UNITED STATES DEPARTMENT OF COMMERCE
National Telecommunications and Information Administration
Washington, D.C. 20230

September 24, 2024

Ms. Shira Perlmutter
Register of Copyrights and Director, U.S. Copyright Office
Library of Congress
James Madison Memorial Building
Washington, DC 20540–3120

Re: Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, Docket No. 2023–5

Dear Ms. Perlmutter:

As Assistant Secretary of Commerce for Communications and Information and Administrator of the National Telecommunications and Information Administration (NTIA), I am pleased to submit our views on proposed exemptions from the Digital Millennium Copyright Act's (DMCA's) prohibition against circumvention, as required by Title 17, Section 1201(a)(1)(C) of the United States Code.[1] NTIA serves as the President's principal adviser on telecommunications and information policy[2] and is charged with promoting "the benefits of technological development in the United States for all users of telecommunications and information facilities."[3] Congress recognized the importance of this perspective when giving NTIA a statutory role in this proceeding[4] and, accordingly, our recommendations are based on our mission and expertise.

Twenty-four years have now passed since our respective agencies discussed proposed exemptions in the first edition of this rulemaking, and we deeply appreciate the productive and friendly relationship our teams have built over time. While much has changed since the first rulemaking, some of the core concerns NTIA noted in the first triennial rulemaking remain extremely relevant today. In our 2000 consultation letter, we cited the challenge of the digital divide and our mission "to ensure that all Americans have the tools necessary to participate successfully in today's digital economy."[5] Today's NTIA is as engaged as ever in advancing

[1] 17 U.S.C. § 1201(a)(1)(C) sets forth the required consultative process, which is that "during each succeeding 3-year period, the Librarian of Congress, upon the recommendation of the Register of Copyrights, who shall consult with the Assistant Secretary for Communications and Information of the Department of Commerce and report and comment on his or her views in making such recommendation, shall make the determination in a rulemaking proceeding…."
[2] 47 U.S.C. § 901(b)(6), § 902(b)(2)(D).
[3] 47 U.S.C. § 901(c)(1).
[4] *See, e.g.*, H.R. Rep. No. 105–551, pt. 2, at 23 (July 22, 1998) (noting NTIA's "expertise in the area of telecommunications and information services and technologies"); 144 Cong. Rec. E2136–02 (Oct. 12, 1998) (in which the Chair of the House Commerce Committee "consider[ed] it vital for the Register to consult closely" with NTIA).
[5] Letter from Gregory L. Rohde, Assistant Secretary of Commerce for Communications and Information, to Marybeth Peters, Register of Copyrights (Sep 29, 2000), https://www.copyright.gov/1201/2000/commerce.pdf.

policies and running programs that put our nation on the path to digital equity. This drives our continued belief that **the prohibition against circumvention must not be allowed to harm competition, repair, or repurposing of software-enabled devices, and it must not transform the free expression enabled by fair use principles into a luxury reserved for those with sufficient means**.

Relatedly, the NTIA of 2000 further expressed that its "greatest immediate concern is the very one envisioned by the Commerce Committee when it warned of the development of a legal framework that would 'inexorably create a pay-per-use society.'"[6] After participating in nine triennial rulemakings and observing the real-world impacts of Section 1201 for over two decades, we continue to be deeply concerned by the potential for access controls to be employed in ways that go far beyond protecting the exclusive rights of copyright owners. The records in these proceedings are replete with examples of the misuse of access controls for ends unrelated to copyright protection, including manufacturers hindering third party repair, software vendors resisting research that could uncover product flaws or vulnerabilities, and media companies attempting to censor criticism of their works.

Against the backdrop of these challenges to digital equity, consumer protection, and free expression, we are grateful to your office for once again expertly running a rulemaking process that offers—to the extent permitted by statute—some relief to lawful users of copyrighted works. The formal recommendations NTIA offers here are broadly consistent with the preliminary views we shared in several staff-level meetings over the last few months. In the enclosed document, we highlight key process reforms your office has adopted over the years to make the rulemaking more accessible and efficient, make some observations about additional process challenges and unanswered questions, and offer views on each of the proposed exemptions.

Should you have any questions regarding our recommendations, please do not hesitate to contact me, or Emma Llansó, Acting Associate Administrator, NTIA Office of Policy Analysis and Development, or Stephanie Weiner, Chief Counsel, NTIA Office of the Chief Counsel. Thank you for your consideration of NTIA's views in this important matter.

Sincerely,

Alan Davidson

Enclosure

[6] *Id*. at 3 (citing H.R. Rep. No. 105–551, pt. 2, at 26 (July 22, 1998)).

Ninth Triennial Section 1201 Rulemaking

Recommendations of the
National Telecommunications and Information Administration
to the U.S. Copyright Office

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Executive Summary

The National Telecommunications and Information Administration (NTIA) congratulates the U.S. Copyright Office for administering a complex rulemaking process with its usual high degree of expertise and professionalism. We appreciate the opportunities the Office has offered to include NTIA in the process and the constructive dialogue between our staff during the rulemaking.

Petitions for Renewal

NTIA supports the Copyright Office's approach as stated in the Office's Notice of Proposed Rulemaking and shares the Office's view that no meaningful or sufficient opposition materialized against renewing the current temporary exemptions.

Rulemaking Process Recommendations

Based on developments in this rulemaking, we offer the following recommendations to the Copyright Office to consider in this and future rulemaking processes:

- **The Office should avoid factoring reputational harm when determining the propriety of exemptions**. Weighing reputational harm would improperly expand the scope of protection offered by the prohibition against circumvention. Moreover, exemption beneficiaries often request exemptions so they can criticize and comment on copyrighted works.

- The Office should evaluate when it would be appropriate to take additional steps, such as contacting exemption beneficiaries and opponents, to determine whether an exemption subject to non-renewal is in use and how its non-renewal might impact potential beneficiaries and opponents. Even when there is no renewal request, current temporary exemptions may still be needed to mitigate adverse effects from the prohibition against circumvention, as affected parties may not always have the knowledge or resources necessary to participate in the renewal process.

- **We encourage the Office to seek additional ways to promote even greater public input in the rulemaking process**. A rulemaking participant indicated that they would have likely taken part in the process in a greater capacity had it been clearer to them how to do so. We appreciate the steps the Copyright Office has previously taken to increase participation, and NTIA is ready to help as needed to further and improve upon these efforts.

- We recommend that the Copyright Office develop a more structured approach in regulatory language, or at least seek other solutions, such as an FAQ, to explain in plainer language the contours of exemptions granted in this process. The Office could apply a structured language format to new exemptions, and, if successful, explore ways to adapt structural modifications to current exemptions.

- We encourage the Office to build out the rulemaking record through additional post-hearing questions, particularly where there may be substantial uncertainty about a key legal or factual question central to the review of a class.

- The Office should reject any attempt to revisit, without notice, any conclusions reached during the streamlined renewal process, which would undermine the process and its benefits. The appropriate time to review whether current temporary exemptions should be recommended for renewal is during the streamlined renewal process, during which both supporters and opponents can submit filings in furtherance of their respective views.

Limitations of the Rulemaking Process

Upon reflecting on the evolution of the rulemaking and the role of technology in society since the first triennial rulemaking in 2000, we conclude that the rulemaking process itself may no longer be adequately tailored to balance the interests of rights holders and people seeking to make non-infringing uses of copyrighted works who are adversely affected by the prohibition against circumvention in Section 1201.

We highlight three key issues that we have seen materialize over the years, and we acknowledge that the Copyright Office and the Librarian of Congress may not have the requisite authority under the statute to fully address them. These issues are exacerbated due to exemptions being granted (if at all) only every three years, which can make it complicated for the rulemaking process to respond to new use cases and fast-paced technological developments in the intervening periods.

- *Third-Party Assistance*: Given the significant interest in third-party assistance, we recommend that the Copyright Office note its latest understanding—either in its recommendation to the Librarian or in a subsequent document—on the extent to which the anti-trafficking provisions in Section 1201 limit in practice the ability of exemption beneficiaries to circumvent technological protection measures (TPMs) to make noninfringing uses of copyrighted works. Most exemption beneficiaries will only be able to use exemptions if they can receive third-party assistance in doing so. The lack of third-party assistance risks making exemptions granted a *de facto* nullity. As a result of the intersection between third-party assistance and the anti-trafficking provisions in Section 1201, we recognize that the rulemaking may not be constituted to address this issue in full.

- *Class Scoping*: The Copyright Office should avoid crafting exemptions so narrowly as to, in practice, lead to a device-by-device approach in the rulemaking process. Such granularity risks placing form over substance and not addressing the adverse effects that the prohibition against circumvention can present to people seeking to make non-infringing uses of copyrighted works. The Office has taken important steps to address this issue, but we acknowledge that the extent to which the Copyright Office can scope a class of works to recognize how technology has evolved and how society uses technology today may be limited by the authority granted under the statute and the Office's own interpretation of that authority.

- *TPMs and Methods of Circumvention*: The Copyright Office should be clear in its recommendations when the Office cannot recommend granting an exemption because the Office does not believe that a TPM or method of circumvention that implicate Section 1201 are present. We explained in 2021 and reiterate here that the Copyright Office should be more assertive in this matter given the lack of incentives for exemption supporters and opponents to delve into this issue. If the Office believes it is not within its regulatory authority to do so, we ask that the Office make that clear in its recommendation to the Librarian as applicable.

Proposed, Additional, and Expanded Exemptions

- *Class 1 (Audiovisual Works – Noncommercial Video)*: We recommend that the Copyright Office clarify whether the presented modified language is functionally equivalent to the current temporary exemption. If so, we recommend that the Office either substitute the language, or, if that is not possible, that the Office note the equivalency in easy-to-access FAQ document or its recommendation to the Librarian. NTIA further recommends that the Copyright Office consider a more comprehensive approach to evaluate non-substantial regulatory language modifications in future rulemakings.

- *Class 2 (Audiovisual Works – Online Learning)*: We support an exemption for non-accredited and for-profit educational institutions to use short, high-quality excerpts of motion pictures and television shows in their teaching (for the purpose of criticism, comment, illustration, and explanation), with some modifications to address opponents' concerns. This would result in an exemption that benefits nontraditional educational entities, where these entities are identified through official documentation filed with a state or a federal government agency. As an alternative, NTIA would support an expansion that includes these nontraditional educational entities but is further limited (as to these entities) only to film study and language courses, which were the focus of petitioners' arguments.

- *Class 3 ((a) Motion Pictures and (b) Literary Works – Text and Data Mining)*: We fully support the proposed expansion of the TDM exemptions, which would result in exemptions to permit researchers to share corpora with colleagues at other universities who are conducting independent research and teaching using TDM. Furthermore, and as explained in part in our discussion of petitions for renewal, NTIA urges the Copyright Office to resist untimely, un-noticed, and ill-informed calls to revisit its conclusion that it intends to recommend renewal of the current TDM exemptions.

- *Class 4 (Computer Programs – AI Trustworthiness Research)*: We support an exemption for AI trustworthiness research largely modeled after the current security research exemption regulatory language, and similar to one of the proposals presented by proponents. However, we note that several of the purported TPMs and methods of circumvention listed by the exemption supporters do not appear to fall within the scope of Section 1201. To the extent that the Copyright Office determines that the prohibition against circumvention does not create adverse effects to the proponents' research activities because these activities do not involve TPMs or circumvention of a technological measure as defined in Section 1201, NTIA recommends that the Copyright

Office explicitly state that the purported TPMs or methods of circumvention listed in the proponents' submissions do not meet the statutory standard. If the Copyright Office determines the existence of TPMs and methods of circumvention under Section 1201, then the Office should recommend granting the exemption, as proponents have otherwise met their burden. Because the ambiguity in whether proponents' activities involve circumventions of TPMs within the meaning of Section 1201 creates meaningful burdens on research of public significance, NTIA requests that the Copyright Office explicitly "report and comment on" NTIA's views as to the existence of TPMs and methods of circumvention within the meaning of Section 1201. Should the Copyright Office be disinclined to recommend an AI trustworthiness research exemption, NTIA recommends in the alternative that the Office seek to interpret the existing security research exemption to cover at least some aspects of good-faith AI trustworthiness research.

- *Class 5 (Computer Programs – Repair)*: We support an exemption for the diagnosis, maintenance, and repair of commercial and industrial equipment. To address opponents' concerns, we would also support language indicating that an exemption does not necessarily provide a safe harbor from, or defense to, liability under other applicable laws or breach of contractual obligations. Should the Copyright Office or Librarian decline to recommend or grant an exemption that covers a range of commercial and industrial equipment, we would support in the alternative an exemption that carves out specific types of industrial and commercial equipment, or an exemption that defines the contours of what a repair activity entails in relation to specific types of commercial or industrial equipment (i.e., a carve-out approach).

- *Class 6 ((a) Computer Programs and (b) Video Games – Preservation)*: NTIA supports expansion of the software and video game preservation exemptions to allow the distribution and availability of works covered under these exemptions outside of the physical premises of the eligible institutions, without a remote user limitation. NTIA has a long history of supporting preservation efforts and the special role that libraries, archives, and museums play in society. The interests of copyright holders have shown to be adequately protected after the removal of the physical premise limitation for software preservation efforts in the 2021 rulemaking. There is no indication that this would not likewise be true if the restriction was removed from the existing video game preservation exemption. Furthermore, additional eligibility requirements for institutions regarding off-premises access—particularly the implementation of reasonable digital security measures—are essential to achieving this goal while ensuring that legitimate activities under the exemption continue.

- *Class 7 (Computer Programs – Vehicle Operational Data)*: NTIA supports an exemption to access vehicles' operational data including diagnostic and telematics data, and we recommend that the exemption be granted as a standalone from the existing vehicle repair exemption. Additionally, NTIA recommends slight modifications to the proposed exemption language, primarily the inclusion of the word "analysis," recognizing the importance of vehicle owners' or lessees' rights to "access, store, share, and analyze" the data. NTIA also recommends that, to the extent possible under this rulemaking, this exemption permit these actions to be carried out with the assistance of third parties.

I. Petitions for Renewal

The National Telecommunications and Information Administration (NTIA) once again applauds the U.S. Copyright Office for its streamlined renewal process, which we see as a continued success. This process has permitted the rulemaking to operate more efficiently while properly considering the interests of exemption supporters and opponents.

NTIA supports the Copyright Office's approach as stated in the Office's Notice of Proposed Rulemaking. NTIA agrees with the Copyright Office's conclusion in its October 2023 NPRM that no meaningful or sufficient opposition materialized that would caution against renewal or that would shift review outside of the streamlined process. While a few commenters expressed opposition to the streamlined renewal of some exemptions,[1] NTIA does not believe there are demonstrated material changes in facts, law, or other circumstances that should lead to non-renewal.[2]

II. Rulemaking Considerations

Below, we highlight key issues for the Copyright Office's consideration in both the current and future rulemakings:

Reputational harm is out of scope in the rulemaking. The Copyright Office should avoid factoring reputational harm when determining whether to recommend renewing (or granting) an exemption under the rulemaking. For example, in this rulemaking, Author Services, Inc., opposes renewal of the exemption for the diagnosis, maintenance, or repair of consumer devices found in 37 CFR § 201.40(b)(14).[3] Author Services in part argues that "[p]ermitting circumvention of TPMs in this category of devices would undermine manufacturers' ability to control both *their reputation* and their software."[4] We note that the prohibition against circumvention in Section 1201 is not intended to provide a device manufacturer the ability to control the manufacturer's "reputation."[5] Weighing reputational harm would improperly expand the scope of protection under Section 1201 and potentially contravene the purpose of some of the granted exemptions that aim to criticize or comment on copyrighted works. We recommend that the Copyright Office

[1] Comments in opposition are available at https://www.copyright.gov/1201/2024/petitions/renewal/.
[2] Several commenters cited to the recent U.S. Supreme Court's decision in *Andy Warhol Foundation for the Visual Arts, Inc. v. Goldsmith*, 598 U.S. 508 (2023), as providing the basis for a reconsideration of some of the renewals. For reasons explained by the Copyright Office in its NPRM, NTIA does not find that argument persuasive as to the renewals of temporary exemptions in this rulemaking. *See Exemptions to Permit Circumvention of Access Controls on Copyrighted Works*, Noticed of Proposed Rulemaking, Docket No. 2023-5 (hereinafter "2023 NPRM"), 88 Fed. Reg. 72013, 72022 (Oct. 2023) (to be codified at 37 C.F.R. § 201), https://www.govinfo.gov/content/pkg/FR-2023-10-19/pdf/2023-22949.pdf.
[3] Renewal Opposition Comments of Author Services, Inc., Docket No. 2023-5, https://www.copyright.gov/1201/2024/petitions/renewal/Opp-Device-Repair-Author-Services-Inc.pdf.
[4] *Id*. at 2 (emphasis added).
[5] NTIA raised a similar point in the 2021 rulemaking. *See Eighth Triennial Section 1201 Rulemaking, Recommendations of the National Telecommunication and Information Administration to the Register of Copyrights*, Docket No. 2020-11 (Oct. 2021), at 109, https://www.ntia.gov/sites/default/files/publications/ntia_dmca_consultation_2021_0.pdf ("Certain potential market harms are not cognizable under copyright law and not meant to be addressed in this rulemaking (e.g., reputational harms for software and devices shown to have security weaknesses).") (hereinafter "2021 NTIA Letter").

make this point clear in its recommendation to the Librarian, as the Office has in the past in the context of security research.[6]

A lack of submission for renewal should not necessarily be understood as a lack of need for an exemption. We recommend that the Copyright Office evaluate when it would be appropriate to take additional steps, such as contacting exemption beneficiaries and opponents, to determine whether an exemption subject to non-renewal has been in use and how its non-renewal might impact potential beneficiaries and opponents. For example, the Copyright Office has indicated that it will not recommend or consider renewal of 37 CFR § 201.40(b)(21), which provides an exemption "solely for the purpose of allowing an individual with a physical disability to use software or hardware input methods other than a standard keyboard and mouse" to interact with video games.[7] The Office explains in its reasoning that no party has sought renewal of the exemption.[8] We caution against a conclusion or presumption—not expressed here by the Office but that could arise from the exemption not being renewed—that an exemption is no longer needed simply because no party requested its renewal. The streamlined renewal process is relatively new, and it is unusual for parties to not submit a request for renewal under the process. Further, as NTIA has noted in the past and others have underscored over the years, the Section 1201 rulemaking is a complex, multi-year process. Sometimes, parties might not be able to fully participate to promote their interests (e.g., they may not have in-house expertise to advise them or may lack the resources or knowledge to do so). It is precisely in these types of instances that a need for an exemption—or a need to push back against renewing or granting one—may go unaddressed in the rulemaking.[9]

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[6] *See, e.g.*, U.S. Copyright Office, *Section 1201 Rulemaking: Eighth Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention*, *Recommendation of the Register of Copyrights* (Oct. 2021), at 244, https://cdn.loc.gov/copyright/1201/2021/2021_Section_1201_Registers_Recommendation.pdf ("To the extent that vulnerabilities found through good-faith security research may hurt a copyright owner's reputation or discourage consumer activity, such a harm is not cognizable under copyright law.") (citing *Campbell v. Acuff-Rose Music*, 510 U.S. 569, 592 (1994)) (hereinafter "2021 Register's Recommendation").

[7] 2023 NPRM, 88 Fed. Reg. at 72015 n.21.

[8] *Id*.

[9] The Copyright Office has already noted that it will occasionally take steps to obtain additional information to determine whether an exemption can be granted. *See, e.g.*, U.S. Copyright Office, *Section 1201 of Title 17, Report of the Register of Copyrights* (June 2017), at 110, https://www.copyright.gov/policy/1201/section-1201-full-report.pdf ("Although the Office has discretion to engage in independent fact-finding and take administrative notice of evidence, the primary way that most evidence supporting an exemption will get into the record will continue to be through the submission of proponents, who are usually in the best position to provide it.") (hereinafter "Section 1201 Report"); U.S. Copyright Office, *Recommendation of the Register of Copyrights in RM 2008-8; Rulemaking on Exemptions from Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies*, at 257 (June 2010), https://www.copyright.gov/1201/2010/initialed-registers-recommendation-june-11-2010.pdf (". . .[T]he Register's staff conducted some additional research to determine whether the case could be made" in favor of a disability-related exemption.).We think this is the type of exemption that could merit further action the Copyright Office, such as reaching out to potential exemption beneficiaries and opponents. The history of this exemption is complicated, but in sum the exemption was borne out of an attempt by advocates of disabled persons to obtain a broad accessibility exemption. *See generally* Eighth Triennial Rulemaking, Class 17 Round 1 Comments of American Council of the Blind *et al*., Docket No. 2020-11, https://www.copyright.gov/1201/2021/comments/Class%2017_InitialComments_Accessibility%20Petitioners.pdf. At the time, the Copyright Office recommended and the Librarian granted a narrower subset of that request focused on disability access for video games. *See, e.g.*, 2021 Register's Recommendation at 337. When there is a significant

Additional assistance may be needed for people to meaningfully participate in the rulemaking. We encourage the Office to seek additional ways to promote even greater public input in the rulemaking process. There was at least one instance in this rulemaking in which additional assistance could have led to greater consideration of an exemption. Based on information presented at the public hearings, there is reason to believe that Class 6 petitioner Ken Austin might have more actively participated in the current rulemaking if the rules of the process and opportunities for input had been clearer to them.[10] NTIA has raised a similar point in the past.[11] We appreciate the need for the Copyright Office to be able to administer the rulemaking in a predictable, timely manner that is fair to all parties, and in this regard the Office has implemented helpful changes to the rulemaking process—e.g., remote participation. NTIA continues to encourage the Copyright Office to consider additional modifications to promote greater public participation and stands ready to discuss with the Office what such modifications could entail.

There is a need for a structured exemption language format to provide a clear guide for exemption beneficiaries. We recommend that the Copyright Office develop a more structured approach to regulatory language, or at least seek other solutions, such as an FAQ, to explain in plainer language the contours of exemptions granted in this process. There is a need for a structured exemption language format to provide a clear guide for exemption beneficiaries. Such a structure would ease the burden on all parties in the process and allow parties to focus better on specific alterations to exemption language in subsequent rulemakings. NTIA has raised these points in previous rulemakings,[12] parties have made similar requests in the past,[13] and the Office

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mismatch between an original petition and a final rule, it would be helpful for the Office to do more targeted outreach to affected parties.

[10] *See* Transcript, Ninth Triennial Rulemaking, In the Matter of Section 1201 Public Hearing: Audience Participation (April 18, 2024) (hereinafter "April 18, 2024 Audience Participation Hearing Transcript"), Remarks of Ken Austin, at 14-15, https://www.copyright.gov/1201/2024/hearing-transcripts/240418-Section-1201-Public-Hearing-Public-Participation-Session.pdf at 14-15 (Ken Austin: "I don't know if you are allowed to answer this question, but I wonder if there is a specific person at the [Copyright] Office I could contact to sort of ask questions about the process so that maybe in three years, if I feel the need for my proposed exemption exists, you know, I could come in a little better prepared as somebody who's not an attorney or CEO or anything like that.").

[11] *See, e.g.*, *Sixth Triennial Section 1201 Rulemaking, Recommendations of the National Telecommunication and Information Administration to the Register of Copyrights*, Docket No. 2014-07 (Sept. 2015), at 3, https://www.ntia.gov/sites/default/files/publications/2015_ntia_dmca_section_1201_consultation_0.pdf ("NTIA remains concerned about the accessibility of these proceedings to members of the public who lack expertise in copyright law or the resources to retain counsel, yet may be adversely affected by either the prohibition against circumvention or proposed exemptions from the prohibition.") (hereinafter "2015 NTIA Letter").

[12] 2021 NTIA Letter at 2-4; *Seventh Triennial Section 1201 Rulemaking, Recommendations of the National Telecommunication and Information Administration to the Register of Copyrights*, Docket No. 2017-10 (Sept. 2018), at 4, https://www.ntia.gov/sites/default/files/publications/ntia_dmca_consultation_09252018_0.pdf (hereinafter "2018 NTIA Letter").

