems contributing to access issues include inadequate labor-hour payment rates, lack of reimbursement for total actual hours worked, lack of payment for "travel time", inadequate reimbursement amounts for the parts supplied, unrealistic prior approval requirements, and excessive documentation requirements.

The fact that the time and costs of "travel" is not reimbursed is significant as the vast majority of repairs are done at the consumer's location. Any repair service involves at least one, if not two, roundtrips and current funding policies do not allow any reimbursement for this time and expense. Another negative factor is that for most insurers, repair parts are reimbursed based on a fixed fee schedule amount which in some situations is below the cost the supplier pays for the part.

The business dynamics of providing repairs and services for CRT power wheelchairs are extremely difficult for CRT providers and manufacturers. CRT providers and manufacturers must have: 1.) fully trained technicians with electronics expertise; 2.) sufficient parts inventory that must be regularly maintained; 3.) the required approval and funding documentation that must be regularly obtained and submitted; and 4.) the ability to respond in a timely manner to a variety of situations, many times in large geographic areas. These operating costs and investments are significant and must be absorbed in an environment of inadequate coverage and payment.

The legislation does not offer solutions to resolve the true barriers to timely access. It is NCART's view that the focus should be redirected on the actions that must be taken to address the problems that CRT providers and manufacturers are encountering in these key areas, particularly regarding insufficient reimbursement policies.

4.) <u>This legislation does not recognize the policy requirements of federal, state, and commercial insurance plans that consumers must meet for the repair of their CRT power wheelchair. This puts users at risk for losing any opportunity for reimbursement</u>.

Federal, state, and commercial insurance plans typically only pay for services provided by their enrolled suppliers based upon claims submitted with the appropriate medical necessity documentation including, if applicable, the required prior approval. Should consumers obtain repairs from an independent repair center not enrolled with a particular insurance plan, or do repairs on their own, they risk losing any opportunity to be reimbursed for the cost of the repair.

5.) <u>This legislation would compromise existing federal oversight of medical devices</u>.

Medical technology servicing and repair by original equipment manufacturers is highly regulated by the FDA and servicing these devices is important for both patient safety and device system security. Power wheelchairs are complex equipment containing a host of electro-mechanical components.

The FDA mandates that the design specifications of these products be developed in strict conformity with best manufacturing practices and that every aspect of the design, testing/validation, production, component sourcing, sales, marketing, distribution, delivery, set up and after-sale service be carefully documented. They audit to make sure a manufacturer's quality system, including all of the above, as well as technical service and reliance upon qualified suppliers and third-party field service technicians, is carefully considered. HB22-1031 would compromise this important oversight and protection.

April 15, 2022

via e-mail

Members of the Senate Committee on Business, Labor, and Technology
Colorado General Assembly

Re: Proposed Consumer Right to Repair Powered Wheelchairs
House Bill 22-1031

Dear Members of the Committee,

As part of our coursework at the Samuelson-Glushko Technology Law & Policy Clinic at Colorado Law and at the invitation of Rep. Brianna Titone, we have conducted a review of the proposed Consumer Right to Repair Powered Wheelchairs (CRRPW), House Bill 22-1031, following up on a similar analysis the Clinic provided last year on the Consumer Digital Repair Bill of Rights (House Bill 21-1199), and are pleased to offer this written testimony.[1]

We have attached our Clinic's previous analyses of the 2021 and 2020 versions of the proposed right to repair bills. Overall, the current version of the bill largely tracks the versions considered in 2020 and 2021, but with a narrower focus on requiring manufacturers of powered wheelchairs to facilitate the repairs of their products by providing the resources needed.[2]

Similar to the 2021 proposed legislation, the CRRPW simply requires original equipment manufacturers (OEMs) of powered wheelchairs to supply replacement parts and information necessary to restore equipment to its working order.[3] In evaluating concerns about the bill's intersection with other areas of law, it is important to understand that the bill goes no further than this.

Our analysis and conclusion remain much the same as with the previous bills: the bill is unlikely to pose significant conflicts with existing state and federal laws governing digital devices generally or powered wheelchairs in particular. We nevertheless offer a summary of our earlier analysis and highlight the changes stemming from the 2022 bill's narrower focus on powered wheelchairs and recent

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[1] This testimony largely mirrors our March 21 testimony to the House Committee on Public & Behavioral Health & Human Services.

[2] HB 22-1031, Gen. Assembly Reg. Sess. (Co. 2022) (CRRPW), https://leg.colorado.gov/bills/hb22-1031.

[3] *See* CRRPW § 6-1-1403(1).

updates to federal law. In terms of issues that have not changed significantly since the last version of the bill:

- **Intellectual Property Law.** The CRRPW again does not conflict with rights companies have been granted under copyright, trade secret, trademark, or patent law;[4]
- **Device Security and Compliance with Regulations and Standards.** The CRRPW again does not pose any threats to network security or enable device owners to avoid legal standards;[5]
- **Warranty and Contract Law.** The CRRPW again protects the rights of parties to contract, and does not alter the terms traditionally included in warranties;[6]
- **Interstate Commerce.** The CRRPW is consistent with the Commerce Clause because the bill does not discriminate against any out-of-state actor and serves many legitimate purposes, including e-waste reduction;[7] and
- **Antitrust and Competition Law.** The CRRPW is again likely to bolster market competition, furthering the policy goals of antitrust and consumer protection laws.[8]

This update provides additional analysis stemming from the narrowed focus of the CRRPW to cover only powered wheelchairs and updates in both warranty and copyright law:

- **Regulation of Durable Medical Equipment (DME).** The CRRPW is consistent with Food and Drug Administration (FDA) guidance on independent repair service of medical equipment;
- **Updates to Warranty Law.** The CRRPW is compatible with the Magnusson-Moss Warranty Act and can be viewed as furthering the Act's purposes and goals; and
- **Updates from the Copyright Office's Eighth Triennial Section 1201 Proceedings.** The CRRPW, like its predecessors, does not implicate the anticircumvention measures under federal copyright law, a conclusion bolstered by the Copyright Office's specific adoption of exceptions and limitations for medical devices.

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[4] *See* 2021 Analysis at 2–3; 2020 Analysis at Part II.

[5] *See* 2021 Analysis at 2; 2020 Analysis at Part III.

[6] *See* 2021 Analysis at 3–4. The 2021 bill was amended to not apply retroactively to existing contracts; this allowed the proposed bill to avoid conflict with the Colorado Constitution. *See* 2020 Analysis at Part IV & V.

[7] *See* 2020 Analysis at Part VI.

[8] *See id.* at Part VII.

I. The CRRPW does not conflict with FDA or state regulation of DME.

The 2022 version of the proposed legislation does not create conflicts with current FDA regulations or guidelines relating to the repair or servicing of medical devices. In particular, the FDA concluded in 2018 that "[t]he continued availability of third-party entities to service and repair medical devices is critical to the functioning of the U.S. healthcare system," demonstrating the agency's allowance and support for independent repair entities.[9] Allowing third-party service providers access to original parts and the information needed carry out repairs would be consistent with the role the FDA envisioned for them.

Although most states do not regulate non-radiation emitting medical devices beyond FDA regulations and guidelines,[10] Section 24-21-115 of the Colorado Revised Statutes requires entities involved in the provision of DME that bill or bid for services or products "listed in the centers for medicare [sic] and medicaid [sic]" to be licensed by the Secretary of State.[11] However, if third-party repair providers are subject to Section 24-21-115, they can simply obtain a license from the Secretary of State.

Finally, allowing third-party vendors access to OEM replacement parts and software needed to repair or service is consistent with the FDA's approach to cybersecurity. Rejecting speculative concerns about unauthorized access to patient information by outside entities, the FDA concluded in its 2018 report that access to these replacement parts and software could actually result in improved cybersecurity.[12]

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[9] *FDA Report on the Quality, Safety, and Effectiveness of Servicing Medical Devices* at i (May 2018) ("2018 FDA Report"), https://www.fda.gov/media/113431/download. In the Report, the FDA purposefully distinguished service providers (the FDA's nomenclature for repair services) from remanufacturers because "servicing returns or maintains a finished device's safety and performance specifications and intended use whereas remanufacturing significantly changes the finished device's performance, safety specifications, or intended use." *Id.* at 24. Because of the differences between service providers and remanufacturers, the FDA concluded that remanufacturers would be governed by the substantial compliance standards for manufacturers, while service providers offering repairs would not be. *Id.* at 24.

[10] 2018 FDA Report at 10.

[11] Colo. Rev. Stat. § 24-21-115(1), (2)(a).

[12] 2018 FDA Report at 25. In any event, the CRRPW does not immunize access to medical devices or information in violation of federal and state computer misuse and data protection statutes.

II. The CRRPW bolsters the Magnusson-Moss Warranty Act.

Warranties are primarily governed at the federal level by the Magnusson-Moss Warranty Act of 1975 (MMWA).[13] The MMWA explicitly prohibits warrantors from tying warranty coverage to the use of only authorized repair services and/or authorized replacement parts for non-warranty service or maintenance.[14] Under the regulations of the Federal Trade Commission (FTC):

> [A] provision in the warranty such as, "use only an authorized 'ABC' dealer" or "use only 'ABC' replacement parts," is prohibited where the service or parts are not provided free of charge pursuant to the warranty.[15]

In other words, "the anti-tying provision gives consumers the right to make repairs on their own or through an independent repair shop without voiding a product's warranty . . . ."[16] The FTC has also discussed "right to repair" bills as a mode of "increasing consumer choice in repair markets."[17]

III. The CRRPW does not implicate the anticircumvention measures under federal copyright law.

While the CRRPW requires the creation of a mechanism to allow consumers and independent repair providers to effectuate repairs,[18] it does not require, allow, or otherwise implicate the circumvention of technological protection measures (TPMs) prohibited by federal law.[19] As we explained in our analysis of the 2020 bill, bills like the CRRPW avoid interplay with Section 1201 of Title 17 by permitting manufacturers to create systems by which consumers and independent repair providers can effectuate repairs without circumventing TPMs.[20]

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[13] 15 U.S.C. §§ 2301–2312.

