

*The Acting Administrator for NHTSA, James Owens, signed the following Advance Notice of Proposed Rulemaking on December 12, 2019, and we submitted it for publication in the Federal Register. While NHTSA has taken steps to ensure the accuracy of this Internet version of the notice, it is not the official version of the notice. Please refer to the official version in a forthcoming Federal Register publication, which will appear on Regulations.gov (<https://www.regulations.gov/docket/NHTSA-2019-0011>). Once the official version of this document is published in the Federal Register, this version will be removed from the Internet and replaced with a link to the official version.*

**DEPARTMENT OF TRANSPORTATION**

**National Highway Traffic Safety Administration**

**49 CFR Part 571**

**[Docket No. NHTSA–2019–0011]**

**RIN 2127–AL96**

**Federal Motor Vehicle Safety Standards; Tires**

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

**ACTION:** Advance notice of proposed rulemaking (ANPRM).

**SUMMARY:** NHTSA is issuing this ANPRM to seek comment on provisions contained in the Federal Motor Vehicle Safety Standards for tires. NHTSA is reviewing existing regulations to determine if updates are necessary to keep pace with new technology. This notice focuses on tire-related comments received to the DOT’s regulatory review and request for public comment notice issued on October 2, 2017. NHTSA seeks comment on matters related to the existing strength test, the bead unseating resistance test, and the tire endurance test. Lastly, the agency seeks comment on the current use and relevance of some tire marking regulations and other matters related to new tire technologies. Comments to this notice will inform NHTSA as it

considers regulatory reform aimed at reducing regulatory burden while maintaining existing safety levels for motor vehicle tires.

**DATES:** Comments must be received no later than [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. See Public Participation heading of the Supplementary Information section of this document for more information about written comments.

**ADDRESSES:** You may submit comments electronically to the docket identified in the heading of this document by visiting the following website:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the online instructions for submitting comments.

Alternatively, you can file comments using the following methods:

- Mail: Docket Management Facility: U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building Ground Floor, Room W12-140, Washington, D.C. 20590-0001
- Hand Delivery or Courier: West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, between 9 a.m. and 5 p.m. ET, Monday through Friday, except Federal holidays.
- Fax: (202) 493-2251

Regardless of how you submit your comments, you should mention the docket number identified in the heading of this document.

*Instructions:* For detailed instructions on submitting comments and additional information on the rulemaking process, see the Public Participation heading of the

Supplementary Information section of this document. Note that all comments received will be posted without change to <http://www.regulations.gov>, including any personal information provided. Please see the Privacy Act heading below.

*Privacy Act:* Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477-78) or at <http://www.transportation.gov/privacy>.

*Confidential Information:* If you wish to submit any information under a claim of confidentiality, you should submit three copies of your complete submission, including the information you claim to be confidential business information, to the Chief Counsel, NHTSA, at the address given below under FOR FURTHER INFORMATION CONTACT. In addition, you should submit two copies, from which you have deleted the claimed confidential business information, to Docket Management at the address given above under ADDRESSES. When you send a comment containing information claimed to be confidential business information, you should include a cover letter setting forth the information specified in the confidential business information regulation. (49 CFR Part 512.)

*Docket:* For access to the docket to read background documents or comments received, go to <http://www.regulations.gov>. Follow the online instructions for accessing the dockets.

**FOR FURTHER INFORMATION CONTACT:** Please contact, Jesus Valentin-Ruiz, Office of Crash Avoidance Standards, telephone 202-366-1810, or David Jasinski, Office of the Chief Counsel, telephone 202-366-2992. You may send mail to both of these officials at the National

Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE, Washington, DC 20590  
or fax to 202-493-0073.

## **SUPPLEMENTARY INFORMATION:**

### **Table of Contents**

#### **I. Introduction**

#### **II. Background**

#### **III. Considerations Regarding Federal Motor Vehicle Safety Standards for Tires**

##### **a. Tire Strength Test**

##### **b. Tire Bead Unseated Test**

##### **c. Tire Endurance**

##### **d. Tire Markings**

##### **e. Other Tire-Related Issues**

#### **IV. Additional Questions**

#### **V. Public Participation**

#### **VI. Rulemaking Notice and Analyses**

### **I. Introduction**

On October 2, 2017, DOT issued a **Federal Register** notice requesting public comment on existing rules and other agency actions that are candidates for repeal, replacement, suspension, or modification (82 FR 45750). This public input was aimed to inform DOT's review of its existing regulations and other agency actions to evaluate their continued necessity, determine whether they are crafted effectively to solve current safety issues, and evaluate whether they potentially burden the development or use of domestically produced energy resources. DOT received almost 3,000 comments in response to this notice, of which approximately twenty-three addressed rules and agency actions under the scope of NHTSA. The agency is publishing a series of advance notices of proposed rulemaking (ANPRMs) on various topics derived from input submitted by stakeholders in response to the DOT notice and NHTSA's own regulatory review. This ANPRM discusses requirements and test procedures for tires that may be candidates for repeal, replacement, suspension or modification.

As part of its mission, NHTSA issues Federal Motor Vehicle Safety Standards (FMVSSs) and regulations for new vehicles and motor vehicle equipment to save lives, prevent injuries, and reduce economic costs due to road traffic crashes. NHTSA also reviews and revises existing standards and regulations to respond to, for example, the introduction of new technology in motor vehicles. In 2017, section 2(a) of Executive Order (E.O.) 13771, Reducing Regulation and Controlling Regulatory Costs, establishes that unless prohibited by law, whenever an agency publicly proposes for notice and comment or otherwise promulgates a new regulation, it must identify at least two existing regulations to be repealed. Also, according to E.O. 13777, Enforcing the Regulatory Reform Agenda, each agency must evaluate existing regulations, and make recommendations for their repeal, replacement, or modification. As part of this process, the Department is directed to seek input from entities significantly affected by its regulations. In response to the October 2, 2017 notice, the U.S. Tire Manufacturers Association (USTMA)<sup>1</sup> identified tire-related regulations that, in its view, are outdated, unnecessary, or ineffective. USTMA stated that the regulations identified present an opportunity to lower regulatory burdens on tire manufacturers and increase regulatory effectiveness by eliminating regulations that do not reflect current technology and removing requirements where compliance costs exceed benefits. Topics identified include: (1) tire strength (plunger energy) tests in FMVSSs No. 109, 119, and 139; (2) bead unseating resistance tests in FMVSS Nos. 109 and 139; (3) the tire endurance test in FMVSS No. 139; (4) the Uniform Tire Quality Grading Standards (UTQGS) in 49 CFR 575.104; and (5) tire markings for ply rating, tubeless, and radial in FMVSS No. 139.

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<sup>1</sup> USTMA, formerly Rubber Manufacturers Association (RMA), represents tire manufacturers with operations in the United States.