[13] *See, e.g.*, Eighth Triennial Section 1201 Rulemaking, Class 13 Round 1 Comments of J. Alex Halderman, Center for Democracy & Technology, and U.S. Technology Policy Committee of the Association for Computing Machinery, Docket No. 2020-11, at 6-7, https://www.copyright.gov/1201/2021/comments/Class%2013_InitialComments_J.%20Alex%20Halderman,%20Center%20for%20Democracy%20&%20Technology,%20and%20U.S.%20Technology%20Policy%20Committee%20of%20the%20Association%20for%20Computing%20Machinery.pdf; Eighth Triennial Section 1201 Rulemaking, Class 8 Round 1 Comments of American Council of the Blind, American Foundation for the Blind, National Federation of the Blind, Association for Education and Rehabilitation of the Blind and Visually Impaired, Library

has recognized the value in simplified regulatory language.[14] In the 2021 rulemaking, we noted one way such a structure could be achieved: "NTIA contemplates such a format would break out each exemption into three essential parts, including 1) the class of work at issue; 2) a description of the covered users who may circumvent access controls on the class of work (if narrower than all users of the class of work); and 3) the covered purposes allowed by the exemption (if narrower than all noninfringing uses)."[15] For example, under the hypothetical structure, the current temporary exemption for computer programs operating 3D printers could read as follows:

37 CFR § 201.40(b)(19). **ORIGINAL.** Computer programs that operate 3D printers that employ technological measures to limit the use of material, ~~when circumvention is accomplished~~ solely for the purpose of using alternative material and not for the purpose of accessing design software, design files, or proprietary data.	**37 CFR § 201.40(b)(19).** **RESTRUCTURED.** Computer programs that: a) Operate 3D printers that employ technological measures to limit the use of material; *For use by:* a) Users of a covered computer program; Solely for the purpose of: a) Using alternative material; and not for the purpose of accessing design software, design files, or proprietary data.

In the example above, we believe the substance of the exemption remains the same, even if some language has changed. There are other ways to achieve these structural modifications, and this example is non-exhaustive.

We acknowledge the potential risk that any change in language could be perceived as a change to the substance of the current regulatory language, but we do not believe addressing the issue is

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Copyright Alliance, Benetech/Bookshare, HathiTrust, and Perkins Braille & Talking Book Library, Docket No. 2020-11, at 10, https://www.copyright.gov/1201/2021/comments/Class%2008_InitialComments_Accessibility%20Petitioners%20II.pdf.

[14] Section 1201 Report at 151 ("The Office agrees with some commenters that drafting the section 1201 regulatory language in plain language is a worthy goal, echoing efforts from the Legislative and Executive Branches to promote clear communications to the public. Congress recently heard testimony that copyright law has become more opaque and technical over time, and section 1201 is no exception—the proposed exemptions in the triennial rulemakings have steadily increased both in complexity and number. Nevertheless, the Office will make a greater effort to use plain language in regulations, while accurately reflecting what is supported in the evidentiary record.") (internal citations omitted).

[15] 2021 NTIA Letter at 2-3.

intractable. For example, the Copyright Office could apply a more structured approach to its recommendation of new exemptions to test whether parties prefer the structure. If successful, the Office could then explore ways to adopt structural modifications to current exemptions as part of a future rulemaking or another process. Even if the Copyright Office does not adopt a structured approach to regulatory language, the Office could consider other solutions like an explanatory FAQ (while noting that ultimately the regulatory language granted by the Librarian is what is lawfully binding).[16]

More post-hearing questions may be warranted to develop the rulemaking record. We encourage the Office to build out the rulemaking record through additional post-hearing questions, particularly where there may be substantial uncertainty about a key legal or factual question central to the review of a class. In this rulemaking, the Copyright Office asked post-hearing questions only for Classes 5 and 7.[17] The Copyright Office has been clear that post-hearing questions are not mandatory but are intended to add additional information or clarifications to the record.[18] We generally agree with the Office's approach. At the same time, post-hearing questions are a great mechanism to bolster the record as the Copyright Office evaluates whether to recommend granting or denying an exemption (e.g., in the context of separate, new exemptions, such as AI trustworthiness research in Class 4).

Requests during the regular rulemaking period should not undermine the streamlined renewal process. NTIA urges the Copyright Office to reject any attempt to revisit, without notice, any conclusions reached during the streamlined renewal process, which would undermine the process and deprive renewal petitioners of the opportunity to respond. During the streamlined renewal phase of this rulemaking, only one party submitted a comment in opposition to the current exemption for text and data mining (TDM). In this comment, the DVD Copy Control Association and Advanced Access Content System Licensing Authority Administrator focused entirely on what they perceived as the petitioners referencing the availability of commercially licensed data mining products, and the possibility that this may constitute an alternative to circumvention.[19] The Copyright Office rejected this argument and concluded that it intends to

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[16] The Copyright Office's background presentations on Section 1201, the rulemaking, and the streamlined renewal process would be a great model to emulate. U.S. Copyright Office, Section 1201 of Title 17: A Legal Overview, *available at* https://cdn.loc.gov/copyright/1201/1201_background_slides.pdf (last accessed Sept. 4, 2024); U.S. Copyright Office, Section 1201 of Title 17: The Triennial Rulemaking Process, *available at* https://cdn.loc.gov/copyright/1201/1201_rulemaking_slides.pdf (last accessed Sept. 4, 2024); U.S. Copyright Office, Section 1201 of Title 17: Streamlined Petitions for Renewed Exemptions, https://cdn.loc.gov/copyright/1201/1201_streamlined_renewal_slides.pdf (last accessed Sept. 4, 2024). We also acknowledge that the Copyright Office in prior rulemakings took steps in this regard. U.S. Copyright Office, Frequently Asked Questions About the Section 1201 Rulemaking, *available at* https://www.copyright.gov/1201/2018/faqs.html (last accessed Sept. 4, 2024); U.S. Copyright Office, Understanding the Section 1201 Rulemaking, *available at* https://cdn.loc.gov/copyright/1201/2015/2015_1201_FAQ_final.pdf (last accessed Sept. 4, 2024).

[17] U.S. Copyright Office, Post-Hearing Questions, https://www.copyright.gov/1201/2024/post-hearing/ (last accessed Sept. 4, 2024).

[18] 2023 NPRM, 88 Fed. Reg. at 72027.

[19] Comments of the DVD Copy Control Association ("DVD CCA") and the Advanced Access Content System Licensing Administrator, LLC ("AACS LA") on the Petition for Renewal of the Exemption for Text and Data Mining, Docket No. 2023-5, at 2-3, https://www.copyright.gov/1201/2024/petitions/renewal/Opp-AV-Educ-TDM-DVD-CCA-AACS-LA.pdf.

recommend renewal of this exemption.[20] Yet later on, during development of the record around the proposed expansion of the TDM exemption, opponents—particularly the Association of American Publishers (AAP)—spent much of their time attacking the current version of the exemption.[21] The AAP went as far as submitting "that the current exemption should be repealed, or at least suspended, pending a finding by the Copyright Office based on convincing evidence that users of the exemption are abiding by its security requirements," and even offered edits narrowing the current exemption as a fallback position.[22] While also disagreeing with their arguments on the merits (as explained below), we caution against revisiting this issue at a stage in the rulemaking when participants may reasonably have assumed that any debate around renewal had been settled.

III. Limitations of the Rulemaking Process

In previous rulemakings, NTIA has raised policy considerations for the Copyright Office as it administers the rulemaking process.[23] For this rulemaking, we refer the Copyright Office back to these and other observations as relevant in today's environment, and we continue to encourage the Office to take any steps it believes to be within its authority to properly balance the interests at stake in this rulemaking process. We have recognized and appreciated the efforts that the Copyright Office has already implemented to make the process more inclusive for all parties involved, particularly through changes in the mid-2000s (e.g., changes in how to determine a class of works)[24] and again in the mid-2010s (e.g., instituting streamlined renewals).[25]

At the same time, upon reflecting on the evolution of the rulemaking and the role of technology in society since the first triennial rulemaking in 2000, we conclude that the rulemaking process itself may no longer be adequately tailored to balance the interests of rights holders and people

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[20] 2023 NPRM, 88 Fed. Reg. at 72018.

[21] For example, the AAP argued that researchers are not complying with the security requirements laid out in the regulatory text, and that the Copyright Office's prior fair use analysis is invalid due to the exemption use examples on the record and the rise of large language models. *See, e.g.,* Class 3 Round 2 Comments of the Association of American Publishers ("AAP"), Docket No. 2023-5, at 2-3, 8-15, https://www.copyright.gov/1201/2024/comments/opposition/Class%203(b)%20-%20Opp'n%20-%20Association%20of%20American%20Publishers.pdf (hereinafter "AAP Class 3 Round 2 Comments").

[22] *Id*. at 4, 16-18.

[23] For example, in the Eighth Triennial Rulemaking we recognized the impact of the COVID-19 pandemic on the rulemaking process. *See* 2021 NTIA Letter at 1, 4, 44-45. In the Seventh and Eighth Triennial Rulemakings we stressed the need to structure regulatory language and make it more intelligible for exemption beneficiaries. *Id.* at 2-3; 2018 NTIA Letter at 4. We continue to see that need, as evidenced by the proposal in Class 1 and our explanation in this section. In earlier rulemakings, we discussed in detail potential process and substance changes when conducting the rulemaking (e.g., from being an early supporter of remote participation to recommending how a "class of works" should be constructed). *See, e.g.*, 2018 NTIA Letter at 2; Letter from Lawrence E. Strickling, Assistant Secretary of Commerce for Communications and Information, to Marybeth Peters, Register of Copyrights, at 2 (Nov. 4, 2009) https://www.copyright.gov/1201/2010/NTIA.pdf (hereinafter "2009 NTIA Letter"); Letter from Nancy J. Victory, Assistant Secretary of Commerce for Communications and Information, to Marybeth Peters, Register of Copyrights (Aug. 11, 2003), https://www.ntia.doc.gov/other-publication/2003/ntia-letter-register-copyrights-regarding-dmca (hereinafter "2003 NTIA Letter"). We have also urged the Copyright Office to not stray the rulemaking process too far afield from copyright and into unrelated areas like environmental regulations. *See, e.g.*, 2021 NTIA Letter at 5; 2018 NTIA Letter at 2-3; 2015 NTIA Letter at 3-6.

[24] 2009 NTIA Letter at 2.

[25] 2018 NTIA Letter at 1.

seeking to make non-infringing uses of copyrighted works who are adversely affected by the prohibition against circumvention in Section 1201.

Below we briefly highlight issues that we have seen materialize rulemaking-after-rulemaking without a clear resolution. These issues are exacerbated due to exemptions being granted (if at all) only every three years, which can make it complicated for the rulemaking process to respond to new use cases and fast-paced technological developments in the intervening periods.

A. Third-party Assistance

We recommend that the Copyright Office note its latest understanding—either in its recommendation to the Librarian or in a subsequent document—as to the extent to which the anti-trafficking provisions in Section 1201(a)(2) and (b) limit in practice the ability of exemption beneficiaries to circumvent TPMs to make non-infringing uses.

Both NTIA and the Copyright Office have discussed third-party assistance issues and their relation to the anti-trafficking provisions at length throughout multiple rulemakings,[26] and the Copyright Office has written about the issue in its Section 1201 report.[27] NTIA appreciates the complexities involved in these provisions, from which the Section 1201 rulemaking provides no exemption. We further welcome the steps the Copyright Office has taken in recent years to acknowledge the existence of third-party assistance that does not violate the anti-trafficking provisions.[28]

Exemptions granted under this rulemaking should not be construed so narrowly as to exclude third-party assistance.[29] To do so would make the granted exemptions unusable for a vast majority of users who do not have the expertise to develop their own circumvention tools or

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[26] *See, e.g.*, 2021 Register's Recommendation at 146-47, 230; U.S. Copyright Office, *Section 1201 Rulemaking: Seventh Triennial Proceeding to the Prohibition on Circumvention, Recommendation of the Acting Register of Copyrights* (Oct. 2018), at 5, 186-87, 222-25, https://cdn.loc.gov/copyright/1201/2018/2018_Section_1201_Acting_Registers_Recommendation.pdf (hereinafter "2018 Acting Register's Recommendation"); U.S. Copyright Office, *Section 1201 Rulemaking: Sixth Triennial Proceeding to the Prohibition on Circumvention, Recommendation of the Register of Copyrights* (Oct. 2015), at 246-47, https://cdn.loc.gov/copyright/1201/2015/registers-recommendation.pdf (hereinafter "2015 Register's Recommendation"); 2021 NTIA Letter at 65, 77, 80; 2018 NTIA Letter at 56-61.

[27] Section 1201 Report at 56-62.

[28] *See, e.g.*, 2021 Register's Recommendation at 146-47 ("The Register recommends removing the language requiring that circumvention be 'undertaken by a patient' and replacing it with a requirement that circumvention be done 'done by or on behalf of a patient.' . . .The Register is not, however, expressing any view at whether particular examples of assistance do or do not constitute unlawful circumvention services, and she cautions that these exemptions do not affect liability under the anti-trafficking provisions.") (quotation marks in original); 2018 Acting Register's Recommendation at 224 ("In light of these competing statutory interpretations, and for the reasons discussed in the Section 1201 Report, the Acting Register recommends removing the current exemption language requiring that circumvention be 'undertaken by the authorized owner.' While the statutory language is far from clear, and the courts have yet to address this issue, there is at least a plausible argument that some forms of third-party assistance involving circumvention will not rise to the level of a prohibited 'service' in all instances.") (citing to Section 1201 Report at 59) (quotation marks in original).

[29] Previously, for example, NTIA has argued in the context of vehicle repair that the third-party use of tools to repair a vehicle "is not primarily for the purpose of circumventing a technological measure" that protects access to copyrighted works but rather an "incidental" step in process of receiving the "necessary assistance to exercise ownership rights that the DMCA intended to leave intact." 2018 NTIA Letter at 58 (internal footnote omitted).

mechanisms. Such narrow exemptions cannot be said to have cured or otherwise properly addressed the adverse effects posed by the prohibition against circumvention, which is a goal of the rulemaking. We acknowledge that the anti-trafficking provisions may pose a hard limit on the practical benefits that exemptions granted under this rulemaking offer. Yet, the ability to obtain third-party assistance and enable independent third-party repair markets have been cited as an important reason why exemptions granted under this process have significant value.[30] Should the anti-trafficking provisions be overly broad or the authority granted to the Copyright Office and the Librarian be so narrow as to hinder the practical benefits of temporary exemptions, this problem may ultimately be one that the rulemaking as currently constituted cannot resolve.

B. Level of Granularity When Scoping a Class

The Copyright Office should avoid crafting exemptions so narrowly as to, in practice, lead to a device-by-device approach in the rulemaking process. NTIA continues to believe the most "practical and efficient way to ensure that consumers are adequately protected from any harm caused by the prohibition against circumvention is to avoid unnecessarily constraining exempted classes based on the specific types of devices on which works are contained."[31] As we noted in 2021, we support an approach that eschews a device-by-device approach that can quickly become outdated. Instead, we recommend that the Copyright Office "focus squarely on classes of work and their users."[32] This means maintaining the level of rigor that the rulemaking requires but looking for ways to avoid hyper-granular approaches. For example, we applaud the Copyright Office's recommendation and the Libarian's adoption in the Eighth Triennial Rulemaking of the current temporary exemption for the repair, maintenance, and diagnosis of consumer devices.[33] We caution against approaches that would in practice lead back to a device-by-device approach. For example, we are concerned that the discussion in Class 5 during the rulemaking period and analysis of device commonality therein could lead to a level of specificity of device types that would defeat an aim of the rulemaking: to address the adverse effects from the prohibition against circumvention. This would be overly burdensome, increasingly difficult to comply with in an ever-changing technological environment that does not pause during the three years between Section 1201 rulemakings, and ultimately frustrate the ability of people to make non-infringing uses of copyrighted works. We acknowledge, however, that the extent to which the Copyright Office can scope a class of works to recognize how technology has evolved and how society uses technology today may be limited by the authority granted under the statute and the Office's own interpretation of that authority.

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[30] *See* Class 5 Round 3 Comments of the United States Department of Justice and Federal Trade Commission, Docket No. 2023-5, at 12, https://www.copyright.gov/1201/2024/comments/reply/Class%205%20&%207%20-%20Reply%20-%20Department%20of%20Justice%20Antitrust%20Division%20and%20Federal%20Trade%20Commission.pdf ("[A]n exemption would give users more choices for *third-party* and self-repair and would likely lead to cost savings and a better return on investment in commercial and industrial equipment. It would also facilitate innovation and competition among *third-party repair and maintenance servicers*, against whom OEMs would have to compete meaningfully in these important aftermarkets.") (emphasis added).

[31] 2021 NTIA Letter at 4 (citing 2015 NTIA Letter at 9).

[32] 2021 NTIA Letter at 4.

[33] 37 C.F.R. § 201.40(b)(14).

C. TPMs and Circumvention Under Section 1201

The Copyright Office should be clear in its recommendations when the Office cannot recommend granting an exemption because the Office does not believe that a TPM or method of circumvention that implicate Section 1201 are present. In 2021, NTIA concluded that the triennial rulemaking process does not appear to provide incentives for exemption supporters and opponents to delve into the contours of what comprises a TPM under Section 1201.[34] We believe this problem continues in this rulemaking. We have in the past also recommended that the Copyright Office avoid conditioning exemptions on circumventing only particular types of TPMs.[35]

As software-enabled products with potential TPMs have proliferated, the need to understand what are TPMs under the statute—as well as which activities constitute circumvention of such TPMs—is greater than before. Exemption supporters are almost always incentivized to argue the existence of a relevant TPM and method of circumvention under Section 1201, even when it isn't clear that an exemption is needed, because they want the liability protection and certainty that an exemption provides.[36] Exemption opponents, on the other hand, may be wary to lessen the perceived scope of their Section 1201 protection by acknowledging that a technological measure is not a TPM or that a particular activity does not amount to circumvention in potential violation of Section 1201. While this dynamic may not occur in all instances, these are rational approaches from the perspective of exemption supporters and opponents, particularly given that in recent rulemakings, the resulting regulatory language for exemptions granted often do not specify or even specifically mention TPMs—what is generally relevant is ultimately the underlying use.[37]

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[34] 2021 NTIA Letter at 5-6.

[35] *See id*. at 5 ("Copyright holders and the vendors they work with may update or change their access control measures on a regular basis. Such changes in access controls employed need not correspond with changes in the class of work being protected nor the noninfringing uses hindered by the prohibition against circumvention.").

[36] *See, e.g.*, Transcript, Eighth Triennial Rulemaking, In the Matter of Section 1201 Rulemaking Hearing: Classes 10, 11, and Audience Participation (April 21, 2021), Remarks of Aaron Williamson, at 900, https://www.copyright.gov/1201/2021/hearing-transcripts/210421-Section-1201-Rulemaking-Class-11-10-Audience-Participation.pdf (Aaron Williamson: "I advise clients on the scope of Section 1201 regularly, and the language is very broad, right, and so it's difficult to say with certainty which of those TPMs [referenced as relevant to the sought exemption to jailbreak networking devices in Class 11 in the Eight Triennial Rulemaking] would be considered to effectively control access to a copyrighted work or protect the right of a copyright owner. So, certainly, they're all measures that I think could be interpreted that way.").

[37] The regulatory language for most current temporary exemptions—and in particular newer exemptions—does not reference specific technological measures to be circumvented or even mention technological measures. *See, e.g.*, 37 C.F.R. § 201.40(b)(5) (text and data mining), (7) (medical device data), (8) (wireless device unlocking), (9) (smartphone jailbreaking), (10) (smart television jailbreaking), (11) (voice assistant device jailbreaking), (12) (router and network device jailbreaking), (13) (motorized land vehicle and marine vessel repair), (14) (consumer device repair), (15) (medical device and system repair), (16) (good-faith security research), (17) (video game preservation), (18) (software preservation), 20 (copyright license investigation), (21) (video game accessibility). Regulatory language in a few of the temporary exemptions references circumvention of technological measures by specifying the purpose of the TPMs. *See* 37 C.F.R. § 201.40(b)(1) (". . .via a digital transmission protected by a technological measure. . ."); (6) (". . .protected by technological measures that either prevent the enabling of read-aloud functionality or interfere with screen readers or other applications or assistive technologies. . .); (b)(19) (". . .that employ technological measures to limit the use of material. . ."). A couple of temporary exemptions require the introduction or reintroduction of TPMs by an exemption user, also by focusing on the purpose of such act. *See* 37

Resolution here—in the form of a specific statement from the Copyright Office in its recommendations as to when a purposed TPM or method of circumvention is not covered under Section 1201—would provide greater clarity to all parties and would likely lead to greater efficiencies in the rulemaking process. For example, resolution would remove the need to discuss in detail technological measures and methods of circumvention that do not implicate Section 1201 in subsequent rulemakings. As we noted in the previous rulemaking, it may fall to the Copyright Office to be more assertive in this matter,[38] particularly in instances when parties do not or cannot resolve the issue. Naturally, if a proposed use does not implicate a TPM or circumvention as outlined in the statute, no exemption is needed. However, the Section 1201 rulemaking has been interpreted to place a burden on petitioners and supporters to show that a TPM and method of circumvention under Section 1201 are present.[39] When the Copyright Office recommends denying a proposed exemption, and the Librarian decides to deny the proposal, exemption petitioners and supporters are usually not given clear indication that the rejection may have occurred because a TPM or circumvention activity do not exist. Rather, the proposing parties are held to not have met their burden under the rulemaking. This procedural outcome does not provide helpful information to the parties, in particular to would-be non-infringing users of copyrighted works.

Instead, the Copyright Office should, when applicable, base its recommendation for denial upon finding that a relevant TPM or method of circumvention are not implicated by Section 1201 and therefore would-be users of copyrighted works are not adversely affected by the prohibition against circumvention. This approach would not be particularly novel or outside of what the Copyright Office is empowered to do under the statute. The Copyright Office already recommends denials and the Librarian denies proposed exemptions precisely when they find that the prohibition against circumvention does not cause the alleged adverse effects (e.g., there is no underlying copyrighted work, an analysis of the Section 1201 factors do not indicate adverse effects, there is no noninfringing use). The Copyright Office brings its expertise throughout the rulemaking process. Stating explicitly when a denial occurs in whole or in part because there is no TPM or method of circumvention that violates the statute simply provides the parties the reasoning as to why no such adverse effect exists.[40] And, in at least in one instance, the

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C.F.R. § 201.40(b)(1)(ii)(B) (". . .applies technological measures that reasonably prevent unauthorized further dissemination of a work. . ."); (b)(14)(ii) (". . .requires restoring any technological protection measures that were circumvented or disabled.").Only a minority of temporary exemptions reference specific TPMs, namely the "Content Scramble System" and the "Advanced Access Content System."37 C.F.R. § 201.40(b)(1)-(4).

[38] 2021 NTIA Letter at 5-6.

[39] *See, e.g.*, 2021 Register's Recommendation at 7 ("The Office has noted that those who seek an exemption from the prohibition on circumvention bear the burden of establishing that the requirements for granting an exemption have been satisfied.") (cleaned up) (internal citation omitted). We question, however, whether the burden of production must always fall on proponents and supporters. As the Office has noted, the statute "does not offer much guidance as to the respective burdens of proponents and opponents of proposed exemptions." Section 1201 Report at 110 (cleaned up) (internal citation omitted).The Office has indicated, however, that as a practical matter, the burden of production should fall on proponents "simply because they have greater knowledge of and access to evidence demonstrating adverse effects of noninfringing uses." *Id*. But, as we have explained, the rulemaking itself does not provide the proper incentives to resolve this question. Moreover, we are not certain that it is always the case that proponents will be best position define the contours of technological measures and methods of circumvention within the context of Section 1201, which requires both a technical and legal determination.

[40] The Copyright Office and the Librarian could make clear that, because an exemption has technically not been granted, parties should be aware that any action they undertake that could circumvent a technological measure that

Copyright Office has explained clearly when a purported barrier to access is not a TPM under the statute.[41] Therefore, we believe that it is within the Copyright Office's authority under the rulemaking to be as specific as possible when a TPM or method of circumvention do or do not exist for the purposes of recommending or denying an exemption. However, if the Office believes it is not within its regulatory authority to do so, we ask that the Office make that clear in its recommendation to the Librarian as applicable.

D. Conclusion

Some of the issues listed in this letter may be resolved through changes that can be achieved under current statutory authority (e.g., structured regulatory language), while others may be beyond the authority granted to the Copyright Office and the Librarian under the statute (e.g., full resolution of issues involving the anti-trafficking provisions and third-party assistance). To the extent there are issues that cannot be resolved through the rulemaking—for example, because the Copyright Office believes neither it nor the Librarian have the authority or resources to take steps necessary to address them—we recommend that the Copyright Office make that clear in its recommendations to the Librarian or in a subsequent notice. Understanding the limitations of the rulemaking process is paramount for parties to understand what is and is not achievable in this rulemaking. This would save time and resources for all parties involved. Such statements would not be novel in this process; for example, in 2010, the Librarian in issuing the final rules in the Fourth Triennial Rulemaking concluded that "[t]he Section 1201 process is a regulatory process that is at best ill-suited to address the larger challenges of access for blind and print-disabled persons."[42]

The Copyright Office, too, has previously analyzed in detail the benefits and drawbacks of the rulemaking process.[43] However, it has been nearly ten years since the Copyright Office kicked off its Section 1201 policy study and software-enabled consumer products study.[44] Technology and its role in society have changed significantly since that time. As the triennial rulemaking process enters its 25th year of existence next year, it may be worth considering whether either of those efforts need to be updated to account for technological changes and other developments. NTIA is ready to assist as necessary.