[14] 15 U.S.C. § 2302(c).

[15] 16 C.F.R. § 700.10(c), *cited by Nixing the Fix: An FTC Report to Congress on Repair Restrictions* at 7 (May 2021) (Nixing the Fix), 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.

[16] *Id.* at 54.

[17] *See id.* at 44, 47–48.

[18] CRRPW § 6-1-1403(1)(b).

[19] *See* 17 U.S.C. § 1201(a)(1)(A).

[20] *See* CRRPW § 6-1-1403(1)(b). *See generally* 2020 Analysis at 6–7.

However, even if the bill did entail circumvention of TPMs ordinarily prohibited by Section 1201, updated exemptions issued by the Librarian of Congress in 2021 cover the circumvention of TPMs for the purpose of repairing land motor vehicles, consumer devices, and medical devices.[21] The repair of powered wheelchairs arguably meets the terms of each of the exemptions,[22] and the Copyright Office made specific mention of repairing motorized wheelchairs in its discussion of the medical device exemption.[23]

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In closing, the CRRPW, like its predecessors, remains unlikely to pose significant conflicts with existing state and federal laws governing digital devices generally or powered wheelchairs in particular. The narrowed focus of the bill and recent updates to federal law underscore that conclusion. Please don't hesitate to contact us if you have any questions.

Respectfully submitted,

/s/

Cameron Benavides, Garrett Janney, and Samuel Retter, Student Attorneys

Blake E. Reid, Director

Samuelson-Glushko Technology Law & Policy Clinic

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[21] *See* 37 C.F.R. § 201.40(b)(13)–(15). We note that a group of medical device companies recently challenged the medical device exemption, but litigation remains in early stages. *Medical Imaging & Technology Alliance et al. v. Library of Congress et al.*, No: 1:22-cv-00499 (D.D.C. 2022); *see also* Tiffany Hu, *Medical Device Group Seeks Win In Copyright Office Suit*, Law360 (Mar. 29, 2022), www.law360.com/articles/1478786/medical-device-group-seeks-win-in-copyright-office-suit?copied=1.

[22] *See* 37 C.F.R. § 201.40(b)(13)–(15).

[23] Section 1201 Rulemaking: Eighth Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention, Recommendation of the Register of Copyrights at 193, 226 & nn.1057, 1249 (October 2021), https://cdn.loc.gov/copyright/1201/2021/2021_Section_1201_Registers_Recommendation.pdf.

samuelson-glushko
tech.law.policy
clinic

Mar. 23, 2021

via e-mail

Members of the House Committee on Business Affairs & Labor
Colorado General Assembly

Re: Proposed Consumer Digital Repair Bill of Rights (House Bill 21-1199)

Dear Members of the Business Affairs & Labor Committee,

As part of our coursework at the Samuelson-Glushko Technology Law & Policy Clinic at Colorado Law and at the invitation of Rep. Brianna Titone, we have conducted a review of the proposed Consumer Digital Repair Bill of Rights ("CDRBR"), following up on a similar analysis we provided last year, and are pleased to offer this written testimony.

We have attached our Clinic's analysis of the 2020 version of the proposed legislation as Appendix A. Overall, the current version of the bill largely tracks the version considered in 2020, and our conclusion remains much the same: the bill is unlikely to pose significant conflicts with existing state and federal laws governing digital devices. We nevertheless offer a summary of our earlier analysis and highlight one change to the 2021 bill's retrospective application that resolves the primary concern we highlighted about last year's bill.

Overall, the CDRBR is unlikely to conflict with any existing laws governing digital devices. The attached analysis considers the intersections of the CDRBR with:

- **Intellectual Property Law.** The CDRBR does not conflict with rights companies have been granted under copyright or trade secret law;[1]
- **Device Security and Compliance with Regulations and Standards.** The CDRBR does not pose any threats to network security or enable device owners to avoid legal standards;[2]
- **Warranty and Contract Law.** The CDRBR protects the rights of parties to contract, and does not alter the terms traditionally included in warranties;[3]

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[1] *See* Appendix A, Part I.

[2] *See* Appendix A, Part III.

[3] *See* Appendix A, Part IV & V. The potential conflict with the Colorado Constitution noted in Part IV has been resolved in the 2021 version of the CDRBR, as discussed below.

- **Interstate Commerce.** The CDRBR is consistent with the Commerce Clause because the bill does not discriminate against any out-of-state actor and serves many legitimate purposes, including e-waste reduction;[4] and
- **Antitrust and Competition Law.** The CDRBR will likely bolster market competition, furthering the policy goals of antitrust and consumer protection laws.[5]

Under the CDRBR, original equipment manufacturers (OEMs) and dealers are simply required to supply replacement parts and information necessary to restore equipment to its working order.[6] In evaluating concerns about the bill's intersection with other areas of law, it is important to understand that the bill goes no further than this.

The bill does not, for example, create, extend, or otherwise affect liability on manufacturers or vendors for the post-sale behavior of their customers. For example, the bill does not impose further liability on a manufacturer or vendor if a customer conducts a faulty repair be conducted. If owners negligently or recklessly tinker with devices, the bill does not protect the owner, or shift liability to the manufacturers. In our view, it is more likely that the CDRBR will increase the safety of post-sale repair by providing users access to a reliable source of documentation and parts.[7]

Contrary to concerns that the bill could increase the risk of owners modifying equipment to evade federal safety standards such as emissions requirements, the CDRBR in no way affects the numerous state and federal laws already in place to prevent improper usage. For example, farmers who modify their equipment to evade environmental regulations and consumers who tinker with their devices to evade technical standards may be liable for the violation notwithstanding the CDRBR. The CDRBR only requires provision of tools, parts, and information as necessary to restore devices to their original functionality and provides options for manufacturers to protect security and standards.[8]

This bill also does not affect any of the relevant array of intellectual property rights of vendors or the relevant set of exceptions and limitations that bear on the rights of users to fix their digital electronic goods. This bill avoids any potential overlap with intellectual property law by giving the manufacturers who hold those

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[4] *See* Appendix A, Part VI.

[5] *See* Appendix A, Part VII.

[6] *See generally* CDRBR § 6-1-1303 and CDRBR §§ 6-1-1302(5)(c)(II) & (13).

[7] *See* Appendix A, Part III(B).

[8] *See* Appendix A, Part III.

rights the flexibility to facilitate repairs consistent with their rights under copyright, trade secret, and other laws.

More specifically, the CDRBR requires the creation of a mechanism to allow consumers to effectuate repairs.[9] However, it does not implicate the issue of unauthorized circumvention, which is a question of federal law addressed by exemptions promulgated by the Library of Congress and the Copyright Office.[10] Contrary to some opponents' arguments, the bill also does not require vendors to provide any access to copyrighted source code. The CDRBR is better understood as helping vendors safeguard their intellectual property rights by allowing manufacturers to design their own processes for resetting digital locks as necessary themselves as needed for repair.

This bill also does not require OEMs to reveal trade secrets. Trade secrets are both explicitly exempted from the bill[11] and remain protected under Colorado's adoption of the Uniform Trade Secrets Act.[12]

Finally, there is unwarranted concern and confusion regarding how warranties and the CDRBR interact. The CDRBR does not change consumers' rights to remedies under their existing warranties and does not purport to change how a warranty on digital electronic equipment can be written in the future.

Currently, the law of warranties is largely governed by the Magnusson-Moss Warranty Act of 1975.[13] The Magnusson-Moss Warranty Act explicitly prohibits a warrantor from conditioning the validity of a warranty on the use of only

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[9] CDRBR § 6-1-1303(1)(b).

[10] *See* 37 C.F.R. § 201.40(b)(9)–(10). Under these exemptions, circumvention of technological protection measures on software in vehicles, smartphones, and home systems for the purposes of repair does not violate the anti-circumvention measures of the Digital Millennium Copyright Act. Further expansion of these exemptions to permit the diagnosis, modification, and repair of a wider category of devices is pending under the Office's ongoing triennial review of exemptions. *See* Proposed Class 12: Computer Programs—Repair, Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, 85 Fed. Reg. 65,306 (Oct. 15, 2020), https://www.govinfo.gov/content/pkg/FR-2020-10-15/pdf/2020-22893.pdf .

[11] CDRBR § 6-1-1303(3)(a)(II).

[12] Colo. Rev. Stat. § 7-74-101 et seq.

[13] 15 U.S.C. § 2301 et seq.

authorized repair services and/or authorized replacement parts for non-warranty service or maintenance.[14] Under the Federal Trade Commission's regulations:

> [P]rovisions such as, "This warranty is void if service is performed by anyone other than an authorized 'ABC' dealer and all replacement parts must be genuine 'ABC' parts," and the like, are prohibited where the service or parts are not covered by the warranty."[15]

In other words, warrantors claiming to void warranties in the event of unauthorized repair is likely impermissible under the Act. It is not clear how a state's adoption of a bill like the CDRBR could interfere with this reality; a person who bought a device outside of Colorado and subsequently moved to this state could not have a warranty voided by virtue of moving to Colorado because of a "right to repair" law like the CDRBR.