USTMA mentioned that each of the regulations identified do not appropriately address how tire technologies have changed since the regulations' inception. Continental Automotive Systems, Inc. (Continental), a member of USTMA, agreed with the comments, with emphasis on the elimination of the tire strength test in FMVSS Nos. 109 and 139. Comments received on the UTQGS, along with other consumer information topics are not the focus of this ANPRM and may be addressed in a separate rulemaking.<sup>2</sup>

NHTSA seeks focused comment on issues and possible modifications to the strength test and bead unseating resistance test for modern tires. NHTSA also seeks comment on the certain aspects of the tire endurance test. Lastly, the agency seeks comment on the current use and relevance of some tire marking regulations as well as other matters related to new tire technologies. Safety standards for tire rims (FMVSSs No. 110 and 120) and tire pressure monitoring systems (FMVSS No. 138) are not the focus of this notice. Similarly, issues related to previously proposed upgrades to FMVSS No. 119, are not the focus of this notice.<sup>3</sup>

## **II. Background**

### **a. NHTSA's Prior Efforts to Improve Tire Safety Standards**

In 2000, a surge in tire tread separation failures prompted Congress to enact the Transportation Recall Enhancement, Accountability, and Documentation Act (TREAD) Act.<sup>4</sup> Section 10 of the TREAD Act, "Endurance and resistance standards for tires", required NHTSA to revise and update FMVSS No. 109 – New Pneumatic Tires<sup>5</sup> and FMVSS No. 119 – New Pneumatic Tires for Vehicles Other than Passenger Cars.<sup>6</sup> NHTSA made several improvements

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<sup>2</sup> RIN 2127-AK76

<sup>3</sup> RIN 2127-AK17

<sup>4</sup> Pub. L. 106-414, November 1, 2000, 114 Stat. 1800.

<sup>5</sup> 49 CFR 571.109

<sup>6</sup> 49 CFR 571.119

and established a new safety standard, FMVSS No. 139, New pneumatic radial tires for light vehicles.<sup>7</sup> FMVSS No. 139 applies to new pneumatic radial tires for use on motor vehicles (other than motorcycle and low speed vehicles) that have a gross vehicle weight rating (GVWR) of 10,000 pounds or less.<sup>8</sup> It adopted more stringent high speed and endurance tests as well as a new low-pressure performance test. The objective was to improve the ability of tires to endure the effects of tire heat building-up and severe under-inflation during highway travel under fully loaded conditions. In a petition for reconsideration to the final rule establishing FMVSS No. 139, manufacturers requested that NHTSA either redefine “chunking” or not consider “chunking” to be an indication of tire failure during the endurance test.<sup>9</sup> The agency decided against eliminating “chunking” as a test failure condition.<sup>10</sup>

As part of the improvements to the tire safety standards following the TREAD Act, NHTSA proposed to replace the strength test in FMVSS No. 109 with a road hazard impact test, modeled after a Society of Automotive Engineers (SAE) recommended practice. The agency also proposed to replace the bead unseating test in FMVSS No. 109 with a new test used by Toyota.<sup>11</sup> The construction characteristics of a radial tire, relative to a bias-ply tire, are what make the tests appear to be ineffective in differentiating among modern tires with respect to these aspects of performance. However, after further consideration and public comments, NHTSA deferred action on proposals to revise the existing strength test and bead unseating resistance test because additional research was needed to inform a decision.

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<sup>7</sup> 68 FR 38115 (Jun. 26, 2003).

<sup>8</sup> 49 CFR 571.139

<sup>9</sup> Chunking means the breaking away of pieces of the tread or sidewall. 49 CFR 571.139, S3.

<sup>10</sup> 71 FR 877 (Jan. 6, 2006).

<sup>11</sup> 67 FR 10050 (Mar. 5, 2002).

Since then, both industry and NHTSA have examined the strength test and bead unseating test, by conducting additional research and updating relevant industry standards.<sup>12,13</sup>

## **b. Tire Trends**

FMVSS for tires were first established in 1967. At the time, the typical light-vehicle tire was a bias-ply tire, had a 78 to 85 percent aspect ratio<sup>14</sup>, and was mounted on a wheel with a 14- to 15-inch diameter (rim codes 14 or 15).<sup>15</sup> Bias tires have body ply cords that are laid at alternate angles, substantially less than 90 degrees to the tread centerline, extending from bead to bead. As the tire deflects, shear occurs between body plies which generates heat.

Currently, most tires sold in the United States are radial tires. In contrast to bias-ply tires, radial tires have body ply cords that are laid radially at 90 degrees to the centerline of the tread, extending from bead to bead. Because the opposite ends of each cord are anchored to the beads at points that are directly opposite to each other, the radial tire carcass is more flexible. The radial tire is reinforced and stabilized by a belt that runs circumferentially around the tire under the tread. This construction allows the sidewalls to act independently of the belt and tread area when forces are applied to the tire. This independent action is what allows the sidewalls to readily absorb road irregularities without overstressing the cords. Research has shown that impact breaks caused by cord rupture are less likely to occur in radial-ply passenger car tires.<sup>16</sup>

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<sup>12</sup> Harris, J.R., Evans, L.R., & MacIsaac Jr., J.D. (July 2013). Evaluation of laboratory tire tread and sidewall strength plunger test methods. (Report No. DOT-HS-811-797). Washington, DC: National Highway Traffic Safety Administration.

<sup>13</sup> Harris, J.R., Evans, L.R., & MacIsaac Jr., J.D. (April 2013). Laboratory tire bead unseating: Evaluation of new equipment, pressures, and “A” dimension from ASTM F-2663-07as. (Report No. DOT-HS-811-735). Washington, DC: National Highway Traffic Safety Administration.

<sup>14</sup> Aspect ratio refers to a two-digit number that gives the tire’s ratio of height to width.

<sup>15</sup> SAEJ918b\_1966, Passenger Car Tire Performance Requirements and Test Procedures. Available at [www.sae.org](http://www.sae.org).

<sup>16</sup> Harris, J.R. et al, *supra* note 12.



Radial body cords deflect more easily under load, generating less heat. Currently, passenger car tires have reached aspect ratios as low as 20, and rim codes as large as 32.

Changes in tire technology, including tire construction and rim diameter codes ratios, have prompted NHTSA to consider updating the existing requirements and test procedures in FMVSS for modern tires. This ANPRM seeks comment and supporting information about tire-related regulations or provisions within the regulations which may be a candidate for repeal, replacement, suspension or modification.

### **III. Considerations Regarding Federal Motor Vehicle Safety Standards for Tires**

#### **a. Tire Strength Test**

NHTSA introduced the tire strength test, also known as “plunger energy,” as part of FMVSS No. 109 in 1967.<sup>17</sup> The test is used to evaluate the strength of tire materials. The tire is mounted on a test rim and inflated to the specified pressure. The tire is conditioned at room temperature for at least three hours and its pressure readjusted as specified. Then, a steel plunger with a rounded end is used to contact the tire at the tread centerline. The plunger is advanced into the tire, at a rate of 50 mm per minute until a certain force (energy level) is reached or the tire is punctured. The tire strength test specifies a minimum energy that must be attained without the tire breaking. However, if the plunger is stopped by reaching the rim prior to attaining the minimum breaking energy (bottoming out) without breaking the tire, the breaking energy of the tire is calculated using the force at the time the tire bottoms out. If the minimum breaking energy is not reached, the tire fails the test.

