



December 1, 2017

Docket Management Facility  
U.S. Department of Transportation  
1200 New Jersey Ave. SE., Room W12-140  
Washington, DC 20590-0001

RE: Notification of Regulatory Review, 82 Fed.Reg. 45750 (October 3, 2017); Docket Number DOT-OST-2017-0069

On behalf of the member companies of the U.S. Tire Manufacturers Association (“USTMA”), I appreciate the opportunity to submit comments regarding the above-referenced Federal Register notice soliciting input on the Department of Transportation’s (DOT’s) regulatory reform initiative. USTMA represents eleven tire manufacturers with manufacturing operations in the United States. USTMA’s membership includes: Bridgestone Americas, Inc.; Continental Tire the Americas, LLC; Cooper Tire & Rubber Company; The Goodyear Tire & Rubber Company; Hankook Tire America Corp.; Kumho Tire U.S.A., Inc.; Michelin North America, Inc.; Pirelli Tire North America; Sumitomo Rubber Industries; Toyo Tire Holdings of Americas Inc.; and Yokohama Tire Corporation.

Tire manufacturing is vital to the U.S. economy. Tires manufactured by USTMA members safely transport millions of Americans and millions of tons of goods each day throughout the United States. In the United States, USTMA members employ nearly 100,000 workers, operate 55 tire-related manufacturing facilities in 19 states and generate over \$27 billion in annual sales.

USTMA and its members generally support the regulatory reform efforts initiated by the Trump Administration and have developed recommendations for regulatory reform action. The subject Federal Notice seeks input on existing regulations that meet one of six criteria delineated in the notice. In particular, USTMA has identified several tire-related regulations issued by the National Highway Traffic Safety Administration (“NHTSA”) that meet two of the criteria listed – all are “outdated, unnecessary, or ineffective” (criteria (b)) and impose costs that exceed benefits (criteria (c)). The regulations outlined below present excellent opportunities to lower regulatory burdens on tire manufacturers and increase regulatory effectiveness by eliminating regulations that do not reflect current technology and removing burdensome requirements where compliance costs exceed benefits.

The notice also requested that commenters consider whether the recommended deregulatory actions present opportunities regulatory efficiencies in any of eleven types listed in the notice. Eliminating the regulations described below would meet several of the regulatory opportunity types listed in the notice. For example, each of the regulations described below is 40 or more years old, and does not appropriately address how tire technologies have changed since the regulations' inception (opportunity 6). As well, in all cases, the burdens imposed by the regulation are "costly when compared to the benefit provided" (opportunity 8).

**Regulations Recommended for Elimination by USTMA:**

<b>Regulation Types*</b>	<b>Reform Opportunities**</b>	<b>Section in CFR</b>	<b>Regulation Topic</b>
b, c	6, 8	49 CFR 571.139 S6.6, 49 CFR 571.109 S5.2	Bead Unseating Resistance
b, c	6, 8	49 CFR 571.139 S6.5/49 CFR 571.109 S5.3/49 CFR 571.119 S7.3	Tire Strength (Plunger Energy)
b,c	8	49 CFR 571.139 S6.3.2(a)	Tire Endurance
b, c	2, 6, 8, 11	49 CFR 575.104	Uniform Tire Quality Grading Standards
b, c	6, 8	49 CFR 571.139 S5.5(e), (f), (g), and (h)	Tire Markings for Ply Description, Ply rating, Tubeless and Radial

**\*Regulatory Types Identified in Federal Register Notice:**

(a) eliminate jobs or inhibit job creation; (b) are outdated, unnecessary, or ineffective; (c) impose costs that exceed benefits; (d) create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies; (e) could be revised to use performance standards in lieu of design standards, or (f) potentially burden the development or use of domestically produced energy resources.

