# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of		
Use of the 5.850-5.925 GHz Band	)	ET Docket No. 19-138
Ose of the 3.630-3.723 GHz Band	)	E1 Docket No. 13-130
	)	



# **COMMENTS OF CONSUMER REPORTS**

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Consumer Reports (CR), an independent, non-profit member organization, welcomes the opportunity to submit comments to the Federal Communications Commission (FCC) regarding its Notice of Proposed Rulemaking (NPRM) on the use of the 5.850-5.925 GHz band (5.9 GHz band). The FCC's proposal would take portions of this band, which it currently reserves for transportation and vehicle safety-related communications and other intelligent transportation system (ITS) applications, and reallocate them for other uses.

A core part of CR's work is to defend consumer rights in telecommunications markets, including by commenting on consumer protection and competition issues before the FCC. As the Commission may know, CR also works extensively on policy topics related to transportation and motor vehicles, including safety issues. These comments draw on both areas of CR's expertise to urge the FCC not to move forward with its proceeding on the 5.9 GHz band unless and until it can, jointly with the Department of Transportation, demonstrate that its proposal is sufficient to ensure the secure and effective application of vehicle-to-vehicle (V2V) and vehicle-to-everything (V2X) communications for transportation safety purposes.

### I. Introduction: Safety First

Since its founding in 1936, CR has evaluated cars and other transportation options, published findings to help consumers navigate the marketplace, and advocated for fair practices by manufacturers and dealers. Today, the multidisciplinary team at the 327-acre CR Auto Test Center in rural Connecticut tests about 50 vehicles per year, driving them hundreds of thousands of miles and assessing survey data collected from CR's members and the general public to supplement analysis, evaluations, and ratings from the track. Unlike most automotive publications, which evaluate cars and trucks lent to them by manufacturers, CR purchases every vehicle it tests from a dealership, both to maintain its independence and test cars with the trim and options people actually buy, rather than the special versions that manufacturers want to showcase.

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<sup>&</sup>lt;sup>1</sup> Founded in 1936, Consumer Reports uses its dozens of labs, auto test center, and survey research center to rate thousands of products and services annually. CR works together with its more than 6 million members for a fairer, safer, and healthier world, and reaches nearly 20 million people each month across our print and digital media properties.

<sup>&</sup>lt;sup>2</sup> In the Matter of Use of the 5.850-5.925 GHz Band, FCC, ET Docket No. 19-138, Notice of Proposed Rulemaking (December 17, 2019) (NPRM).

CR's auto testing is known for being thorough.<sup>3</sup> Instead of spending a day to a week getting to know a car, CR drives each vehicle it rates for 2,000 break-in miles over several weeks before even starting formal testing. After that, CR conducts more than 50 tests using state-of-theart measurement tools and a facility that includes a 4,400-foot-long main straight track, a 3,500-foot handling course, and a crash-avoidance course. CR also conducts a portion of its testing on nearby public roads that are studded with the types of bumps and ruts that drivers encounter every day.

CR puts safety first and foremost, including—for example—by evaluating headlights on moonless nights and using car-like targets to check automatic emergency braking systems. CR also evaluates infotainment systems thoroughly and advises consumers on how much they require drivers to divert their attention from the road. In addition to testing cars, CR operates an extensive child-seat program, including crash tests, and provides independent tire ratings based on our testing.

CR has worked side-by-side with consumers for decades to ensure their cars keep them as safe as possible on the road. CR helped make seat belts standard, pushed to equip passenger vehicles with antilock brakes and electronic stability control, and championed making rear back-up cameras mandatory in all new cars.<sup>4</sup> In recent years, CR has set a higher bar for child seat testing;<sup>5</sup> required that vehicles have safety technology, such as automatic emergency braking with pedestrian detection, in order to receive our recommendation;<sup>6</sup> and spearheaded a common naming initiative for advanced safety features to help consumers more easily understand these systems.<sup>7</sup>

CR also has pushed for federal agencies, tech companies, and the auto industry to foster the implementation of vehicle-to-everything or "V2X" communications, the collective name to refer to vehicle-to-vehicle, vehicle-to-infrastructure, and vehicle-to-pedestrian communications technologies that allow different parts of the transportation system to share important safety-

<sup>&</sup>lt;sup>3</sup> How Consumer Reports Tests Cars, Consumer Reports (March 3, 2020), available at: www.consumerreports.org/cars-how-consumer-reports-tests-cars.