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<sup>17</sup> 32 FR 15792 (Nov. 16, 1967).

The performance requirements for tire strength are included in FMVSS No. 109 S4.2.2.4, FMVSS No. 117 S5.1.1(d), FMVSS No. 119 S7.3 and FMVSS No. 139 S6.5.1 and S6.5.2 for LT tires. FMVSS No. 109, New pneumatic tires and certain specialty tires, applies to bias-ply tires used on light vehicles and radial tires for use on passenger cars manufactured before 1975. FMVSS No. 117, Retreaded pneumatic tires, applies to retreaded tires for use on passenger cars manufactured after 1948. FMVSS No. 119, applies to new pneumatic tires of motor vehicles with a GVWR of more than 4,536 kilograms and motorcycles. FMVSS No. 139, New pneumatic radial tires for light vehicles, applies to new radial tires used on light vehicles manufactured after 1975.

In a 2002 notice of proposed rulemaking, NHTSA reported that when conducting the strength test, the plunger often bottoms-out on the rim rather than breaking the reinforced materials in a radial tire. The issue seems to be more prevalent on radial tires with low aspect ratio (low-profile); these tires have less available section height for the plunger to travel to generate the required minimum breaking energy. The agency explained that radial tires have flexible sidewalls that absorb deflections and have high-strength belt packages. At the time, NHTSA proposed replacing the existing strength test with a new test modeled after SAE J1981, Road Hazard Impact for Wheel and Tire Assemblies.<sup>18</sup> However, the agency deferred action on the proposal to revise the test because tests on 4 of the 20 tires subject to the SAE J1981 test resulted in the test device damaging the rim without air loss or damage to the tire.<sup>19</sup> Public comments also questioned whether the proposed test was more stringent and correlated well with field performance.

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<sup>18</sup> 67 FR 10050 (Mar. 5, 2002). See also SAE J1981\_200205, Road Hazard Impact for Wheel and Tire Assemblies (Passenger Car, Light Truck, and Multipurpose Vehicles). Available at [www.sae.org](http://www.sae.org).

<sup>19</sup> Harris, J.R. et al, *supra* note 12.

On July 12, 2011, USTMA submitted a petition for rulemaking requesting NHTSA update existing requirements related to tire strength testing.<sup>20</sup> In its petition, USTMA stated that when testing radial passenger tires with low aspect ratios, the plunger strikes the inside of the wheel well before reaching the minimum force required to pass the existing tire strength test. NHTSA test procedure (TP-109) indicates that: “If any plunger application contacts the test rim before the minimum specified breaking energy is reached, the tire shall be put on a different rim that has more clearance in the test area, and the test repeated.”<sup>21</sup> Tires are tested using any rim that is listed as appropriate for use with that tire according to the year books listed in the tire standards or by notification to NHTSA in accordance with FMVSS No. 139 S4.1 (or other similar provision for other tire standards).

In its petition, USTMA stated that, when using specially fabricated rims with deeper wells used solely for testing, the plunger may still bottom out on the rim; however, the tires would achieve the minimum strength requirement. USTMA included with its petition a table with strength test results for 20 tires tested using standard rims and specially fabricated deep well rims. The table includes data for tire rim codes 17 to 20, width 215 to 275, and aspect ratios 35 to 50. USTMA stated that there is a need to provide a more practical test procedure for low aspect ratio tires. To address its concerns, USTMA suggested that NHTSA adopt a test procedure for testing low-profile tires used in American Society for Testing and Materials (ASTM) F414-09, “Standard Test Method for Energy Absorbed by a Tire When Deformed by Slow-Moving Plunger.” When the plunger bottoms out on the rim without puncturing the tire, ASTM F414-09

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<sup>20</sup> Docket No. NHTSA-2011-0002-0005.

<sup>21</sup> <https://www.nhtsa.gov/document/tp-109-09pdf>

specifies that the required minimum breaking energy is deemed to have been achieved.<sup>22</sup>

USTMA stated that this modification would eliminate the need to use deep-well rims for testing.

In response to the October 2, 2017 notice, USTMA asked that the tire strength test in FMVSS Nos. 109, 119, and 139 be eliminated.<sup>23</sup> Although USTMA acknowledged its petition for rulemaking requesting modification of the tire strength requirement, it stated that the complete elimination of the strength requirement would reduce the regulatory burden on manufacturers without impacting tire safety or performance. USTMA also stated that eliminating the strength requirement would eliminate costs to NHTSA associated with auditing for compliance.

NHTSA examined the laboratory tire tread and sidewall strength test procedures.<sup>24</sup> The study determined what percentage of tires tested to the applicable FMVSS No. 109 or FMVSS No. 119 experienced plunger bottom-out without reaching the minimum specified breaking energy. All 12 tires tested reached the FMVSSs minimum breaking energy level before bottoming (67%) or rupturing (33%).<sup>25</sup> NHTSA also evaluated ways to modify the FMVSS strength test to avoid plunger bottom-out. Nine passenger car tires were evaluated with the then-draft version of the ASTM F414-06. The ASTM F414-06 included a clause that if a bottom-out occurred, the tire could be considered as passing any standard; or the tire could continue to be retested at incremental higher inflation pressures until rupture or bottom-out occurred at the maximum allowable pressure. The six tires tested to ASTM F414-06 also reached the FMVSS minimum breaking energy before either bottoming-out (66.6%) or rupturing (16.6%). When

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<sup>22</sup> Current version, F414-15, also contains this provision.

<sup>23</sup> Docket No. DOT-OST-2017-0069-2842.

<sup>24</sup> Harris, J.R. et al, *supra* note 12.

<sup>25</sup> *Ibid.*

increasingly higher inflation pressure was used, four of those six tires transition from bottoming-out to rupturing. Lastly, six passenger tire models were tested using an experimental sidewall bruise/strength test and generated statistically different levels of bruise width, penetration, and rupture force between 1-ply, 2-ply, and 3-ply sidewall tires. The results suggested that plunger penetration and breaking force were significantly influenced by the number of plies in the tire sidewall.

NHTSA seeks comment on whether a change to or elimination of the tire strength test is appropriate. Based on the test results submitted by USTMA, some low-profile passenger car tires may not comply with the existing strength requirement. NHTSA currently does not have data to indicate a greater safety concern related to low-profile tires that may not meet the minimum strength requirement because they bottom out on the test rim prior to reaching the minimum strength requirement.