**\*\*Regulatory Opportunities Identified in Federal Register Notice:**

(1) Simplify or clarify language in a regulation; (2) eliminate overlapping and duplicative regulations, including those that require repetitive filings for conducting business with the Department; (3) eliminate conflicts and inconsistencies in the Department's regulations and those of its agencies; (4) eliminate conflicts and inconsistencies with the rules of other Federal agencies or state, local, or tribal governments, (5) determine if matters in an existing regulation could be better handled fully by the states without Federal regulations; (6) revise regulations in which technology, economic conditions or other factors have changed in the area affected by the regulation; (7) reconsider regulations that were based on scientific or other information that has been discredited or superseded; (8) reconsider the burdens imposed on those directly or indirectly affected by the regulation and, specifically, those that are costly when compared to the benefit provided; (9) reconsider burdens imposed on small entities; (10) foster innovation by revising regulations to include performance standards for regulatory compliance; and (11) reduce burdens by incorporating international or industry consensus standards into regulations.

1. Recommendations for Regulatory Reform of Existing Regulations

- a. Federal Motor Vehicle Safety Standards (FMVSS) Part 109/139 – Tubeless Tire Resistance to Bead Unseating – 49 CFR 571.139 S6.5; 49 CFR 571.109 S5.2 (“bead unseating test”)

USTMA asks that the FMVSS 109/139 bead unseating test be eliminated, since it is an outdated, obsolete test method that does not provide a safety benefit for modern tires. Field performance of tires in countries with no tire bead unseating performance test requirement shows no related performance issues with tires in service.

The NHTSA bead unseating test was first issued in 1967 and was adopted from the 1965 version of SAE J918 - “Passenger Car Tire Performance Requirements and Test Procedures.”(1),(2),(3) This test was designed to evaluate bias tires when tubes were eliminated from use. Today’s highway tires are nearly exclusively radial tires. Also, since that time tire sizes have changed dramatically. When the FMVSS 109 was published, most light vehicle tires had aspect ratios of 78 to 85 percent and had rim sizes of 14- to 15-inch diameter.

Now, tire aspect ratios are much lower, with aspect ratios as small as 20- and up to 25-inch rim diameters. The bead unseat test cannot perform as intended for all modern tire sizes and does not meet its original objective, since passenger and light truck tires almost completely have been converted to radial technology. Although there have been several revisions to FMVSS 109 to accommodate tires with larger bead diameters, the current regulation does not properly address the range of tire sizes in the market today. NHTSA evaluated the challenges associated with conducting the bead unseating test in its 2013 report entitled “Laboratory Tire Beat Unseating – Evaluation of New Equipment, Pressures and “A” Dimension from ASTM F-2663-07” (DOT HS 811 735). ASTM also developed an updated test method to address the wide range of tire sizes in the market today (ASTM F2663-15).

In August 2016, USTMA (then Rubber Manufacturers Association, or RMA) filed a Petition for Rulemaking with NHTSA to adopt a new ASTM bead unseating test procedure, which would accommodate modern tire sizes and aspect ratios. While this petition would address challenges with testing some tire sizes, it does not address the underlying issue that this test was designed to assess

performance of bias ply tires.

USTMA advocates that NHTSA eliminate the bead unseating test for radial tires, since it is an outdated test that was designed for bias ply tires. Eliminating the bead unseating test would reduce costs for manufacturers to test products during product surveillance and development testing. It would also reduce costs to NHTSA to audit compliance. In addition, tires designed specifically to pass the test may contain additional material (with increased weight) at no benefit to the consumer and with an unintended consequence of increased rolling resistance, which contributes to lower vehicle fuel economy.

- b. Federal Motor Vehicle Safety Standards (FMVSS) Part 139/109 – Tire Strength Test – 49 CFR 139 S6.5; 49 CFR 571.109 S5.3; 49 CFR 571.119 S7.3 (tire strength or “plunger energy” test)

USTMA asks that the FMVSS 109/119/139 strength test be eliminated, since it is an outdated, obsolete test method that does not provide a safety benefit for modern tires. This test was designed in the late 1960s to test bias ply and glass belted tires. Currently, passenger and LT tires in the US are radial and steel-belted. With radialization of the tire industry and use of steel belted tires often with overlay, breakage of the belts of tires in service is not an issue.