<sup>&</sup>lt;sup>4</sup> Transportation Evolution: Keeping Roads, Rails, and Skyways Safe, Consumer Reports (August 25, 2016), available at: www.consumerreports.org/cars-transportation-evolution-keeping-roads-rails-skyways-safe.

<sup>&</sup>lt;sup>5</sup> How Consumer Reports Tests Child Car Seats, Consumer Reports (December 17, 2018), available at: www.consumerreports.org/car-seats/how-consumer-reports-tests-child-car-seats.

<sup>&</sup>lt;sup>6</sup> Consumer Reports Puts Emphasis on Safety, Consumer Reports (February 20, 2020), available at: www.consumerreports.org/media-room/press-releases/2020/02/consumer-reports-puts-emphasis-on-safety-vehicle-price-in-naming-its-10-top-pick-cars-suvs-trucks-for-2020.

<sup>&</sup>lt;sup>7</sup> Clearing the Confusion: Recommended Common Naming for Advanced Driver Assistance Technologies, Consumer Reports (November 20, 2019), available at: <a href="mailto:advocacy.consumerreports.org/research/clearing-the-confusion-recommended-common-naming-for-advanced-driver-assistance-technologies">advocacy.consumerreports.org/research/clearing-the-confusion-recommended-common-naming-for-advanced-driver-assistance-technologies</a>.

related information through wireless transmissions. While improvements to crash protection for vehicle occupants are far from exhausted, the best way to protect lives is to avoid crashes in the first place. Therefore, the continued development and adoption of crash prevention technologies, including V2X communications, will play a major role in improving road safety—a critical and urgent mission with people's lives on the line.

The United States faces a pervasive, long-running public health crisis on our roads. Each year, motor vehicle crashes in the U.S. kill almost 40,000 people and send an additional 2.3 million people to hospital emergency departments.<sup>8</sup> These crashes are the leading cause of death in the first three decades of Americans' lives, 9 and they cost the nation \$800 billion in direct and indirect expenses per year. <sup>10</sup> Motor vehicle deaths, injuries, and crashes must be substantially reduced—and those in positions of leadership must strive for their elimination—for the U.S. to achieve a transportation system in which people can readily get around without fear that they or their loved ones will not make it to their destination.

V2X communications technologies are especially promising for addressing this terrible toll through significant reductions in the number and severity of motor vehicle crashes. According to the National Highway Traffic Safety Administration (NHTSA), vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communications offer immense safety benefits. For example, in 2017, the crash population identified by NHTSA as potentially addressable by V2V communications alone was significant, including 3.4 million light-vehicle to light-vehicle crashes every year, or 62% of the total, involving an estimated 7,000 fatalities and 1.8 million injuries occurring annually. 11 NHTSA's estimates of the monetized benefits to society of a V2V rule were at least several hundred billion dollars a year. 12

The safety potential of V2X communications comes both by addressing crashes that cannot be mitigated by current in-vehicle camera and sensor-based technologies, as well as by augmenting sensor-based systems as an additional part of sensor fusion. Overall, because these systems involve the use of radio signals and can transmit safety-related data without a direct line

<sup>&</sup>lt;sup>8</sup> CDC Winnable Battles, Centers for Disease Control and Prevention (December 14, 2017), available at: www.cdc.gov/winnablebattles/report/motor.html.

<sup>&</sup>lt;sup>10</sup> Blincoe, L. J., Miller, T. R., Zaloshnja, E., & Lawrence, B. A., The Economic and Societal Impact Of Motor Vehicle Crashes, 2010 (Revised) (May, 2015), available at: crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812013.

<sup>&</sup>lt;sup>11</sup> Federal Motor Vehicle Safety Standards; V2V Communications, NHTSA, notice of proposed rulemaking (January 12, 2017), available at: www.federalregister.gov/documents/2017/01/12/2016-31059/federal-motor-vehicle-safetystandards-v2v-communications.