NHTSA also requests comment about modifying the tire strength test to accommodate low-profile tires. NHTSA seeks comments on these amendments where the tire strength test could be modified. First, NHTSA could allow testing with specially manufactured deep-well test rims. These rims would be like those used by USTMA in its testing of low-profile tires. The test results submitted by USTMA indicate that all tires they tested would meet the minimum tire strength requirement when tested with specially manufactured deep-well test rims. As the tire strength test procedure is currently written, tires are tested when mounted on rims meeting dimensional specifications set forth by tire manufacturers. These specifications may be submitted directly to NHTSA or those contained in publications of the following tire standards organizations including the Tire and Rim Association (TRA); the European Tyre and Rim Technical Organization (ETRTO); Japan Automobile Tire Manufacturers' Association, Inc.

(JATMA); Tyre & Rim Association of Australia (TRAA); Associacao Latino Americana de Pneus e Aros (Brazil) (ALAPA); and South African Bureau of Standards (SABS). To test with specialized deep well rims, those rims would have to be specified by the tire manufacturer as suitable for use with the tire and either submitted to NHTSA or published by one of those standards organizations. NHTSA would then need to acquire those specialized rims to conduct its testing.

Second, NHTSA requests comment on the need and feasibility to set a different minimum breaking energy requirement to apply to low-profile radial tires. It is possible that a performance value could be derived from knowledge of the impact forces exerted on a tire when driven over a road hazard. However, NHTSA currently has no data to consider. In addition, the issue of what tires would be considered “low profile” and subject to a different minimum breaking energy would have to be addressed.

Third, NHTSA seeks comment on the idea of deeming tires that have bottomed out on the test rim to have met the minimum breaking energy requirement.<sup>26</sup> This is consistent with USTMA’s suggestion that NHTSA use the test procedure for testing low-profile tires used in ASTM F414-09, “Standard Test Method for Energy Absorbed by a Tire When Deformed by Slow-Moving Plunger.” According to ASTM F414-09, when the plunger bottoms out on the rim without puncturing the tire, the required minimum breaking energy is deemed to have been achieved.

Fourth, NHTSA seeks comment on whether a new performance test for tire strength has been developed or whether a new test should be developed. Such a test could address the issue

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<sup>26</sup> Ibid.

raised in the petition related to the testing of low-profile tires. Low-profile tires may be more prone to blowing out upon impact with a road hazard (i.e., pothole, curb) because the low sidewall height causes the sidewall to be pinched between the road hazard and the rim. In addition, low-profile tires may be damaged when impacting a road hazard, resulting in a sidewall “bubble” that compromises the integrity of the tire. However, the existing tire strength requirement addresses the strength along the tread, not the sidewall. The testing of forces on the sidewall of the tire would likely require a dynamic road wheel impact test that is substantially different than the current quasi-static plunger test.<sup>27</sup> NHTSA seeks comment about any safety concerns related to low-profile tires.

Finally, NHTSA seeks comment about the practical and safety implications of removing the tire strength test. The tire strength requirement was adopted at a time when most tires produced for the U.S. market were bias-ply tires. The purpose of the strength requirement is to ensure that there are no weak points along the tread of bias-ply tires. NHTSA seeks comment on the differences between the failure modes of radial-ply tires and bias-ply tires, specifically along the tread area, and whether the testing is necessary for radial tires. Data show nearly all passenger car tires sold in the U.S. today are radial tires.<sup>28</sup> NHTSA also seeks comment about the scope of any elimination of, or amendments to, the tire strength requirement. For example, the performances test could be modified or eliminated for all tires, low-profile tires, or all radial tires. The issue identified by USTMA is not applicable to tires other than low-profile radial passenger car tires. Finally, although few bias-ply tires are sold in the U.S., some bias-ply tires

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<sup>27</sup> Harris, J.R. et al, supra note 12.

<sup>28</sup> Tire Industry Facts: US Tire Shipment Activity Report for Statistical Year 2018. (March 2019). Washington, DC: U.S. Tire Manufacturers Association.

are still used. NHTSA seeks comment on how bias-ply tires are used in the marketplace in the U.S. and whether bias-ply tires will continue to be sold in the U.S.

To summarize, NHTSA seeks comment on the following:

1. Can the tire strength test be repealed, replaced, or modified without negatively affecting safety? If not, what potential safety issues should the agency be focused on and how could such safety issues be mitigated? Explain your perspective, include specifics and data supporting your response.
2. *Repealing*. What are the practical and safety implications of eliminating the tire strength test? Should the test be eliminated for all low-profile tires, all radial tires, or all tires without adversely affecting safety? What are the estimated cost savings of repealing this provisions within the standards?
3. *Modifying*. What specific changes should the agency consider? What are the estimated cost savings of implementing such modifications? In addition, provide comments to the following possible modifications:
  - a. Specify and allow use of deep-well test rims.
  - b. Specify new minimum breaking energy (performance value) to apply to low-profile radial tires. How should NHTSA define the term “low-profile tires”?
  - c. Are there any ambiguities in the term “bottomed out” and, if so, is there any suggestion on how to define the term?
4. *Replacing*. What other test procedures(s) are available or can be developed to replace the strength test (currently used to evaluate the strength of tire materials)? Should a different procedure be used for low-profile tires? Please provide sufficient details about each procedure to permit the agency to analyze and determine whether



the procedure is appropriate and feasible, and whether the procedure is objective and repeatable. What are the estimated costs of implementing such procedures?

5. How many bias-ply tires are sold in the U.S. annually? Will manufacturers continue selling bias-ply tires for use on motor vehicles? Should NHTSA keep the strength test for bias-ply tires?

#### **b. Tire Bead Unseating Resistance Test**

NHTSA introduced the tire bead unseating resistance test as part of FMVSS No. 109 in 1967.<sup>29</sup> This test is used to evaluate the ability of the tire's bead to remain seated on the rim and retain tire inflation pressure when the tire is subjected to high lateral forces.<sup>30</sup> The test consists of mounting the wheel and tire in a fixture and force a bead unseating block against the tire sidewall as specified. The load is applied through the block to the tire's outer sidewall at the distance specified. The force applied to the sidewall is increased until the bead region unseats with resulting air loss, or the specified minimum force value is achieved, whichever occurs first. The performance requirements for bead unseating resistance that applies to passenger car tires are included in FMVSS No.109 S5.2 and FMVSS No. 139 S6.6.

The test forces used in the bead unseating resistance test are based on bias-ply tires. Because radial tires can satisfy the test easily,<sup>31</sup> industry has suggested that NHTSA eliminate this requirement. In 2002, NHTSA proposed to replace the existing test with a new bead unseating test that was based on a procedure used by Toyota.<sup>32</sup> The alternate test procedure uses forces more stringent than those in the current standard. However, NHTSA test data and public

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<sup>29</sup> 32 FR 15792 (Nov. 16, 1967).

<sup>30</sup> Bead means that part of the tire made of steel wires, wrapped or reinforced by ply cords, that is shaped to fit the rim.

<sup>31</sup> Harris, J.R. et al, *supra* note 13.