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effectively controls access to a copyrighted work could be subject to legal challenges under Section 1201. We note that a similar dynamic is present even when an exemption is granted; for example, a rights holder could bring a claim in court arguing that the use that the Copyright Office and Librarian determined was likely noninfringing is actually infringing.

[41] *See* U.S. Copyright Office, *Recommendation of the Register of Copyrights in RM 2002-4; Rulemaking on Exemptions from Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies*, at 149-50 (Oct. 2003), https://cdn.loc.gov/copyright/1201/docs/registers-recommendation.pdf (explaining that user violations of an end-user licensing agreement are not prohibited by Section 1201(a)(1)) (hereinafter "2003 Register's Recommendation").

[42] *See Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies*, Final Rule, Docket No. RM 2008-8, 75 Fed. Reg. 43825, 43839 (July 2010), https://www.copyright.gov/fedreg/2010/75fr43825.pdf.

[43] *See generally* Section 1201 Report.

[44] *Section 1201 Study: Notice and Request for Public Comment*, Notice of Inquiry, Docket No. 2015-8, 80 Fed. Reg. 81369 (Dec. 2015), https://www.copyright.gov/fedreg/2015/80fr81369.pdf; *Software-Enabled Consumer Products Study: Notice and Request for Public Comment*, Notice of Inquiry, Docket No. 2015-6, 80 Fed. Reg. 77668 (Dec. 2015), https://copyright.gov/fedreg/2015/80fr77668.pdf.

IV. Proposed, Additional, and Expanded Exemptions

Class 1 – Audiovisual Works – Noncommercial Videos

One petitioner, the Organization for Transformative Works (OTW), is seeking to renew the existing exemption, without modification, for use of DVD and Blu-ray disc excerpts in noncommercial videos.[45] The petitioner advocates for the renewal of the noncommercial video exemption, asserting that the need for the exemption continues to exist, and there will be continued use in the future.[46] However, the petitioner would like to restate the exemption language into a simpler, more understandable form that mirrors language from an exemption granted in the 2008 rulemaking.[47] The petitioner asserts that the current language is too complex, and returning to simple, functional language would clarify the exemption for ordinary users.[48]

The petitioner argues that the Office's "shorthand" for the exemption ("[e]xcerpts for use in noncommercial videos") "makes clear what participants in this process already understand," namely that "this is an exemption for fair use of audiovisual works in noncommercial video."[49] The actual regulatory text today, the petitioner noted, substantially increases the difficulty of "communicating and implementing the exemptions in practice."[50] The petitioner instead asserts that the language that defined the exempted class from the 2008 rulemaking is "relatively simple language,"[51] which states:

> "[W]hen circumvention is accomplished solely in order to accomplish the incorporation of short portions of motion pictures into new works for the purpose of criticism or comment, and where the person engaging in circumvention believes and has reasonable grounds for believing that circumvention is necessary to fulfill the purpose of the use."[52]

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[45] Organization for Transformative Works ("OTW"), Petition to Renew a Current Exemption under 17 U.S.C. § 1201, Docket No. 2023-5 (July 2023), https://www.copyright.gov/1201/2024/petitions/renewal/Renewal%20Pet.%20-%20Noncom.%20Videos%20-%20The%20Organization%20for%20Transformative%20Works.pdf (hereinafter "OTW Renewal Petition (Class 1)").

[46] *Id*.

[47] *Id*. at 4 ("To be clear, we are not requesting an expansion of the existing exemption, but a more understandable restatement. The Office's own shorthand for the exemption, 'Excerpts for use in noncommercial videos,' makes clear what participants in this process already understand: this is an exemption for fair use of audiovisual works in noncommercial video. The complexity of the current provisions substantially increases the difficulty of communicating and implementing the exemptions in practice. Returning to the simple, functionally similar language of the initial remix exemption (with the addition of Blu-Ray) would clarify the exemption for ordinary users and further the Office's stated policies of increasing public accessibility and transparency.") (internal citations in original).

[48] *Id*.

[49] OTW Renewal Petition (Class 1) at 4.

[50] *Id*.

[51] *Id*.

[52] *Id.* (referencing 37 C.F.R. § 201.40(b)(1) (2010)).

The petitioner reasons that returning to the "simple, functionally similar language of the initial remix exemption (with the addition of Blu-Ray) would clarify the exemption for ordinary users and further the Office's stated policies of increasing public accessibility and transparency."[53]

After submitting its proposal for the exemption, the petitioner did not follow up with any comments nor was a hearing held on the matter. However, two comments were submitted in opposition to the language modification during the second round.[54] Both comments support exemption renewal but oppose amending the regulatory language. One opponent states that there were previous requests made by the petitioner for the language modification that have been denied by the Register due to *de minimis* evidence provided by the petitioner.[55] The other comment also cites the lack of support, from the petitioner or others, for the petitioner's request for language modification.[56]

NTIA Position

NTIA recommends that the Copyright Office clarify whether the presented modified language (which is intended to be a return to previous regulatory language) is functionally equivalent to the current temporary exemption. If so, we recommend that the Office either substitute the language, or, if that is not possible, that the Office note the equivalency in an easy-to-access FAQ document or its recommendation to the Librarian. NTIA further recommends that the Copyright Office consider a more comprehensive approach to requests that seek non-substantial regulatory language changes in future rulemakings.

Analysis

This proposal is unique in this rulemaking in that it is theoretically seeking a non-substantial change to make it easier for users to understand the exemption. As we explained in the introduction to this letter, it is important that regulatory language be understandable to exemption beneficiaries. In the 2021 rulemaking cycle, NTIA recommended that the Copyright Office "consider ways to make the resulting regulatory text more accessible by potential exemption users and more conducive to clear discussion and debate in future rulemakings."[57] There is

[53] *Id*.
[54] One comment was submitted by the DVD Copy Control Association (DVD CCA) and the Advanced Access Content System Licensing Administrator (AACS LA). Class 1 Round 2 Comments of DVD CCA and AACS LA, Docket No. 2023-5, https://www.copyright.gov/1201/2024/comments/opposition/Class%201%20-%20Opp'n%20-%20DVD%20CCA%20and%20AACS%20LA.pdf (hereinafter "DVD CCA and AACS LA Class 1 Round 2 Comments). A second comment was submitted by the "Joint Creators" (the Entertainment Software Association (ESA); the Motion Picture Association (MPA); and the Recording Industry Association of America (RIAA)). Class 1 Round 2 Comments of Joint Creators (ESA, MPA, RIAA), Docket No. 2023-5, https://www.copyright.gov/1201/2024/comments/opposition/Class%201%20-%20Opp'n%20-%20Joint%20Creators.pdf (hereinafter "Joint Creators (ESA, MPA, RIAA) Class 1 Round 2 Comments").
[55] DVD CCA and AACS LA Class 1 Round 2 Comments at 4-5.
[56] Joint Creators (ESA, MPA, RIAA) Class 1 Round 2 Comments at 2-4.
[57] 2018 NTIA Letter at 2.

clearly a strong need to structurally alter the way exemptions are written. This petitioner, for example, has submitted the request for language modification on more than one occasion.[58]

We acknowledge that petitioners should follow the correct protocol when submitting such a request, but in this situation, we are concerned that there may not be an adequate mechanism that is resource-optimal for all parties involved. In the 2021 rulemaking cycle, the petitioner submitted a similar request for exemption renewal. However, the Copyright Office rejected that request, treating it as a request for an expansion.[59] In this rulemaking cycle, the petitioner submitted the exemption renewal again, explicitly stating they were not requesting an expansion of the existing exemption, "but a more understandable restatement."[60] Although the petitioner submitted their request as a renewal petition, once the Copyright Office moved the petition outside of the streamlined renewal process, the petitioners did not follow up with Round 1, Round 2, or Round 3 comments to support their request, nor was a hearing held on the matter.

NTIA thinks the best recourse during this rulemaking is for the Copyright Office to consider addressing this dynamic more comprehensively to arrive at a procedurally efficient solution. Because the Copyright Office in the 2021 rulemaking regarded the request as a request for expansion rather than renewal, the Office should consider discussing why it decided to move the petition outside of the streamlined rulemaking process. Absent changes to the factual or legal circumstances, was the Copyright Office expecting additional evidentiary support to be submitted during the three rounds of comments or in the form of testimony during hearings? This may instead raise other procedural issues, such as whether there are mechanisms whereby parties can reasonably respond to this type of request without going through the entire triennial process (three rounds of comments and hearings). As a general matter, allowing a petitioner to submit a request for renewal but asking them to go through the entire triennial process where the petitioner is not seeking to make substantive changes places a significant burden on the parties in terms of both time and resource cost.

Here, NTIA recommends that the Register clarify whether the proposed change is functionally equivalent to the current temporary exemption. If there is functional equivalence, we recommend the Office seek to replace the regulatory language or note in guidance (e.g. via FAQ or its recommendation) that the language is equivalent.

We understand that the way the Copyright Office administers the rulemaking may lead the Office to determine that a recommendation for denial is the most appropriate path forward in this instance. Therefore, we also recommend the Office consider how to handle non-substantive language requests in the future – for example, through a "non-binding," simplified document, such as an FAQ. The Office should also consider a more substantive solution to this problem. This could take the form of structured exemption language format (as we described in the introduction), or a process specifically designed for non-substantive language changes.

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[58] OTW Renewal Petition (Class 1) at 4 ("Specifically, the exemption should be renewed using the relatively simple language defining the exempted class from the 2008 rulemaking[.] . . . To be clear, we are not requesting an expansion of the existing exemption, but a more understandable restatement.").
[59] 2021 Register's Recommendation at 16 n.74.
[60] OTW Renewal Petition (Class 1) at 4.

Conclusion

Given the unique circumstances stated above, we recommend that the Register clarify whether the presented modified language is substantially equivalent to the current rule and either recommend adopting the proposed language or indicate the equivalency to the Librarian. Additionally, NTIA recommends that the Register consider a more comprehensive solution for non-substantive regulatory language changes in future rulemakings.

E. Class 2 – Audiovisual Works – Online Learning

Proponents, which include educators and academics,[61] seek to add an exemption "to allow educators and preparers of online learning materials offered by qualified educational entities to use short, high-quality excerpts of motion pictures and television shows."[62] Petitioners note that this proposal is "analogous to existing 1201 exemptions in its educational goals, use, and TPMs employed, but this separate class of innovative, nontraditional educational entities, specifically for-profit, nonaccredited learning programs, is distinct in the educators and students it represents."[63] This exemption would allow these entities to use short, high-quality motion picture excerpts in their teaching (for the purpose of criticism, comment, illustration, and explanation).[64] Opponents[65] generally are concerned that the proposed class is not a valid class[66] and argue that the proposal is too broad.[67]

NTIA Position

Consistent with NTIA's 2021 recommendation, NTIA supports an exemption for non-accredited and for-profit educational institutions to use short, high-quality excerpts of motion pictures and television shows in their teaching (for the purpose of criticism, comment, illustration, and explanation), with some modifications to address opponents' concerns. This would result in an exemption that benefits nontraditional educational entities, where these entities are identified through official documentation filed with a state or a federal government agency. As an alternative, NTIA would support an expansion that includes these nontraditional educational entities but is further limited (as to these entities) only to film study and language courses, which were the focus of petitioners' arguments.

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[61] The proponents submitted comments as "Joint Educators" (Peter Decherney, Professor of Cinema and Media Studies and English, University of Pennsylvania; Sarah Banet-Weiser, Ph.D., Professor and Dean, Annenberg School for Communication, University of Pennsylvania; Nate Harrison, Ph.D., Dean of Academic Affairs and Professor of the Practice, Media Arts, School of the Museum of Fine Arts at Tufts University; Lauren van Haaften-Schick, Ph.D. Student in History of Art, Department of History of Art and Visual Studies, Cornell University; Shiv Gaglani, Ed Tech Entrepreneur and Medical Student; and the Society for Cinema and Media Studies.).

[62] Class 2 Round 1 Comments of Peter Decherney *et al*. ("Joint Educators"), Docket No. 2023-5, at 1, https://www.copyright.gov/1201/2024/comments/Class%202%20-%20Initial%20Comments%20-%20Joint%20Educators.pdf. (hereinafter "Joint Educators Class 2 Round 1 Comments").

[63] *Id*.

[64] Joint Educators Class 2 Round 1 Comments at 1 ("This exemption advances educational purposes because these excerpts will contribute to students' learning through criticism, comment, illustration, and explanation.").

[65] DVD Copy Control Association (DVD CCA), Advanced Access Content System Licensing Administrator (AACS LA), the Entertainment Software Association (ESA), the Motion Picture Association (MPA), the News/Media Alliance (N/MA), and the Recording Industry Association of America (RIAA).Class 2 Round 2 Comments of DVD CCA and AACS LA, Docket No. 2023-5, https://www.copyright.gov/1201/2024/comments/opposition/Class%202%20-%20Opp'n%20-%20DVD%20CCA%20and%20AACS%20LA.pdf (hereinafter "DVD CCA and AACS LA Class 2 Round 2 Comments"); Class 2 Round 2 Comments of Joint Creators (ESA, MPA, N/MA, RIAA), Docket No. 2023-5, https://www.copyright.gov/1201/2024/comments/opposition/Class%202%20-%20Opp'n%20-%20Joint%20Creators.pdf (hereinafter "Joint Creators (ESA, MPA, N/MA, RIAA) Class 2 Round 2 Comments").

[66] DVD CCA and AACS LA Class 2 Round 2 Comments at 1 ("Proponents erroneously presume that styling any online learning as being done by *qualified educational entities* is sufficient to create a class.") (emphasis in original).

[67] *Id*. at 7 ("Just as proposals for broad categorical exemptions were impermissible in the 2006 and in every subsequent proceeding, so should it be impermissible for online learning in the 2024 Recommendation.").

Analysis

Americans are seeking online education from both traditional and non-traditional educators more frequently than in the past. As stated in NTIA's 2021 letter, people are migrating to the online environment to obtain an education.[68] Some of this transition has happened because of the COVID-19 pandemic.[69] Moreover, the Administration has been a strong supporter of digital equity and inclusion efforts (which ultimately affect the ability of Americans to access online resources), with NTIA playing a pivotal role in this area.[70] Continued adoption of the Internet for everyday life has not only led more users to seek online education but to supplement their traditional education online with both traditional and nontraditional education tools.[71] For example, adult learners may supplement traditional education using nontraditional educational opportunities as a way to upskill and reskill in order to build their careers.[72] The current temporary exemption, which does not include non-traditional educational entities, stifles the abilities of these valuable non-traditional entities to operate on a more even base with traditional educators online, ultimately reducing the options that Americans have to take full advantage of the modern-day digital economy.

NTIA appreciates opponents' arguments against the inclusion of non-traditional entities, but we are concerned that a binary black-and-white distinction between traditional and non-traditional educational entities inadvertently leads the rulemaking process to adjudicate the educational value of an online education when considering an exemption. Opponents contend, for example, that many for-profit, non-accredited courses would have no impact on the digital equity goals as there are a wealth of more educational alternatives.[73] Opponents argue that the educational

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[68] *See* 2021 NTIA Letter at 8 ("As a general matter, NTIA supports expanding the users of this exemption to the groups listed in the current educational environment where so much learning has moved necessarily online during the pandemic. Proponents have provided sufficient evidence of harm for these groups to permit moving forward with these expansions and have shown that while the pandemic may be a one-time event, changes to the educational environment will continue to evolve to include a virtual or online component.").

[69] *See, e.g.*, National Center for Education Statistics, *U.S. Education in the Time of COVID,* https://nces.ed.gov/surveys/annualreports/topical-studies/covid/; Marcella Bombardieri, *COVID-19 Changed Education in America Permanently*, Politico (Apr. 14, 2021), https://www.politico.com/news/2021/04/15/covid-changed-education-permanently-479317; 1. Barbara B. Lockee, Online Education in the Post-COVID Era, 4 Nature Electronics 5 (2021).

[70] For example, NTIA has been tasked with administering key programs designed to close the digital divide, including the Digital Equity Act programs, the Broadband Equity, Access, and Deployment program, and other pieces of the Internet for All initiative. *See,* NTIA, *High Speed Internet For all*, Internet for All, https://www.internetforall.gov.

[71] Ilana Hamilton, *2024 Online Learning Statistics*, Forbes (May 31, 2024) https://www.forbes.com/advisor/education/online-colleges/online-learning-stats/ (stating that more than 60% of students at private, for-profit colleges only take classes online).

[72] Joint Educators Class 2 Round 1 Comments at 8.

[73] *See* Transcript, Ninth Triennial Rulemaking, In the Matter of Section 1201 Public Hearing: Proposed Class 2: Audiovisual Works – Online Learning (April 16, 2024) (hereinafter "April 16, 2024 Class 2 Hearing Transcript"), Remarks of Steven Englund, at 42, https://www.copyright.gov/1201/2024/hearing-transcripts/240418-Section-1201-Public-Hearing-Public-Participation-Session.pdf (Steven Englund: "So I think this exemption doesn't really move the needle one way or the other much on digital equity. Like Professor Decherney said, there is a wealth of online education that is being offered by non-profit accredited institutions.").

opportunities provided by for-profit education platforms "stretch the bounds of education,"[74] and that "you can't think about this through the same lens as you would a typical accredited college or university education."[75] NTIA urges against conditioning an exemption on a subjective view of what type of education is valuable or immediately apparent based on a course's description. Comparable courses can be found at accredited institutions that would likely fall under the current exemptions, all other factors being equal. For example, "Zombies,"[76] taught online at George Mason University, "Ancient Magic and Witchcraft,"[77] offered by Arizona State University, and "Global Anime," provided by the University of Pittsburgh[78] would appear to qualify for the current exemption to use film clips, and appear to be similar in nature to the courses criticized by opponents. NTIA urges against conditioning an exemption on a subjective view of the value of different types of courses and educational programs.

In the event the Copyright Office believes the record is insufficient to support the full scope of proponents' request, an exemption for nontraditional educational entities focusing on film study and language courses could alleviate opponents' concerns about "stretching the bounds of education," while also meeting some of the proponents' requested goals. Petitioners focused on these types of courses, and, although NTIA is generally wary of content-based distinctions, the record could be interpreted to support such a distinction in this instance.

In accordance with the previous rulemaking, NTIA acknowledges the tendency to tie education exemptions to the limitations articulated in the TEACH Act. However, as NTIA stated in 2021, while instructive, "the current circumstances, along with the evolution of the online educational market, have obviated the need for strict reliance on this notion" that exemptions should be strictly limited to the contours of the TEACH Act.[79] As such, "the TEACH Act can be instructive, but this exemption process is designed to be flexible and innovative, and therefore it need not mandate the same requirements as that statute, especially as those may be dated or irrelevant to the circumstance at hand."[80]

Opponents also raise concerns that the concept of nontraditional educational entity is too broad and could encompass entities that do not actually have an educational purpose. We continue to believe, as expressed in our 2021 letter, that "this exemption should be limited to educational entities that employ educators or demonstrate that they themselves are educators that provide or develop content whether or not they are accredited or are for-profit or not-for-profit."[81] We noted then that "it would be sufficient to qualify for this exemption if the entity is registered with their state or local jurisdiction as an entity, for profit or not-for-profit, with an educational purpose or

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[74] April 16, 2024 Class 2 Hearing Transcript, Remarks of Steven Englund, at 26 (Steven Englund: "And when you look at the full range of courses on a platform like Udemy, you have things like 'Learn to use the mystery of fairy witchcraft Shamanism today,' another course I observed, it really stretches the bounds of education.").
[75] *Id*.
[76] *ANTH 314: Zombies*, George Mason University, https://soan.gmu.edu/courses/anth314.
[77] *Lat 363: Ancient Magic and Witchcraft*, Arizona State University, https://catalog.apps.asu.edu/catalog/courses/courselist?keywords=magic&term=2247.
[78] *FMST 1230: Global Anime,* University of Pittsburgh https://catalog.upp.pitt.edu/preview_course_nopop.php?catoid=223&coid=1193756.
[79] 2021 NTIA Letter at 10.
[80] *Id*. at 11.
[81] *Id*.

mission."[82] NTIA continues to support a such requirement, coupled with the other limitations in the regulatory language, as sufficient to address the concern than an entity does not have an educational purpose. For this rulemaking, NTIA would further support requiring additional documentation from a nontraditional entity to highlight its educational purpose – particularly a Form 990, an SEC 10-K filing, and annual tax filings.[83] We caution, however, that the range and type of noneducational entities that would be covered by the exemption may not allow for a one-document-fits-all approach,[84] and we continue to stress to the Copyright Office that "[t]he definition of educators and educational entities in this context should be construed as broadly as possible"[85] such that the ultimate aim of this proposed exemption – to allow nontraditional educational entities to use the exemption to teach courses to their students – is not thwarted. However, should the Copyright Office decline to recommend an exemption in whole or in part because it is unclear whether all the entities covered would be educational entities, the Copyright Office should provide some clarity as to why the additional documentation does not provide the assurance the Copyright Office believes it needs under the rulemaking.

Opponents further argue that proponents can create their own film clips using screen capture as an alternative to circumvention.[86] Regardless of whether screen capture itself might be considered circumvention in some instances, screen capture is not a valid solution for nontraditional educators that wish to supplement traditional education for film studies or language learning courses. In particular, a duplicate obtained through screen capturing will generally not feature the original quality from a film, which can be essential when teaching a course.[87] Further, as proponents note, screen capture is not viable for language learning courses due to quality loss; for example, part of learning a language entails watching a person speak, and the frames lost through screen capture can make this a nonviable alternative.[88]

Finally, the current marketplace for educators to acquire licenses for films is either non-existent or an unreliable source for educational purposes and has been so for at least the past six years for a variety of reasons.[89] Requiring non-accredited educators who are making non-infringing uses

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[82] *Id*.
[83] *See* April 16, 2024 Class 2 Hearing Transcript, Remarks of Peter Decherney, at 16-17; Class 2 Round 3 Comments of Peter Decherney *et al*. ("Joint Educators"), Docket No. 2023-5, at 3 https://www.copyright.gov/1201/2024/comments/reply/Class%202%20-%20Reply%20-%20Joint%20Educators.pdf (hereinafter "Joint Educators Class 2 Round 3 Comments").
[84] *See* April 16, 2024 Class 2 Hearing Transcript, Remarks of Peter Decherney, at 17-18 (Peter Decherney: "Some [of the proposed covered entities] are unaccredited non-profits; some are unaccredited for-profits, and so there are a number of different ways that they are established and would interact with different governing bodies.").
[85] 2021 NTIA Letter at 11 (internal citation omitted).
[86] DVD CCA and AACS LA Class 2 Round 2 Comments at 12-13.
[87] April 16, 2024 Class 2 Hearing Transcript, Remarks of Peter Decherney, at 38 (Peter Decherney: ("…we have talked many, many times about screen capture and the available streaming libraries and why they're insufficient, the quality of screen capture, drop frames, pixelation, others, and the clip libraries are very, very narrow and really diminish the range of teaching opportunities. That's been true for accredited non-profits, and it's equally true for unaccredited organizations.").
[88] *Id*.; 2021 NTIA Letter at 16.
[89] Transcript, Seventh Triennial Rulemaking, Copyright Office Section 1201 Roundtable: Classes 1 and 3 (April 11, 2018), Remarks of Peter Decherney and J. Matthew Williams, at 312-314, https://www.copyright.gov/1201/2018/hearing-transcripts/1201-Rulemaking-Public-Roundtable-04-11-2018.pdf (Peter Decherney: "I'm just curious if they're [films] available to be licensed for educational use.") (J. Matthew

of film to nonetheless contract with film studios for access to clips that they already have lawful access to[90] when peers teaching similar courses at non-profit accredited institutions need not do so is an untenable double standard, particularly given the aforementioned lack of licensing mechanisms. Online educational of all types are members of the digital economy and non-traditional educational entities need not exist at a competitive disadvantage due to a lack of reliable licensing opportunities (if any).[91]

Fair Use

NTIA believes that the fair use doctrine supports the nontraditional educators' activities contemplated by petitioners' proposal. While the analysis here would not be exactly the same when compared to traditional (e.g., non-profit) educators, the distinctions present do not alter the fair use outcome. Under the first factor, commercial nature is relevant but ultimately not dispositive,[92] as this element "is to be weighed against the degree to which the use has a further purpose or different character."[93] Here, while the requested exemption would benefit non-accredited and for-profit and educational entities, the use of the copyrighted material would be for educational purposes and not for entertainment or personal enjoyment. The U.S. Supreme

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Williams: "My understanding is they probably are in the terms limited to personal use. We've talked about that that is not a section 1201 issue per se, but there is a contractual issue there. Mr. Midgley said that he had been reaching out to try to get licenses. I'm not aware of those discussions."); Transcript, Eighth Triennial Rulemaking, In the Matter of Section 1201 Rulemaking Hearing: Class 1 (April 6, 2021), Remarks of Sara Rachel Benson, at 183, https://www.copyright.gov/1201/2021/hearing-transcripts/210406-Section-1201-Public-Hearing-Class-1.pdf (Sara Rachel Benson: "I collected data from the fall and spring from our media services, 25 percent of our requests were just not fulfillable at all because there was no streaming license available"); April 16, 2024 Class 2 Hearing Transcript, Remarks of Steven Englund and Peter Decherney, at 48-49 (Steven Englund: "I understand that the Copyright Clearance Center has a motion picture licensing program, and you know, if you go to the websites of the studios, there a venues for applying for licenses for clips. So there are definitely ways to access a lot of the repertoire, though I can't cite specific titles.") (Peter Decherney: "We have looked at this in the past, and the studio libraries make up a very, very small percentage of the films that are taught within my university, less than 10 percent.").