12 Id.

of sight, they have significant potential to improve traffic safety in a manner complementary to other crash avoidance technologies, including by giving drivers and vehicle software an early warning of yet-unseen crash hazards posed by other vehicles, weather, or road conditions. By adding to their sensor fusion systems, V2X technology can also help enhance the safety and effectiveness of self-driving cars.<sup>13</sup>

Accordingly, CR has strongly supported the establishment of mandatory safety standards governing the use of wireless communications for crash prevention purposes, provided that they reasonably account for potential future developments and that manufacturers and suppliers meet baseline, enforceable standards to protect consumer privacy and data security. <sup>14</sup> CR has supported research initiatives by NHTSA around V2V communications, and commented in support of the agency's 2017 notice of proposed rulemaking, <sup>15</sup> which would have required all new light vehicles to be capable of sending and receiving V2V communications using a standardized message and format for V2V transmissions. <sup>16</sup> This proposal envisioned Dedicated Short-Range Communications (DSRC) technology and DSRC-based systems as the primary means of V2V communications. DSRC is a two-way wireless technology characterized by short-to-medium range (up to 300 meters), low latency, and high reliability. <sup>17</sup>

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<sup>&</sup>lt;sup>13</sup> See, e.g., A. H. Sakr, G. Bansal, V. Vladimerou, K. Kusano and M. Johnson, *V2V and on-board sensor fusion for road geometry estimation*, 2017 IEEE 20th International Conference on Intelligent Transportation Systems (ITSC), Yokohama, 2017, pp. 1-8; Luís Conde Bento, Ricardo Parafita, Hesham A. Rakha & Urbano J. Nunes (2019) *A study of the environmental impacts of intelligent automated vehicle control at intersections via V2V and V2I communications*, Journal of Intelligent Transportation Systems, 23:1, 41-59, DOI: 10.1080/15472450.2018.1501272.

<sup>&</sup>lt;sup>14</sup> See CR comments to the U.S. Department of Transportation on V2X Communications Technologies, Consumer Reports (February 24, 2019), available at: advocacy.consumerreports.org/research/cr-comments-to-the-u-s-department-of-transportation-on-v2x-communications-technologies. As a part of these comments, CR emphasized to DOT that it should heed several key principles as V2X communications technologies emerge, namely: (1) Everyone on the road should be able to benefit from interoperable wireless safety communications among cars, trucks, pedestrians, and infrastructure, meaning that DOT should require new cars to be able to send and receive safety messages in a mutually intelligible manner so that safety benefits reach all consumers, not just those who can afford to buy expensive add-ons; (2) There should be dedicated and adequate spectrum available exclusively for vehicle safety purposes, with non-safety commercial use of this dedicated safety spectrum prohibited, including because it would be anti-competitive and run counter to public ownership principles and the efficiency and flexibility of the spectrum; (3) Consumers deserve to know what their car is transmitting, and who has access to this information, and ultimately consumers should be able to trust that companies are legally obligated to protect the privacy and security of V2X communications; and (4) DOT should set implementation time frames for V2X standards that recognize the urgency of bringing lifesaving technology to consumers' vehicles.

<sup>&</sup>lt;sup>15</sup> CU comments to NHTSA on the proposed V2V communications safety standard, Consumer Reports (April 12, 2017), available at: <a href="mailto:advocacy.consumerreports.org/research/cu-comments-to-nhtsa-on-the-proposed-v2v-communications-safety-standard">advocacy.consumerreports.org/research/cu-comments-to-nhtsa-on-the-proposed-v2v-communications-safety-standard</a>.

<sup>&</sup>lt;sup>16</sup> Federal Motor Vehicle Safety Standards; V2V Communications, NHTSA, notice of proposed rulemaking (January 12, 2017), available at: <a href="www.federalregister.gov/documents/2017/01/12/2016-31059/federal-motor-vehicle-safety-standards-v2v-communications">www.federalregister.gov/documents/2017/01/12/2016-31059/federal-motor-vehicle-safety-standards-v2v-communications</a>.