<sup>32</sup> 67 FR 10050 (Mar. 5, 2002).

comments called into question whether the proposed test would adequately upgrade the existing standard. As a result, in the subsequent final rule, the agency decided to retain the FMVSS No.109 bead unseating test for pneumatic tires, to extend that test to light truck tires, and to conduct additional research to inform a decision.<sup>33</sup>

In an August 12, 2008 letter to NHTSA, USTMA petitioned the agency to update the bead unseating resistance test in FMVSS No. 109. USTMA described two issues with the existing test procedure. First, Figure 1, Bead Unseating Fixture, does not have specifications necessary to test tires with rim diameter code greater than 20. Second, Figure 2 and Figure 2A, the diagrams of the bead unseat block, do not provide suitable geometries for use on low aspect ratio and larger diameter tires. USTMA asked that NHTSA revise the test fixtures (in Figure 1, Figure 2, and Figure 2A) or reference within the regulation, ASTM International F2663-07, paragraph 11.10 and annex A1 Fixtures and Settings.

ASTM F2663, “Standard Test Method for Bead Unseating of Tubeless Tires for Motor Vehicles with GVWR of 4536 kg (10,000 lb.) or Less” was developed by the ASTM International F09 committee.<sup>34</sup> The petitioner mentioned that the industry standard provides a solution to the two concerns identified because it includes a comprehensive set of test blocks that accommodate a wide range of tire sizes for bead unseating resistance testing and a formula to calculate the “A” dimension that is required to complete the test.

In April 2011, USTMA responded to a request for comments about existing DOT regulations.<sup>35</sup> It suggested NHTSA remove the bead unseating test as a mandatory requirement

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<sup>33</sup> 68 FR 38115 (Jun. 26, 2003).

<sup>34</sup> ASTM F2663-07a, Standard Test Method for Bead Unseating of Tubeless Tires for Motor Vehicles with GVWR of 4536 kg (10 000 lb.) or Less, ASTM International, West Conshohocken, PA, 2007, [www.astm.org](http://www.astm.org).

<sup>35</sup> Docket No. DOT-OST-2011-0025-0054.

for new pneumatic radial tires for light vehicles (as described in FMVSS No. 139). It mentioned that the test should be only applicable to tubeless bias-ply tires (in FMVSS No. 109). It expressed concerns that the bead unseat test is outdated, developed for bias-ply tires, and not effective in evaluating radial tires. USTMA cited differences in construction and force distribution between bias and radial tires as the reason it believes a bead unseat test for radial tires is of little value. USTMA suggested that, if NHTSA determines that it is critical to maintain the test, the agency consider test protocols like those found in ASTM International F2663-07a. It mentioned that using ASTM provisions would allow testing tires with rim diameter codes larger than 20 and with lower aspect ratios.

In a report issued in 2013, NHTSA described its work examining the feasibility of the equipment and test procedures in ASTM F2663-07a.<sup>36</sup> The study evaluated block designs, the “A” dimension, and whether inflation pressures were appropriate for testing. A total of 14 passenger vehicle tires and 4 light truck (load ranges D & E) tire models were included in the study. The tires had widths from 155 to 345 mm, aspect ratios from 30 to 80, and rim codes from 12 to 28. Tires were selected to evaluate the limits of the test equipment including the physical dimensions and possible forces required to unseat the tire.

Although NHTSA did not find rim interference problems while testing these radial ply tires using the revised test blocks, the agency seeks comment on the testing of these tires. The study suggests that ASTM F2663-07a methods facilitated the conduct tests for passenger vehicles and light truck tires having a wide range of rim diameter codes and aspect ratios. The test blocks used allowed testing of different tire sizes with low aspect ratios since the block did

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<sup>36</sup> Harris, J.R. et al, supra note 12.

not contact the rim before reaching the test force specified in the requirement. Two test pressures were used to evaluate the bead unseating performance of the tires tested. One test pressure was the inflation pressure, 180 kPa (26 psi), specified for the bead unseating test in FMVSS No. 109. The other pressure used was 240 kPa (35 psi). Results at the test pressures indicated that the force required to unseat the tire's bead from the rim exceeded the minimum test force required in FMVSS No. 109.

In June 2011, USTMA withdrew the petition after testing low-profile tires and indicated that additional study of the suggested test method was needed. It formed a task group to study and develop recommendations for ASTM and NHTSA to consider. The task group found that some sizes could not be tested according to ASTM F2663-07a due to: (1) interference between the block and the fixture or the block and the rim and (2) test block sliding across the tread instead of pushing on the sidewall when testing. The task group developed recommendations for the location of the block and revised which blocks is most appropriate to use on each size.

*Table 1 USTMA comparison of FMVSS No. 109 versus ASTM F2663-15*

Provision	FMVSS No. 109	ASTM F2663-15
Bead Unseated Block Type	Specifies use of block: <ul style="list-style-type: none"> <li>Block 2A: tire diameter codes 10-16 in</li> </ul>	Defines two new blocks (in addition to 2A), that are larger in radius and arc to provide consistent tire contact for diameters up to 30 in code: <ul style="list-style-type: none"> <li>Block 2A: tire diameter codes 10-16 in</li> <li>Block 2B: tire diameter codes 17-24 in</li> <li>Block 2C: tire diameter codes 25-30 in</li> </ul>
Bead Unseated Block Position	Specified a single block location based on rim diameter.	Specifies the point of contact to be 75% of the tire section height.

Provision	FMVSS No. 109	ASTM F2663-15
	Fixed location does not accommodate sufficiently low aspect ratio tires and results in inconsistent point of contact with the block on the tire sidewall.	Location based on tire geometry and treats each tire in a consistent manner.

These recommendations were presented to the ASTM F09 and included in F2663-15, published in 2015 to replace F2663-07a.<sup>37</sup> In August 2016, USTMA petitioned NHTSA to amend FMVSS No. 109 and FMVSS No. 139. It requested the agency to adopt the F2663-15 ASTM Bead Unseating Procedure.

USTMA requested NHTSA eliminate the bead unseating test in FMVSS Nos. 109 and 139 for radial tires, indicating that the test is outdated and does not provide a safety benefit for modern tires.<sup>38</sup> It highlighted four reasons for this request. First, most of the tires in the market today are radial ply tires and the bead unseating test was designed in the 1960s to evaluate bias-ply tires.<sup>39</sup> Second, tires today have much larger diameters (up to 25-inch diameters) and smaller aspect ratios (as small as 20) and the current regulation does not properly address the range of tire sizes in the market today.<sup>40,41</sup> Third, the test cannot be performed as intended for some modern tires, and these tires designed to pass the test may have additional material at no benefit to the consumer—with an unintended consequence of increasing rolling resistance, which contributes to lower vehicle fuel economy. Lastly, it indicated that eliminating the bead unseated

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<sup>37</sup> ASTM F2663-15, Standard Test Method for Bead Unseating of Tubeless Passenger and Light Truck Tires, ASTM International, West Conshohocken, PA, 2015, [www.astm.org](http://www.astm.org)

<sup>38</sup> <https://www.regulations.gov/document?D=DOT-OST-2017-0069-2842>.