[90] *Compare* Joint Educators Class 2 Round 3 Comments at 6 ("Faculty in the [Khan Academy class on 'Storytelling'] use Pixar films to show how storytelling can draw from personal experiences to create intimate stories."), *with* DVD CCA and AACS LA Class 2 Round 2 Comments at 4 (" Indeed, Khan [Academy] is a successful, unaccredited, non-profit entity with $93 million in resources, at the end of 2022. Accordingly, Khan was able to leverage its plentiful resources to enter into a cooperative relationship with the creators of the copyrighted content shown in its *Pixar in a Box* course.") (internal citation omitted). Implicit here is a possible suggestion that it was not until Khan Academy had plentiful resources that Khan Academy was able to enter into a cooperative relationship with Pixar, or that at least Khan Academy's significant resources had a major role to play into entering into this relationship. Regardless, if a use is non-infringing, it should not be limited to those who have significant financial resources. Such an outcome would mean that non-traditional educational entities would not have access to film clips for educational purposes until they have reached a high level of success or are independently wealthy (because otherwise they might not be able to enter into agreements with rights holders, even when their use would be noninfringing).

[91] April 16, 2024 Class 2 Hearing Transcript, Remarks of Peter Decherney, at 39-40 (Peter Decherney: "So I know from my own experience that these [clips available through Fandango Movie Clips website and Movie Clips YouTube channel] are very, very limited libraries. I know from my department experience we have students who prepare clips because, even though Kanopy has a great system for making clips, the available libraries are very narrow."), (Peter Decherney: "We have looked at this [licensing and avenues for applying for a license] in the past, and the studio libraries make up a very, very small percentage of the films that are taught within my university, less than 10 percent.").

[92] *Andy Warhol Foundation for the Visual Arts, Inc. v. Goldsmith*, 598 U.S. 508, 531 (2023).

[93] *Id.* (internal citation omitted).

Court in *Warhol*, in accordance with precedent, continues to note that "a use that has a distinct purpose is justified because it furthers the goal of copyright, namely, to promote the progress of science the arts."[94] Here, proponents wish to use film clips for "criticism, comment, illustration, and explanation,"[95] which aligns with goals at the core of fair use.[96]

Regarding the second factor, "the nature of the copyrighted work," NTIA agrees with Register's decision in 2021 that it is not especially relevant to the proposed use.[97] NTIA further agrees with the Register's analysis of the third factor—"the amount and substantiality of the portion used in relation to the copyrighted work as a whole"—that limiting the circumvention to short portions is likely to weigh in favor (or at least not against) fair use.[98]

For the fourth factor, "the effect of the use upon the potential market for or value of the copyrighted work," we note that proponents who wish to use the work exist in an inherently different commercial market than the copyright owners. Educators in this context, for example, will repeatedly reuse specific clips from films rather than the entire film itself. Moreover, as noted above, there is an underserved market for film clips to be used for educational purposes,[99] and educators require different platforms than entertainment consumers to find their clips. In short, market harm seems minimal or nonexistent where there does not appear to be a robust licensing market for the uses contemplated.

Conclusion

For the reasons stated above, NTIA supports an exemption for non-traditional educational entities.

[94] *Id.* (internal citation omitted).
[95] Joint Educators Class 2 Round 1 Comments at 1 ("This exemption advances educational purposes because these excerpts will contribute to students' learning through criticism, comment, illustration, and explanation.").
[96] *See* 17 U.S.C. § 107 ("Notwithstanding the provisions in section 106 and 106A, the fair use of a copyrighted work, [. . .] for purposes such as *criticism*, *comment*, news reporting, *teaching* (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright.") (emphasis added).
[97] 2021 Register's Recommendation at 43 ("As in 2012, 2015, and 2018, the Register concludes that the second fair use factor slightly disfavors the proposed expansion, but is not especially relevant to most of the proposed uses.") (internal citations omitted).
[98] *Id*. ("While recognizing that the extent of permissible copying may vary, for purposes of this class, the 'short portions' limitation provides useful guidance as to what is generally likely to be a fair use without imposing a wholly inflexible rule as to length.") (quotation marks in original).
[99] April 16, 2024 Class 2 Hearing Transcript, Remarks of Peter Decherney, at 39-40.

Class 3 – (a) Motion Pictures and (b) Literary Works – Text and Data Mining

Petitioners and supporters[100] seek to expand the current exemptions for text and data mining (TDM) to permit researchers to share corpora with colleagues at other universities who are conducting independent research and teaching using TDM. Currently, the TDM exemptions for both motion pictures and literary works limit cross-institution sharing to colleagues collaborating on the same project or attempting to replicate results. The proponents would require researchers sharing corpora pursuant to this exemption to ensure recipients are also in compliance with its terms, including the requirement that institutions storing corpora use effective security measures to prevent further dissemination.

Proponents cite two deficiencies in the current exemptions that prevent researchers from making noninfringing use of works for TDM: 1) "uncertainty surrounding what is and what is not allowed in the current exemption's rules for corpora sharing," and 2) "the inability to share the corpora with researchers affiliated with other higher education institutions, except in enumerated narrow circumstances."[101] It can be difficult for researchers and university counsel to delineate what counts as a single line of research and what should be treated as a separate project, as academic studies routinely build and expand upon previous work. Moreover, the process of preparing corpora is expensive and time consuming, hindering research that—even if unrelated to previous work—would otherwise be able to benefit from the sharing of corpora between institutions. In addition to providing multiple real-world examples of these difficulties,[102] proponents point out that fair use analysis that weighs in favor of the current TDM exemption continues to apply unchanged with the proposed expansion.[103] They further argue that the proposed expansion is unlikely to harm any market for licensing corpora, which in their view is largely unserved.[104]

Opponents[105] express concern about infringing (and potentially commercially harmful) activities resulting from these activities and even question the propriety of already-granted temporary exemption, arguing that TDM involves considerations of matters like generative AI, which was not at issue in 2021. In addition to expressing general concerns about the scope of the existing

[100] Petitioners: Authors Alliance, Library Copyright Alliance, and American Association of University Professors.Supporter for only 3(a): Kinolab. Supporter for only 3(b): Quinn Dombrowski, co-President of the Association of Computers and the Humanities.
[101] Class 3 Round 1 Comments of the Authors Alliance, the American Association of University Professors, and the Library Copyright Alliance (Authors Alliance *et al*.), Docket No. 2023-5, at 8, https://www.copyright.gov/1201/2024/comments/Class%203a-and-3b-Initial-Comments-Authors-Alliance-Library-Copyright-Alliance-and-Am-A.pdf (hereinafter "Authors Alliance *et al*. Class 3 Round 1 Comments").
[102] *See, e.g., id*. at 8-15.
[103] Class 3 Round 3 Comments of Authors Alliance *et al*., Docket No. 2023-5, at 9, https://www.copyright.gov/1201/2024/comments/reply/Class%203a%20and%203b%20-%20Reply%20-%20Authors%20Alliance,%20American%20Association%20of%20University%20Professors,%20and%20Library%20Copyright%20Alliance.pdf (hereinafter "Authors Alliance *et al*. Class 3 Round 3 Comments").
[104] *Id*. at 20.
[105] For 3(a) and 3(b), "Joint Creators" (News/Media Alliance (N/MA), Motion Picture Association (MPA), and Recording Industry Association of America (RIAA)).For only 3(a), DVD Copy Control Association (DVD CCA) and Advanced Access Content System Licensing Administrator (AACS LA). For only 3(b), Association of American Publishers (AAP) and the International Association of Scientific, Technical and Medical Publishers (STM).

TDM exemption[106] (which the Copyright Office has already tentatively concluded it will recommend for renewal), opponents argue that the proposed expansion would effectively circumvent the security measures that govern the current exemption—which they assert are not being followed anyway.[107] Opponents further raise the specter of artificial intelligence systems, claiming that "the letters of support submitted by petitioners suggest that the corpora and/or results of TDM research could also be (and seemingly are being) used for their expressive content, including for the development and training of generative AI systems."[108]

NTIA Position

NTIA fully supports the proposed expansion of the TDM exemptions. Proponents would add the bolded text below to 37 C.F.R. § 201.40(b)(4)(i)(D) and (b)(5)(i)(D), where (b)(4) is the TDM exemption for motion pictures, and (b)(5) is the nearly identical exemption for literary works:

> The institution uses effective security measures to prevent further dissemination or downloading of motion pictures in the corpus, and to limit access to only the persons identified in paragraph [(b)(4)(i)(A)/(b)(5)(i)(A)] of this section or to researchers affiliated with other institutions of higher education solely for purposes of collaboration or replication of the research**; or for the purposes of conducting independent text and data mining research and teaching, where those researchers are in compliance with this exemption**.*[109]*

Furthermore, and as explained in part in our discussion of petitions for renewal, NTIA urges the Copyright Office to resist untimely, un-noticed, and ill-informed calls to revisit its conclusion that it intends to recommend renewal of the current TDM exemptions. In addition to running afoul of the process meticulously described by the Copyright Office in its Notice of Inquiry,[110] such a dramatic reversal is supported by neither the record on current compliance practices[111] nor

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[106] *See, e.g.,* Class 3 Round 2 Comments of AAP, Docket 2023-5, at 2, https://www.copyright.gov/1201/2024/comments/opposition/Class%203(b)%20-%20Opp'n%20-%20Association%20of%20American%20Publishers.pdf (hereinafter "AAP Class 3 Round 2 Comments").

[107] AAP Class 3 Round 2 Comments at 3, 4.

[108] *Id*. at 3.

[109] Authors Alliance *et al*. Class 3 Round 1 Comments at 5-6.

[110] *Exemptions to Permit Circumvention of Access Controls on Copyright Works*, Notification of Inquiry and Request for Petitions, Docket No. 2023-5, 88 Fed. Reg. 37486 (July 2023). In outlining the streamlined renewal process for current exemptions, the Copyright Office makes clear that "if the Office recommends renewal of the current exemption, then it will consider only the discrete aspects relevant to its expansion as a new petition." Because the Copyright Office has already concluded that it intends to recommend renewal of the current TDM exemptions, it would be inappropriate for the new version of the exemptions it recommends to the Librarian (including both actual regulatory text and any accompanying explanations) to be less inclusive than the ones they replace.

[111] Following the first round of comments on proposals for new or expanded exemptions, an opponent of the TDM exemptions sent letters to researchers who contributed their experiences to the record on text and data mining in which they demanded details of security measures taken to protect copyrighted material, citing the current exemption's requirement that "if the institution uses the security measures it uses to protect its own highly confidential information, it must, upon a reasonable request from a copyright owner whose work is contained in the corpus, provide information to that copyright owner regarding the nature of such measures." AAP Class 3 Round 2 Comments at 20-31 (including Exhibits 1-3: the list of researchers contacted, a sample letter, and responses received by the February 7, 2024 deadline suggested by AAP); 37 C.F.R. § 201.40(b)(5)(ii)(B). In its letter to researchers, the opponent informs them that they were contacted expressly because, "based on your recent statement submitted to the

assertions of dramatic changes in the character of this exemption based on the rise of generative models.

Analysis

Proponents describe in their initial comments both an environment in which numerous researchers have been empowered to undertake important work,[112] as well as encountering obstacles while attempting to apply the exemption to real-world situations.[113] In response to this experience, proponents propose what NTIA considers to be the relatively modest expansion of the current TDM exemptions described above. Rather than needing to determine whether a particular researcher's intended use of a corpus qualifies as "collaboration or replication"—terms which researchers, administrators, and their attorneys may well find ambiguous[114]—the additional text makes clear that other researchers can be recipients of shared corpora provided they too are engaging in noninfringing use, have the necessary security measures in place, and otherwise are in compliance with the terms of the exemption. Contrary to some opponent views, it is common and expected that exemption users will learn from real-world experience and return to this rulemaking if they find that the regulatory text has not fully enabled the contemplated noninfringing uses of protected works.[115]

NTIA emphasizes that, with the proposed addition to the regulatory text, the TDM exemptions would continue to be usable exclusively by academics conducting research and teaching. The revised exemptions would apply solely to researchers and certain students and staff "affiliated with a nonprofit institution of higher education," and "solely to deploy text and data mining techniques on a corpus of" either literary works or motion pictures "for the purpose of scholarly research and teaching."[116] Moreover, their institutions must still own a copy or possess a perpetual license for each work,[117] the exemption user must only view the contents of each work for verification purposes,[118] and the institution must use effective security measures to protect the corpus.[119] As previously described, exemption users will also need to ensure they only share corpora with others who meet the stringent requirements enumerated by the exemption—an

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U.S. Copyright Office in support of expanding the current [TDM] exemption…, it appears that you and/or the institution with which you are affiliated are relying on the Exemption." AAP Class 3 Round 2 Comments at 21. The timing, targeting, and tenor of these requests are disturbing. NTIA, the Copyright Office, and the Librarian can only successfully carry out their statutory mandates in this proceeding if all interested parties can contribute to the record without fear of reprisal. We urge all parties to avoid escalatory tactics and focus on the merits of the proposals at hand.

[112] Authors Alliance *et al*. Class 3 Round 1 Comments at 6-8.

[113] *Id*. at 8-15.

[114] *Id*. at 8-9.

[115] Class 3 Round 2 Comments of the Joint Creators (N/MA, MPA, RIAA), Docket 2023-5, at 3, https://www.copyright.gov/1201/2024/comments/opposition/Class%203(a)%20and%203(b)%20-%20Opp'n%20-%20Joint%20Creators.pdf (hereinafter "Joint Creators (N/MA, MPA, RIAA) Class 3 Round 2 Comments") ("Curiously, the proponents' primary argument is now that a word *they* actually proposed in 2021—'collaboration'—is so ambiguous that it 'prevents researchers and teachers from effectively using the current exemption.' But, that wasn't what they said in 2021 when they wholeheartedly embraced the term as a way to enable the research activities described in their petition.") (emphasis and quotation marks in original) (citation omitted).

[116] 37 C.F.R. § 201.40(b)(4)(i)(A) (for motion pictures) and (5)(i)(A) (literary works).

[117] 37 C.F.R. § 201.40(b)(4)(i)(B) and (5)(i)(B).

[118] 37 C.F.R. § 201.40(b)(4)(i)(C) and (5)(i)(C).

[119] 37 C.F.R. § 201.40(b)(4)(i)(D) and (5)(i)(D).

additional set of safeguards that does not currently apply when granting access to external researchers under the "collaboration or replication" provision. In view of these clear limitations, we respectfully disagree with opponent views that the proposed expansion is dramatic in scope, or that it presents a heightened infringement risk.[120]

Because the character of the contemplated use of motion pictures and literary works here is essentially the same as it was for the current TDM exemptions, NTIA sees no reason to believe the fair use analysis changes with the proposed language. One particular argument offered by opponents is that "TDM research could also be (and seemingly are being) used for their expressive content, including for the development and training of generative AI systems," and that "the legality of exploiting copyrighted materials without permission to develop and population AI systems is… far from established as a fair use."[121] NTIA notes that this argument seemingly would apply equally to the current TDM exemptions as well as the expended versions being proposed, so it is unclear how denial of the proposed expansion at issue here would address these concerns. Moreover, while there is indeed much debate and litigation around the rise of generative models that are trained on unlicensed materials, NTIA is unconvinced that this somehow means that the fair use analysis for the very particular set of activities facilitated by the TDM exemptions has fundamentally changed. In our view, it would be a mistake to conflate certain popular services and the controversies that surround them with the research questions being answered by exemption users—even if the computer programs being employed share some high-level similarities. As proponents explain, large language models have many potential applications beyond chatbots or content generation, many of which are fully consistent with the research activities contemplated by the TDM exemptions.[122] NTIA further emphasizes that no exemption issued under this rulemaking can legally apply to infringing activities, assuring that the scope of an exemption cannot exceed what is otherwise permissible under copyright law. The current TDM exemptions do not limit the type of algorithm researchers can use with a corpus and, given that there is nothing fundamental about generative models that makes them incompatible with the established noninfringing uses researchers have sought to undertake, there would be no need to impose such a limitation even if it were procedurally appropriate.

Conclusion

While the TDM exemptions appropriately cannot be used to develop commercial products, they can be used to conduct important, noninfringing research in a variety of fields, from film studies to algorithmic bias. Proponents have clearly established that there are many noninfringing uses being harmed by the prohibition against circumvention, and have proffered a reasonable addition to the regulatory text to address the challenges they have encountered. NTIA strongly supports adoption of the Class 3 proposal.

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[120] *See, e.g.*, Joint Creators (N/MA, MPA, RIAA) Class 3 Round 2 Comments at 5, 7-10; AAP Class 3 Round 2 Comments at 19-20.

[121] AAP Class 3 Round 2 Comments at 3.

[122] For example, David Bamman, speaking on behalf of Authors Alliance, describes the application of a large language model—which fundamentally, is designed to predict the next word in a string of text—to measure how formulaic or predictable (or not) a given literary work may be. Transcript, Ninth Triennial Rulemaking, In the Matter of Section 1201 Public Hearing: Proposed Class 3: Motion Pictures & Literary Works – Text and Data Mining (April 17, 2024) (hereinafter "April 17, 2024 Class 3 Hearing Transcript"), Remarks of David Bamman, at 84.

Class 4 – Computer Programs – AI Trustworthiness Research

Petitioner Jonathan Weiss requests a new exemption for the "[c]ircumvention of technological measures that control access to copyrighted generative AI models, solely for the purpose of researching biases."[123] In Round 1 and Round 3 Comments, supporters of the petition[124] (including the original petitioner) developed the record in support of an exemption for "good-faith AI trustworthiness research" in place of an exemption focused only for bias research on generative AI models.[125]

In the most full articulation of this proposed exemption, the Hacking Policy Council proposed in its Round 3 comments and in an August 20, 2024 *ex parte* letter (co-submitted with the "Joint Academic Researchers") that the term "good-faith AI trustworthiness research" be defined to mean "accessing a computer program solely for purposes of good-faith testing or investigation of bias, discrimination, infringement, or harmful outputs in an AI system, where such activity is carried out in an environment designed to avoid any harm to individuals or the public, and where the information derived from the activity is used primarily to promote the trustworthiness of the

[123] Jonathan Weiss, Petition for New Exemption Under 17 U.S.C. § 1201, Docket 2023-5, https://www.copyright.gov/1201/2024/petitions/proposed/New-Pet-Jonathan-Weiss.pdf (hereinafter "Jonathan Weiss Class 4 Petition").

[124] Supporters include the Hacking Policy Council, HackerOne, OpenPolicy, Cranium AI, and "Joint Academic Researchers" (Researchers Affiliated with MIT, Princeton Center for Information Technology Policy, and Stanford Center for Research on Foundation Models).

[125] Class 4 Round 3 Comments of Hacking Policy Council, Docket No. 2023-5, at 7, https://www.copyright.gov/1201/2024/comments/reply/Class%204%20-%20Reply%20-%20Hacking%20Policy%20Council.pdf (proposing an exemption for certain circumvention "solely for the purpose of good-faith AI trustworthiness research") (hereinafter "Hacking Policy Council Class 4 Round 3 Comments"). *See also id*. at 2 ("As noted in our initial comments, we believe that the petitioner did not fully define the contours of the proposed exemption, and that the Copyright Office should consider the exemption to apply to artificial intelligence (AI) trustworthiness research – which encompasses bias, discrimination, synthetic content, infringement, and other alignment issues not directly related to security."); Class 4 Round 3 Comments of Jonathan Weiss, Docket 2023-5, at 1, https://www.copyright.gov/1201/2024/comments/reply/Class%204%20-%20Reply%20-%20Jonathan%20Weiss.pdf ("For clarification, the exemption should not be limited to bias. It is my intention for the petition to encompass AI trustworthiness research, including research on bias, discrimination, copyright infringement, synthetic content, sexual imagery, and other non-security harms, as explained and elaborated in the Hacking Policy Council and OpenPolicy comments on the record.") (hereinafter "Jonathan Weiss Class 4 Round 3 Comments"); Class 4 Round 1 Comments of OpenPolicy, Docket No. 2023-5, at 2, https://www.copyright.gov/1201/2024/comments/Class%204%20-%20Initial%20Comments%20-%20OpenPolicy.pdf ("We believe such exemption can be further expanded to good-faith research performed on broader categories of AI systems or deployments, that extend beyond generative AI. We further believe, similar to HPC, that the research permitted should not be confined to findings or concerns related to 'bias', but can include broad sets of undesirable social impacts, and other harmful or undesirable unintended outputs in AI systems, from discrimination to 'untrustworthy' behavior.") (quotations in original) (hereinafter "OpenPolicy Class 4 Round 1 Comments"); Class 4 Round 1 Comments of Hacking Policy Council, Docket No. 2023-5, at 2, https://www.copyright.gov/1201/2024/comments/Class%204%20-%20Initial%20Comments%20-%20Hacking%20Policy%20Council.pdf (proposing language to exempt certain circumvention "solely for the purpose of good-faith AI alignment research.") (hereinafter "Hacking Policy Council Class 4 Round 1 Comments"); Class 4 Round 1 Comments of HackerOne, Docket No. 2023-5, at 2, https://www.copyright.gov/1201/2024/comments/Class%204%20-%20Initial%20Comments%20-%20HackerOne,%20Inc.pdf (hereinafter "HackerOne Class 4 Round 1 Comments").

AI system, and is not used or maintained in a manner that facilitates copyright infringement."[126] As so presented, the proposed language broadly tracks the language and structure of the existing security research exemption,[127] adjusted to be applicable in the context of AI trustworthiness research.

The Department of Justice's Computer Crime and Intellectual Property section (CCIPS) and Senator Mark Warner have filed letters in the rulemaking expressing strong support for AI research that goes beyond "security" research.[128]

Opponents[129] argue that the record does not adequately demonstrate that the prohibition against circumvention is causing adverse effects that would justify the proposed exemption, that the technological protection measures at issue are unclear, and that there may be safety concerns with permitting the proposal.

NTIA Position

NTIA supports an exemption for AI trustworthiness research largely modeled after the current research exemption regulatory language, similar to the proposal presented by the Hacking Policy Council's Round 3 comments and the *ex parte* letter submitted with the Joint Academic Researchers.[130] However, we note that several of the purported TPMs and methods of

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[126] Hacking Policy Council Class 4 Round 3 Comments at 7 (internal citation omitted); Class 4 *Ex Parte* Letter of the Hacking Policy Council and Joint Academic Researchers (August 20, 2024), Docket No. 2023-5, at 9, https://www.copyright.gov/1201/2024/ex-parte-communications/Ex-Parte-Letter-Class-4-HPC-and-Joint-Academic-Researchers-20240820.pdf (hereinafter "Hacking Policy Council and Joint Academic Researchers Class 4 *Ex Parte* Letter").

[127] 37 CFR § 201.40(b)(16).

[128] Letter from the Department of Justice's Computer Crime and Intellectual Property Section ("DOJ CCIPS") to the U.S. Copyright Office re: Class 4 (April 15, 2024), https://www.copyright.gov/1201/2024/USCO-letters/Letter%20from%20Department%20of%20Justice%20Criminal%20Division.pdf (hereinafter "2024 DOJ CCIPS Class 4 Letter."); Letter from Senator Mark Warner to the U.S. Copyright Office re: Class 4 (May 24, 2024), https://www.copyright.gov/1201/2024/USCO-letters/Senator%20Warner%20DMCA%20AI%20Exemption%20Letter%20-%2024%20May%202024.pdf (hereinafter "2024 Senator Warner Class 4 Letter.").