The tire strength test employs a steel plunger, with a rounded end, that is used to contact the tire/wheel mounted assembly at the tire tread centerline and then slowly advance into the tire until a certain force (energy level) is reached, or the tire is punctured. However, with increasingly popular, low aspect ratio radial passenger tires, the plunger “bottoms out” on the wheel well before reaching the required force to pass the existing strength test.

In response to this situation, the industry has developed deep well rims, which allow the test to be conducted on more tire sizes, even though the deep well test rims are not representative of real world conditions that a tire will see. Even when specially fabricated deep well rims are used, the plunger will still at times bottom out before the minimum required force is achieved, which requires redesign and fabrication of a new, even deeper, well design. The various deep well rim designs add more cost and complexity to compliance testing, while trying to fit an outmoded test to modern tires. In addition, tires are sometimes redesigned (or over-designed) beyond what is necessary for good

performance in all other areas in order to pass this antiquated test, adding costs to manufacturers without a commensurate safety benefit.

In 2011, USTMA (then RMA) petitioned NHTSA for rulemaking to address this problem in FMVSS 109 and 139. USTMA recommended that NHTSA adopt ASTM International test procedure F414-15 “Standard Test Method for Energy Absorbed by a Tire When Deformed by Slow-Moving Plunger”. This test procedure provides a solution to this problem in paragraph 9.7, *“If the tire fails to break before plunger is stopped on reaching the rim...then the required minimum breaking energy is deemed to have been achieved at that point.”* USTMA recommended that NHTSA revise the existing tire strength test requirements to include this provision, and eliminate the need for deep-well rims which are not standard and not representative of real-world needs.

While acting on this petition would solve the immediate testing challenges, it would not address the underlying fact that the strength test was designed for bias ply tires and does not protect against product performance issues in modern radial tires. Eliminating this test requirement would reduce the regulatory burden on tire manufacturers without impacting tire safety or performance. Many other global regions do not mandate a strength test and do not experience related performance issues in the field. Likewise, eliminating the strength test would eliminate costs to NHTSA associated with auditing for compliance.

c. Federal Motor Vehicle Safety Standard No. 139 (FMVSS 139)

FMVSS 139 sets testing standards for passenger and light truck tires for vehicles of up to 10,000 gross vehicle weight. Among the tests is an endurance test where a tire is tested on a test wheel for a total of 34 hours at increasing load as a percentage of tire maximum load rating. The regulation sets forth tire damage conditions that would indicate that a tire did not successfully reach the end of the test. These conditions include: “tread, sidewall, ply, cord, belt or bead separation, chunking, open splices, cracking or broken cords.” USTMA advocates that chunking of tread blocks should not be considered as a damage condition when inspecting the tire after FMVSS 139 endurance testing.

Tread chunking is a benign condition that is not the targeted condition to be generated from the DOT139 endurance test. In an effort to create a sufficiently aggressive test for other targeted conditions, the over-deflection on a curved surface can result in the unintended chunking of tread

blocks. This condition is not a structural degradation of the tire and is not a safety related condition, and therefore should not be considered a damage condition used in regulatory compliance assessments. Chunking is also a result that lacks consistency due to variability in test conditions.

Eliminating tire chunking as a condition that would cause a tire not to pass the FMVSS endurance test would save tire manufacturers resources without compromising safety. USTMA views tire chunking as an endurance testing anomaly and should be viewed as such, rather than a tire damage mode, from a regulatory perspective.

d. Uniform Tire Quality Grading Standards – 49 CFR 575.104

USTMA asks that the uniform tire quality grading standards (“UTQGS”) be eliminated, since they are outdated, ineffective at conveying information to consumers and do not reflect performance of modern tires. The UTQGS were promulgated by NHTSA in 1978 “to aid the consumer in making an informed choice in the purchase of passenger car tires.” 49 CFR 575.104(b). While this aim is laudable, the standards do not achieve this goal, instead placing burdens on tire manufacturers (tire development and testing) and NHTSA (course monitoring, compliance assurance auditing) while failing to reach consumers with actionable information.