Finally, the 2021 version of the proposed legislation no longer contains a potential conflict with the Colorado Constitution in its provisions regarding contracts. The legislation proposed in 2020 contained terms that could have hypothetically been used to retrospectively void warranty terms, which conflicted with the manufacturer obligations under the 2020 version of the bill.[16] This language has been updated and the 2021 version of the legislation now only applies to contracts entered into after the effective date of the legislation,[17] and thus avoids any potential constitutional infirmities.

Respectfully submitted,

/s/

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Blake E. Reid, Director

Samuelson-Glushko Technology Law & Policy Clinic

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[14] 15 U.S.C. § 2302(c).

[15] *See* 16 C.F.R. § 700.10(c). A warrantor may expressly exclude liability for defects or damage caused by "unauthorized" articles or service, but the validity of the warranty may not be conditioned on the use of an "authorized" repair service.

[16] *See* Appendix A, Part IV.

[17] CDRBR § 6-1-1304(2).

Testimony Before the Colorado Business Committee Regarding Right to Repair

March 24, 2020

Samuelson-Glushko Technology Law & Policy Clinic at Colorado Law

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Executive Summary

The Samuelson-Glushko Tech Law & Policy Clinic at Colorado Law School, at the invitation of Rep. Brianna Titone, prepared the following analysis of the proposed Consumer Digital Repair Bill of Rights ("CDRBR").[1]The CDRBR addresses a body of consumer concerns regarding device reparability. Efforts to address these concerns are commonly referred to as "right-to-repair." The CDRBR seeks to make digital devices easier to repair by requiring manufacturers to provide parts and information to device owners and independent repair shops at fair and reasonable rates. Original equipment manufacturers (OEMs)[2] and opponents of repair legislation have raised concerns about whether the CDRBR might interfere with, conflict with, or be preempted by existing law.

This document provides objective, neutral legal analysis based on independent legal research that may help to inform this discussion. The Clinic does not speak to the various policy judgments that the legislature may consider, but is merely providing the results of research and legal analysis on how the CDRBR will interact with existing state and federal laws.

Overall, the CDRBR is unlikely to conflict with any existing laws governing digital devices. This document considers the intersections of the CDRBR with:

- **Intellectual Property law.** The CDRBR does not conflict with rights companies have been granted under copyright or trade secret law;
- **Device Security and Compliance with Regulations and Standards.** The CDRBR does not pose any threats to network security or enable device owners to avoid legal standards.
- **Warranty and Contract Law.** The CDRBR protects the rights of parties to contract, and does not alter the terms traditionally included in warranties, though it may require some changes to provisions that void existing contracts;
- **Interstate Commerce.** The CDRBR is consistent with the Commerce Clause because the bill does not discriminate against any out-of-state actor and serves many legitimate purposes, including e-waste reduction; and
- **Antitrust and Competition Law.** The CDRBR will likely bolster market competition, furthering the policy goals of antitrust and consumer protection laws.

In each of these areas, state and federal law places certain restrictions on the sale and use of digital electronic equipment.[3] However, the mechanics CDRBR are drafted to be compatible with relevant state and federal laws and regulations.

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[1] HB 20-1195, Gen. Assemb. Reg. Sess. (Co. 2020) (hereinafter *CDRBR*).

[2] CDRBR § 6-1-1302(7).

[3] Digital electronic equipment means "a product sold in this state that, for its functionality, depends in whole or in part of digital electronics embedded in, or attached to, the product." CDRBR § 6-1-1302(2).

We do recommend that the legislature consider two minor changes to the CDRBR:

- Staging implementation to reduce burdens of compliance on manufacturers (see "Consumer Digital Repair Bill of Rights," p. 4); and
- Limiting the CDRBR's scope to future sales to avoid any potential conflict with the Colorado Constitution's protections for existing contracts (see "Warranty Law, and the Colorado Constitution," p. 12).

However, these proposed changes do not affect the substance or character of the bill, but merely its implementation. They likewise do not change our overall conclusion that the CDRBR is compatible with existing law. We hope this analysis will assist the legislature as it considers the CDRBR. We are happy to provide any additional feedback or answer any questions.

Table of Contents

I. The Consumer Digital Repair Bill of Rights

The CDRBR is based on the Model State Right-to-Repair Law which has been proposed in twenty states since 2018.[4] This document analyzes the impacts of device security and standards avoidance, intellectual property law, warranties, the dormant commerce clause, and antitrust considerations.[5] Additional questions which may be raised are addressed in the Appendix of Alternative Issues.[6]

The CDRBR's stated objective is to mitigate the ballooning cost repairs for digital electronic devices. Proponents argue that the increasing complexity of common digital electronic devices has caused even simple repairs to become unjustifiably expensive or unavailable. In part, proponents argue, this is because consumers and independent repair providers have been barred—through lack of replacement parts and digital locks—from making such repairs.[7] They point to lack of access to repairs as resulting in needless electronics waste and consumer expense. The CDRBR's proponents contend that these hardships may be alleviated by legislative efforts to expand access to tools and information needed to conduct repairs.[8]

The CDRBR's proponents further argue that many manufacturers restrict information about how to perform repairs to their own authorized repair providers ("ARPs"), encouraging monopolistic pricing and depriving consumers of repair options altogether as a strategy for encouraging consumption of new devices. Proponents argue that the CDRBR will, via the following two primary mechanisms, improve device owners' access to services and parts needed for repair:

- Requiring manufacturers to make available documentation necessary for repair, replacement parts, and tools—on fair and reasonable terms—to independent repair providers and owners of digital electronic equipment;[9] and
- Requiring manufacturers to make available "any documentation, parts, embedded software, or tools needed to reset the lock or function when disabled in the course of providing services."[10]

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[4] *Legislation*, The Repair Association, https://repair.org/legislation.

[5] *Id.*

[6] These issues include trademark and patent law, device security and standards avoidance, contracts, and ownership, leasing, and licensing law.

[7] CDRBR, Bill Summary.

[8] *Policy Objectives,* The Repair Association, https://repair.org/policy.

[9] CDRBR § 6-1-1303(1)(a).

[10] CDRBR § 6-1-1303(1)(b).

Digital electronic equipment is defined as a product sold within Colorado which "for its functionality, depends in whole or in part on digital electronics embedded in, or attached to, the product."[11]

Proponents suggest the CDRBR would serve the following public policy goals:

- Minimizing unnecessary electronic waste;[12]
- Protecting consumers against planned obsolescence;
- Increasing access to affordable technology;[13]
- Opening market alternatives to wasteful, involuntary expenditures;[14]
- Improving consumer choice and stimulating healthy, competitive repair markets;[15] and

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[11] CDRBR § 6-1-1302(2).

[12] Digital electronic devices result in an estimated 9.4 million tons of e-waste discarded annually in the United States. Internal components of e-waste contain toxic and heavy metals, such as lead, mercury, and beryllium, which pose environmental and health risks, and mining operations for internal components may contribute to environmental degradation. *See* Kimberly Burton, *20 Staggering E-Waste Facts*, Earth 911 (Feb. 23, 2016), https://earth911.com/eco-tech/20-e-waste-facts/, *see also* Alana Semuels, *The World Has an E-Waste Problem,* Time (May 23, 2019), https://time.com/5594380/world-electronic-waste-problem/

[13] *About Us*, PCs for People Online, https://pcsrefurbished.com/about/aboutusaspx.

[14] In farming, inaccessible repairs can represent monetary losses in the hundreds of thousands of dollars if the equipment must sit idle for several days. In a military context, it can result in active military personnel being prevented from performing field repairs, depriving them of equipment for extended periods of time. *See* Elle Ekman, *Here's One Reason the U.S. Military Can't Fix Its Own Equipment*, The New York Times (Nov. 20, 2019), https://www.nytimes.com/2019/11/20/opinion/military-right-to-repair.html.

[15] Some product lifespan issues are related to design features (such as making devices smaller, lighter, always-on, etc.), but discouraging and limiting repair stimulates the market for new devices. It is estimated that Americans spend $5 billion annually merely upgrading iPhones to slightly newer models and that consumers, on average, keep their cell phones for fewer than three years. Quentin Fottrell, *Americans Spent $5 Billion Upgrading iPhones in 2013,*" MarketWatch (Dec. 22, 2013), https://www.marketwatch.com/story/americans-spent-5b-upgrading-iphones-in-2013-2013-12-20; Ina Fried, *People Are Keeping Their Cell Phones a Lot Longer*, Axios (Nov. 1, 2017), https://www.axios.com/people-are-keeping-their-cell-phones-a-lot-longer-1513306602-d260303c-8684-4e45-ab74-50b87284f30e.html. Consumer electronics produce revenues of close to $400 billion annually. https://digitalcontentnext.org/blog/2019/01/09/consumer-electronics-sector-approaches-400-billion-in-annual-revenues/.