[129] Opponents of the petition include DVD Copy Control Association (DVD CCA) and Advanced Access Content system Licensing Administrator (AACS LA), ACT | The App Association, and "Joint Creators" (Entertainment Software Association (ESA), Motion Picture Association (MPA), News/Media Alliance (N/MA), and Recording Industry Association of America (RIAA)).

[130] Specifically, NTIA would recommend that the Register and Librarian adopt the following exemption language:

> i) Computer Programs, solely for the purpose of good-faith AI trustworthiness research.
> ii) For purposes of paragraph (i), "good-faith AI trustworthiness research" means accessing a computer program solely for purposes of good-faith testing or investigation of bias, discrimination, infringement, or harmful outputs in an AI system, where such activity is carried out in an environment designed to avoid any harm to individuals or the public, and where the information derived from the activity is used primarily to promote the trustworthiness of the AI system, and is not used or maintained in a manner that facilitates copyright infringement.
> iii) For purposes of paragraph (i), the term "artificial intelligence" or "AI" has the meaning set forth in 15 U.S.C. § 9401(3): a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments.

circumvention listed by the exemption proponents or noted throughout the rulemaking do not appear to fall within the scope of Section 1201. To the extent that the Copyright Office determines that the prohibition against circumvention does not create adverse effects to the proponents' research activities because these activities do not involve circumventing a technological measure as defined in Section 1201, NTIA recommends that the Copyright Office explicitly state that the purported technological measures or the methods of circumvention listed in the proponents' submissions do not meet the statutory standard. If the Copyright Office determines the existence of TPMs and methods of circumvention under Section 1201, then the Office should recommend granting the exemption, as proponents have otherwise met their burden. Because the ambiguity in whether proponents' activities involve circumventions of technological measures within the meaning of Section 1201 creates meaningful burdens on research of public significance, NTIA requests that the Copyright Office explicitly "report and comment on" NTIA's views[131] set forth in this section as to the existence of technological protective measures and methods of circumvention within the meaning of Section 1201.

Should the Copyright Office be disinclined to grant an AI trustworthiness research exemption, NTIA recommends in the alternative that the Office seek to interpret the existing security research exemption to cover at least some aspects of good-faith AI trustworthiness research.

In short, we recommend the following:

> iv) For purposes of paragraph (i), the term "AI system" means any data system, software, hardware, application, tool, or utility that operates in whole or in part using AI.
> v) Good-faith AI trustworthiness research that qualifies for the exemption of this section may nevertheless incur liability under other applicable laws, including without limitation the Computer Fraud and Abuse Act of 1986, as amended and codified in title 18, United States Code, and eligibility for that exemption is not a safe harbor from, or defense to, liability under other applicable laws.

This language differs from the language proposed by the Hacking Policy Council by removing the requirement that the circumvention be undertaken "on a lawfully acquired device or machine on which an AI system operates, or [] on a computer, computer system, or computer network on which an AI system operates with the authorization of the owner or operator of such computer, computer system, or computer network." Such language is largely inapplicable to the noninfringing uses described in the record, which predominately relate to noninfringing uses which are not authorized by the owner or operator of the applicable computer, computer system, or computer network (although we note that this may not be an issue when AI models can run on local hardware).In the context of security research in the 2021 rulemaking, NTIA flagged that sometimes "lawfully acquired" provisions can present an obstacle to good-faith security research, for example due to the lack of understanding of what "lawfully acquired" can mean in specific contexts. 2021 NTIA Letter at 98-101.We continue to stress, as we did in 2021, that "consideration of contractual issues or other legal issues involving obtaining access to programs, devices, machines, and systems legitimately do not go away for any user in this class if the Librarian removes the 'lawfully acquired' limitation, as the Librarian's exemptions do not affect liability under other laws and regulations.") *Id*. at 99 (internal citation omitted).

[131] 17 U.S.C. § 1201(a)(1)(C) ("During the 2-year period described in subparagraph (A), and during each succeeding 3-year period, the Librarian of Congress, upon the recommendation of the Register of Copyrights, who shall consult with the Assistant Secretary for Communications and Information of the Department of Commerce and *report and comment on his or her views in making such recommendation*, shall make the determination in a rulemaking proceeding for purposes of subparagraph (B) of whether persons who are users of a copyrighted work are, or are likely to be in the succeeding 3-year period, adversely affected by the prohibition under subparagraph (A) in their ability to make noninfringing uses under this title of a particular class of copyrighted works.") (emphasis added).

- The Copyright Office should explicitly state in its recommendation to the Librarian when a TPM and method of circumvention does or does not fall within Section 1201.

- To the extent that a TPM and method of circumvention fall within Section 1201, the Copyright Office should recommend granting the exemption, given that the proponents and supporters have otherwise met their burden.

- If the Copyright Office does not find support for a separate AI trustworthiness research exemption, the Copyright Office should recommend that the security research exemption be interpreted to include aspects of good-faith AI trustworthiness research.

Analysis

As CCIPS has noted in this proceeding, "[i]ndependent research on the functioning and security of AI systems, often called AI 'red-teaming'—including research into the generation of outputs that perpetuate or exacerbate bias and discrimination, the generation of outputs that result in or encourage unlawful conduct or harm, and the vulnerability of AI systems to manipulation and misuse—will likely be essential to ensuring the integrity and safety of AI systems. In much the same way that computer security research has helped protect the integrity of computer systems and networks on which the public rely, good-faith research into bias and other potentially harmful outputs in AI models can serve a similar, critical, role."[132] The federal government has more broadly recognized the importance of AI red-teaming and independent research.[133]

Having reviewed the record, NTIA concludes that the Section 1201 prohibition on circumventing technological protection measures adversely affects[134] persons engaged in "good-faith AI trustworthiness research."[135] The prohibition against circumvention affects their ability to make noninfringing uses of copyrighted computer programs described in the proposed class, to the extent that the research activity described in the proponents' submissions is undertaken after circumventing of technological protection measures under the statute and no meaningful

[132] 2024 DOJ CCIPS Class 4 Letter at 3-4.
[133] *See, e.g.*, Exec. Order No. 14,110, sec. 4.1(a)(ii) (2023), https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/ (requiring the National Institute of Standards and Technology to "[e]stablish appropriate guidelines (except for AI used as a component of a national security system), including appropriate procedures and processes, to enable developers of AI, especially of dual-use foundation models, to conduct AI red-teaming tests to enable deployment of safe, secure, and trustworthy systems"); National Telecommunications and Information Administration, AI Accountability Policy Report, (March 2024), at 70, https://www.ntia.gov/sites/default/files/2024-04/ntia-ai-report-print.pdf ("Independent AI audits and evaluations are central to any accountability structure."). *See also id.* at 57 ("The creation of safe harbors from liability is relevant to AI accountability, whether the one sheltered in that harbor is an AI actor or an independent researcher."); *id.* at 22 ("This Report identifies a role for government in facilitating appropriate researcher and other independent evaluator access to AI system components through tools that exist or must be developed."). *See also* U.S. Department of Defense, CDAO Launches First DOD AI Bias Bounty Focused on Unknown Risks in LLMs, (Jan. 29, 2024), https://www.defense.gov/News/Releases/Release/Article/3659519/cdao-launches-first-dod-ai-bias-bounty-focused-on-unknown-risks-in-llms/.
[134] Specifically, that users of the proposed class are, and are likely to be, adversely affected by the prohibition against circumvention from engaging in noninfringing uses (AI trustworthiness research).
[135] As defined in Hacking Policy Council Class 4 Round 3 Comments and the addendum in the Hacking Policy Council and Joint Academic Researchers Class 4 *Ex Parte* Letter.

alternatives exist. The Hacking Policy Council and the Joint Academic Researchers further highlight both broad and individual adverse effects, demonstrating that the negative impact of the circumvention prohibition is not confined to particular (e.g., *de minimis*) situations.[136]

NTIA urges the Copyright Office to clarify in the first instance whether the identified TPMs and methods of circumvention on the record meet the statutory standard under Section 1201, and, to the extent that the Copyright Office determines the existence of TPMs and circumvention under the statute, that the Office recommend granting an exemption to shield researchers from the adverse effects from the prohibition against circumvention.

Protected works and noninfringing uses. As computer programs, the proposed class includes at least some works that are protected by copyright.[137] To the extent that good-faith AI trustworthiness research implicates copyright law, NTIA concludes that it is a fair use for largely the same reasons as those articulated by NTIA in analyzing the proposed expansion of the security research exemption in 2021.[138]

Considered together, the four statutory fair use factors strongly support a finding of fair use. The first factor favors fair use because research into AI trustworthiness is a transformative use of the computer programs at issue. The second factor favors fair use because the computer programs at issue "are likely to fall on the functional rather than creative end of the spectrum."[139] The third factor "can tilt in favor of fair use when the copying is for a transformative purpose and the user copies only what was necessary for that purpose."[140] The fourth factor also does not prevent a finding of fair use, as the record does not indicate that good-faith AI trustworthiness research has, or is likely to, supplant the market for computer programs. Any other plausibly assertable harms to the market for the work, such as "reputational harm" if vulnerabilities are discovered "are not cognizable under the fourth factor or copyright in general."[141]

Causation and adverse effects. The record demonstrates that noninfringing users – specifically, good-faith AI trustworthiness researchers – "are, or are likely to be, adversely affected" by the prohibition against circumvention. The record demonstrates that those researchers face the

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[136] Hacking Policy Council and Joint Academic Researchers Class 4 *Ex Parte* Letter at 3-4.
[137] These programs can include the code for "the user interface, the code that drives the algorithm, and APIs." Transcript, Ninth Triennial Rulemaking, In the Matter of Section 1201 Public Hearing: Proposed Class 4 Computer Programs – Generative AI Research (April 17, 2024) (hereinafter "April 17, 2024 Class 4 Hearing Transcript"), Remarks of Harley Geiger, at 8, https://www.copyright.gov/1201/2024/hearing-transcripts/240417-Section-1201-Public-Hearing-Class-4.pdf. *See also id*., Remarks of Harley Geiger, at 53 (Harley Geiger: ". . .I'll just note that, again, what we are focused on are the code for the user interface, code for the API, and software code that drives the algorithm. I would be, frankly, shocked if the outcome of the Copyright Office's study is that the code for those computer programs are not protected works.").
[138] *See* 2021 NTIA Letter at 89-91.
[139] 2021 NTIA Letter at 90 (quoting Eight Triennial Section 1201 Rulemaking, Class 13 Round 1 Comments of J. Alex Halderman, Center for Democracy & Technology, and U.S. Technology Policy Committee of the Association for Computing Machinery, Docket No. 2020-11, https://www.copyright.gov/1201/2021/comments/Class%2013_InitialComments_J.%20Alex%20Halderman,%20Center%20for%20Democracy%20&%20Technology,%20and%20U.S.%20Technology%20Policy%20Committee%20of%20the%20Association%20for%20Computing%20Machinery.pdf).
[140] 2021 NTIA Letter at 90.
[141] 2021 NTIA Letter at 90.

chilling effect of legal ambiguity in their research and that Section 1201 contributes meaningfully to that chilling effect.

In their Round 3 Comment, "Joint Academic Researchers" (including researchers from MIT, Princeton University, and Stanford University) noted that their "experience with on-the-ground research demonstrates that the absence of clear protections under DMCA Section 1201 adversely affects good faith research on generative AI models and systems."[142] Joint Academic Researchers submitted into the record an article titled "A Safe Harbor for AI Evaluation and Red Teaming,"[143] which was authored in 2023 by over 20 researchers[144] and which specifically identifies the Section 1201 prohibition as a source of legal risk for independent evaluation and red teaming of AI systems.[145]

Joint Academic Researchers also cite an open letter led by MIT and signed by over 350 academic researchers, which notes that "[i]ndependent evaluation is necessary for public awareness, transparency, and accountability of high impact generative AI systems" and that such research is "chill[ed]" both by the risk of "account suspension" and "legal reprisal"[146] – which, as supporters note, includes Section 1201 risks. Taken as a whole, the record demonstrates that the prohibition against circumvention adversely affects noninfringing uses of the computer programs at issue.

Furthermore, in their *ex parte* letter, the Hacking Policy Council and Joint Academic Researchers emphasize both individualized and broad adverse effects attributed to the circumvention prohibition in Section 1201.[147]

User agreements. Opponents DVD CCA and AACS LA argue that "applicable user agreements" are responsible for adverse effects on the research activity, rather than the prohibition against circumvention.[148] However, NTIA concludes that the record supports at least some adverse

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[142] Class 4 Round 3 Comments of Joint Academic Researchers, Docket No. 2023-5, at 8, https://www.copyright.gov/1201/2024/comments/reply/Class%204%20-%20Reply%20-%20Kevin%20Klyman%20et%20al.%20(Joint%20Academic%20Researchers).pdf (hereinafter "Joint Academic Researchers Class 4 Round 3 Comments").

[143] Shayne Longpre *et al.*, A Safe Harbor for AI Evaluation and Red Teaming, ARXIV, (March 5, 2024), https://arxiv.org/pdf/2403.04893.

[144] The coauthors' institutional affiliations include MIT, Princeton University, Stanford University, Georgetown University, the AI Risk and Vulnerability Alliance, Eleuther AI, Brown University, Carnegie Mellon University, Virginia Tech, Northeastern University, UCSB, the University of Pennsylvania, and UIUC. *Id*. at 1.

[145] *Id*. at 7 ("Section 1201 of the Digital Millennium Copyright Act (DMCA) allows for civil lawsuits if researchers circumvent technological protection measures (TPMs), which effectively control access to works protected by copyright. These risks are not theoretical; security researchers have been targeted under the CFAA, and DMCA § 1201 hampered security researchers to the extent that they requested a DMCA exemption for this purpose. Already, in the context of generative AI, OpenAI has attempted to dismiss the New York Times v OpenAI lawsuit on the allegation that New York Times research into the model constituted hacking.") (internal citations omitted).

[146] A Safe Harbor for Independent AI Evaluation, MIT.EDU, https://sites.mit.edu/ai-safe-harbor/ (last accessed Sept. 4, 2024).

[147] Hacking Policy Council and Joint Academic Researchers Class 4 *Ex Parte* Letter at 3-4.

[148] Class 4 Round 2 Comments of DVD CCA and AACS LA, Docket No. 2023-5, at 10-11, https://www.copyright.gov/1201/2024/comments/opposition/Class%204%20-%20Opp'n%20-%20DVD%20CCA%20and%20AACS%20LA.pdf ("Proponents have also suggested that, in the absence of the exemption, they would have to acquire approval for the research from the AI system owner, which would 'reduce

effects arising from the Section 1201 prohibition. The materials cited by Joint Academic Researchers discussed above indicate that the Section 1201 prohibition creates a significant chilling effect on good-faith AI trustworthiness research. The Register has also recognized, in the security research context, that the existence of other legal restrictions on a proposed class does not defeat the existence of an adverse effect caused by the prohibition against circumvention. In 2021, the Register concurred with CCIPS in determining that the preexisting requirement that security research be conducted in compliance with other applicable laws "impos[es] potentially substantial liability under section 1201 for an 'inadvertent or minor violation[] of an unrelated law' that carries a much lower penalty, and possibly where prosecutorial discretion suggests enforcement is likely," and therefore adversely affects noninfringing uses.[149] Similarly, the existence of user agreements that could prohibit good-faith AI trustworthiness research – which similarly might "carr[y] a much lower penalty" than the "potentially substantial liability under section 1201" – does not defeat a finding of adverse effects.[150]

Technological protection measures.[151] Opponents argue that the record does not support a finding of adverse effects because the record does not clearly indicate which technological protection measures are at issue. Supporters of the proposed class identify several different technological protection measures at issue, including "account requirements," "rate limits," and "algorithmic safeguards" (e.g., to block inputs and outputs).[152] NTIA concludes that account requirements and rate limits likely do not qualify as technological measures that effectively control access to a copyrighted work. To the extent that the Copyright Office agrees with NTIA as to those proposed technological measures, NTIA strongly recommends the Copyright Office state so; some

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the independence volume and diversity of testing.' Hacking Policy Comments at 4. They explained that the terms of use for AI systems may 'prohibit bypassing any protective measures or safety mitigations.' Id. at 3. However, the terms of any applicable user agreements that may prevent research are not governed by Section 1201(a)(1), and no evidence has been provided demonstrating that Proponents are unable to, rather than simply preferring not to, engage with AI system owners to achieve their goals.").

[149] 2021 Register's Recommendation at 253 (internal citations omitted).

[150] NTIA notes that, like in the security research context, the existence of a Section 1201 exemption cannot "provide a safe harbor from liability for violating other laws," 2021 Register's Recommendation at 254, or a safe harbor from needing to abide by user agreements or other legal requirements. The Hacking Policy Council's proposed language makes this clear, tracking the existing security research exemption in providing that "[g]ood-faith AI trustworthiness research that qualifies for the exemption of this section may nevertheless incur liability under other applicable laws, including without limitation the Computer Fraud and Abuse Act of 1986, as amended and codified in title 18, United States Code, and eligibility for that exemption is not a safe harbor from, or defense to, liability under other applicable laws." Hacking Policy Council Round 3 Comments at 8.

[151] Per the record, exemption supporters are looking to access "computer programs," which they described as including the code for "the user interface, the code that drives the algorithm, and APIs." April 17, 2024 Class 4 Hearing Transcript at 8, 53.

[152] Hacking Policy Council Class 4 Round 3 Comments; Joint Academic Researchers Class 4 Round 3 Comments. In their *ex parte* letter, the Hacking Policy Council and Joint Academic Researchers note: ". . .several technological protection measures that may be circumvented as part of good faith AI trustworthiness research; such technological protection measures include loss of account access, but encompass other measures as well. Other technological protection measures the Joint Academic Researchers reiterated from comments and the hearing included:

i. Blocking model outputs (e.g. via a safety classifier or guardrails)
ii. Blocking user inputs or prompts (e.g., via a filter in the user interface)
iii. Account rate limits
iv. Limiting access to model or system outputs

Hacking Policy Council and Joint Academic Researchers Class 4 *Ex Parte* Letter at 2 (internal citation omitted).

exemption supporters have also asked for a similar clarification.[153] If the Copyright Office disagrees with NTIA's view, the Copyright Office should indicate so and recommend granting an exemption because proponents have met the burden imposed on them to demonstrate adverse effects caused by prohibition against circumvention.

- *Account requirements*. "Compared to past digital technologies, prominent [AI] models require accounts" to access the interface and use the AI model. Proponents argue that such a requirement—which, as discussed below, we understand to refer at least to or be interconnected or intertwined with a requirement to create or use an account adhering to the terms of service governing user accounts—may constitute a technological protection measure within the meaning of Section 1201.

- The Hacking Policy Council argues that account requirements "may be circumvented when a prospective user establishes an account to conduct independent AI research, despite restrictions on such activity in the account terms of service." [154] Subsequently, the Hacking Policy explained that it does not view "terms of service" itself as a TPM,[155] and, in their *ex parte* letter filed with the Joint Academic Researchers, note that "the role of terms of service is to confer authorization for use of software."[156] Per supporters, a violation of the terms of service can then sometimes serve as the basis for the imposition of TPMs restricting access to copyrighted works.[157]

- Given that there has been discussion on the record about whether "terms of service" do or do not constitute TPMs, the Copyright Office should address this issue in its recommendation. NTIA concludes that terms of service are not TPMs and that violating these terms likely on its own does not entail circumvention under the statute, because "restrictions on [] activity in the account terms of service" of a platform do not constitute

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[153] *See, e.g.*, Hacking Policy Council Class 4 Round 3 Comments at 4 ("If the Copyright Office does not consider these measures to be technological measures that effectively control access to copyrighted works within the meaning of 17 U.S.C. § 1201(a)(3), we request that the Copyright Office provide an affirmative declaration of this conclusion for clarity."; Hacking Policy Council and Joint Academic Researchers Class 4 *Ex Parte* Letter at 1 ("If the measures identified by the Hacking Policy Council and the Joint Academic Researchers are not 'technological protection measures' within the meaning of the statute, we would welcome explicit clarification from the Copyright Office regarding this interpretation.") (quotation marks in original).

[154] Hacking Policy Council Class 4 Round 3 Comments at 5. *See also* Hacking Policy Council Class 4 Round 1 Comments at 3 ("Several generative AI alignment testing methods may be characterized as involving circumvention of technological protection measures to affect system behavior. For example, the copyright owner of the AI system may require a user account, the terms of which prohibit bypassing any protective measures or safety mitigations as a condition for permission to log in and use the system. By creating an account to access the system, an AI alignment researcher may be agreeing not to perform research.").Discussion of the intersection between Section 1201 and TPMs also occurred during the public hearing. *See, e.g.*, Hearing Transcript at 11 ("And the second point is that this good faith research and many of the researchers that are even doing this research are feeling a form of chilling effects because of fear of potential liability for violating terms of service and/or trying to circumvent guardrails or creating new accounts after their accounts have been terminated in order to do this good faith research.").

[155] Class 4 Hearing Transcript at 84-85 ("The terms of service are not the technological protection measure. When we describe TPMs, we are describing account requirements. We are describing rate limits. We're describing guardrails. The terms of service really come into play when you lose your accounts. They're the reason sometimes that an individual loses their account.").

[156] Hacking Policy Council and Joint Academic Researchers Class 4 *Ex Parte* Letter at 2.

[157] *See id*.

a *technological* measure within the meaning of Section 1201.[158] In this scenario, a user conducting independent AI research must have first acquired a user account from the AI system operator. Even if the AI system operator would have refused to grant an account if it had been aware that the researcher intended to engage in unauthorized independent AI research, the researcher would not be circumventing a *technological* measure within the meaning of 17 U.S.C. § 1201(a)(3) because, in this scenario, the researcher in fact possesses a user account.

- The Hacking Policy Council also argues that an account suspension constitutes a TPM and that account requirements are circumvented "when a user's account has been suspended for conducting generative AI research, and the same user then establishes a new account to conduct additional generative AI research, as occurred during the Marcus and Southen research."[159] As explained during the public hearing, account suspensions can happen due to violations of terms of service or other reasons.[160] NTIA similarly concludes that no circumvention within the meaning of Section 1201 has occurred in this case. Again, in this scenario, the user has acquired a user account from the AI system operator and is therefore not circumventing a *technological* measure protecting access to

[158] The understanding that terms of service are not TPMs and that violation of terms of service do not automatically constitute circumvention under the statute appears to be shared or at least acknowledged by some opponents. April 17, 2024 Class 4 Hearing Transcript, Remarks of David Jonathan Taylor, at 13 (David Jonathan Taylor: "And so terms of use that they may violate, those aren't governed by 1201 and this rulemaking really has no ability to address that."); *Id.*, Remarks of Steven R. Englund, at 50 (Steven R. Englund: "But, if a concern over violating a service's terms is killing projects, nothing else is going to matter because the Office can't immunize researchers from terms of service violations and contract liability.").*See also* 2003 Register's Recommendation, at 149-50 ("Section 1201(a)(1) prohibits circumvention of a technological measure that controls access, but does not refer to contractual conditions imposed on access. A user's agreement to additional terms as a condition to receiving access is a separate issue, and violations of such terms are not prohibited by §1201(a)(1), but rather would be actionable as a breach of contract or in a traditional copyright infringement suit.").

[159] Hacking Policy Council Class 4 Round 3 Comments at 5 (citing Gary Marcus and Reid Southen, Generative AI Has a Visual Plagiarism Problem, IEEE Spectrum, Jan. 6, 2024, https://spectrum.ieee.org/midjourney-copyright.). *See also* April 17, 2024 Class 4 Hearing Transcript, Remarks of Harley Geiger, at 7-8 (Harley Geiger: ". . .a potential scenario is a researcher that is performing research on discrimination in an AI system. They need an account in order to access that user interface, as well as the code that drives the algorithm, and they engage in prompt engineering, prompt injections, and they lose their account as a result of this. So they become suspended once the AI system operator discovers that they are performing this research. *To circumvent their account suspension, which has blocked them from getting access to the protected works, they create a new account*. The terms of service forbid this because the terms of service say only one account per user When they are creating their new account, the circumvention includes the creation of a new username and a password. They may need to use a new email address because their original email address was banned. If there is a subscription, they may need to use a new credit card as well. They may need to use a new IP address, so they use an IP address rotator. But they have circumvented this and created a new account and they're able to continue with their research. So those are -- that is one possible scenario.") (emphasis added).