<sup>39</sup> Bias-ply tire means a pneumatic tire in which the ply cords that extend to the beads are laid at alternate angles substantially less than 90 degrees to the centerline of the tread. Radial ply tire means a pneumatic tire in which the ply cords which extend to the beads are laid at substantially 90 degrees to the centerline of the tread.

<sup>40</sup> Harris, J.R. et al, supra note 12.

<sup>41</sup> Harris, J.R. et al, supra note 13.

requirements would reduce test and materials cost for tire manufacturers and reduce costs to NHTSA to audit compliance. It mentioned that field performance of tires in countries with no bead unseating performance test requirements show no related performance issues with tires in service. No data was provided with this submission.

NHTSA seeks comment on whether change to or elimination of the tire bead unseating test is appropriate. NHTSA seeks data about low-profile tire testing with regards to the bead unseat test. NHTSA also requests comment about modifying the test to accommodate low-profile tires. NHTSA seeks comment on whether the bead unseating test can be modified using ASTM F2663 to extend the applicability of the test to low profile tires and tires with larger rim diameter codes. NHTSA is also seeking comment on whether a new test to examine tire bead unseating, in addition to the one described in this notice, has been developed or whether a new test can be developed. Such a test could address the issue raised in the petition related to the testing of low-profile tires. Lastly, NHTSA seeks comment about the practical and safety implications of removing the tire bead unseating test and about the scope of any elimination of this requirement.

To summarize, NHTSA seeks comment on the following:

6. Can the bead unseating resistance test be repealed, replaced, or modified without negatively affecting safety? If not, what potential safety issues should the agency be focused on and how could such safety issues be mitigated? Explain your perspective in detail and include any available data in support of your response.
7. *Repealing*. What are the practical and safety implications of eliminating the tire bead unseating resistance test? Could the test be eliminated for all low-profile tires,

all radial tires, all tires without adversely affecting safety? What are the estimated cost savings of repealing this provision within the standards?

8. *Modifying*. What specific changes should the agency consider? What are the estimated cost savings of implementing such modifications? NHTSA seeks specific comment on the following modification:
  - a. Adopt *ASTM F2663*, to apply FMVSS No. 109 procedure to tires with rim diameter code up to 30.<sup>42</sup>
9. *Replacing*. What other test procedures are available or can be developed to replace the bead unseating resistance test? Should a different procedure be used for low-profile tires?

Please provide sufficient details about each procedure to permit the agency to analyze and determine whether the procedure is appropriate and feasible, and whether the procedure is objective and repeatable. What are the estimated costs of implementing such procedures?

### **c. Tire Endurance Test: Failure Due to Chunking**

The endurance test requirements for passenger car tires are included in FMVSS No. 139. The test consists of mounting the tire on a test rim and inflate to the pressure specified for the tire. The assembly is conditioned and the pressure readjusted to the values specified. The assembly is then mounted in a test axle and pressed against the outer face of a smooth wheel. The test is conducted without interruptions at not less than 120 km/h and with the specified loads and test periods. The inflation pressure is not corrected during the test and the test load is

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<sup>42</sup> For example, using the information in Table A1.1 – “Table of Recommended Blocks and Rim Sizes” for ‘A’ dimension data that include larger rim diameter codes and is organized to specify which test block to use for each ‘A’ dimension value and its corresponding rim diameter code from 10 to 30; the formula to calculate an alternate ‘A’ dimension value; and information about dimensional mechanical drawings for each test block for manufacturing.

maintained at the value corresponding to each test period. After running the test for the time specified, the inflation pressure is measured and the tire is visually inspected.

When tested in accordance to the specified test procedure, FMVSS No. 139, S6.3.2(a) specifies that there shall be no visual evidence of tread, sidewall, ply, cord, belt or bead separation; chunking; open splices; cracking or broken cords.<sup>43</sup> The tire pressure after the test shall not be less than 95% of the initial pressure specified in S6.3.1.1.1.

After the 2013 final rule establishing FMVSS No. 139, tire manufacturers requested that NHTSA either redefine tire chunking or not consider tire chunking to be an indication of tire failure during the endurance test. In response to petitions for reconsideration to that final rule, the agency decided against eliminating “chunking” as a test failure condition.<sup>44</sup> The agency concluded that operating a vehicle with chunked tires may create concerns due to wheel imbalance and vehicle vibration. Further, the agency found that allowing tread chunking just short of exposing the reinforcement cords could create risk of tire failure. No data was provided to the agency demonstrating that some fixed percentage of a tire’s tread could break away without detrimental effect on safe vehicle operation. NHTSA noted that international standards also include the presence of tire chunking as a damage condition.

In response to the October 2, 2017 notice, USTMA stated that tread chunking is not a structural degradation of the tire, is not a safety related condition, and therefore should not be considered a damage condition used in regulatory compliance assessments. It views tire chunking as an endurance testing anomaly, indicating that chunking is also a result that lacks consistency due to variability in test conditions. USTMA did not provide data to support its

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<sup>43</sup> These damage conditions are defined in 49 CFR 571.139, S3

<sup>44</sup> 71 FR 877 (Jan. 6, 2006).



assertion, to justify the expected benefits, or to evaluate the potential unintended consequences of removing this requirement. Such data would be helpful to inform potential regulatory action on this subject.

NHTSA seeks comments on the following:

10. NHTSA seeks data and information about the test conditions and performance requirements for the endurance test in FMVSS No. 139.
11. What are the potential cost savings associated with the removal of chunking as a damage condition for the endurance test? Please describe the cost elements and provide supporting data for the estimates.
12. Are there negative safety consequences of removing chunking as a relevant damage condition for the endurance test? Please explain.

**d. Tire Markings for Ply Description, Ply Rating, Tubeless, and Radial**

FMVSS No. 139, S5.5 Tire markings, specifies that a tire must be marked on each sidewall with the following information: (a) the symbol DOT, which constitutes a certification that the tire conforms to the FMVSS; (b) the tire size designation as listed in the documents and publications specified in S4.1.1 of this standard; (c) the maximum permissible inflation pressure, subject to the limitations of S5.5.4 through S5.5.6 of this standard; (d) the maximum load rating and for light truck (LT) tires, the letter designating the tire load range; (e) the generic name of each cord material used in the plies (both sidewall and tread area) of the tire; (f) the actual number of plies in the sidewall, and the actual number of plies in the tread area, if different; (g) the term “tubeless” or “tube type,” as applicable; (h) the word “radial,” if the tire is a radial ply tire; and (i) the alpine symbol, at the manufacturer’s option if the tire meets the definition of a “snow tire.”