- Affirming consumers' ownership rights.[16]

Manufacturers have generally opposed legislation arising out of the right to repair movement. Although the workings of the CDRBR do not implicate the concerns most often cited by manufacturers for their opposition, this testimony addresses those concerns that are frequently raised in opposition to right-to-repair legislation generally. Opposing manufacturers assert that their tight control over repair prevents consumers from unsafe or insecure repairs.[17] Opponents further argue that:

- Manufacturers' intellectual property rights are implicated;[18]
- Consumers agree to contract and licensing agreements limiting their repair options, and that the restrictions placed upon consumers as part of these licensing agreements and warranties are an integral part of their business models;[19] and
- Compliance with the CDRBR will impose unreasonable burdens upon manufacturers.

Basic Requirements. The CDRBR requires manufacturers to "make available to any independent repair provider or owner of the manufacturer's equipment any documentation, parts, embedded software, or tools, including updates to information or embedded software" needed for the purpose of diagnosis, maintenance or repair.[20] Manufacturers must make these accessible on "fair and reasonable terms and costs."

Manufacturers must also provide owners and independent repair providers with "documentation, parts, and tools necessary to reset security locks when disabled

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[16] When consumers are limited by operability or contract to a manufacturer past the point of sale, this is referred to as "tethering." Tethered consumers who must go to an authorized repair provider for service on their devices have limited repair options; the manufacturer effectively has a monopoly over that consumer's repair options. This can result in high repair costs and early obsolescence of functional devices. Chris Jay Hoofnagle et. al., *The Tethered Economy*, 87 Geo. Wash. L. Rev. 783, 787 (2019).

[17] Marissa MacAneney, *If It Is Broken, You Should Not Fix It: The Threat Fair Repair Legislation Poses to the Manufacturer and the Consumer*, 92 St. John's L. Rev. 331, 340–41 (2018). Safety concerns cited by manufacturers include exploding lithium ion batteries and improperly repaired medical equipment. *Id.* at 340-42.

[18] *Id.* at 342.

[19] *Id.* at 336-37. *See also* Kara Y. Wanstrath, *Access to Repair Parts Act: Will It Achieve Its Goal or Hurt an Already Struggling Industry?*, 20 DePaul J. Art, Tech. & Intell. Prop. L. 409, 417–20 (2010).

[20] CDRBR § 6-1-1303(1)(a)

for the purpose of diagnosis, maintenance, or repair."[21] To address security concerns, the CDRBR provides that compliance may be accomplished through "appropriate secure release systems, appropriate nondisclosure agreements, or both."

Fair and reasonable terms are defined as "terms and costs, including convenience of delivery and of enabling functionality and including rights of use, that are equivalent to the most favorable terms and costs that the manufacturer offers to an authorized repair provider."[22] This calculation includes "discounts, rebates, or incentives."[23] Documentation includes the manuals, diagrams, schematics, and similar information that are provided to authorized repair providers for the purpose of assisting with repair.[24]

Exceptions. Manufacturers are not required to make available parts which are no longer available to the manufacturer.[25] Additionally, manufacturers are not required to provide to product owners or independent repair providers information provided to authorized repair providers for purposes other than effectuating repairs in compliance with the CDRBR.[26] The CDRBR affords manufacturers broad latitude to determine preferred compliance strategies.[27]

Trade Secret Limitations. The CDRBR includes protections for trade secrets. Manufacturers are permitted to make redactions to documentation provided for repair purposes as necessary to protect trade secrets, and may withhold information regarding manufacture, process, embedded software, and tools, if that information is a trade secret.[28]

Affirming Pre-existing Contractual Terms. The CDRBR will not change contractual terms between manufacturers and authorized repair providers.[29] Subsequent contractual or licensing arrangements, including warranties, that are renewed or executed after the effective date of the CDRBR may not contractually

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[21] CDRBR § 6-1-1303(1)(b).

[22] CDRBR § 6-1-1302(5)(a)(I).

[23] CDRBR § 6-1-1302(5)(a)(II)

[24] "[E]xcept that the manufacturer may charge a fee for a printed copy of the documentation if the amount of the fee covers only the manufacturer's actual cost to prepare and send the printed copy of the documentation." CDRBR § 6-1-1302(5)(b).

[25] CDRBR § 6-1-1303(3)(a)(I).

[26] CDRBR § 6-1-1304(1)(b).

[27] CDRBR § 6-1-1303(3).

[28] CDRBR § 6-1-1303(3)(b).

[29] CDRBR § 6-1-1304(1).

"waive, avoid, restrict, or limit . . . the manufacturer's obligation under the CDRBR."[30]

Products Affected. The CDRBR applies to products sold and in use on or after the effective date of the CDRBR. Making all provisions of the CDRBR immediately effective could impose unanticipated expenses upon manufacturers if they do not already have compliance regimes prepared.[31] It may be appropriate to implement the CDRBR in stages, allowing manufacturers additional time to come into compliance with certain CDRBR provisions.

II. Intellectual Property

There are four main categories of intellectual property rights: copyright, trade secret, trademark, and patent. Each category covers different types of intellectual property, and each confers a different sets of rights. Although each body of intellectual property law overlaps with the repair of devices in different ways, the CDRBR has been crafted in such a way as to avoid interfering with any legal rights conferred under intellectual property law. This document addresses all four areas of intellectual property law; however, the two most salient are copyright and trade secret.

A. Copyright

Questions of copyright law may arise because copyright law protects software code,[32] and digital locks controlling access to the software are protected from being broken under copyright law.[33] However, the CDRBR does not conflict with copyright law.

Computer programs are classified as literary works under copyright law.[34] Copyright law creates a cause of action for copyright holders to bring suit against those who make infringing copies of their work, but does not give a copyright holder (in this case, manufacturers of digital electronic equipment) immunity from having to provide information.[35]

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[30] CDRBR § 6-1-1304(2).

[31] For example, it may be appropriate to require manufacturers to release repair manuals as of the compliance date, while allowing them additional time to increase production of required parts and tools.

[32] 17 U.S.C. §§ 101, 102(a); *Goldman v. Healthcare Mgmt. Sys., Inc.*, 628 F. Supp. 2d 748, 753 (W.D. Mich. 2008) (explaining that computer programs may be copyrighted as literary works.).

[33] 17 U.S.C. § 1201(a)(1)(A).

[34] 17 U.S.C. §§ 101, 102(a).

[35] 17 U.S.C. §§ 501(a)&(b)

No copyright claims are implicated by the CDRBR.[36] Here, the CDRBR merely would compel manufacturers to exercise their own exclusive rights under copyright law. The CDRBR does nothing to impair a holder's valid copyright interest.[37]

Section 1201 of the Digital Millennium Copyright Act (DMCA) states that "[n]o person shall circumvent a technological measure that effectively controls access to a work protected under this title."[38] The objective of the DMCA was to protect digitally distributed creative works against infringement.[39] It provides civil and criminal penalties for the circumvention of technological measures ("digital locks," "digital rights management," or "DRM").[40] The statute's objective is limited to preventing copyright infringement, and explicitly states that "[t]he prohibition . . . shall not apply to . . . noninfringing uses of [a] particular class of works under this title, as determined" by the Librarian of Congress in triennial rulemaking.[41]

Although DRM's objective is to give creators tools to protect against copyright infringement, it is frequently used as a device by manufacturers to prevent repair.[42] For example, by inserting computer chips into toner cartridges, DRM is used to prevent consumers from refilling or using third-party toner cartridges.[43] Another notorious example is Apple's Error 53, which in 2016 rendered affected phones permanently disabled after iPhone owners had their phone screens

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[36] Design patents may be a limited exception to this rule, but the information contained within design patents is not implicated by the CDRBR.

[37] 17 U.S.C. § 1201(a); 17 U.S.C. § 106; 17 U.S.C. §117.

[38] 17 U.S.C.A. § 1201(a)(1)(A).

[39] 17 U.S.C. § 1201(a)(1)(B). "In the final Commerce Committee Report . . . Representatives Klug and Boucher highlighted their intent that . . . 'Whatever protections Congress grants should not be wielded as a club to thwart consumer demand for innovative products, consumer demand for access to information, consumer demand for tools to exercise their lawful rights, and consumer expectations that the people and expertise will exist to service these products.'" Steve P. Calandrillo & Ewa M. Davison, *The Dangers of the Digital Millennium Copyright Act: Much Ado About Nothing?*, 50 Wm. & Mary L. Rev. 349, 360 (2008) (*quoting* H.R. Rep. No. 105-551, pt.2, at 87 (1998).).

[40] 17 U.S.C. § 1201 et seq.

[41] 17 U.S.C.A. § 1201(a)(1)(B) & (C).

[42] Leah Chan Grinvald & Ofer Tur-Sinai, *Intellectual Property Law and the Right to Repair*, 88 Fordham L. Rev. 63, 79 (2019); *see also* Daniel Cadia, *Fix Me: Copyright, Antitrust, and the Restriction on Independent Repairs*, 52 U.C. Davis L. Rev. 1701, 1710–11 (2019) (explaining that The Copyright Office grants limited exceptions for non-copyright holders to bypass digital locks for purposes of repair.).

[43] *See* Lexmark Int'l, Inc. v. Static Control Components, Inc., 572 U.S. 118 (2014).

repaired by unauthorized repair providers.[44] Thus, DRM can prevent consumers from using their property in legal, non-infringing ways, is often employed with the deliberate objective of obstructing repair.[45]

However, the CDRBR creates a mechanism for consumers to reset locks without requiring them to resort to unauthorized circumvention. It does this by requiring manufacturers to reset DRM themselves as needed for repair.[46] Without unauthorized circumvention, there is no possibility of a DMCA violation. Put otherwise, if a device owner needs to perform a repair that would be obstructed by a digital lock, the DMCA may inhibit the consumer from breaking that lock herself—but a manufacturer can be compelled to reset the digital lock itself. There would be no copyright violation in this scenario, because the end result is repair, not copying or circumvention.