<sup>&</sup>lt;sup>17</sup> Preliminary Regulatory Impact Analysis - FMVSS No. 150 Vehicle-To-Vehicle Communication Technology For Light Vehicles, NHTSA (November, 2016), available at: www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/v2v pria 12-12-16 clean.pdf.

Since then, the U.S. Department of Transportation (DOT) has not finalized either a new federal motor vehicle safety standard to require V2V communications capabilities on new cars or a rule governing V2X deployment, contributing to delays. In February 2019, CR called on DOT to build on its past work by setting relevant performance standards and test methods within 18 months, and require V2X technology to be standard on all new vehicles no later than 2025. Although time has passed since this recommendation, CR still urges federal agencies to work together to ensure, within five years, that all new cars and trucks can securely and effectively communicate with one another and critical roadway infrastructure for safety purposes.

Instead of moving forward expeditiously on V2V and V2X rules, DOT has sought additional stakeholder comment about connected vehicle systems; <sup>18</sup> pushed for the full 5.9 GHz band to remain for transportation safety and ITS use; <sup>19</sup> and fostered discussion about the potential future transportation safety benefits of Cellular-V2X (C-V2X) and 5G-based technologies, in addition to those based on DSRC. While its viability for safety applications is currently unclear, C-V2X is a communications technology that utilizes the Long Term Evolution (LTE) standard developed by the 3rd Generation Partnership Project (3GPP) and allows both direct V2V communication and communication between vehicles and traditional cellular network-based devices. <sup>20</sup>

Most recently, DOT has said that NHTSA will consider including V2X communications technologies in a forthcoming upgrade to its New Car Assessment Program,<sup>21</sup> the program through which NHTSA communicates vehicles' five-star safety ratings and related consumer information to the public. The Department also announced a pilot program to roll out V2X capability supporting emergency response vehicles and its intention to procure V2X communications devices for testing within the 5.9 GHz band.<sup>22</sup>

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<sup>&</sup>lt;sup>18</sup> See, e.g., Docket No.: DOT-OST-2018-0210, DOT, available at: <a href="www.regulations.gov/docket?D=DOT-OST-2018-0210">www.regulations.gov/docket?D=DOT-OST-2018-0210</a>, DOT-OST-2018-0210.

<sup>&</sup>lt;sup>19</sup> See, e.g., Margaret Harding McGill, *Chao asks for FCC delay on auto airwaves*, Politico Pro (May 15, 2019); The Honorable Elaine L. Chao, Secretary of Transportation, DOT, *Letter to The Honorable Ajit Pai, Chairman, FCC* (November 20, 2019), *available at:* <a href="www.highways.org/wp-content/uploads/2019/12/sec-chao-letter-5.9-11-20-19.pdf">www.highways.org/wp-content/uploads/2019/12/sec-chao-letter-5.9-11-20-19.pdf</a>.

<sup>&</sup>lt;sup>20</sup> 3rd Generation Partnership Project; Technical Specification Group Services and System Aspects, 3rd Generation Partnership Project (June 8, 2018), available at: www.3gpp.org/release-14.

<sup>&</sup>lt;sup>21</sup> Tanya Snyder, *DOT wants vehicle communications in its new car assessment program*, Politico Pro (December 23, 2019).

<sup>&</sup>lt;sup>22</sup> Press Release, U.S. Transportation Secretary Elaine L. Chao Announces New Initiatives to Improve Safety on America's Roads, DOT (January 15, 2020), available at: <a href="https://www.transportation.gov/briefing-room/us-transportation-secretary-elaine-l-chao-announces-new-initiatives-improve-safety">www.transportation.gov/briefing-room/us-transportation-secretary-elaine-l-chao-announces-new-initiatives-improve-safety</a>; Contract Opportunity: Vehicle to Everything (V2X) Communications Devices for Safety Band Spectrum Testing, DOT (January 9, 2020), available at: beta.sam.gov/opp/0678d5124e52475cbc03f6c8800c10e3/view.