The 40-year old UTQGS requires tire manufacturers to provide ratings for new passenger car tires in areas: treadwear, wet traction and temperature resistance. Each criterion, test method and rating scale has challenges. In addition, the overall program has several shortcomings that inhibit its ability to provide consumers with information that truly could assist in the tire purchase experience.

i. Treadwear Rating

The treadwear test is an antiquated test that does not give an accurate representation of what treadwear performance customers will experience. Because the actual treadwear a consumer will see on a set of tires is so variable and dependent on a number of factors – vehicle selection, driving style, tire air pressure maintenance, road surface/aggregate type, road maintenance, drive cycle (city, highway, etc.) and weather conditions, to name a few, designing a test and predicting performance is inherently difficult. The UTQGS test delineates a set course route in east Texas for testing to occur according to specific procedures and requires comparison to the performance of a reference tire.

The resulting treadwear rating is not a mileage estimate – instead it is a comparison value to that reference tire, where the performance of the reference tire is set at 100, and the performance of the candidate tire is a two or three-digit number (in increments of 20) that is percentage of the performance of that reference tire. Among the challenges of this system, rating the performance of the candidate tire is limited to ten times the performance of the reference tire, which effectively caps the potential to communicate outstanding performance and potentially stifles innovation. Simply, the scale does not allow for high performance to be differentiated: this is a 40-year old test with a 40-year old scale that does not represent 40 years of technological improvements. As well, the variability of the test causes unclear distinctions among increments of performance. Perhaps most significant, the rating system is difficult, if not impossible, to translate into meaningful information that would aid the consumer in making a tire purchase, due to the relative nature of the ratings and the lack of correlation to mileage expectations.

The treadwear test also has testing challenges due to the proliferation in the number of tire sizes since the test was developed. The test cannot be run as prescribed in the regulation for larger sized tires. The regulation specifies that the standard reference test tire (SRTT) must be placed on the same vehicle as the candidate tires. However, the 14-inch SRTT cannot be placed on same vehicle as larger rim diameter tires. While NHTSA is in the process of transitioning to a 16" SRTT for this regulation, this challenge will continue to exist for some tire sizes.

The costs associated with this requirement are enormous. On-road tire testing is inherently expensive, as it requires significant human resources, test vehicles, fuel and time. The treadwear test is a 7,200-mile test (800-mile break-in, plus 6,400-mile test), which is run by completing the 400-mile test course a total of eighteen times. After the completion of each 400-mile segment, the tires are rotated within each wheel position on each vehicle. After every 800 miles, the vehicles are rotated in the convoy, the vehicles are realigned if necessary and each tire's remaining tread depth is measured. Tire manufacturers are burdened with significant costs during tire development and compliance surveillance, while NHTSA incurs costs due to compliance auditing and quarterly testing to assess the base course wear rate, as specified in the regulation. Rescinding this regulation would eliminate these significant costs to both tire manufacturers and to the government and remove a regulation that is not providing actionable information to consumers.

ii. Temperature Resistance Rating

The temperature resistance rating was designed to provide consumers with information about how well the tire structure resists the elevated temperatures associated with tire operation. While this grade may have been meaningful at the time the regulation was promulgated, due to other intervening regulations, it no longer provides significant additional information to consumers. Eliminating the temperature rating requirement would reduce costs to tire manufacturers and to NHTSA but would not negatively affect tire safety or actionable information available to consumers.

FMVSS 139, promulgated in 2002, added a new minimum performance test for new light duty vehicle tires. 49 CFR 571.139 S 6.3, S6.4. The tire endurance and low inflation pressure performance test set a high bar for the performance of new tires sold in the United States. Together these tests, often described as the most stringent tire performance standards in the world, require a tire to successfully complete 34 hours on a test wheel at 120 km/h with increasing load severity while properly inflated, plus an additional 90 minutes on the test wheel going 120 km/h at 100 percent load capacity while 20 percent underinflated. In order to successfully complete these tests, a tire must be resistant to the effects of temperature during operation – both the length of the endurance test and the low pressure during the low-pressure test generate heat that would be deleterious to a tire that is not constructed to resist heat.