B. Trade Secret

Questions regarding trade secrets might arise because the CDRBR requires manufacturers to disclose information necessary for repair. However, there are few trade secret issues implicated by the bill's disclosure requirements. Furthermore, the CDRBR provides manufacturers with adequate protections against trade secret disclosure.

Trade secret law is primarily governed by Colorado statute.[47] The purpose of trade secret law is to prevent businesses from stealing secrets from one another.[48] However, trade secret protections are relatively weak. Anyone who successfully reverse engineers a product protected only by trade secret is free to use this

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[44] Chris Jay Hoofnagle et. al., *The Tethered Economy*, 87 Geo. Wash. L. Rev. 783, 819–20 (2019); *see also* Daniel Moore, *You Gotta Fight for Your Right to Repair: The Digital Millennium Copyright Act's Effect on Right-to-Repair Legislation*, 6 Tex. A&M L. Rev. 509, 514 (2019).

[45]The Copyright Office grants limited exceptions for non-copyright holders to bypass digital locks for purposes of repair. These exceptions are narrow and only apply within very specific contexts. Furthermore, they require renewal by the Copyright Office every three years. 37 C.F.R. § 201.40(a)(9) & (10); *see also* Daniel Cadia, *Fix Me: Copyright, Antitrust, and the Restriction on Independent Repairs*, 52 U.C. Davis L. Rev. 1701, 1710–11 (2019).

[46] CDRBR § 6-1-1303(1)(b).

[47] Colo. Rev. Stat. § 7-74-102(4). The Defend Trade Secrets Act ("DTSA") is a federal regulation protecting trade secrets. The DTSA primarily provides federal remedies for theft of trade secrets through corporate espionage. 18 U.S.C. §1831 et seq.

[48] Restatement (Third) of Unfair Competition § 39 (1995). C.R.S. § 7-74-101, et seq.

information however she wishes.[49] Thus, any person who wishes to take apart a device to figure out how it works is permitted to do so—regardless of which intellectual property regime it falls under. If the product is protected under trade secret law, a person who reverse engineers the device is permitted to copy, manufacture, or sell whatever he wishes based on the information gleaned. Trade secret law will not provide any cause of action against reverse engineering.

Although it is hard to get a clear sense of how much information manufacturers are protecting as trade secrets (because they are secret), the nature of the available legal protections makes it unlikely that many trade secrets would be implicated by the requirements of the CDRBR. The risk—and frank likelihood—that competitors will reverse engineer the new inventions of electronic device manufacturers creates a strong incentive for any manufacturer to pursue the stronger intellectual property protections of patent law (discussed below).

Finally, the CDRBR contains measures to protect any trade secret that might fall within the ambit of its requirements. The CDRBR permits manufacturers to redact trade secrets from documents needed for repair wherever necessary. In the alternative, manufacturers may protect released trade secrets pursuant to protective contractual terms.

C. Trademark

Questions regarding trademark may be raised because manufacturers may fear that losing control over product repair may lead to trademark dilution. However, trademark law does not allow manufacturers to retain control over devices after sale to a consumer, and trademark dilution claims do not apply in this context.

Trademark law is primarily governed by federal law,[50] with additional provisions in Colorado statutory law.[51] Trademark law protects distinctive mark or trade dress that identifies the source or manufacture of the product.[52] Trademark helps ensure that a company's investments in quality, performance, longevity, brand, and other reputational investments, are protected as assets of the company.[53]

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[49] C.R.S. § 7-74-102(2).

[50] 15 U.S.C. § 1051 et seq.

[51] C.R.S. 7-70-101, et. seq.

[52] *Id.*

[53] "The purpose underlying any trade-mark statute is twofold. One is to protect the public so it may be confident that, in purchasing a product bearing a particular trademark which it favorably knows, it will get the product which it asks for and wants to get. Secondly, where the owner of a trade-mark has spent energy, time, and money in presenting to the public the product, he is protected in his investment from its misappropriation by pirates and cheats. This is the well-

A trademark holder may claim trademark dilution, or "tarnishment," upon showing that the infringing mark has created consumer confusion between the two sources and has damaged the value of the senior mark by virtue of that confusion or creating unsavory associations in the mind of the consumer.[54] Speculative claims of trademark dilution will not stand; actual tarnishment of the mark is required.[55]

The CDRBR does not risk giving rise to claims of trademark dilution. Trademark law does not grant the manufacturer a right to control a device after it has been sold,[56] and cannot be used to control the product past the point of sale.[57] For example, a vacuum cleaner manufacturer cannot prevail in a trademark dilution case against a repair shop that advertises repairing its trademarked vacuum cleaner. To do so would "convert anti-dilution laws into a tool for manufacturers to police independent repair shops and second-hand sales."[58]

D. Patent

Questions regarding patent may arise out of misunderstanding of the scope and protections of patent law; manufacturers may suggest that the technological monopolies available under patent law extend to the repair market. However, the CDRBR's requirements do not implicate patent law, and patent rights extinguish at the point of sale.

Patent protection is available for any "new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof."[59] After successful prosecution of a patent claim, patent law grants the

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established rule of law protecting both the public and the trade-mark owner." S.Rep. No. 1333, 79th Cong., 2d Sess., 3 (1946).

[54] "The term 'dilution' means the lessening of the capacity of a famous mark to identify and distinguish goods or services, regardless of the presence or absence of (1) competition between the owner of the famous mark and other parties, or (2) likelihood of confusion, mistake, or deception." *Moseley v. V Secret Catalogue, Inc.*, 537 U.S. 418, 433 (2003) (*quoting* 15 U.S.C. 1127).

[55] *Id.*

[56] "Trademark law does not entitle markholders to control the aftermarket in marked products." Scott Fetzer Co. v. House of Vacuums Inc., 381 F.3d 477, 489–90 (5th Cir. 2004); *see also* Ty, Inc. v. Perryman, 306 F.3d 509, 513 (7th Cir.2002).

[57] "[C]onsumers will often base their opinion of a product on the product's performance after months or years of use and periodic repairs. These phenomena are necessary and unremarkable offshoots of a robust aftermarket in trademarked products, not evidence of dilution." *See* Fetzer, 381 F.3d at 490.

[58] *Id.*

[59] 35 U.S.C. § 101

holder the right to exclude others from making, using, or selling the patented invention for the statutory period, usually twenty years.[60]

Manufacturers have an incentive to more frequently use patent protection for valuable technological inventions, and the same invention cannot be protected by both patent and trade secret law: the two forms of protection are mutually exclusive.[61]

However, although patent rights are powerful the right to exclude others from making, producing, and selling does *not* include the right to control the use and transfer of the *product itself* after sale.[62] This includes controlling the terms of repair.[63] Accordingly, the CDRBR does not implicate any rights held under patent because patent law does not grant to patent holders any control or monopoly over the repair market.

III. Device Security & Regulatory Compliance

Requiring manufacturers to supply parts and information has raised arguments from both sides regarding security and regulatory compliance. However, it is important to note the limited scope of the CDRBR. The CDRBR (1) only requires manufacturers to supply tools, parts, and documentation that is required for repair,[64] (2) provides manufacturers options to protect security when providing

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[60] 35 U.S.C. §§ 154(a)(1)&(2)

[61] "Publication in a patent destroys the trade secret because patents are intended to be widely disclosed—that is the quid for the quo of the patentee's exclusive right to make and sell the patented device." BondPro Corp. v. Siemens Power Generation, Inc., 463 F.3d 702, 706–07 (7th Cir. 2006) (citing On–Line Technologies, Inc. v. Bodenseewerk Perkin–Elmer GmbH, 386 F.3d 1133, 1141 (Fed.Cir.2004); Scharmer v. Carrollton Mfg. Co., 525 F.2d 95, 99 (6th Cir.1975).).

[62] "The authorized sale of an article that substantially embodies a patent exhausts the patent holder's rights and prevents the patent holder from invoking patent law to control postsale use of the article." Quanta Computer, Inc. v. LG Elecs., Inc., 553 U.S. 617, 638 (2008). *See also* United States v. Univis Lens Co., 316 U.S. 241, 249 (1942).

[63] 35 U.S.C. § 154(a). "When a patentee chooses to sell an item, that product 'is no longer within the limits of the monopoly' and instead becomes the 'private, individual property' of the purchaser, with the rights and benefits that come along with ownership. A patentee is free to set the price and negotiate contracts with purchasers, but may not, '*by virtue of his patent,* control the use or disposition' of the product after ownership passes to the purchaser. Impression Prod., Inc. v. Lexmark Int'l, Inc.*,* 137 S. Ct. 1523, 1531 (2017) (internal citations omitted).

[64] CDRBR § 6-1-1301(1)(a).

these materials,[65] and (3) does not alter or conflict with the laws enforcing device security and standards compliance.

Opponents of right to repair legislation have raised concerns that enabling owners and independent repairers could lead to circumvention of regulations and standards, including security, safety, and environmental controls.[66] These concerns pose two distinct questions. First, this section considers whether more people repairing their own devices or taking them to independent repair shops will make devices and their connected networks be more vulnerable to hacking. [67] Second, this section examines whether the CDRBR make it easier for consumers to intentionally alter their devices avoid regulatory standards governing things like emissions and the wireless spectrum.