[160] April 17, 2024 Class 4 Hearing Transcript, Remarks of Harley Geiger, at 85 (Harley Geiger: "The terms of service really come into play when you lose your accounts. They're the reason sometimes that an individual loses their account. However, you can have your account suspended for any reason even if you're not violating terms of service. So this is really not about terms of service and changing terms of service. This is about removing liability under Section 1201 for good faith AI trustworthiness when you are circumventing TPMs that include account suspension.").

the copyrighted work at issue within the meaning of Section 1201.[161]

A contrary conclusion would escalate an inordinate volume of run-of-the-mill disagreements and contractual disputes between operators and users of Internet services into Section 1201 disputes and therefore, possibly, into the ambit of criminal law.[162] In analogous cases in interpreting the Computer Fraud and Abuse Act, courts have refused to extend the reach of similar legal prohibitions to these types of disputes.[163] This expansion of Section 1201's role would be inconsistent with the text and purpose of the statute. Such an outcome in this context would be dramatic; it could mean, for example, that users of any online service whose accounts are suspended would be liable under Section 1201 for creating new accounts. The Copyright Office should make clear that this is not the case.

- *Rate Limits*. For broadly the same reasons set forth above in discussing account requirements, alleged circumventions of rate limits would not come within Section 1201's scope. The Hacking Policy Council suggests that "[r]ate limits may be bypassed through such processes as IP address rotation and automated backoff measures, or by establishing another account."[164] However, rate limits that could be bypassed through "IP address rotation and automated backoff measures" do not appear to constitute TPMs within the meaning of Section 1201. A person who does not use such measures could still likely access the underlying copyrighted work, in the "ordinary course of its operation," *without* "the application of information, or a process or a treatment, with the authority of the copyright owner,"[165] because in the ordinary course of operation, a rate limit does not prevent someone from accessing the computer programs. Only after repeatedly accessing the computer program does a rate limit become effective and only then as to computer programs that are already in the possession or have been lawfully accessed by the user,

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[161] That is not to say that there could never be methods of circumvention that could be encompassed under Section 1201 when a user tries to gain access to an account. For example, if a user whose account was suspended took steps to regain access to an account, the method of circumvention might be one that has traditionally been considered to fall under the ambit of the statute (e.g., brute forcing login credentials that the service operator may have changed to limit access to the account or hacking into a service operator's servers to alter the status of the account or gain access to another account). *See* 2003 Register's Recommendation at 149 ("Yet even if [end-user licensing agreements] were enforceable, one who agreed to the terms and then received access would not be in violation of §1201(a)(1) if he breached the terms of the contract. The only way that §1201(a)(1) would be implicated would be if one attempted to avoid agreement to the terms by hacking through a measure protecting access.").

[162] 17 U.S.C. § 1204.

[163] *See, e.g.*, *Van Buren v. United States*, 593 U.S. __, __ (2021) (slip op., at 17-18), *available at* https://www.supremecourt.gov/opinions/20pdf/19-783_k53l.pdf ("If the 'exceeds authorized access' clause criminalizes every violation of a computer-use policy, then millions of otherwise law-abiding citizens are criminals. . . [C]onsider the Internet. Many websites, services, and databases—which provide 'information' from 'protected computer[s],' [18 U.S.C.] §1030(a)(2)(C)—authorize a user's access only upon his agreement to follow specified terms of service. If the 'exceeds authorized access' clause encompasses violations of circumstance-based access restrictions on employers' computers, it is difficult to see why it would not also encompass violations of such restrictions on website providers' computers."); *Sandvig v. Barr*, 451 F. Supp. 3d. 73, 76 (D.D.C. 2020) ("[T]he Court concludes that the CFAA does not criminalize mere terms-of-service violations on consumer websites and, thus, that plaintiffs' proposed research plans [to provide false information to employment websites to test whether they discriminate based on race and gender] are not criminal under the CFAA.").

[164] Hacking Policy Council Class 4 Round 3 Comments at 5.As we discussed above, we do not believe creating a different user account obtain access to a computer program constitutes a circumvention under Section 1201.

[165] 17 U.S.C. § 1201(a)(3).

rendering the measure ineffective at best at protecting access to the copyrighted work at issue (e.g., the interface code for the AI system).

- *Blocking Model Outputs, Blocking User Inputs and Prompts, and Limiting Access to Model or System Outputs*. In addition to rate limits, exemption supporters also highlight "blocking model outputs (e.g. via a safety classifier or guardrails)," "blocking user inputs or prompts (e.g., via a filter in the user interface)," and "limiting access to model or system outputs" as technological protection measures relevant in this proceeding.[166] For example, Joint Academic Researchers note that "[g]enerative AI companies use a variety of measures to block models from generating undesired or harmful outputs, such as adapting the model so that it is less likely to produce untrustworthy outputs (e.g. via reinforcement learning from human feedback) and adding a filter to the model to identify and halt such outputs."[167] These adaptations and filters can be bypassed by "jailbreaking" a model, such as by adding "adversarial text" to a user input that causes the AI system to ignore the algorithmic safeguards.[168] This kind of attempted "jailbreak" bypass is the subject of active substantial research.[169] While not every instance of this kind of "jailbreaking" necessarily constitutes circumvention of a TPM, NTIA believes at least some of these actions likely qualify. In certain circumstances, an algorithmic safeguard of this kind potentially "effectively controls access to a work" within the meaning of 17 U.S.C. § 1201(a)(3)(B) because, "in the ordinary course of its operation," the safeguard may prevent a user from accessing works that an AI model has been trained not to divulge. For example, if an algorithmic safeguard was installed on an AI model to prevent it from divulging or limiting access to a "system prompt" (internal instructions to the AI model which are developed by the system operator, which could be a work protected under copyright law), a researcher who used a "jailbreak prompt" to obtain access to the system prompt would be circumventing a technological measure within the meaning of 17 U.S.C. § 1201(a)(3)(A). Similarly, safeguards that prevent researchers in the first instance from inputting information may also protect access to a "system prompt," and such safeguards could function as TPMs. Therefore, for the purpose of this proposed exemption, to the extent that blocking model outputs, blocking user inputs and prompts, and limiting access to model or system outputs protect access to computer programs, their circumvention would be encompassed under Section 1201.

In summary, NTIA concludes that some of the common research activities identified in the proponents' submissions do not involve circumventing a technological protection measure within the meaning of Section 1201 to carry out. Per the consultation process between NTIA and the Copyright Office, we urge the Copyright Office to "report and comment on" that conclusion. If the Copyright Office believes circumvention within the meaning of Section 1201 is implicated in

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[166] *See, e.g.,* Hacking Policy Council and Joint Academic Researchers Class 4 *Ex Parte* Letter at 2.
[167] Joint Academic Researchers Class 4 Round 3 Comments at 6.
[168] *Id*.
[169] *See, e.g.,* Dong Shu *et al.*, AttackEval: How to Evaluate the Effectiveness of Jailbreak Attacking on Large Language Models, ARXIV, (Aug. 3, 2024), https://arxiv.org/pdf/2401.09002; Minseon Kim *et al.*, Automatic Jailbreaking of the Text-to-Image Generative AI Systems, ARXIV, (May 28, 2024), https://arxiv.org/pdf/2405.16567; Yi Liu *et al.*, Jailbreaking ChatGPT via Prompt Engineering: An Empirical Study, ARXIV, (March 10, 2024), https://arxiv.org/pdf/2305.13860; Junjie Chu *et al.*, Comprehensive Assessment of Jailbreak Attacks Against LLMs, ARXIV, (Feb. 8, 2024), https://arxiv.org/pdf/2402.05668.

some instances, proponents have met the burden imposed on them. Regardless, proponents have shown that at least a portion of the proposed research activity does involve circumventing a technological protective measure within the meaning of Section 1201, and – as shown in the record – would be adversely affected by the circumvention prohibition absent an exemption.[170]

NTIA reiterates the concern it expressed in the introduction to this letter and the 2021 Consultation Letter on "the challenge of identifying whether particular technologies presenting barriers to noninfringing use qualify as technological protection measures under Section 1201."[171] In the 2021 Consultation Letter, we noted that "experience suggests that neither proponents nor opponents necessarily have an interest in exploring the distinction between access controls under the statute and other technologies that may pose a technical (but not necessarily legal) hurdle to noninfringing uses."[172] This phenomenon counsels the Copyright Office to more definitely resolve whether a particular technical control qualifies as a technological measure within the meaning of 17 U.S.C. § 1201(a)(3), and to clearly identify when a measure does not qualify.

Other statutory factors. Section 1201 sets forth additional factors to be considered in the rulemaking process. Those factors tend to favor granting an exemption. In particular, the third statutory factor weighs heavily in favor of an exemption, as the record indicates that "the impact that the prohibition on the circumvention of technological measures applied to copyrighted works has on […] scholarship, or research"[173] is substantially negative.

NTIA's alternative recommendation. Should the Register be disinclined to recommend this proposed exemption, NTIA recommends in the alternative that the Register seek to interpret the existing security research exemption to cover at least some aspects of good-faith AI trustworthiness research.

Some supporters of the proposed exemption appear to suggest that the research on "bias, discrimination, synthetic content, infringement, and other alignment issues" are "not directly related to security"[174] and therefore would not qualify for the security research exemption codified at 37 CFR § 201.40(b)(16); or that there is at least there is a need to clarify when the security research exemption might be applicable.[175] However, upon review, NTIA concludes that the regulatory terms "good-faith testing, investigation, and/or correction of a security flaw or vulnerability" and "promote the security or safety," as used in 37 CFR § 201.40(b)(16)(ii), could under one interpretation include at least some aspects of good-faith AI trustworthiness research.

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[170] And the Copyright Office may well disagree with NTIA's conclusion that account requirements and rate limits do not constitute TPMs and implicate circumvention under Section 1201.
[171] 2021 NTIA Letter at 5.
[172] *Id*. at 6.
[173] 17 U.S.C. § 1201(a)(1)(C)(iii).
[174] Hacking Policy Council Class 4 Round 3 Comments at 2.
[175] HackerOne Class 4 Round 1 Comments at 2 ("In addition to adopting the proposed exemption, we recommend the Copyright Office clarify how the existing exemption for good faith security research may protect AI research. Certain research pertaining to the confidentiality, integrity, and availability of AI data, or pertaining to the safety of AI systems or users of such systems, should be protected by the existing exemption, and it would be helpful for the Copyright Office to clarify this in the triennial proceeding. However, as noted above, security researchers also play a fundamental role in disclosing non-security issues in AI systems, such as how AI can exacerbate racial discrimination in housing opportunities or financial decisions.")

One colorable understanding of the terms "security flaw or vulnerability" and "security or safety" could include research into "bias, discrimination, infringement, or harmful outputs" in AI systems, as the presence of "bias, discrimination, infringement, or harmful outputs" might *ipso facto* qualify as a "security flaw or vulnerability," the correction of which would improve the system's "security or safety." We note that a narrow interpretation of the security research exemption to exclude all types of research on the record risks potential chilling effects on activities that may fall under the security research exemption but be closer to the edge of that exemption;[176] an interpretation that at least parts of this research fall under the security research exemption would provide greater certain to researchers in the AI trustworthiness space.

Granting the proposed exemption, as NTIA recommends, would resolve this ambiguity by ensuring that good-faith AI trustworthiness research is covered under a new exemption. However, the Registrar and Librarian could also resolve this ambiguity by interpreting the security research exemption to include some aspects of good faith AI trustworthiness research in the definition of good-faith security research, including by issuing interpretive guidance to that effect.

Conclusion

NTIA recommends granting an exemption in the following form:

i) Computer Programs, solely for the purpose of good-faith AI trustworthiness research. ii) For purposes of paragraph (i), "good-faith AI trustworthiness research" means accessing a computer program solely for purposes of good-faith testing or investigation of bias, discrimination, infringement, or harmful outputs in an AI system, where such activity is carried out in an environment designed to avoid any harm to individuals or the public, and where the information derived from the activity is used primarily to promote the trustworthiness of the AI system, and is not used or maintained in a manner that facilitates copyright infringement. iii) For purposes of paragraph (i), the term "artificial intelligence" or "AI" has the meaning set forth in 15 U.S.C. § 9401(3): a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. iv) For purposes of paragraph (i), the term "AI system" means any data system, software, hardware, application, tool, or utility that operates in whole or in part using AI.

[176] *See* 2024 DOJ CCIPS Class 4 Letter at 4 ("While the existing exemption for computer security research covers many types of research focused on the security and integrity of AI models, we recognize that it may not be sufficiently broad in its current form to exempt research that falls outside of 'security' concerns. Therefore, we recommend that the Copyright Office consider clarifying the existing exemption to ensure its application to good-faith security research regarding AI systems and other, similar, algorithmic models, but also consider how best to clarify or amend the existing exemptions to cover good-faith research into bias and other harmful and unlawful outputs of such systems.").

v) Good-faith AI trustworthiness research that qualifies for the exemption of this section may nevertheless incur liability under other applicable laws, including without limitation the Computer Fraud and Abuse Act of 1986, as amended and codified in title 18, United States Code, and eligibility for that exemption is not a safe harbor from, or defense to, liability under other applicable laws.[177]

However, in the alternative, should the Register be disinclined to recommend such an exemption, we recommend that the Register seek to interpret the existing security research exemption to cover at least some aspects of good-faith AI trustworthiness research.

[177] As noted in this section, this language is modeled, but not exactly equivalent to, the proposed language found in Hacking Policy Council Class 4 Round 3 Comment at 7-8, and Hacking Policy Council and Joint Academic Researchers Class 4 *Ex Parte* Letter at 9.

Class 5 – Computer Programs – Repair

Petitioners Public Knowledge and iFixit seek to expand the current temporary exemption for the diagnosis, maintenance, or repair of consumer devices to include industrial and commercial equipment.[178] Under the proposed exemption, equipment covered would include but would not be limited to, retail ice cream machines, construction equipment, and enterprise IT.[179] In addition to the current consumer device exemption, there are separate temporary exemptions for the diagnosis, maintenance, or repair of motorized land vehicles, marine vessels, and medical devices and systems.[180] The petitioners explicitly exclude from the scope of the class devices marketed for medical, scientific, or consumer use.[181]

Under the exemption, users would be limited to engaging in diagnosis, maintenance, and repair necessary to restore their commercial or industrial equipment to "pre-error levels of functionality."[182] The petitioners and supporters note that the devices at issue are controlled by computer software, which is copyrighted. They highlight the importance of promoting third-party assistance and self-repair options.[183] They also specifically note the potential anticompetitive effect of manufacturers' technological protection measures.[184]

The Department of Justice's Antitrust division and the Federal Trade Commission filed a comment in support of the petition.[185] While recognizing the importance of TPMs for rights holders, the agencies note that "renewing and expanding repair-related exemptions would promote competition in the markets for replacement parts, repair, and maintenance services, as well as facilitate competition in markets for repairable products."[186] An exemption here would benefit consumers by allowing them to extend the life and usefulness of their products. The DOJ Antitrust Division and the FTC write that reducing repair restrictions (such as TPMs) can lower

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[178] Public Knowledge and iFixit, Petition for New Exemption Under 17 U.S.C. § 1201, Docket 2023-5, https://www.copyright.gov/1201/2024/petitions/proposed/New-Pet-Public-Knowledge-and-iFixit.pdf. For simplicity and unless otherwise noted, this section generally uses the term "repair exemption" or "repair exemptions" to refer to exemption or exemptions, respectively, covering "maintenance, diagnosis, or repair."
[179] *See generally* Class 5 Round 1 Comments of Public Knowledge and iFixit, Docket No. 2023-5, https://www.copyright.gov/1201/2024/comments/Class%205%20-%20Initial%20Comments%20-%20Public%20Knowledge.pdf (hereinafter "Public Knowledge and iFixit Class 5 Round 1 Comments").
[180] 37 CFR § 201.40(b)(13), (15).
[181] Public Knowledge and iFixit Class 5 Round 1 Comments at 9.
[182] *See id*. at 8.
[183] *See* id.; Classes 5 and 7 Round 3 Comments of the United States Department of Justice and Federal Trade Commission, Docket No. 2023-5, at 12, https://www.copyright.gov/1201/2024/comments/reply/Class%205%20&%207%20-%20Reply%20-%20Department%20of%20Justice%20Antitrust%20Division%20and%20Federal%20Trade%20Commission.pdf https://www.copyright.gov/1201/2024/comments/reply/Class%205%20&%207%20-%20Reply%20-%20Department%20of%20Justice%20Antitrust%20Division%20and%20Federal%20Trade%20Commission.pdf(hereinafter "DOJ Antitrust and FTC Classes 5 and 7 Round 3 Comments").
[184] Public Knowledge and iFixit Class 5 Round 1 Comments at 17; DOJ Antitrust and FTC Classes 5 and 7 Round 3 Comments at 13 ("TPMs have the potential to cause anticompetitive effects when there are no alternative practicable means of accessing information necessary to repair industrial and commercial equipment. Moreover, TPMs can delay the repair of industrial and commercial equipment, increase repair costs, and exacerbate revenue losses. Access to repair information is needed if a purchaser is to obtain the full value of a product, and controlling access to repair information can lead to lock-in and other market distortions.") (internal footnote omitted).
[185] DOJ Antitrust and FTC Classes 5 and 7 Round 3 Comments.
[186] *Id*. at 2.

repair costs and improve access to repair services, while repair restrictions serve to reduce consumer choice, raise costs, and stifle competition for parts/repair/maintenance.[187] Their submission also cites NTIA's 2018 and 2021 consultation letters for support.[188]

Opponents principally contend that the requested exemption is overbroad,[189] circumvention for purposes of repairing commercial devices is infringement (e.g., not a fair use),[190] there are alternative ways to obtain the results petitioners/supporters seek,[191] and there are safety and security risks and other concerns in granting the exemptions that apply to commercial and industrial equipment.[192]

NTIA Position

NTIA supports iFixit and Public Knowledge's petition, resulting in an exemption for the diagnosis, maintenance, and repair of commercial and industrial equipment. To address opponents' concerns, we would also support language highlighting that an exemption does not necessarily provide a safe harbor from, or defense to, liability under other applicable laws or breach of contractual obligations. Should the Copyright Office or Librarian decline to recommend or grant an exemption that covers a range of commercial and industrial equipment, we would support, in the alternative, an exemption that carves out specific types of industrial and commercial equipment from an exemption, or an exemption that defines the contours of what a repair activity entails in relation to specific types of commercial or industrial equipment.

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[187] *See, e.g.*, *id*. at 2.
[188] *Id.* at 11-13, 17.
[189] *See, e.g.*, Class 5 Round 2 Comments of ACT | The App Association, Docket No. 2023-5, at 2, https://www.copyright.gov/1201/2024/comments/opposition/Class%205%20-%20Opp'n%20-%20ACT%20The%20App%20Association.pdf (hereinafter "ACT | The App Association Class 5 Round 2 Comments"); Class 5 Round 2 Comments of AED, Docket No. 2023-5, at 1, https://www.copyright.gov/1201/2024/comments/opposition/Class%205%20-%20Opp'n%20-%20Associated%20Equipment%20Distributors.pdf (hereinafter "AED Class 5 Round 2 Comments"); Class 5 Round 2 Comments of Philips North America,, LLC, Docket No. 2023-5, at 5-6, https://www.copyright.gov/1201/2024/comments/opposition/Class%205%20-%20Opp'n%20-%20Philips%20North%20America,%20LLC.pdf (hereinafter "Philips North America Class 5 Round 2 Comments"); Classes 5 and 7 Ex Parte Letter of the National Association of Manufacturers (NAM) (July 31, 2024), Docket No. 2023-5, at 1-2, https://www.copyright.gov/1201/2024/ex-parte-communications/Ex%20Parte%20Letter%20--%20NAM%20--%20Class%205%20and%20Class%207%20--%20%207-31-2024.pdf.
[190] *See, e.g.*, Philips North America Class 5 Round 2 Comments at 5-6.
[191] *See, e.g.*, ACT | The App Association Class 5 Round 2 Comments at 4. *Cf.* Class 5 Round 2 Comments of Joint Creators (Entertainment Software Association (ESA), Motion Picture Association (MPA), and Recording Industry Association of America (RIAA)), Docket No. 2023-5, at 2-3, https://www.copyright.gov/1201/2024/comments/opposition/Class%205%20-%20Opp'n%20-%20Joint%20Creators.pdf ("The Copyright Office also found [in the 2021 rulemaking] that some of the users of commercial and industrial equipment had adequate alternatives to circumvention, and it was concerned that the proposed circumvention would contravene negotiated licensing terms between commercial actors, which might affect the analysis of potential market harm.") (cleaned up) (internal citation omitted) (hereinafter "Joint Creators (ESA, MPA, RIAA) Class 5 Round 2 Comments").
[192] *See, e.g.*, Class 5 Round 3 Comments of the Association of Home Appliance Manufacturers (AHAM), Docket No. 2023-5, at 3-4, https://www.copyright.gov/1201/2024/comments/reply/Class%205%20-%20Reply%20-%20Association%20of%20Home%20Appliance%20Manufacturers.pdf (hereinafter "AHAM Class 5 Round 3 Comments"); ACT | The App Association Class 5 Round 2 Comments at 3-4; AED Class 5 Round 2 Comments.

Analysis

In 2021, NTIA supported a comprehensive, device-agnostic exemption for maintenance, diagnosis, and repair, and we incorporate by reference our 2021 analysis here.[193] Key parts of our 2018 and 2021 analyses are included in the Department of Justice's Antitrust Division and the Federal Trade Commission's submission in this rulemaking.[194] We also support the arguments made by those federal agencies in their submission. Furthermore, we incorporate by reference our 2021 analysis on noninfringing use[195] and the factors listed in Section 1201(a)(1)(C)(i)-(v).[196]

As we noted in the previous rulemaking, a repair exemption not limited by device type – which in this rulemaking would translate to an expanded exemption (or a new exemption) to cover commercial and industrial equipment – would advance important policy goals expressed by the Administration and other federal agencies.[197] Giving people greater ability to repair devices[198] has been strongly supported, for example, in President Biden's Executive Order on Competition.[199] Moreover, the FTC, which supports iFixit and Public Knowledge's petition, noted in its May 2021 *Nixing the Fix* report that there was "scant evidence to support manufacturers' justifications for repair restrictions."[200] The Copyright Office and the Librarian,

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[193] 2021 NTIA Letter at 74-84.
[194] DOJ Antitrust and FTC Class 5 Round 3 Comments at 11-13, 17.
[195] 2021 NTIA Letter at 80-82.
[196] *Id*. at 82. Moreover, we specifically support the DOJ Antitrust Division and FTC's analysis of these five factors.DOJ Antitrust and FTC Classes 5 and 7 Round 3 Comments at 13-14.
[197] 2021 NTIA Letter at 78.
[198] This section uses the term "devices" and "equipment" interchangeably.
[199] https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/.
[200] Federal Trade Commission, Nixing the Fix: An FTC Report to Congress on Repair Restrictions (May 2021), 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 at 6. *Nixing the Fix*, which was published in May 2021, recognized that the "the use of embedded software that forces consumers to have the maintenance and repair of their products performed by the manufacturers' authorized service networks may also raise competition issues." *Id*. at 10. Two then-Commissioners noted that "the report excludes from scope of its coverage an analysis of manufacturers' intellectual property rights, which may provide legitimate justification for some repair restrictions." *Id*. at 6 n.18. The report did not engage in a thorough analysis of all the intellectual property issues possibly implicated by repair restrictions, though it concluded that "at present, the assertion of IP rights does not appear to be a significant impediment to repair." *Id*. at 24. However, there are a couple of considerations to this conclusion that are relevant for the current rulemaking and the submission from the DOJ Antitrust Division and the FTC, which cites to the FTC's 2021 report. First, the 2021 report indicated that "while it is clear that manufacturers' assertion of intellectual property rights can impede repairs by individuals and independent repair shops, in many instances intellectual property rights do not appear to present an insurmountable obstacle to repair" in part precisely because of the maintenance, diagnosis and repair exemptions granted in the 2018 rulemaking process. *See id.* at 26 ("Moreover, in its most recent exemptions to the Digital Millennium Copyright Act's anti-circumvention provisions, the Librarian of Congress has permitted the circumvention of TPMs to diagnose, maintain, or repair motorized land vehicles, smart phones, home appliances and home systems.") (internal citations omitted).The existence of the exemptions granted in the 2018 rulemaking appears to have served as part of the basis for the FTC to arrive at that conclusion in the report. Second, the DOJ Antitrust Division and FTC's submission in this rulemaking, three years following the publication of *Nixing the Fix* and five years after convening the related workshop, serves as a strong indication that the 2021 report should not be read to conclude that there is no tension between the assertion of IP rights and the ability to engage in independent repair, at least in the context of the particular exemption sought here.

too, have acknowledged the importance or diagnosis, maintenance, and repair activities, through the recommending and granting, respectively, of various exemptions in the last few rulemakings and by recognizing that many of the intended activities are noninfringing.[201]

The need for comprehensive rules to promote the ability to engage in legitimate repair activities has continued since the 2021 rulemaking. In addition to its filing in this rulemaking, the DOJ Antirust Division and FTC have taken other steps to address repair restrictions imposed by manufacturers.[202] At a meeting in October 2023 convening a roundtable of public and private sector stakeholders on the "right to repair," White House National Economic Council Director Lael Brainard explained:

> "In the simplest terms, the right to repair means that when something you own breaks, you should have the right to fix it yourself or to take it to an independent repair shop. . . . For everything from smartphones, to wheelchairs, to cars, to farm equipment, too often manufacturers make it difficult to access spare parts, manuals, and tools necessary to make fixes. Consumers are compelled to go back to the dealer and pay the dealer's price or to discard and replace the device entirely. This not only costs consumers money, but it prevents independent repair shops from competing for the business and creates unnecessary waste by shortening the life span of devices."[203]

Crucially, while repair-related exemptions granted through this rulemaking process cannot fully resolve this issue, their careful consideration is critical to enable Americans to have greater agency in repairing devices. The Administration has recently recognized the importance of the rulemaking process in this regard, for example, by highlighting the Copyright Office's own recommendation in the 2021 rulemaking as an example of an action to "further the right to repair

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If that was the case, it is unlikely that the FTC would have filed a supportive comment in this rulemaking or that the FTC and the DOJ Antitrust Division would have relied extensively on the *Nixing the Fix* report as part of their filing. Both agencies have continued to look at the landscape in intervening time between the workshop and the report and this rulemaking. *See, e.g.*, DOJ Antitrust and FTC Classes 5 and 7 Round 3 Comments at 10 ("In the five years since the FTC held the Nixing the Fix Workshop, the Agencies have not seen any additional data that supports manufacturers' safety and privacy justifications for repair restrictions."). Given the FTC's previous statement about the 2018 rulemaking in *Nixing the Fix*, the FTC and DOJ's Antitrust Division's analysis between the intervening time since the workshop and 2021 report, and their extensive citation of the report in their current submission, a natural reading of the submission in this rulemaking is that there will likely be an impediment to repair from manufacturer restrictions (in the form of TPMs) if the current petition is not granted.