Additionally, if NHTSA is interested in providing consumers with better information about the temperature resistance of tires, NHTSA could adopt provisions mandating assignment of speed symbols to tires sold in the United States. While a significant volume of tires sold in the United States do contain speed symbols, the assignment of a speed symbol is not required by U.S. regulations. The UNECE global technical regulation for tyres, GTR No. 16, contains a high speed test that contains provisions for assessing high speed performance of a tire according to a tire's speed symbol (GTR No. 16, section 3.11). Speed symbols are a more precise measure of a tire's resistance to heat. Instead of three rating options in the case of UTQGS, there are 17 speed symbols referenced in the GTR. In order to transpose GTR No. 16 into U.S. regulations, NHTSA would need to adopt requirements for assigned speed symbol in order to adopt the high speed test contained in the GTR. As a contracting party to the 1998 Agreement on Global Technical Regulations that voted in favor of GTR No. 16, the United States is obligated to begin the process of evaluating transposition of GTR No. 16 into its domestic

regulations according to the provisions of the agreement.

### iii. Wet Traction Rating

The wet traction test should be eliminated, since the method is outdated and inconsistent with current international test methods and regulations. The UTQGS test method rates tires for traction performance during the “slide” portion of the wet traction test, after the vehicle’s brakes have locked and the tires are sliding. With the transition to anti-lock brakes, now on all new vehicles, tires no longer typically see a “slide” condition in service. The anti-lock braking system engages before the tires begin to slide. As a consequence, “slide” data is no longer a preferred method of rating a tire’s wet traction capabilities.

Instead, other global tests, including UNECE Regulation 117 and GTR No. 16 for Tyres, specify a test method that measures the peak traction prior to slide. This measurement is more reflective of tire performance on modern vehicles and a better benchmark for standards or to compare product performance. As described above, as the United States moves toward transposing GTR No. 16 into its domestic regulations, consideration of the wet traction standard and test method will be part of the process.

Additionally, the Fixing America’s Surface Transportation Act of 2015 (“FAST Act”) mandates that NHTSA develop tire wet traction minimum performance standards. That regulation specifies that the standards must be “expressed in terms of peak coefficient of friction.” FAST Act Sec. 24332. Once the FAST Act regulations are promulgated to create a minimum performance standard for wet traction, the UTQGS requirements will become completely obsolete, and could cause confusion, since they are based on an outmoded test. Likewise, the UTQGS wet traction test will be completely duplicative and serve only to add testing and administrative costs without a corresponding performance benefit.

### iv. Tread stickers and sidewall molding ineffective and do not provide consumers with information before purchase

The UTQGS for tread stickers and sidewall molding should be eliminated, since they are costly requirements with no consumer benefit. UTQGS requires tire manufacturers to mold the tire ratings for temperature, traction and treadwear in the sidewall of the tire and include the ratings on a sticker

placed on the tread. However, the vast majority of consumers never see the tread sticker at all – it is removed prior to installation and typically discarded by the installer. The consumer usually sees the tire sidewall for the first time at the conclusion of the tire purchase experience when leaving the tire retailer. In short, the tread stickers and sidewall molding are not informing consumers during a tire purchase and should be abandoned as requirements.

e. Tire Markings

In addition to the regulations identified above, USTMA has determined that several tire markings are obsolete and should be eliminated from tire marking requirements contained in FMVSS 139 S5.5. As tire aspect ratios continue to become lower and the space on sidewalls similarly decreases, the space on tire sidewalls for required markings becomes more valuable. If the requirement to label a tire with the number of plies were eliminated, additional space on a tire's sidewall would be available for other uses. This would increase manufacturing flexibility and enhance a tire manufacturer's ability to efficiently make a high quality, high value product.

i. Ply description and Ply rating (number of plies)

FMVSS 139 S5.5(e) requires that the ply description be indicated on the sidewall, while FMVSS 139 S5.5(f) requires that the actual number of plies in the tire be indicated on the sidewall. Ply description was originally included to facilitate tire repair, but this information is not needed for the repair of modern tires. As tire technology has advanced, the number of plies no longer indicates a tire's robustness and tire purchasers do not purchase tires based on this information. Errors in this marking can lead to a tire manufacturer filing a petition for inconsequential noncompliance. The potential cost of this error is the administrative burden on both tire manufacturers and NHTSA in filing and processing the petition for inconsequential noncompliance and potentially the cost of conducting a recall. However, there is no safety impact associated with this information or errors to it.