The NPRM we are asked to comment upon today lays out a new allocation of the spectrum in the 5.9 GHz band (5.850-5.925 GHz band) currently set aside for Intelligent Transportation System (ITS) operations: 45 MHz for unlicensed applications that could include WiFi services, and the remaining 30 MHz reserved for ITS split between C-V2X (20 MHz) and DSRC (10 MHz). Consumer Reports is in a unique position to weigh the pros and cons of this proposal, given our long history of improving auto safety through technological advances, and our support for better, faster, and more affordable broadband internet access that can be achieved with more unlicensed spectrum dedicated to WiFi.

By carving up this spectrum band, the NPRM implies that we can have our cake and eat it, too, but does not provide clear and convincing data indicating that its proposal will protect the ability to use V2X technology to save lives. The Commission asks many critical and appropriate questions in its proposed rulemaking that require sober answers based upon evidence. And time will be required to assess what is possible and not possible with this 75 MHz of valuable spectrum. Expanding consumer access to the internet through access to affordable WiFi is important, but that goal must come after auto safety needs are appropriately addressed. Specifically, the proposal does not answer the most critical question—will the significant reduction of spectrum assigned to ITS be enough to deliver the life-saving technologies this band was reserved for in 1999? Indeed, the NPRM begins with a general call for comment on its overall 45/30 megahertz split.<sup>23</sup> We are skeptical and urge the Commission to assure us, consumers, and other auto safety stakeholders that its proposal will not severely limit the transportation safety benefits of V2X communications if enshrined as a rule.

#### II. Political Decisions Stunted the Growth of the 5.9 GHz Band for Auto Safety

Claiming the lack of widespread use of this spectrum as a rationale to divvy up this band is not a convincing argument when considering the history of missed opportunities. The NPRM cites the 5.9 GHz as "fallow" and "underused for ITS services" when justifying its plan to reassign 45 MHz of this band for unlicensed uses.<sup>24</sup> This assertion suggests that the auto industry is somehow solely to blame for not better deploying DSRC as was the hope when this spectrum was originally allocated for ITS in 1999. However, much of the blame falls squarely upon policymakers who failed to break down barriers to the deployment of V2X technologies that would have better realized the benefits of ITS safety applications.

<sup>&</sup>lt;sup>23</sup> NPRM at ¶ 11.

<sup>&</sup>lt;sup>24</sup> NPRM at ¶ 18 and ¶ 63.

The benefits of V2X technology depend on its widespread use, so individual car companies do not have strong incentives to equip their vehicles with needed systems unless other companies are doing the same. This network effect barrier and the technology's life-saving potential are among the key reasons Consumer Reports supported (and continues to support) a NHTSA regulation proposed in 2017 that would mandate DSRC transmitters for V2V be installed in all new vehicles.<sup>25</sup> The current leadership at DOT has yet to act upon the proposal, and absent a mandate, automakers have retreated from their plans to install DSRC in their vehicle fleets. Nonetheless, the spectrum needed for V2X should not be put at risk because of a political decision that failed to prioritize consumer safety.

The FCC also bears some responsibility for chilling investment in and discouraging the deployment of DSRC, including a temporary freeze on "the acceptance and processing of new and expanded use applications related to part 90 services operating in certain portions (specifically, 5850-5895 MHz and 5905-5925 MHz) of the 5850-5925 MHz spectrum band (5.9 GHz band), and on the processing of applications to renew part 90 licenses in the 5.9 GHz band" in the wake of this proceeding being approved at the Commission's December Open Meeting last year, among other things.<sup>26</sup> According to DOT, 498 pending ITS licenses were pending at the time of the FCC's freeze.<sup>27</sup>

Interestingly, the NPRM asks "whether there are actions that we should take, or requirements that we should adopt, to promote rapid and effective deployment of ITS (e.g., establishing appropriate benchmarks for infrastructure deployment or in-vehicle equipment installation)."28 Subject to the limits of the FCC's authority to do so, this question speaks to what role the federal government should and must play to help promote the deployment of ITS moving forward. If the FCC can take actions—ideally coordinated with DOT—to speed adoption of ITS safety applications within the 5.9 GHz band, CR would support them and is available to assist in those efforts.