[201] *See, e.g.*, 2021 Register's Recommendation at 200-212; 2021 NTIA Letter at 78-79.

[202] *FTC Warns Companies to Stop Warranty Practices that Harm Consumers' Right to Repair*, Federal Trade Commission, July 3, 2024, https://www.ftc.gov/news-events/news/press-releases/2024/07/ftc-warns-companies-stop-warranty-practices-harm-consumers-right-repair; Statement of Interest of the United States, *In re: Deere & Company Repair Services Antitrust Litigation*, No. 3:22-cv-50188 (N.D. Ill. Feb. 13, 2023), *available at* https://www.justice.gov/atr/case-document/file/1568686/dl?inline; Roshan Abraham, *Justice Department Says John Deere Should Let Farmers Repair their Tractors,* Vice, Feb. 15, 2023, https://www.vice.com/en/article/doj-john-deere-right-to-repair-lawsuit/.*See also FTC to Ramp Up Law Enforcement Against Illegal Repair Restrictions,* Federal Trade Commission, Jul. 21, 2021, https://www.ftc.gov/news-events/news/press-releases/2021/07/ftc-ramp-law-enforcement-against-illegal-repair-restrictions. The agencies' submission in this rulemaking contains references to other relevant activities.

[203] *Remarks as Prepared for Delivery by National Economic Council Director Lael Brainard on the Right to Repair*, THE WHITE HOUSE (2023), https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/10/24/remarks-as-prepared-for-delivery-by-national-economic-council-director-lael-brainard-on-the-right-to-repair/.

across industries[.]"[204] Moreover, since the previous rulemaking, Section 1201 has been raised in other contexts related to discussions about the "right to repair," including in comments to a petition for rulemaking to the FTC on repair[205] and a recent congressional hearing on the "right to repair."[206] The Copyright Office has also previously noted that Section 1201 should not inhibit competition and the ability of people to repair their products, noting that the statute is "not intended to facilitate manufacturers' use of TPMs to facilitate product tying or to achieve a lock-in effect under which consumers are effectively limited to repair services offered by the manufacturer[,]"[207] a sentiment echoed by a member of Congress in last year's "right to repair" hearing.[208]

In this rulemaking, NTIA concludes that petitioners have met the burden required by the Copyright Office under this rulemaking to demonstrate a need for an exemption. Petitioners have introduced a stronger record than in previous cycles, including an index of examples demonstrating commonality amongst commercial and industrial equipment, and, more importantly, showing that the prohibition on circumvention of TPMs is having an adverse effect on the ability to engage in diagnosis, maintenance, and repair on a wide range of such equipment. Petitioners highlight a diverse set of such equipment: commercial soft serve machines, construction equipment, programmable logic controllers, and enterprise IT.[209] In each of these instances, petitioners explain in detail how the prohibition on circumvention of access controls impairs the ability of people to engage in noninfringing uses, and explain how the factors in Section 1201(a)(1)(C)(i)-(v) align to a finding of adverse effects such that an exemption is warranted.[210] Moreover, as noted by the DOJ Antitrust Division and FTC, an exemption here would have greater benefits in areas even beyond those facially evident from petitioner's index of examples; for example, "increasingly sophisticated agricultural equipment often employs onboard computers that control error identification and repair, limiting options for farmers in need of quick repair."[211]

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[204] *Readout of the White House Convening on Right to Repair*, THE WHITE HOUSE, (2023), https://www.whitehouse.gov/briefing-room/statements-releases/2023/10/25/readout-of-the-white-house-convening-on-right-to-repair/.

[205] *See, e.g.*, Comment from the Copyright Alliance on Petition for Rulemaking of the U.S. Public Interest Research Group Education Fund and iFixit (Feb. 2, 2024) Docket No. 2023–0077, 89 Fed. Reg. 286 (File No. R0407000), https://www.regulations.gov/comment/FTC-2023-0077-1630.

[206] *See generally Is There a Right to Repair?: Serial No. 118-37 Hearing Before the Subcomm. on Ct., Intell Prop, and the Internet,* 118th Cong. (2023), https://www.govinfo.gov/content/pkg/CHRG-118hhrg53108/pdf/CHRG-118hhrg53108.pdf (hereinafter "'Right to Repair' Hearing").

[207] Section 1201 Report at 92.

[208] "Right to Repair" Hearing at 128 (Statement of Congressmember Zoe Lofgren: ". . .[W]e didn't do TPMs so monopolies could control products. That was never the intent."). *See also id*. at 139 (Congressmember Darrell Issa: "If I remove from my BMW, at least during certain models, I remove the radio, unplug it, and then plug it back in simply because I was fiddling around with the dash, I now have to go back to the dealer to reinstall it. Similarly, the transmission example, authentic tran—I have got two John Deere tractors, one has got a busted engine, the other has got a busted transmission. Currently, they will prohibit you from moving the transmission from one to the other. From a standpoint of intellectual property, where in God's green Earth, or the Constitution, are any of those designed to be rights that belong to the manufacturer rather than rights that belong to the owners of those two John Deere tractors?").

[209] Public Knowledge and iFixit Class 5 Round 1 Comments at 3-7.

[210] *See* Public Knowledge and iFixit Class 5 Round 1 Comments at 11-18.

[211] DOJ Antitrust and FTC Classes 5 and 7 Round 3 Comments at 12 (internal citation omitted).

Scope of the Class

Several opponents argue that the proposed class is too broad to be granted in the rulemaking. We acknowledge opponents' concern about potential overbreadth in the scope of the class, but we do not think the class is construed so broadly as to make an exemption here untenable or otherwise unworkable under the rulemaking process. We offer the following observations for the Copyright Office as it considers its recommendation on the scope of a potential exemption:

- First, in addition to the index examples in the submission, the petitioners offer a potential definition of "commercial and industrial" equipment tethered to other statutory definitions.[212] To the extent that the Copyright Office wishes to cabin its recommendation, this could serve as a useful limitation. We note that such a definitional limitation does not exist in the regulatory language of the consumer device repair exemption, but such limitation could be applied in this context to provide a greater degree of certainty as to what the exemption would encompass.

- Second, including "commercial and industrial equipment" as part of a class of works would not break new ground in this rulemaking. The Copyright Office and the Librarian have over the years adopted an approach to repair and in other contexts that either encompasses a wide range of devices or is device-agnostic.

    - The current exemption on consumer device repair is an example of the former. As noted above, that exemption encompasses a range of lawfully acquired devices primarily designed for use by consumers. Moreso, we agree with petitioners' arguments that commercial and industrial equipment are generally more alike than a wide range of consumer devices.[213]

    - Furthermore, other current temporary exemptions are even less granular and adopt a device-agnostic approach. Take, for example, the security research exemption under 37 CFR § 201.40(b)(16). Users availing themselves of that exemption may engage in circumvention to access "computer programs" on "a lawfully acquired device or machine on which the computer program operates" or "a computer, computer system, or computer network on which the computer program operates with the authorization of the owner or operator of such computer, computer system, or computer network[.]" In that context, there is no separation between commercial, industrial or consumer devices, or between specific types of commercial and industrial devices. Proponents and supporters in that context, like the proponents here, offered in previous rulemakings several non-exhaustive and

[212] Public Knowledge and iFixit Class 5 Round 1 Comments at 9 n.29.

[213] *See* Public Knowledge and iFixit Class 5 Round 1 Comments at 2 ("If anything, the commercial and industrial uses of the equipment at issue here gives this class more (and more important) points of similarity than the consumer devices exempted in 2021. A Taylor soft serve machine and a skid-steer loader are both used in tightly regulated industries with strict safety protocols for workers and products alike; utilize arrays of environmental and safety sensors to guide operations; return complex diagnostic codes when prompted; and require extensive occupational training to use in the first instance. Meanwhile, a smart thermostat and a child's portable podcast player are only alike insofar as they are sold on Amazon, and currently exist within my own home. Yet while the latter are (correctly) grouped as part of a class for the purposes of repair exemptions, opponents insist that the former are too wildly divergent to be considered by this office.").

illustrative examples of relevant devices with TPMs that would be circumvented for a noninfringing purpose.

- Third, the scope of the class would be further limited by a requirement that the commercial or industrial equipment be lawfully acquired.[214]

- Fourth, we understand petitioners' request to not encompass *all* "commercial and industrial" equipment. In addition to the limitations referenced above, some equipment that are already covered by the non-consumer device repair exemption are arguably commercial or industrial. To the extent that some motorized land vehicles, marine vessels, or medical devices and systems are also commercial or industrial equipment, the petition here would be filling an important gap by covering other types of commercial and industrial equipment. Relatedly, there would be at least some equipment that under petitioners' language would not be included in the proposed exemption, as petitioner notes that "[d]evices designed or marketed for medical, scientific, or consumer use should remain outside the scope of this class."[215] The exclusion of medical devices, in particular, would appear to help address a concern raised by one of the opponents.[216] We support inclusion of regulatory language to that effect.

NTIA strongly urges the Copyright Office to avoid a recommendation that in practice would result in a granular device-by-device approach to the rulemaking process. Rather, as we have expressed in the past and explained in this section and introduction to this letter, we think the rulemaking best achieves the intended balance between rights holders and users when the exemption analysis focuses on classes of works and their users and eschews a device-by-device approach.[217] Exemptions should be granted based on the need to cure adverse effects from the circumvention prohibition in making non-infringing uses, and, in practice, the adverse effects posed by the circumvention of access prohibition continue regardless of specific device at issue.[218]

Indeed, the Copyright Office has already recognized that the Librarian "should not draw the boundaries of 'particular classes' too narrowly."[219] For example, the Office has noted that while the rulemaking would support the construction of a class of works that subdivides "motion pictures and other audiovisual works" into "motion pictures" or "television programs," the rulemaking would disfavor a further subdivision into "particular genres of motion pictures, such

[214] Far from being a boilerplate limitation, this type of limitation has been argued significantly in other contexts and should be considered as a limitation that narrows the scope of the class when adopted. The security research exemption again offers an illustrative example. In 2021, for example, some petitioners argued removing this limitation from that class to expand its scope. *See, e.g.*, 2021 Register's Recommendation at 9.The Copyright Office and the Librarian rejected this proposal.
[215] Public Knowledge and iFixit Class 5 Round 1 Comments at 9.
[216] Philips North America Class 5 Round 2 Comments at 2 ("Should the Librarian further consider such a vast expansion of the consumer device class to also cover industrial and commercial equipment, Philips requests that the Librarian add clarifying language expressly stating that the proposed expansion does not cover medical devices.").
[217] *See* 2021 NTIA Letter at 4.
[218] As explained in this section, the current temporary exemption for security research is a good model for this approach.
[219] 2021 Register's Recommendation at 9 (internal citation omitted).

as Westerns, comedies, or live action dramas."[220] And, in the context of a potential statutory exemption to Section 1201, the Copyright Office has recommended "against limiting an exemption to specific technologies or devices, such as motor vehicles, as any statutory language would likely be soon outpaced by technology."[221] We agree, and we think the Copyright Office has the authority in this rulemaking to avoid such narrow constructions and has demonstrably utilized such authority in the past (e.g., in the security research exemption). It should do so here as well.

For Class 5, we think the right level of specificity can be achieved by creating a class centered on "computer programs that are contained in and control the functioning of a lawfully acquired commercial or industrial equipment" or a similar construction. Computer programs are already a subdivision of literary works under 17 U.S.C. § 102,[222] and for Class 5, this subdivision would be subsequently divided into "computer programs" as they relate to "lawfully acquired commercial or industrial equipment." However, a further subset of that—say, literary works in the form of computer programs that are contained in and control the functioning of an enumerated list of lawfully acquired commercial or industrial equipment, such as commercial soft-serve machines or food preparation equipment—would appear to be akin to subdividing motion pictures into specific genres.[223]

In determining whether to recommend an exemption and how to scope it, the Copyright Office should focus on actual *and* likely adverse effects on noninfringing uses stemming from the prohibition against circumvention. In a post-hearing question to Class 5 participants, the Copyright Office asked them to "identify and provide any additional examples where the proposed repair-related uses of commercial food preparation equipment are being adversely affected by the prohibition against circumvention."[224] While the post-hearing question period is an opportunity to gather or clarify information related to particular exemptions,[225] this request may have inadvertently been too focused on present adverse effects, in contrast to the statutory requirement that asks for analysis of whether users of a copyrighted work "are, *or* are likely to be . . . adversely affected" in their ability to make noninfringing uses by the prohibition against circumvention.[226] At least one opponent appears to have interpreted the Copyright Office's

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[220] *See id*.
[221] Section 1201 Report at 95.
[222] 2021 Register's Recommendation at 9 ("[T]he category of literary works under section 102(a)(1) embraces both prose creations such as journals, periodicals or books, and computer programs of all kinds[.]") (intentional quotation marks and citation omitted).
[223] To be clear, we do not suggest that that the Copyright should recommend denial if it does not find support for a class that includes "computer programs" for only some types of "commercial and industrial equipment." Rather, should the Copyright Office disagree with NTIA on the appropriate level of class construction, we would support the Copyright Office at least recommending a more granular exemption for Class 5—for example, for computer programs contained in and that control the functioning of commercial soft-serve machines or food preparation equipment. An exemption that least covers some commercial and industrial equipment, however limited, can nonetheless be helpful to address some of the adverse effects posed by the circumvention of access prohibition, even though NTIA believes the rulemaking would authorize the construction of a broader class under the record presented.
[224] U.S. Copyright Office, Class 5 Post-Hearing Questions (May 20, 2024), Docket No. 2023-5, at 2.
[225] 2023 NPRM, 88 Fed. Reg at 72027 ("As with previous rulemakings, following the hearings, the Office may request additional information with respect to particular classes from rulemaking participants, to supply missing information for the record or otherwise resolve issues that it believes are material to particular exemptions.").
[226] 17 U.S.C. § 1201(a)(1)(C) (emphasis added).

request to indicate that proponents must demonstrate "actual harm"; as noted by this opponent, "[t]he questions asked by the [Copyright Office] implicate a significant portion of the agency's consideration of proposed exemptions to Section 1201: the proponents' burden to prove ***actual harm***."[227] Such framing risks reading "likely" out of the statutory requirement.[228]

Should the Copyright Office determine that overbreadth or a similar problem of scope present a fatal challenge to class construction, we propose in the alternative the Office recommend an exemption that covers commercial and industrial equipment but excludes specific categories of equipment for which the exemption should not apply—e.g., enterprise IT.[229] Another alternative might be to narrow the definition of what "repair" entails for select types of commercial and industrial equipment, like how the current exemption for consumer device repair limits the meaning of "repair" in the context of repairing video game consoles.[230] In sum, in the alternative, we recommend that the Copyright Office engage in a carve-out rather than a carve-in approach given the breadth of material that proponents have included in the record to cover a wide range of commercial and industrial equipment as part of the class.

Safety, Security, and Other Legal and Regulatory Concerns

Opponents also raise safety, security, and other legal and regulatory concerns related to any exemption covering commercial and industrial equipment that may be granted in the rulemaking. While these issues are important, they are not within the purview of this rulemaking to resolve. We again urge the "the Copyright Office against interpreting the statute in a way that would require it to develop expertise in every area of policy that participants may cite on the record" and recommend that "the deliberative process . . . not deviate too far afield from copyright policy concerns."[231] Similar to our observation in the Eight Triennial Rulemaking, to the extent that commercial and industrial equipment is "subject to non-copyright laws or regulations governing who may service them, those requirements fall outside the scope of this proceeding. Agencies such as the Food and Drug Administration and the Environmental Protection Agency are equipped to impose and enforce such requirements irrespective of whether users are free to

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[227] Class 5 Post-Hearing Letter of Act | The App Association, Docket No. 2023-5, at 2, https://www.copyright.gov/1201/2024/post-hearing/letters/class5/ACT-The-App-Association.pdf (emphasis in original).

[228] NTIA and the Copyright Office have not always agreed on how to interpret "likely to be. . . adversely affected." *See, e.g.*, 2003 NTIA Letter. However, use the phrase, preceded by "or" indicates the need to consider both present and future adverse effects, or at least that "likely" should be an additional element to analyze. *See* U.S. Copyright Office, *Section 1201 Rulemaking: Fifth Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention* (Oct. 2012), at 8, https://www.copyright.gov/1201/2012/Section_1201_Rulemaking_2012_Recommendation.pdf ("To meet the burden of proof, proponents of an exemption must provide evidence either that actual harm currently exists or that it is 'likely' to occur in the next three years.") (quotation marks in original).

[229] Class 5 *Ex Parte* Letter of Industry Representatives (Consumer Technology Association, Cisco, Hewlett Packard Enterprise, Information Technology Industry Council, and TechNet) (August 2, 2024). Docket No. 2023-5, at 6 https://www.copyright.gov/1201/2024/ex-parte-communications/Ex-Parte-letter-class5-ITIandTechNet.pdf (hereinafter "Industry Representatives Class 5 *Ex Parte* Letter").

[230] 37 CFR § 201.40(b)(14)(ii) ("For video game consoles, 'repair' is limited to repair or replacement of a console's optical drive and requires restoring any technological protection measures that were circumvented or disabled.") (quotation marks in original).

[231] 2015 NTIA Letter at 4. *See also* 2018 NTIA Letter, at 2-3.

circumvent TPMs for copyright purposes."[232] Some opponents separately note that negotiated license terms between equipment manufacturers or servicers and users would suggest that alternatives to circumvention do exist and that an exemption here might upset that relationship or change the market harm analysis or lead to other risks.[233]

To address the concerns expressed by opponents, we would support regulatory language that indicates that an exemption does not necessarily provide a safe harbor from, or defense to, liability under other applicable laws or breach of contractual obligations.

Conclusion

For the reasons stated above, NTIA supports an exemption for the maintenance, diagnosis, and repair of commercial and industrial equipment. Proponents have met the burden imposed on them, and the Copyright Office has the authority to recommend and the Librarian the authority to grant an exemption that covers computer programs that are contained in and that control the functioning of lawfully acquired commercial and industrial equipment.

[232]2021 NTIA Letter, at 83. *See also* 2015 NTIA Letter, at 57.

[233] *See, e.g.*, Joint Creators (ESA, MPA, RIAA) Class 5 Round 2 Comments at 2-3; Industry Representatives Class 5 *Ex Parte* Letter at 6 ("IBM will – and continues to – support z13 systems (and even older mainframes and equipment) under commercial Hardware Service Extension contracts, and customers continue to use and maintain such older machines until they are ready to take next technology steps.") (internal citation omitted); *See also id*. at 4 ("Likewise, the New York Governor and the legislature excluded business-to-business and business-to-government contracts from the repair law out of concern about the impact of the law on critical infrastructure.") (internal citation omitted).

Class 6 – (a) Computer Programs and (b) Video Games – Preservation

Petitioner and supporters[234] propose modifications to the current computer programs—software preservation exemption ("software preservation exemption") and computer programs—video games preservation exemption ("video games preservation exemption").

The current software preservation exemption permits the circumvention of a TPM to preserve computer programs and computer program-dependent materials by eligible libraries, archives, or museums (eligible institutions), where such activities are not commercial and remote access to the material is made to only one user at a time, for a limited time, and only where the eligible institution has no notice that the copy would be used for any purpose other than private study, scholarship, or research.[235]

The current exemption for video games permits the circumvention of a TPM to preserve the games in a playable form by eligible institutions, where such activities are not commercial, and the games are not distributed or made available outside the physical premises of the eligible institutions.[236]

The Software Preservation Network (SPN) and the Library Copyright Alliance (LCA) aim to align both exemptions to permit remote access to copyright works without user number limitations. The proposed modification to the software preservation exemption would allow simultaneous remote access to out-of-commerce software for research and educational purposes, while maintaining all other limitations, such as time and purpose verification.[237] Similarly, the proposed modification to the video games preservation exemption would remove the premise limitation and introduce a user verification requirement, ensuring that users access the preserved game primarily for private study, scholarship, teaching, or research.[238] Proponents generally assert that the current limitations prevent eligible institutions, which have preservation-oriented missions, from carrying out those missions and providing access to lawfully acquired works to a

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[234] Petitioners: The Software Preservation Network (SPN) and Library Copyright Alliance (LCA).Supporters for 6(b): several individual commenters. Ken Austin separately submitted a petition "seeking a circumvention exemption for individual owners of video games which have DRM (digital rights management) that no longer functions due to incompatibility, for example, with modern operating systems." Ken Austin, Petition for New Exemption Under 17 U.S.C. § 1201, Docket 2023-5, https://www.copyright.gov/1201/2024/petitions/proposed/New-Pet-Ken-Austin.pdf.The Copyright Office subsequently included Ken Austin's petition into the proposed Class 6(b). During the public of the public hearings, Ken Austin requested a contact at the Copyright Office to "ask questions about the process, so that maybe in three years. . .I could come in a little better prepared as somebody who's not an attorney or CEO or anything like that." As we write in the introduction to this letter, NTIA appreciates the Copyright Office has already taken to facilitate public participation and encourages the Office to look for additional ways to engage parties who are not copyright subject matter experts or as knowledgeable about the rulemaking process.

[235] *See* 37 C.F.R. § 201.40(b)(18).

[236] *See* 37 C.F.R. § 201.40(b)(17).

[237] Software Preservation Network and Library Copyright Alliance, Petition for New Exemption under 17 U.S.C.§ 1201 (Class 6(a)), Docket No. 2023-5, https://www.copyright.gov/1201/2024/petitions/proposed/New-Pet-Software-Preservation-Network-and-Library-Copyright-Alliance-1.pdf.

[238] Software Preservation Network and Library Copyright Alliance, Petition for New Exemption under 17 U.S.C.§ 1201 (Class 6(b)), Docket No. 2023-5, https://www.copyright.gov/1201/2024/petitions/proposed/New-Pet-Software-Preservation-Network-and-Library-Copyright-Alliance-2.pdf; Class 6(b) Round 3 Comments of SPN and LCA, Docket No. 2023-5,at 2 and 20-22, https://www.copyright.gov/1201/2024/comments/reply/Class%206(b)%20-%20Reply%20-%20Software%20Preservation%20Network%20and%20Library%20Copyright%20Alliance.pdf. (hereinafter "SPN and LCA Class 6(b) Round 3 Comments").

variety of individuals, including preservationists, librarians, researchers, and educators.[239] Proponents argue that the barriers posed by these restrictions reduce an eligible institution's incentive to preserve a work.[240] Opponents,[241] on the other hand, indicate that both proposed exemptions create significant risk for infringement and would impede development of a "retro" market for works, causing commercial harm.[242]

NTIA Position

Consistent with NTIA's recommendation in 2021, NTIA supports expansion of the software and video game preservation exemptions to allow the distribution and availability of works covered under these exemptions outside of the physical premises of the eligible institutions, without a remote user limitation. NTIA has a long history of supporting preservation efforts and the special role that libraries, archives, and museums play in society. The interests of copyright holders have shown to be adequately protected after the removal of the physical premise limitation for software preservation efforts in the 2021 rulemaking. There is no indication that this would not likewise be true if the restriction was removed from the existing video game preservation exemption. Furthermore, additional eligibility requirements for institutions regarding off-premises access—particularly the implementation of reasonable digital security measures—are essential to achieving this goal while ensuring that legitimate activities under the exemption continue.