A. Device Security

The CDRBR is not likely to increase device vulnerabilities.[68] The CDRBR only requires manufacturers to supply parts, tools, and information as needed to repair devices.[69] Importantly, it gives manufacturers options protect device security and sensitive information, including secure release systems (SRSs) and appropriate agreements.[70] To the extent that the CDRBR enables manufacturers to exercise more control over the repair process by providing consumers with a trusted source of parts and information.

Proponents of right-to-repair also point out that it will improve software security by making it easier for consumers to keep them up to date. Security experts widely recognize that software patches and updates are integral to digital security.[71] They have pointed out that "[b]y erecting barriers—whether monetary

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[65] CDRBR § 6-1-1301(1)(b).

[66] *E.g.*, Thomas E. Iles, "Kansas HB 2122: Digital Electronic Repair Requirements," John Deere & Company (Jan. 31, 2017); Responsive Comment of Apple, Inc. In Opposition to Proposed Exemption 5A and 11A (Class #1), U.S. Copyright Office, Docket No. RM 2008-8: Exemption on Circumvention of Copyright Protection Systems for Access Control Technologies (Responsive Comment of Apple).

[67] *E.g.*, Responsive Comment of Apple at 8; Paul Roberts, "Updated: A New Lobbying Group is Fighting Right to Repair Efforts", The Security Ledger (Feb. 23, 2018 10:47 AM), https://securityledger.com/2018/02/new-lobbying-group-fights-right-repair-laws/.

[68] Louise Matsakis, "Security Experts Unite Over Right to Repair," Wired (Apr. 30, 2019 9:51 AM), https://www.wired.com/story/right-to-repair-security-experts-california/.

[69] CDRBR § 6-1-1301(1)(a).

[70] CDRBR § 6-1-1301(1)(b).

[71] *E.g.*, Ira Winkler & Araceli Treu Gomes, *Countermeasures*, Advanced Persistant Security (2017).

or logistical—to owners and their agents to repair or service their property" manufacturers may create vulnerabilities by causing users to delay or opt out of updates and patches.[72]

The CDRBR requires manufacturers to provide approved software patches and updates needed to keep devices functioning.[73] Including these patches and updates will likely improve device security by ensuring that owners and repairers do not attempt to re-write code in order to enable repairs, and ensuring that necessary repairs, whether to hardware or software, are not put off.

Finally, the CDRBR does not remove, contradict, or affect any state or federal laws that prevent and punish hacking. In short, if someone did somehow use the repair process to hack a device, that person will still be liable under anti-hacking laws. The federal Computer Fraud and Abuse Act and Colorado computer crime statutes broadly prohibit unauthorized computer activities.[74] These activities include accessing a computer or other digital device[75] without authorization, using unauthorized access to cause harm, and exceeding authorized access.[76] These protections remain even if access to the device may have been authorized at some point for repair purposes (for instance, to an independent repairer), and do not distinguish based on the technological means were used to gain this access (for instance, access using third-party components that were intentionally installed). If a malicious actor did gain access to a device because it had been repaired by an owner or third party, the CDRBR would not protect that malicious actor.

B. Standards & Regulation Avoidance

Critics of right to repair question whether the CDRBR will make it easier for non-repair oriented parties (often referred to as hackers or tinkerers) to intentionally circumvent controls.[77] However, the CDRBR only requires provision of tools, parts, and information as necessary to restore devices to their original functionality, and as discussed above, provides options for manufacturers to protect security and standards. The CDRBR also does not affect the laws in place to prevent improper usage.

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[72] Statement of Principles, Securepairs.org (last visited Nov. 22, 2019), https://securepairs.org/statement-of-principles/.

[73] CDRBR §§ 6-1-1302(4)(b), 6-1-1303(1)(a).

[74] 18 USC 1030, *et seq.*; C.R.S. 18-5.5-102.

[75] *E.g.*, United States v. Kramer, 631 F.3d 900 (8th Cir. 2011).

[76] 18 USC 1030(4)-(7); C.R.S. 18-5.5-102(1).

[77] *Illegal Tampering Survery*, Equipment Dealers Association, https://illegaltampering.com/ legislators/illegal-tampering-survey/.

Various federal laws, regulations, and standards place limitations on how people can use and modify certain devices.[78] For instance, the Federal Communications Commission (FCC) sets strict regulations for phones, and prohibits modification of radio frequency devices in ways that might disrupt communications.[79] Similarly, the Environmental Protection Agency (EPA) regulates emissions from tools and other fuel-burning devices, such as chainsaws or lawnmowers.[80] EPA regulations prohibit tampering with any of these devices such that they do not meet emissions standards.[81]

Manufacturers have raised concerns that right to repair will lead to more owners evading these federal standards, increasing liability for owners and potentially dealers.[82] However, these regulations often exclude making necessary repairs to equipment.[83] Relatedly, federal copyright law only exempts circumvention of device software for repair activities that "make [a device] work in accordance with its original specifications" or authorized updates.[84] Because the CDRBR only requires OEMs to provide the tools, parts, and information that are necessary to restore a device to its original functionality, it does not affect owners' capacity to violate these federal standards.[85]

Similarly, if owners do tinker with devices in ways that make them non-compliant, the CDRBR does not protect the owner, or shift liability to the manufacturers. Legal prohibitions on device modification remain in place regardless of what actions states may take to enable legitimate device repair.

For example, farmers who modify their equipment to evade environmental regulations and consumers who tinkers with their device to evade technical standards may be liable for the violation notwithstanding the CDRBR. However, that liability in no ways shifts to manufacturers and dealers. Under the Clean Air Act, dealers and manufacturers are only liable for selling equipment "where the principal effect" is to evade environmental controls.[86] Because the CDRBR in no way encourages manufacturers to make such tools or equipment available, it does not expose them to liability under the Clean Air Act.

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[78] *Id.*

[79] 47 C.F.R. § 2.1043.

[80] 40 C.F.R. § 1054.

[81] 40 C.F.R. § 1068.101(b)(1).

[82] *Illegal Tampering Survey*, *supra* note 77.

[83] *See, e.g.,* 40 C.F.R. 1068.101(b)(1)(i).

[84] 37 C.F.R. § 201.40(10).

[85] CDRBR § 6-1-1301(1)(a).

[86] 42 U.S.C. 7522(3)(B).

Consumers are currently able to tinker with their devices in ways that violate standards; if they do so, they may be liable as the party that made the modification. Under the CDRBR, manufacturers and dealers are required to supply replacement parts and information necessary to restore equipment to its working order and nothing more; this does not make them a party to any standards avoidance that consumers might engage in, any more than they are today. On the contrary, it is possible that the CDRBR may reduce device tinkering and tampering by providing users access to a reliable source of repairs and parts.

IV. Warranty Law and the Colorado Constitution

There is both concern and confusion regarding the interplay of warranties and right to repair legislation.[87] However, the CDRBR does not substantially alter the current state of law surrounding warranties on "consumer products," which are governed to a large extent by the Magnuson-Moss Warranty Act of 1975. The CDRBR does not change consumer's rights to remedies under their existing warranties and does not purport to change how a warranty on digital electronic equipment will be written in the future.

The Act applies to warranties on consumer products that cost more than five dollars.[88] "Consumer products" are defined as "tangible personal property . . . which is normally used for personal, family or household purposes."[89] The Act sets minimum standards for what warranties must entail under Federal Law.[90] For example, the Act requires remedies supplied by the warrantor be carried out "within a reasonable time and without charge."[91] The Act also gives the FTC authority to promulgate rules further governing warranties.[92]

The Act does not include any provisions with which the CDRBR would obviously conflict. However, warranties lawfully entered under the Act could hypothetically have terms which could be voided by the CDRBR in favor of its obligations on manufacturers. Under the Colorado Constitution, this voiding provision is potentially overbroad because the CDRBR could be used as grounds to void

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[87] *See* LAUREN GOODE, *Could Feds Force Companies to Support Your Right to Repair?*, WIRED (Jul. 23, 2019, 7:00 AM), https://www.wired.com/story/right-to-repair-ftc-workshop/; CRAIG LLOYD, *What Are "Right to Repair" Laws, and What do They Mean for You?*, HOW-TO GEEK (Jan. 20, 2019, 2:51 PM), https://www.howtogeek.com/339925/what-are-%E2%80%9Cright-to-repair%E2%80%9D-laws-and-what-do-they-mean-for-you/.

[88] 15 U.S.C.A. §§ 2302, 2304

[89] 15 U.S.C.A. § 2301

[90] 15 U.S.C.A. §§ 2302 (a), 2304

[91] 15 U.S.C.A. § 2304 (a)(1)

[92] 15 U.S.C.A. § 2302 (a)

warranty terms which conflict with manufacturer obligations under the bill. This type of retrospective law is disallowed under the Colorado Constitution.[93]

Therefore, there could be a hypothetical problem where the Act's definition of "consumer products" overlaps with the CDRBR's definition of "digital electronic equipment." The CDRBR defines "digital electronic equipment" as "a product sold in this state that, for its functionality, depends in whole or in part on digital electronics embedded in, or attached to, the product."[94]

In practice, the current version of CDRBR voids any provisions with respect to any contract or arrangement entered the by OEM, which "waives, avoids, restricts, or limits" the OEM's obligations under the CDRBR.[95] With respect to warranties, this section means OEMs cannot, for example, condition warranty services on terms which would disclaim the OEMs responsibility to provide repair documentation or repair tools to the entity requesting warranty services.