<sup>&</sup>lt;sup>25</sup> Federal Motor Vehicle Safety Standards; V2V Communications, NHTSA, notice of proposed rulemaking (January 12, 2017), available at: www.federalregister.gov/documents/2017/01/12/2016-31059/federal-motor-vehicle-safetystandards-v2v-communications.

<sup>&</sup>lt;sup>26</sup> Public Notice, Wireless Telecommunications Bureau And Public Safety And Homeland Security Bureau Announce Temporary Filing Freeze On The Acceptance And Processing Of Part 90 Applications For Certain 5850-5925 Mhz (5.9 Ghz Band) Spectrum, FCC, ET Docket No. 19-138 (December 19, 2019) available at: docs.fcc.gov/public/attachments/DA-19-1298A1.pdf. See also: www.fcc.gov/document/orielly-and-rosenworcelletter-james-lentz-ceo-toyota-motor-na.

<sup>&</sup>lt;sup>27</sup> For a graphic highlighting the number of pending applications per state, see www.transportation.gov/researchand-technology/states-active-59-ghz-intelligent-transportation-service-its-licenses.

NPRM at ¶ 23.

Moreover, despite DOT's lack of action, V2X continues to be promoted and supported in the 5.9 GHz band. For example, earlier this year DOT Secretary Elaine Chao announced the creation of a new program funded up to \$38 billion to assist first responders equip their vehicles and infrastructure with V2X technology using the 5.9 GHz band.<sup>29</sup> In response to the NPRM's request for "up-to-date information on actual DSRC operations under existing licenses, as well as the various uses of ITS that have been implemented through DSRC technology in this band," we note that according to DOT, there are 57 operational V2X communications deployments in the U.S. using the 5.9 GHz band, including more than 6,000 roadside units, in addition to thousands of vehicles on the road with V2X devices.<sup>30</sup>

Finally, because final DOT rules for V2V and V2X have been delayed and on hold, CR is actively engaging with automakers to accelerate their implementation of this life-saving technology. This effort is focused on encouraging automakers to equip all their new vehicles with V2X capabilities as soon as possible. An assurance of dedicated and adequate spectrum is fundamental to begin the widespread installation of V2X communications technology in new vehicles.

## III. Unlicensed Spectrum for Expanded WiFi

Access to the internet at a reasonable cost is squarely in the consumer interest and is only becoming more so as connectivity becomes integral to participating in our economy. As the NPRM points out, the need for more unlicensed spectrum to fuel the growing demand for WiFi is real and the next generation of technological advances will require more bandwidth.<sup>31</sup> The role of WiFi delivered via equipment like home routers is a key part of expanding internet access and improving its reach and performance.<sup>32</sup> Allocating more unlicensed spectrum to fuel more and better WiFi will help expand broadband internet access, which empowers consumers to better participate not only in the world around them, but also the economy as a whole. Many work, healthcare, and educational opportunities are being delivered to consumers online and it is a robust broadband connection that makes it possible.<sup>33</sup>

<sup>&</sup>lt;sup>29</sup> Press Release, *U.S. Transportation Secretary Elaine L. Chao Announces New Initiatives to Improve Safety on America's Roads*, DOT (January 15, 2020), *available at:* <a href="https://www.transportation.gov/briefing-room/us-transportation-secretary-elaine-l-chao-announces-new-initiatives-improve-safety">www.transportation.gov/briefing-room/us-transportation-secretary-elaine-l-chao-announces-new-initiatives-improve-safety</a>.

<sup>&</sup>lt;sup>30</sup> Operational Connected Vehicle Deployments in the U.S., DOT (accessed March 9, 2020), available at: www.transportation.gov/research-and-technology/operational-connected-vehicle-deployments-us.

<sup>&</sup>lt;sup>31</sup> NPRM at ¶14.

 $<sup>^{32}</sup>$  NPRM at ¶ 11 and ¶ 13.

<sup>&</sup>lt;sup>33</sup> Adrienne Benton Furniss, *Want To Solve America's Problems? Start With Broadband*, Fortune (March 5, 2020), *available at:* fortune.com/2020/03/05/broadband-access.