Analysis

It is critical to afford eligible libraries, archives, and museums as much flexibility as possible under the law to make noninfringing uses of copyrighted works, and the nature of these noninfringing uses does not necessarily become infringing by removing the single-user limitation or the physical premises limitation. Proponents assert that the single-user limitation imposed on the exemption for the preservation of computer programs creates a barrier to preserving and providing access to out-of-commerce-software for scholarship research. They cite a number of

[239] Class 6(a) Round 1 Comments of SPN and LCA, Docket No. 2023-5, at 4-9, https://www.copyright.gov/1201/2024/comments/Class%206(a)%20-%20Initial%20Comments%20-%20%20Software%20Preservation%20Network%20and%20Library%20Copyright%20Alliance.pdf (hereinafter "SPN and LCA Class 6(a) Round 1 Comments"); Class 6(b) Round 1 Comments of SPN and LCA, Docket No. 2023-5, at 6-8, https://www.copyright.gov/1201/2024/comments/Class%206(b)%20-%20Initial%20Comments%20-%20%20Software%20Preservation%20Network%20and%20Library%20Copyright%20Alliance.pdf. (hereinafter "SPN and LCA Class 6(b) Round 1 Comments").

[240] SPN and LCA Class 6(a) Round 1 Comments at 6.

[241] DVD Copy Control Association (DVD CCA), the Advanced Access Content System Licensing Administrator (AACS LA), and "Joint Creators" (Entertainment Software Association (ESA), Motion Picture Association (MPA), and Recording Industry Association of America (RIAA)).

[242] Class 6 Round 2 Comments of DVD CCA and AACS LA, Docket No. 2023-5, https://www.copyright.gov/1201/2024/comments/opposition/Class%206(a)%20and%206(b)%20-%20Opp'n%20-%20DVD%20CCA%20and%20AACS%20LA.pdf; (hereinafter "DVD CCA and AACS LA Class 6 Round 2 Comments); Class 6 Round 2 Comments of Joint Creators (ESA, MPA, RIAA) Comments, Docket No. 2023-5, https://www.copyright.gov/1201/2024/comments/opposition/Class%206(a)%20and%206(b)%20-%20Opp'n%20-%20Joint%20Creators.pdf (hereinafter "Joint Creators (ESA, MPA, RIAA) Class 6 Round 2 Comments"). ESA filed additional opposition comments in Round 2 specific to Class 6(b). Class 6(b) Round 2 Comments of ESA, Docket No. 2023-5, https://www.copyright.gov/1201/2024/comments/opposition/Class%206(b)%20-%20Opp'n%20-%20Entertainment%20Software%20Association.pdf. (hereinafter "ESA Class 6(b) Round 2 Comments").

scenarios where multiple individuals have tried to unsuccessfully access the same software remotely and have limited to no-means to travel to an eligible institution to physically access the material for scholarship research.[243] Numerous firsthand accounts from librarians and other individuals at the institutions serve to strengthen the record by demonstrating that the harms are real, happening now, and not merely hypothetical.[244] Opponents (Joint Creators), however, argue that the proposed use would contradict Section 108, which prohibits reproduction, and impede with the rising market for retro works.[245]

Yet, NTIA notes that no evidence demonstrates how a change to a single-user limit would specifically impact the retro market. Opponents largely reference examples from the retro video game market but provide no evidence to substantiate the existence of any retro market for out-of-commerce computer software. This absence of evidence raises questions about the applicability of their concerns to the broader context of digital preservation efforts for software. Nonetheless, NTIA clarifies that any such retro market titles, if they were to exist, would not fall under the current or proposed exemption unless they are no longer reasonably available in the commercial marketplace. Copyrighted works that are reasonably available in the commercial marketplace would fall outside of the exemption.

Proponents convincingly explain that eliminating the single-user limitation would greatly enhance the preservation of out-of-commerce software.[246] This flexibility would accommodate the simultaneous need for a single program by multiple scholars and acknowledge the limited funding available for research. By removing the restriction, academic and research institutions can more effectively support collaborative efforts, where multiple users may access the same software concurrently. It is unrealistic to expect that private study, scholarship, teaching, or research efforts can be adequately supported by allowing only one remote user at a time, forcing others to expend limited financial resources to travel to an eligible institution.[247] Such a limitation undermines the very purpose of software preservation by restricting access to those with the means to travel, thereby excluding a significant portion of the academic community.

Moreover, the current restriction fails to consider the value of hands-on, individual interaction with software, or the reality of research and their associated deadlines.[248] The single-user limitation significantly reduces the potential for interactive use, which is essential for collaborative and comprehensive learning experiences. Entire classrooms have resorted to observing a single user interact with the software, instead of having students experience the technology for themselves.[249] Interactive software use is crucial for thorough understanding and mastery, particularly in educational settings where practical experience often enhances learning. Additionally, the challenges incurred by attempting to access preserved, out-of-commerce software simultaneously do not align with the flexible and often unpredictable nature of research. Scholars frequently discover new directions and needs for their projects only when deeply engaged in their work. Students and educators need the ability to access software as needed to

[243] SPN and LCA Class 6(a) Round 1 Comments at 6-9.
[244] *Id.* at 8-9.
[245] DVD CCA and AACS LA Class 6 Round 2 Comments at 4-5.
[246] SPN and LCA Class 6(a) Round 1 Comments at 7.
[247] *Id.* at 8.
[248] *Id.* at 9.
[249] *Id.*

meet their course requirements and project deadlines. By not accommodating these needs, the restriction inadvertently hampers the educational process, potentially hindering the development of skills and knowledge essential for academic and professional success.

Regarding the proposal to remove the physical premises requirement for video game preservation exemption, NTIA is cognizant of the long history of exemptions for preservation in this rulemaking process, and the careful balance of interests that the Librarian tries to craft as they align the final rules with the Section 1201 statutory factors and copyright law. In 2021, the Register did not remove the physical premise limitation for the video games exemption.[250] The Register cited concerns that the proposed language to the exemption did not contain "tailored restrictions to ensure that uses would be limited to bona fide teaching, research, or scholarship uses and would affect the market for the original works."[251] Proponents of the 2024 proposal have since then added language that "includes the requirement of individualized human review of requests for access."[252] They have also added testimonies from video game re-release companies who cited that the primary barriers to the re-release market is not competition from scholarly access, but rather commercial and logistical hurdles.[253]

NTIA believes that the additional language petitioners have introduced in this rulemaking provide an additional layer of protection for rights holders and exactly the type of assurances the Copyright Office sought in 2021. The Office noted then that the imposition of user verification requirements or other measures would make video games more likely to be used solely for education or research purposes.[254] Proponents have added these verification requirements in this round of rulemaking, and they additionally noted that recreational use of video games in research collections is unlikely because preserved games are suboptimal for leisure play.[255] Moreover, publisher testimonies address opponents' concerns that the exemption would impede with the retro video game market.[256]

NTIA observes that opponents failed to present any examples of market harm under the current exemption,[257] bolstering proponents' assertion that the majority of historical video games are out of commerce and unlikely to be re-released. This admission undermines opponents' argument that the proposed modification would enable non-university, Internet-only platforms like the Internet Archive, to provide minimally restricted access to preserved video games.[258] Even if the modified exemption were to permit less restrictive access by the Internet Archive, opponents

[250] 2021 Register's Recommendation at 279.
[251] *Id.*
[252] SPN and LCA Class 6(b) Round 3 Comments at 4. We acknowledge opponents' concerns expressed during the hearing that they were not given an opportunity to respond to the language modifications introduced by proponents in their reply. We note that the interim time between the reply period and the hearing, the hearing itself, as well as the *ex parte* period thereafter, can serve as opportunities to supplement the record.
[253] *Id.* at 5-6.
[254] 2021 Register's Recommendation at 279-80.
[255] *See, e.g.*, SPN and LCA Class 6(b) Round 1 Comments at 10.
[256] *See* SPN and LCA Class 6(b) Round 3 Comments at 23-27.
[257] *See* Transcript, Ninth Triennial Rulemaking, In the Matter of Section 1201 Public Hearing: Proposed Class 6(b) Video Games – Preservation and Proposed Class 6(a) Computer Programs – Preservation (April 18, 2024) (hereinafter "April 18, 2024 Class 6 Hearing Transcript"), at 62-63, https://www.copyright.gov/1201/2024/hearing-transcripts/240418-Section-1201-Public-Hearing-Class6a-6b.pdf.
[258] *See id.* at 15-17 and 45.

retain the option to pursue litigation against such entities for failing to adhere to the exemption's verification requirements.

Overall, NTIA agrees that software and video game infringement are legitimate concerns that must be addressed vigorously. In the context of this proceeding, NTIA reiterates that the exemptions granted in the rulemaking do not provide eligible institutions or their patrons with a license to infringe. The rulemaking does not allow patrons to engage in infringing activities with the copies of works preserved under these exemptions. Likewise, if eligible institutions also engage in activities outside of the exemption that violate copyright law, whether directly or indirectly (e.g., vicarious or contributory copyright infringement), the 1201 rulemaking offers no safe harbor and such activities may be a violation of Section 1201. It is each eligible institution's responsibility to assess and bear the risk associated with falling outside of the exemption, including being subject to the various remedies copyright law provides.

Moreover, the Copyright Office has consistently recommended adopting preservation exemptions based on the understanding that the uses covered by these exemptions are likely noninfringing, including fair use.[259] This rationale was particularly evident when the Office removed the physical premises limitation from the software preservation exemption in 2021. Here, then, one of the Office's considerations should be whether the removal of the physical premises limitation and the single-user limitation change this analysis in such a way that the uses become likely infringing. NTIA once again cautions against substantially reopening the discussion on every matter addressed in the current exemptions that would have been better served in discussion of renewing the exemptions.[260]

Conclusion

NTIA recommends modifying the exemption to remove the single-user limitation of the software preservation exemption, and the "on-premises" limitation of the video games preservation exemption.

[259] *See generally* 2015 Final Rule, 80 Fed. Reg. 65944; 2018 Final Rule, 83 Fed. Reg. 54010; 2021 Final Rule, 86 Fed. Reg. 59627.

[260] The Copyright Office has stated that the streamlined renewal process will continue in effect for this rulemaking; the Office has used the streamlined process to "facilitate the renewal of previously adopted exemptions for which there was no substantive opposition." *Exemptions to Permit Circumvention of Access Controls on Copyright Works*, Notification of Inquiry and Request for Petitions, Docket No. 2023-5, 88 Fed. Reg. 37486, 37487 (July 2023) (internal citation and footnote omitted). In its 2023 Notice of Proposed Rulemaking, the Office further expressed its intention to recommend the renewal of the 2021 software and video game preservation exemptions, along with all but one of the other class exemptions, after thorough consideration of the renewal petitions and comments received. *See* 2023 NPRM, 88 Fed. Reg. at 72015-25.

Class 7 – Computer Programs – Vehicle Operational Data

Description

Petitioner MEMA, The Vehicle Suppliers Association, requests an exemption to access vehicles' operational data including diagnostic and telematics data.[261] The petition would create a new exemption to permit circumvention of TPMs that control access to electronic control units (ECUs) that are contained in and control the functioning of land and marine vehicles while continuing the existing vehicle repair exemption. MEMA's petition extends to personal, commercial, and agricultural vehicles whether owned or leased. In addition to accessing the data, MEMA also proposes the ability to store and share this data with third parties that may be involved in repair or maintenance of their vehicles. The full text of the proposed exemption is as follows:

> Circumvention of technological protection measures [("TPMs")] on computer programs that are contained in and control the functioning of a lawfully acquired motorized land vehicle or marine vessel such as a personal automobile or boat, commercial vehicle or vessel, or mechanized agricultural vehicle or vessel to allow lawful vehicle owners and lessees, or those acting on their behalf, to access, store, and share vehicle operational data, including diagnostic and telematics data.[262]

MEMA's main argument is that owners and lessees need access to critical vehicle performance data to evaluate the safety of their vehicles, better understand vehicle operations—such as safety features and fuel efficiency-- and review overall performance.[263] MEMA asserts that these uses of the data constitute fair use and are not covered under the current vehicle repair exemption.[264] This proposed access would allow owners and lessees to utilize the data to schedule maintenance and repairs, share it with repair facilities of their choice, or perform the repairs themselves. Currently, MEMA contends that while owners and lessees generate this important vehicle data, they do not have access to it.[265]

This petition is supported by the Specialty Equipment Market Association (SEMA), iFixit, and the Department of Justice (DOJ) Antitrust Division and Federal Trade Commission (FTC).[266]

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[261] MEMA, The Vehicle Suppliers Association, Petition for New Exemption Under 17 U.S.C. 1201 (Class 7), Docket No. 2023-5, https://www.copyright.gov/1201/2024/petitions/proposed/New-Pet-MEMA.pdf (hereinafter "MEMA Class 7 Petition).

[262] MEMA Class 7 Petition, Item B.

[263] Class 7 Round 1 Comments of MEMA, The Vehicle Suppliers Association, Docket No. 2023-5, at 2, https://www.copyright.gov/1201/2024/comments/Class%207%20-%20Initial%20Comments%20-%20MEMA.pdf, (hereinafter "MEMA Class 7 Round 1 Comments") .

[264] *Id*. at 4-5.

[265] *Id*. at 6.

[266] Class 7 Round 1 Comments of the Specialty Equipment Market Association, Docket No. 2023-5, https://www.copyright.gov/1201/2024/comments/Class%207%20-%20Initial%20Comments%20-%20SEMA.pdf; Transcript, Ninth Triennial Rulemaking, In the Matter of Section 1201 Public Hearing: Classes 6 and 7 (April 18, 2024), Remarks of iFixit, https://www.copyright.gov/1201/2024/hearing-transcripts/240418-Section-1201-Public-Hearing-Class-7.pdf (hereinafter "April 18, 2024 Class 7 Hearing Transcript); and DOJ Antitrust and FTC Classes 5 and 7 Round 3 Comments.

The DOJ Antitrust Division and FTC argued that expanding this exemption would "promote competition in markets for replacement parts, repair, and maintenance services, as well as facilitate competition in markets for repairable products. Eliminating repair restrictions can lower the costs of repairs, improve access to repair services, and minimize costly and inconvenient delays. Unnecessary repair restrictions have the opposite effect. They can reduce consumer choice, raise repair costs, and drive independent repair shops out of business by denying them access to key inputs." [267]

Several groups oppose the expansion of the vehicle repair exemption. First, the Alliance for Automotive Innovation (Auto Innovators) oppose this exemption as it relates to personal vehicles, arguing that proponents lack evidence showing that limited access to data harms users by impeding their ability to repair their personal vehicles.[268] Further, Auto Innovators argue that proponents do not address existing alternatives for accessing this data, such as the Right to Repair Agreement for third party repair entities.[269] This argument is supported by the Association of Equipment Manufacturers (AEM), which notes that some manufacturers of off-road vehicles already share this data through end user license agreements, developer contracts, or other commercial agreements. AEM also asserts that sharing this data may conflict with certain state privacy laws, which require businesses to impose contractual obligations on third parties that process personal information.[270]

The National Association of Manufacturers (NAM) argues that allowing unfettered access to operational data would undermine manufacturers' intellectual property rights and facilitate aftermarket modifications that could endanger users and violate environmental and safety regulations.[271] The Joint Creators further argue that the proposed exemption is vague and undefined, including the scope of the class and the types of data that would be accessed. They also note that the petition is similar to proposals that have been rejected in the past.[272]

NTIA Position

NTIA supports granting this exemption and recommends that it be granted as a standalone exemption, separate from the existing vehicle repair exemption. Additionally, NTIA recommends slight modification to the proposed exemption language, primarily the inclusion of

[267] DOJ Antitrust and FTC Classes 5 and 7 Round 3 Comments at 2.
[268] Class 7 Round 2 Comments of the Alliance for Automotive Innovation (Auto Innovators), Docket No. 2023-5, at 5, https://www.copyright.gov/1201/2024/comments/opposition/Class%207%20-%20Opp'n%20-%20Alliance%20for%20Automotive%20Innovation%20(Auto%20Innovators).pdf (hereinafter "Auto Innovators Class 7 Round 2 Comments).
[269] *Id*. at 11.
[270]Class 7 Round 2 Comments of the Association of Equipment Manufacturers (AEM), Docket No. 2023-5, at 2, 5-8, https://www.copyright.gov/1201/2024/comments/opposition/Class%207%20-%20Opp'n%20-%20Association%20of%20Equipment%20Manufacturers.pdf (hereinafter "AEM Class 7 Round 2 Comments).
[271] Class 7 Round 2 Comments of the National Association of Manufacturers, Docket No. 2023-5, at 2-3, https://www.copyright.gov/1201/2024/comments/opposition/Class%207%20-%20Opp'n%20-%20National%20Association%20of%20Manufacturers.pdf.
[272] Class 7 Round 2 Opposition Comments of the Entertainment Software Association, the Motion Picture Association, and the Recording Industry Association of America (Joint Creators), Docket No. 2023-5, at 3-4, https://www.copyright.gov/1201/2024/comments/opposition/Class%207%20-%20Opp'n%20-%20Joint%20Creators.pdf.

the word "analyze," to recognize the importance of vehicle owners' or lessees' rights to "access, store, share, and analyze" the data. NTIA also recommends that, to the extent possible under this rulemaking, this exemption permit these actions to be carried out with the assistance of third parties.

Analysis

The creation of a new exemption class that allows circumvention of TPMs to access and analyze software-enabled, vehicle-generated data is an important step in continuing to recognize the modernization of vehicle technology. During the Eighth Triennial Rulemaking, both NTIA and the Copyright Office recognized the rapid expansion of technology and data proliferation in the automotive industry.[273] Vehicles now rely heavily on software for basic operations, generating a wealth of user-specific data like speed, driving habits, and other measurements tied to the driver's handling of a vehicle. NTIA believes access to this data is an important expansion of the current vehicle repair exemption, and note the proliferation of vehicle data in recent years and the expectation that this trend will continue.

While repair is commonly cited as a justification for accessing user data, this proposed exemption covers a different scope than previous triennial rulemaking and should be recognized as a standalone vehicle repair exemption. NTIA acknowledges that in some situations, these exemptions may be closely related. However, the existing vehicle repair exemption is focused more on vehicle repair which can only be completed after accessing software. The purpose of the proposed exemption here is to circumvent an access control to permit access to the vehicle-generated data for purposes of understanding that data and not to specifically repair the vehicle, which may require an additional step including using the existing vehicle repair exemption.[274]

Proponents clarified that the data covered by the proposed exemption specifically relates to the operation of the vehicle and is generated by the owner based on the performance of the vehicle. The opposition's asserted arguments against access to this data by owners and lessees are similar in nature to arguments raised in the past for the existing vehicle exemption and are easily addressed. For example, the data generated by the vehicle's performance is owned by the consumer and contrary assertions are otherwise unconvincing to justify preventing access to that data.[275] This exemption would grant consumers the ability to obtain and share data directly produced by their vehicles, while remaining within the existing parameters of regulatory compliance and safety regulations. It is a marked step in establishing an ecosystem where consumers are able to monitor their own equipment.

In addition to generating valuable user data, rapid expansion of technology in the automotive industry has continued to create numerous obstacles relating to vehicle diagnostics and repair for users and third parties. The inclusion of third parties in this exemption further empowers data

[273] 2021 NTIA Letter at 69; 2021 Register's Recommendation at 168.
[274] *See* April 18, 2024 Class 7 Hearing Transcript at 25-27.
[275] This includes assertions of intellectual property ownership of that data generated by the vehicle. The vehicle manufacturer no doubt owns intellectual property in the software on which the vehicle operates and that generates the data. NTIA is unconvinced, however, that vehicle manufacturers own the data generated by the vehicle. Moreover, the data itself may not necessarily be considered intellectual property.

owners to control their vehicle-generated data (by being able to access, store, share and analyze the data). NTIA reiterates its position stated in the Seventh Triennial Rulemaking that third-party assistance in circumvention is not an automatic trigger to the anti-trafficking provisions within Section 1201.[276] Including third party assistance as part of the exemption remains consistent with Section 1201's anti-trafficking provisions and past Copyright Office's positions.[277] It is an extension of the Copyright Office's own analysis to infer that Congress did not intend to apply the anti-trafficking provisions to third-party circumvention in situations that would empower device owners to own, control, and interpret their own data. This exemption would allow vehicle owners to seek out additional assistance for the interpretation of their vehicle data, empowering drivers to exercise their ownership rights. If third party assistance is included, this exemption would allow for circumvention to be carried out at the direction and consent of the vehicle owner to foster greater understanding of vehicle-generated data.

Establishing this standalone exemption, which permits consumers to "access, store, share, and analyze" their data, creates an appropriate scope for consumers to control their own information. Proponents recognize that use of this exemption may be highly situational, but the envisioned use cases involve obtaining, reading, and processing the data in situations that are not focused on vehicle repair. NTIA believes that adding "analysis" in the list of uses cited by the proponents as proposed authorized uses is helpful in demonstrating fair use of the data and coincides with evidence presented at the hearings. The inclusion of the term "analyze" further distinguishes this exemption from the existing vehicle repair exemption, highlighting its scope beyond strict diagnosis, repair, and modification. Once obtained, the data may not be readily readable by the average consumer, thus requiring assistance from a third party, manufacturer, or vehicle repair shop. Enabling vehicle owners to grant others access to interpret and analyze the data advances the exemption's goal and ensures that consumers can truly own and understand their information. The full text of the proposed exemption, modified by NTIA is as follows:

> Circumvention of technological protection measures [("TPMs")] on computer programs that are contained in and control the functioning of a lawfully acquired motorized land vehicle or marine vessel such as a personal automobile or boat, commercial vehicle or vessel, or mechanized agricultural vehicle or vessel to allow lawful vehicle owners and lessees, or those acting on their behalf, to access, store, share, and analyze vehicle operational data, including diagnostic and telematics data.

Opponents argue that there is not enough evidence to distinguish this class exemption from the already-existing vehicle repair exemption.[278] However, accessing vehicle data through the existing exemption does not give users access to the data being discussed within this class. Proponents established a valuable point indicating that, in the quickly evolving arena of vehicle technology, vehicle data can be housed within separate systems based on the manufacturer.[279] This stresses the need for an independently established exemption alongside the renewal of the existing vehicle repair exemption. The lack of independent exemption risks creating a perverse

[276] 2018 NTIA Letter at 58.
[277] 2021 Register's Recommendation at 230; 2018 Acting Register's Recommendation at 222-26.
[278] Auto Innovators Class 7 Round 2 Comments at 2; AEM Class 7 Round 2 Comments at 5-6.
[279] April 18, 2024 Class 7 Hearing Transcript at 22-24.

incentive for manufacturers to intentionally segment the data into different systems, creating additional obstacles for consumers to access their data. Relying on existing agreements or similar structures to provide access to the data continues to not provide a viable alternative but is more akin to a barrier to the vehicle owner's personal access to the data and their ability to share what data they would like to with third parties who repair and maintain their vehicles. Although some manufacturers house data in the same system, consumers are still restricted by the limits of the existing exemption, which only permits accessing data for the purposes of repair or lawful modification to the vehicle, but not to also store, share and analyze that data.

The creation of this exemption is fully supported by DOJ and FTC, which have cited competition issues among others as reason to permit the expansion.[280] The agencies have acknowledged that TPMs can undermine research into vehicle operation, user data, and other valuable areas of data interpretation and there has not been sufficient data to support safety and privacy concerns voiced by automotive manufacturers.[281] Privacy concerns are a red herring as the user, who is the owner of the data, should be able to control the disclosure of their own data.

Conclusion

This exemption is necessary to restore the balance between automotive manufacturers and consumers who are the owners of the data in question. Vehicle-generated data should be accessible to consumers beyond the strict scope of vehicle repair and can provide valuable information into driver performance and overall analysis. As vehicles continue to become more reliant on technological services for their operations, it is crucial to recognize an owner's ability to obtain their data and provide for third-party assistance in order to understand their data for a host of situational purposes that go beyond the existing exemption of vehicle repair.

[280] DOJ Antitrust and FTC Classes 5 and 7 Round 3 Comments.
[281] *Id.* at 17.