ii. "TUBELESS" marking

FMVSS 139 S5.5(g) requires that a tire be marked with either "tubeless" or "tube type". Since virtually all tires sold in the United States today are tubeless, USTMA asks that the requirement to mark "tubeless" be eliminated. If a tire does happen to be "tube type", then it should still be so

marked. This requirement is outdated and is a vestige of a time when tires in the United States were both tubeless and tube type, and installers and consumers needed to know whether an innertube needed to be installed along with the tire. Today, tube type technology is obsolete, and indicating that a tire is tubeless is not conveying any meaningful information to installers or consumers.

iii. "RADIAL" marking

FMVSS 139 S5.5(h) requires that a tire be marked with the word "radial" on the tire sidewall. Today, virtually all tires sold in the United States in the light duty consumer tire market are radial tires. In fact, USTMA data shows that for 2016, of the nearly 284 million U.S. passenger and light truck tire shipments, over 99 percent were radial tires. This marking is unnecessary and is not conveying needed information to consumers or to tire installers. Additionally, this marking is redundant with requirements for the tire size. The tire size of a radial tire contains the letter "R" in the size designation, which indicates that it is a radial tire.

2. USTMA Supports Action on Key Tire-Related Rulemakings and NHTSA Actions (FAST Act provisions)

USTMA understands and generally supports the Trump Administration's priority focus on reducing regulatory burdens on U.S. industry, streamlining requirements to increase efficiency and lower costs and modernize requirements in line with current technologies and products. We appreciate the opportunity to provide the Administration with our best thinking about ideal candidates for regulatory reform focus.

USTMA also supports the continued focus and attention of the Trump Administration on new regulatory projects that have the potential to improve product performance, assure product safety and level the playing field for U.S. manufacturers. In particular, USTMA advocates that NHTSA move forward with rulemaking mandated under the FAST Act.

The FAST Act requires that NHTSA set minimum performance standards on tire fuel efficiency (or rolling resistance, the tire's contribution to vehicle fuel economy) and wet traction. Setting these minimum performance standards would bring U.S. regulations in line with other global tire regulations and transpose requirements of GTR No. 16 into U.S. law, thus assuring that the U.S.

market will not become a dumping ground for tires that do not meet similar standards in other geographic regions. The standards also will keep the worst performing tires out of the U.S. market and improve overall aggregate vehicle fuel economy for the U.S. fleet and highlight advanced tire technologies.

The FAST Act also directs NHTSA to undertake an important non-regulatory project that is directly related to vehicle and tire safety – developing an online searchable tire recall database. This database would give consumers and tire service professionals the ability to easily determine whether a tire has been recalled – currently, this is very difficult if not impossible using the information available on NHTSA’s website. USTMA has already developed such a tool for tires sold by its members. The USTMA tool is available at <https://recallinfo.ustires.org/>. USTMA has previously met with NHTSA officials and offered its assistance and access to its online tool to assist NHTSA with developing its own version of this tool. USTMA also provided NHTSA with the full data file that supports the USTMA online tool for the agency’s use as it works to meet the mandate in the FAST Act. USTMA reiterates its desire to work cooperatively with NHTSA to develop this key safety resource. NHTSA leadership in this area is critical to assuring that an online searchable tool exists to determine whether any tire in the U.S. has been subject to a recall, whether or not the manufacturer is a USTMA member company.

The U.S. Tire Manufacturers Association appreciates the opportunity to submit these comments. Please contact me at [tnorberg@ustires.org](mailto:tnorberg@ustires.org) or +1 202 682 4839 should you have any questions or need further information.

Sincerely,

A handwritten signature in black ink that reads "Tracey J. Norberg." The signature is written in a cursive, flowing style.

Tracey J. Norberg  
Senior Vice President & General Counsel