However, the CDRBR's current form has a limitation preventing it from altering existing contract terms.[96] It is also, unlikely there will be an existing contract which attempts to avoid liability under the CDRBR, at the time the CDRBR is enacted. Therefore, it is unlikely there will be a practical problem under the Colorado Constitution.

However, the CDRBR could still benefit from the addition of language limiting its hypothetical retroactive applications. Adding language such as "with respect to any contract that an OEM enters into after the effective date of this section," to the limitations section of the CDRBR would be sufficient to remedy any such retroactive application problems.[97] In all other circumstances, an individual's warranty, for example on a phone, would operate the same way it currently does under federal and state law.

V. Contracts

Critics of right-to-repair legislation have concerns over bills before state legislatures that do not adequately address how conflicts and gaps between existing OEM contracts and actions required by the proposed legislation will be

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[93] C.R.S.A. Const. Art. 15 § 12 ("The General Assembly shall pass no law . . . for the benefit of any individual or association of individuals, retrospective in its application.")

[94] CDRBR § 6-1-1301(2)

[95] CDRBR § 6-1-1304(2)

[96] CDRBR § 6-1-1304(1)(a)

[97] CDRBR § 6-1-1304(2)

resolved.[98] A coalition of tech industry groups, in a letter to California lawmakers, said that providing information and parts to independent repair shops 'without any contractual protections, requirements, or restrictions" would put consumers and consumer data at risk and put the OEMs intellectual property "in the hands of hundreds if not thousands of new entities.'[99]

In the above example, the opponents' main concern is with security and intellectual property, not with their ability to contract. This is likely because the CDRBR doesn't interfere with an OEMs ability to protect their intellectual property, or to ensure consumer device and data security through contracts.[100]

The CDRBR does not contemplate taking away a OEMs ability to subject the release of information and parts to legally binding contracts. To maintain compliance with the CDRBR, OEMs must contract with only one limitation in mind. The CDRBR simply requires OEMs "on fair and reasonable terms and costs, make available . . . any documentation, parts, embedded software, or tools, including updates to information or embedded software."[101] The CDRBR also permits OEMs to "make the documentation, [etc.] . . . available . . . through appropriate secure release systems, appropriate agreements, or both."[102]

Everything an OEM is obligated to provide under this CDRBR is subject to "fair and reasonable terms."[103] "Fair and reasonable terms" is defined in the CDRBR, in relevant part, as "terms and costs . . . that are equivalent to the most favorable terms and costs that the manufacturer offers to an authorized repair provider."[104] OEMs can therefore, hide documentation, parts, etc., behind any number of enforceable contracts and agreements,[105] so long as authorized repairers, independent repairers and owners are all subject to the same "fair and reasonable" contractual terms. This language has the benefit of standardizing

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[98] *See* ELAINE S. POVICH, *Tech Giants Fight Digital Right-to-Repair Bills*, PEW (Oct. 16, 2019), https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2019/10/16/tech-giants-fight-digital-right-to-repair-bills.

[99] *Id.*

[100] *See supra* sections I, II, & III(A) of this document.

[101] CDRBR § 6-1-1303 (1)(a)

[102] CDRBR § 6-1-1303 (1)(b)

[103] CDRBR § 6-1-1303 (1)(a)

[104] CDRBR § 6-1-1302 (5)(a)(I). There are other components to the definition of "fair and reasonable terms" in the CDRBR, but they are special case requirements. The cited section here is of primary importance.

[105] Varieties of enforceable digital contracts include; "clickwrap" and "browsewrap." For physical materials, OEMs can ship or sell them with "shrinkwrap" agreements that are equally enforceable.

"repair contracts," within each individual OEM, while limiting the OEM's ability to discriminate among different kinds of repairers.

VI. Interstate Commerce

Some critics question whether state laws like the CDRBR will impede interstate commerce in violation of the U.S. Constitution. The Commerce Clause of the Constitution prevents states from passing protectionist measures that unduly burden interstate commerce.[106] This idea is referred to as "Dormant Commerce Clause" doctrine.[107] As written, the CDRBR would likely survive any Dormant Commerce Clause challenges because it does not discriminate between in-state and out-of-state businesses, and because it serves numerous legitimate local purposes.[108]

Courts use a two-step test to determine whether state laws are unconstitutional under the Dormant Commerce Clause.[109] Courts first ask whether a particular statute is discriminatory against out-of-state citizens and businesses.[110] Such discriminatory laws are rarely upheld, as courts usually conclude that they interfere with Congress's constitutional power to regulate interstate commerce.[111] However, in the test's second step, statutes that are *not* discriminatory are upheld unless they place burdens on interstate commerce that are "clearly excessive" compared to the local benefits.[112]

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[106] *E.g.,* Tenn. Wine & Spirits Retailers Ass'n v. Thomas, 139 S. Ct. 2449, 2459 (S. Ct. 2019).

[107] *Id*; *see also* Nat'l Ass'n of Optometrists Opticians Lenscrafters, Inc. v. Brown 567 F.3d 521, 524 (9th Cir. 2009).

[108] A separate stream of Dormant Commerce Clause thinking also prevents states from regulating commercial activities "wholly beyond the State's borders." Healy v. Beer Inst., Inc. 491 U.S. 324, 336 (S. Ct. 1989). This school of Dormant Commerce Clause jurisprudence is known as extraterritoriality, but today it is very limited in its application. *See generally* Brandon Denning, *Extraterritoriality and the Dormant Commerce Clause: A Doctrinal Post-Mortem*, 73 Louisiana L. Rev. 980 (2013). The Commerce Clause does not prevent states from affecting the local economic landscape for industries, even if those industries serve a national market outside the state. *See* Exxon Corp v. Governor of Maryland, 437 U.S. 117, 128 (S. Ct. 1978).

[109] Eastern Kty. Resources v. Fiscal Court, 127 F.3d 532, 540 (6th Circ. 1997).

[110] *Id.*

[111] Northwest Cent. Pipeline Corp. v. State Corp. Comm'n, 489 U.S. 493, 523 (S. Ct. 1989).

[112] Pike v. Bruce Church, 397 US 137, 142 (S. Ct. 1970).

Whether a state law is discriminatory is a question of fact, specifically hinging on the intent of the legislature and the economic environment of the state.[113] The CDRBR is not facially discriminatory because it does not distinguish between in-state and out-of-state companies.

While challengers could argue that the CDRBR is discriminatory because it facilitates the work of repairers within this state, this challenge would be difficult to sustain. Courts have generally recognized that when a statute "[effectuates] a legitimate local public interest, and its effects on interstate commerce are only incidental" it is not discriminatory.[114] Dormant Commerce Clause discrimination inquiries look specifically for situations in which "the predominant effect of a law is protectionism."[115]

If a law is found to be nondiscriminatory, then the second step of the Dormant Commerce Clause inquiry examines the burden to interstate commerce, whether a legitimate local interest is served, and whether that interest could be achieved through less burdensome means.[116] This second step is fairly deferential to states, requiring not merely an effect on interstate commerce, but a substantial burden on interstate commerce.[117]

Challengers could also claim that the duty to provide parts and information will disrupt the commerce of OEMs, but this argument is not well-supported by legal precedent. In interpreting the Commerce Clause, courts require substantial burdens on interstate commerce itself, not just companies' business within a state.[118]

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[113] *See generally, e.g.,* Hunt v. Wash. State Apple Adver. Comm'n, 432 U.S. 333 (S. Ct. 1977) (State law requiring apple labelling was subjected to greater scrutiny because the apple industry in that state was struggling to compete with out-of-state growers).

[114] Pike v. Bruce Church, *supra* note, at 142.

[115] Tenn. Wine & Spirits Retailers Ass'n v. Thomas, 139 S. Ct. 2449, 2474 (S. Ct. 2019).

[116] Pike v. Bruce Church, 397 US 137, 142 (S. Ct. 1970) ("If a legitimate local purpose is found, then the question becomes one of degree. And the extent of the burden that will be tolerated will of course depend on the nature of the local interest involved, and on whether it could be promoted as well with a lesser impact on interstate activities.")

[117] Great Atlantic & Pacific Tea Co. v. Cottrell, 424 U.S. 366 424 U.S. 366, 371 (S. Ct. 1976).

[118] Nat'l Ass'n of Optometrists & Opticians v. Harris 682 F.3d 1144, 1155 (9th Cir. 2012). Challengers could claim the law burdens the interstate market for digital products by shifting economic activity to Colorado repairers. However, courts will uphold regulations even if they have the effect of shifting market share between

Courts are similarly deferential when weighing state interests and the purpose of the law in question (provided it is not a pretext for protectionism). Courts do not require that regulations be guaranteed to have the intended effect, or be the best possible policy approach.[119] They do not consider "the wisdom of the state," only its effect on interstate commerce.[120]

Courts have upheld numerous laws based on similar state interests to those represented in the CDRBR.[121] Given that the CDRBR regulates even-handedly, and effects the local retail market for digital products, it is unlikely to run afoul of the dormant Commerce Clause.

VII. Antitrust & Competition Law

Finally, proponents of the CDRBR point out that the CDRBR supports the broader policy goals of antitrust laws and competitive markets. Antitrust is designed to avoid situations which limit consumers' options in a market.[122] The CDRBR thus furthers the objectives of antitrust by creating more competition in the market for repairs.