USTMA states that several marking regulations for tires are obsolete and should be eliminated. These include ply description and ply rating; ‘tubeless’ marking, and ‘radial’ marking.<sup>45</sup> USTMA indicates that the number of plies no longer indicates a tire’s robustness, customers do not purchase tires based on this information, and there is no safety impact associated with this information or errors to it. USTMA states that errors in marking can lead to a manufacturer filing a petition for inconsequential noncompliance, with associated administrative cost for both NHTSA and tire manufacturer. The agency has made determinations that some labeling errors constitute an inconsequential noncompliance.<sup>46</sup>

NHTSA seeks comments on the following:

13. Are there benefits to all required tire markings, specifically, ply description and ply rating; ‘tubeless’ marking, and ‘radial’ marking and seeks information on the impacts of these marking requirements on motor vehicle safety? If there are potential safety issues associated with the removal of any required markings, how could such safety issues be mitigated? Explain your perspective, include specifics and any data supporting your response.
14. What are the potential cost savings associated with the removal of these markings (ply description and ply rating; ‘tubeless’ marking, and ‘radial’ marking)? Please provide any supporting data for the estimates.

**e. Other Tire-Related Issues**

In response to a January 18, 2018, request for comments on automated driving systems (ADS),<sup>47</sup> Bridgestone America asked that NHTSA consider new and emerging tire technologies

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<sup>45</sup> 49 CFR.571.139, S5.5 (e), (f), (g), and (h).

<sup>46</sup> See, e.g., 76 FR 73007 (Nov. 28, 2011).

<sup>47</sup> 83 FR 2607.

to reduce tire failures on ADS-equipped vehicles.<sup>48</sup> It asked that NHTSA consider how pneumatic tire alternatives can be permitted as compliance options for both ADS-equipped vehicles and conventional vehicles. Examples provided include extended mobility tires; run-flat tires; and non-pneumatic extended use tires. NHTSA seeks comment on how existing regulations can be revised to foster tire innovation without adversely affecting safety.

NHTSA has also received two petitions for rulemaking to update tire regulations and the agency is seeking comments in this ANPRM to support its response. First, in a December 3, 2010 petition,<sup>49</sup> the Tire and Rim Association petitioned NHTSA to recognize 250 kPa and 290 kPa as allowable maximum inflation pressures for passenger car tires in FMVSS No. 139, and to provide a corresponding reference in FMVSS No. 138. TRA stated that these tire sizes have been recognized by the European Tyre and Rim Technical Organization and the Japanese Tyre Manufacturers Association and have been approved and published by ISO. TRA suggested that no adjustments to test criteria would be necessary, meaning that 250 kPa tires would be subject to the test criteria for 240 kPa standard load tires and 290 kPa tires would be subject to the test criteria for 280 kPa extra load tires.<sup>50</sup> Although this would result in 250 kPa and 290 kPa tires being subject to slightly more stringent standards than the 240 kPa and 280 kPa tires, higher tire pressure equates to higher load capacity. NHTSA seeks comment on whether to amend FMVSS No. 139 as requested by TRA (with a corresponding amendment to FMVSS No. 138).

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<sup>48</sup> NHTSA-2018-0009

<sup>49</sup> NHTSA-2019-0011

<sup>50</sup>The December 3, 2010 petition states, that based on the actions of the ISO Working Group on passenger car tire loads, TRA, the European Tyre and Rim Technical Organization, and the Japanese Automobile Tyre Manufacturers Association have adopted new guidelines for load ratings for future size passenger car tires. These harmonize guidelines have also been approved by ISO and are published in ISO Standard 4000-1. The reference inflation pressure for standard load tires is 250 kPa and 290 kPa for extra load tires. This program has been reviewed and accepted by most of the vehicle manufacturers in United States, Europe and Japan. These proposed additions do not include any changes to the test inflation pressure criteria.

In a July 14, 2014 petition,<sup>51</sup> TRA requested that NHTSA revise the metric conversion for T-type spare tires. Currently, T-type spare tires have a maximum inflation pressure of 420 kPa (60 psi). Currently, the TRA year book recognizes both 415 kPa and 420 kPa as options for T-type spare tires with the notation that NHTSA requires T-type spare tires to be marked with a maximum inflation pressure of 420 kPa. ETRTO and JATMA only specify a maximum inflation pressure of 420 kPa. No change was suggested to the 60 psi maximum inflation pressure. NHTSA requests comment on whether this change suggested by TRA is necessary and would not reduce safety.

15. NHTSA seeks comments on the following: Please provide information about emerging tire technologies and trends that may impact motor vehicle safety.

16. Do existing regulations impede tire innovation(s)? Please explain.

17. What regulatory actions are needed to remove impediment(s) to tire innovation without adversely affecting safety?

#### **IV. Public Participation**

*a. How can I influence NHTSA's thinking on this rulemaking?*

Your comments will help us improve this rulemaking. NHTSA invites you to provide different views on options NHTSA discusses, new approaches the agency has not considered, new data, descriptions of how this ANPRM may affect you, or other relevant information.

NHTSA welcomes public review of on all aspects of this ANPRM, but request comments on specific issues throughout this document. NHTSA will consider the comments and information received in developing its eventual proposal for how to proceed with updating

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<sup>51</sup> Docket No. NHTSA-2014-0009-0003.

requirements for motor vehicles. Your comments will be most effective if you follow the suggestions below:

- Explain your views and reasoning as clearly as possible.
- Provide solid technical and cost data to support your views.
- If you estimate potential costs, explain how you arrived at the estimate.
- Tell NHTSA which parts of the ANPRM you support, as well as those with which you disagree.
- Provide specific examples to illustrate your concerns.
- Offer specific alternatives.
- Refer your comments to specific sections of the ANPRM, such as the units or page numbers of the preamble.

*b. How do I prepare and submit comments?*

Your comments must be written and in English. To ensure that your comments are filed correctly in the Docket, please include the docket number of this document located at the beginning of this notice in your comments.

Your primary comments should not be more than 15 pages long.<sup>52</sup> You may attach additional documents to your primary comments, such as supporting data or research. There is no limit on the length of the attachments.

Please submit one copy of your comments (two if submitting by mail or hand delivery), including the attachments, to the docket via one of the methods identified under the

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<sup>52</sup> 49 CFR 553.21.

**ADDRESSES** section at the beginning of this document. If you are submitting comments electronically as a PDF (Adobe) file, we ask that the documents submitted be scanned using an Optical Character Recognition (OCR) process, thus allowing NHTSA to search and copy certain portions of your submission.

Please note that pursuant to the Data Quality Act, for substantive data to be relied upon and used by the agency, it must meet the information quality standards set forth in the OMB and DOT Data Quality Act guidelines. Accordingly, NHTSA encourages you to consult the guidelines in preparing your comments. DOT's guidelines may be accessed at [www.transportation.gov/regulations/dot-information-dissemination-quality-guidelines](http://www.transportation.gov/regulations/dot-information-dissemination-quality-guidelines).

*Privacy Act:* Anyone can search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act statement published in the Federal Register on April 11, 2000 (65 FR19477-78) or you may visit <http://www.transportation.gov/privacy>.