Our long support for both auto safety and increased broadband internet access is why CR has a special voice regarding the issues discussed in the NPRM. When faced with weighing these competing interests, CR prioritizes policies to eliminate the unnecessary loss of life that can be achieved, in part, through V2X technology using the spectrum in the 5.9 GHz band for the many reasons outlined above. Therefore, notwithstanding the tangible benefits of expanded WiFi, and in light of more than 100 Americans dying in traffic crashes each day and the availability of other spectrum options, CR supports efforts—either within this rulemaking process or elsewhere—to ensure that adequate spectrum remains allocated to ITS applications that will improve auto safety and reduce traffic fatalities.

Importantly, the FCC is considering, but has yet to act on/finalize, other proposals that could free up large amounts of unlicensed spectrum in other bands that dwarf the 45 MHz that is proposed to be allocated in this proceeding. The ongoing 6 GHz proceeding could potentially unlock the entire 1200 MHz of the 6 GHz band for unlicensed uses, including WiFi. The 45 MHz the Commission is proposing to take from the 5.9 GHz band seems but a drop in the bucket compared to what might be available in the adjacent band.<sup>34</sup> Perhaps not all spectrum is created equal, but given the potential abundance of resources for WiFi elsewhere, it gives us pause for why the FCC seems so intent upon reassigning more than half of the lower band of the 5.9 GHz in this proceeding for unlicensed operations.

#### IV. Conclusion: The Path Forward

Until the FCC, jointly with the DOT, can demonstrate that its current proposal, or an alternative approach, is sufficient to ensure secure and effective application of V2X for safety purposes, including a transition period where multiple technologies (C-V2X and DSRC) may be competing in the market, the Commission should not release spectrum dedicated to traffic safety purposes and should instead focus on other opportunities it has put forth that can expand internet access at a reasonable cost for consumers. V2X applications can work effectively to save lives but will need adequate spectrum resources to do so.

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<sup>&</sup>lt;sup>34</sup> In the Matter of Unlicensed Use of the 6 GHz Band, FCC, ET Docket No. 18-295, Notice of Proposed Rulemaking (October 24, 2018) available at: <a href="https://www.fcc.gov/document/fcc-proposes-more-spectrum-unlicensed-use-0">www.fcc.gov/document/fcc-proposes-more-spectrum-unlicensed-use-0</a>.

The NPRM acknowledges the FCC is seeking to "evaluate the benefits and costs of our proposed approach as well as alternatives, and request comment on how to best calculate these benefits and costs."<sup>35</sup> Paragraph 63 continues:

Designating the 5.850-5.895 GHz band for unlicensed operations is likely to generate quantifiable benefits for consumers, stakeholders, and the American economy. Similarly, we believe removing uncertainty pertaining to the future of ITS services in the band, including the type(s) of technologies that are authorized, would promote more rapid and effective deployment of these services in the band. At the same time, we recognize that reducing the spectrum available for ITS, depending on the approach taken, potentially could lead to social costs if deployments of ITS would ever occur at wide-scale. We seek comment on how to best calculate these benefits and costs.<sup>36</sup>

In many ways, this excerpt summarizes the fundamental challenges that must be addressed before the Commission can move forward with any final rule—if it chooses to do so at all. We strongly encourage the FCC to work with the DOT and other third-party stakeholders to accurately assess the costs and benefits of the current proposal. Though CR is not positioned to definitively measure the costs and benefits in this comment, we cannot underscore enough that the FCC must be absolutely sure that widespread, effective ITS safety applications will be able to operate in anything less than 75 MHz before reducing the current allocation. We look forward to reviewing the record regarding this particular matter before reply comments are due to determine the feasibility of the Commission's approach.

Safety must come first and we urge the FCC not to move forward with this proceeding unless and until it can, jointly with the DOT, demonstrate that its current proposal is sufficient to ensure the secure and effective application of V2X for safety purposes.

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<sup>&</sup>lt;sup>35</sup> NPRM at ¶ 63.

<sup>36</sup> Id