The Supreme Court has found manufacturers who try to limit independent repair of their products through access to parts may be liable under antitrust laws.[123] Forcing consumers to rely on OEMs for digital repairs limits consumer choice and

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interstate firms, or from out-of-state firms to in-state firms. Nat'l Ass'n of Optometrists & Opticians v. Harris 682 F.3d 1144, 1152-54 (9th Cir. 2012) (explaining the holdings of the Court in *Exxon Corp. v. Governor of Maryland* and *Minn. V. Clover Leaf Creamery Co.*).

[119] Northwest Cent. Pipeline Corp. v. State Corp. Comm'n, 489 U.S. 493, 525 (S. Ct. 1989).

[120] Exxon Corp v. Governor of Maryland, 437 U.S. 117, 128 (S. Ct. 1978).

[121] *See generally* Minn. V. Clover Leaf Creamery Co., 449 U.S. 456 (S. Ct. 1981), upholding a law that imposed environmental requirements on manufacturers in order to reduce waste *See also* Exxon Corp v. Governor of Maryland, 437 U.S. 117 (S. Ct. 1978), upholding a law that prevented petroleum refiners from operating retail service stations, and requiring them extend "all voluntary allowances uniformly" to service stations they supplied.

[122] *E.g.,* Northern Pacific Railway Co. v. United States, 356 U.S. 1, 4-5 (S. Ct. 1958).

[123] *See generally* Eastman Kodak Co. v. Image Tech. Servs., Inc., 501 U.S. 451 (S. Ct. 1992).

competition. This practice can be viewed as a form of "tying,"[124] or using power in one market to attempt to monopolize another.[125]

For example, Kodak faced antitrust liability when it attempted to limit access to parts for photocopiers to customers that used Kodak's repair services.[126] Kodak attempted to justify its behavior by claiming the limitations it imposed were necessary to maintain quality and avoid being blamed for breakdowns caused by shoddy repairs.[127] However, the courts concluded that this was a pretext, and that holding intellectual property in their devices did not allow Kodak to monopolize the separate market for repairing those devices.[128]

Sound competition policy also weighs against manufacturer claims that the CDRBR will suppress innovation.[129] First, scholars have questioned the factual claim that allowing manufacturers to control the market for repairs will incent innovation in the market for devices.[130] Second, cross-subsidization, in which consumers in one market are made to subsidize innovation in another market, has long been considered inefficient and problematic under antitrust law.[131] Antitrust law and competition policy more broadly would not be well-served by suppressing competition in the market for device repair in order to subsidize innovation in the primary market for devices.

The CDRBR supports the twin policy goals of antitrust by introducing more competition into the market for device repair. OEMs' ability to control access to the parts and information needed to make repairs reduces their incentives to offer

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[124] *Id.*

[125] A. Douglas Melamed, *et al*, Antitrust Law & Trade Regulation, 7th ed. (Foundation Press 2018) 553.

[126] Eastman Kodak, *supra* note 52, at 458.

[127] *Id.* at 484.

[128] *Id.*; *see also* Image Techs. Servs. v. Eastman Kodak Co., 125 F.3d 1195, 1219-20 (9th Cir. 1997). This latter holding, that holding intellectual property in a product does not make its owner immune from antitrust liability, was reiterated in the famous *Microsoft* case in 2001. United States v. Microsoft, 253 F.3d 34, 63 (D.C. Cir. 2001).

[129] *E.g.,* "Right-to-Repair Laws Undermine Innovation," *Equipment Dealers Oppose Illegal Tampering*, FarWest Equipment Dealers Association; *but see, e.g.,* Leah Chan Grinvald & Ofur Tur-Sinai 88 Fordham L. Rev. 63, 89-91 (Oct. 2019); Chris J. Hoofnagle, Aniket Kasari & Aaron Perzanowski, *The Tethered Economy*, 87 Geo. Wash. L. Rev 783, 840 (Jul. 2019).

[130] *See, e.g.*, Grinvald and Tur-Sinai, *supra* note 129; Hoofnagle, Kasari & Perzanowski, *supra* note 129.

[131] *E.g.*, P.M. Rao & Joseph A. Klein, *Antitrust issues concerning R&D cross-subsidization*, Telecom. Pol'y 417 (Jul. 1992).

low-cost, high-quality repair services. By allowing device owners and independent repairers to make repairs, the CDRBR gives consumers more choice, lowers the price and increases the quality of device repairs.

* * *

In sum, if the CDRBR is applied to future sales of digital electronic equipment, it will not significantly conflict with existing areas of federal and state law. The duties the CDRBR imposes on manufacturers do not infringe on their intellectual property, or substantially burden interstate commerce. The CDRBR does not conflict with the legal framework around warranties, licensing, leasing, or contracts, except to the extent that it applies retroactively. This conflict can be resolved by limiting the CDRBR to future sales. The CDRBR does not weaken state or federal standards protecting things like the communications network or environment, and does not affect prohibitions on device hacking. Finally, the CDRBR supports the policy goals of antitrust by promoting market competition for repairs.

We recommend that the legislature consider minor changes to the CDRBR:

- Consider staging its implementation as necessary to reduce burdens to manufacturers (see “Consumer Digital Repair Bill of Rights,” p. 4); and
- Limit its effects to future sales of digital electronic equipment, in order to avoid the Colorado constitution’s protections for existing contracts (see “ Warranty Law, and the Colorado Constitution,” p. 12).

These changes do not affect the character of the bill, merely the implementation. Overall, the policy provisions of the CDRBR do not conflict with existing laws.

ASSOCIATION OF COLORADO CENTERS FOR INDEPENDENT LIVING

April 14, 2022

Dear Colorado Legislators:

The Association of Colorado Centers for Independent Living would like to inform you of our strong and steadfast support of HB22-1031, Consumer Right to Repair Powered Wheelchairs proposed legislation.

As the nine Colorado centers for independent living Directors have made our opinion known to our individual district leaders, we wish to collectively, once again, emphasize the importance of allowing consumers the right to lead, live and choose independently.

Countless stories have been shared from the disabled community all across our state of the debilitation and life interruption that occurs when being unable to choose where to receive repairs on one's mobility device. The cruel punishment to wait weeks and months for a small part when only the anointed repair centers can grant you freedom, is against every tenant of independent living.

Thank you for your continued support of consumer control granted to every group, especially those most marginalized in our great state.

Considerately,

DocuSigned by: Rochelle Mitchell-Miller EED27D11D53849D...

Rochelle Mitchell-Miller, Connections for Independent Living
Chair

DocuSigned by: Linda Taylor AC7086F6DFA243B...

Linda Taylor, Executive Director, Center for Independence

DocuSigned by: Maria Stepanyan 2AF1CFD5AE7046B...

Maria Stepanyan, Executive Director, Center for People with Disabilities

DocuSigned by: Ian Engle D7F9F25D5319461...

Ian Engle, Executive Director, NW CO Center for Independence

DocuSigned by: Bill Edwards 3A824B34EB94400...

Bill Edwards, Executive Director, Center Towards Self-Reliance

DocuSigned by: Anaya Robinson 7D6808BF422242F...

Anaya Robinson, Associate/Acting Director, Atlantis Community, Inc.
Acting Member

DocuSigned by: Indy Frazee 0D3575A6AF37466...

Indy Frazee, Executive Director, The Independence Center

Denise Meyer, Executive Director, Disabled Resource Services

Senate Business, Labor, & Technology – April 18, 2022 Testimony

HB22-1031 – Consumer Right to Repair Powered Wheelchairs

Mr. Chair and Members of the Committee, my name is Mary Fries and I am a Volunteer with AARP which has over 670,000 members in Colorado. I am a retired physical therapist, clinician and administrator.

AARP strongly supports HB22-1031.

Mobility is an essential component of quality of life, and wheelchair breakdowns not only immobilize their users, but sometimes cause adverse consequences and secondary disabilities.

Often times, medical equipment is sold with the requirement that only the manufacturer can make repairs, claiming these restrictions are necessary due to safety concerns. By limiting repair options, manufacturers benefit financially. Higher repair costs and fewer repair options can lead to bottlenecks, especially in a time of crisis, like when one's power wheelchair isn't working.

The FDA Reauthorization Act became law on August 18, 2017,[1] and Section 710 charges the Secretary of Health and Human Services, to issue a report related to the quality, safety, and effectiveness of medical device servicing.

In May 2018, the FDA issued its Report. It cited 4 conclusions:

1. The currently available objective evidence is not sufficient to conclude whether or not there is a widespread public health concern related to servicing, including by third party servicers, of medical devices that would justify imposing additional/different, burdensome regulatory requirements at this time;
2. Rather, the objective evidence indicates that many original equipment manufacturers and third-party entities provide high quality, safe, and effective servicing of medical devices;
3. A majority of comments, complaints, and adverse event reports alleging that inadequate "servicing" caused or contributed to clinical adverse events and deaths actually pertain to "remanufacturing" and not "servicing"; and
4. The continued availability of third-party entities to service and repair medical devices is critical to the functioning of the U.S. healthcare system.[2]

Please vote YES on HB22-1031 to remove unnecessary barriers to repairing power wheelchairs. Thank you.

Mary L. Fries, PT, DPT
AARP Colorado Volunteer Advocate
Littleton, CO 80123

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[1] Public Law No. 115-52.

[2] FDA Report on the Quality, Safety, and Effectiveness of Servicing of Medical Devices. May 2018. https://www.fda.gov/media/113431/download