*c. How can I be sure that my comments were received?*

If you submit comments by hard copy and wish Docket Management to notify you upon its receipt of your comments, enclose a self-addressed, stamped postcard in the envelope containing your comments. Upon receiving your comments, Docket Management will return the postcard by mail. If you submit comments electronically, your comments should appear automatically in the docket number at the beginning of this notice on <http://www.regulations.gov>. If they do not appear within two weeks of posting, we suggest that you call the Docket

Management Facility at 202-366-9826.

*d. How do I submit confidential business information?*

If you wish to submit any information under a claim of confidentiality, you should submit three copies of your complete submission, including the information that you claim to be confidential business information, to the Chief Counsel, NHTSA, U.S. Department of Transportation, 1200 New Jersey Avenue SE, Washington, DC 20590. In addition, you should submit a copy from which you have deleted the claimed confidential business information to Docket Management, either in hard copy at the address given above under **ADDRESSES**, or electronically through regulations.gov. When you send a comment containing information claimed to be confidential business information, you should include a cover letter setting forth the information specified in 49 CFR Part 512.

*e. Will the agency consider late comments?*

NHTSA will consider all comments received to the docket before the close of business on the comment closing date indicated above under the **DATES** section. NHTSA will consider these additional comments to the extent possible, but we caution that we may not be able to fully address those comments prior to the agency's proposal.

*f. How can I read the comments submitted by other people?*

You may read the comments received by Docket Management in hard copy at the address given above under the **ADDRESSES** section. The hours of the Docket Management office are indicated above in the same location. You may also read the comments on the internet by doing the following:

- (1) Go to <http://www.regulations.gov>.

(2) Regulations.gov provides two basic methods of searching to retrieve docket and docket materials that are available in the system:

- a. The search box on the home page which conducts a simple full-text search of the Web site, into which you can type the docket number of this notice and
- b. “Advanced Search,” which is linked on the regulations.gov home page, and which displays various indexed fields such as the docket name, docket identification number, phase of the action, initiating office, date of issuance, document title, document identification number, type of document, Federal Register reference, CFR citation, etc. Each data field in the advanced search function may be searched independently or in combination with other fields, as desired. Each search yields a simultaneous display of all available information found in regulations.gov that is relevant to the requested subject or topic.

(3) Once you locate the docket at <http://www.regulations.gov>, you can download the comments you wish to read. We note that since comments are often imaged documents rather than word processing documents (e.g., PDF rather than Microsoft Word), some comments may not be word-searchable.

Please note that, even after the comment closing date, NHTSA will continue to file relevant information in the Docket as it becomes available. Further, some people may submit late comments. Accordingly, NHTSA recommends that you periodically check the Docket for new material.



## V. Rulemaking Notices and Analyses

### a. *Executive Orders 12866, 13563, and DOT Regulatory Policies and Procedures*

NHTSA has considered the impact of this ANPRM under Executive Order 12866, Executive Order 13563, and DOT Order 2100.6, "Policies and Procedures for Rulemakings." This rulemaking has been determined to be not "significant" under the Department of Transportation's regulatory policies and procedures and the policies of the Office of Management and Budget. Because NHTSA does not have sufficient information to formulate a proposal on all of the issues discussed in this notice, NHTSA cannot estimate the costs and benefits of this ANPRM. However, NHTSA requests comments on the costs and benefits of any of the regulatory actions suggested in this ANPRM or by any commenter.

### b. *Executive Order 13771 (Reducing Regulation and Controlling Regulatory Costs)*

This action is not subject to the requirements of E.O. 13771 (82 Fed. Reg. 9339, February 3, 2017) because it is an advance notice of proposed rulemaking.

### c. *Regulatory Flexibility Act*

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, no analysis is required for an ANPRM. However, vehicle manufacturers and equipment manufacturers are encouraged to comment if they identify any aspects of the potential rulemaking that may apply to them.

### d. *Executive Order 13132 (Federalism)*

As an ANPRM, NHTSA does not believe that this document raises sufficient federalism implications to warrant the preparation of a federalism assessment. NHTSA believes that federalism issues would be more appropriately considered if and when the agency proposes changes to its tire regulations.

*e. Executive Order 12988 (Civil Justice Reform)*

With respect to the review of the promulgation of a new regulation, section 3(b) of Executive Order 12988, “Civil Justice Reform” (61 Fed. Reg. 4729, February 7, 1996) requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect; (2) clearly specifies the effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct, while promoting simplification and burden reduction; (4) clearly specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issues by the Attorney General. This document is consistent with that requirement.

*f. Paperwork Reduction Act*

Under the Paperwork Reduction Act of 1995 (PRA), a person is not required to respond to a collection of information by a Federal agency unless the collection displays a valid OMB control number. There are no information collection requirements associated with this ANPRM. Any information collection requirements and the associated burdens will be discussed in detail once a proposal has been issued.

*g. National Technology Transfer and Advancement Act*

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) requires NHTSA to evaluate and use existing voluntary consensus standards in its regulatory activities unless doing so would be inconsistent with applicable law (e.g., the statutory provisions regarding NHTSA's vehicle safety authority) or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus

standards bodies, such as the Society of Automotive Engineers. The NTTAA directs us to provide Congress (through OMB) with explanations when we decide not to use available and applicable voluntary consensus standards. As NHTSA has not yet developed specific regulatory requirements, the NTTAA does not apply for purposes of this ANPRM.

*h. Unfunded Mandates Reform Act*

The Unfunded Mandates Reform Act of 1995 requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure of State, local, or tribal governments, in the aggregate, or by the private sector, of more than \$100 million annually (adjusted for inflation with base year of 1995). NHTSA has determined that this ANPRM would not result in expenditures by State, local, or tribal governments, in the aggregate, or by the private sector, in excess of \$100 million annually.

*i. National Environmental Policy Act*

NHTSA has analyzed this rulemaking action for the purposes of the National Environmental Policy Act. The agency has preliminarily determined that implementation of this rulemaking action would not have any significant impact on the quality of the human environment.

*j. Plain Language*

The Plain Language Writing Act of 2010 (Pub. L. 111-274) requires that federal agencies write documents in a clear, concise, and well-organized manner. While the Act does not cover regulations, Executive Orders 12866 and 13563 require each agency to write all notices in plain language that is simple and easy to understand. Application of the principles of plain language includes consideration of the following questions:

- Have we organized the material to suit the public's needs?
- Are the requirements in the notice clearly stated?
- Does the notice contain technical language or jargon that is not clear?
- Would a different format (grouping and order of sections, use of headings, paragraphing) make the rule easier to understand?
- Would more (but shorter) sections be better?
- Could we improve clarity by adding tables, lists, or diagrams?

If you have any responses to these questions, please include them in your comments on this proposal.

*k. Regulatory Identifier Number (RIN)*

The Department of Transportation assigns a regulation identifier number (RIN) to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. You may use the RIN contained in the heading at the beginning of this document to find this action in the Unified Agenda.

Issued on \_\_\_\_\_ in Washington, DC, under authority delegated in 49 CFR part 1.95 and 501.5.

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James Clayton Owens  
Acting Administrator

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