



NHTSA-97-1748-018

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Regulatory and Trade  
Counsellors

94-30-NO2-017

January 12, 1995

The Honorable Ricardo Martinez, M.D.  
Administrator  
National Highway Traffic Safety Administration  
400 Seventh Street, S.W.  
Washington, D.C. 20590

ORIGINAL

45 pgs

RE: Petition to:

- (1) Proceed with Proposed Rulemaking on Certain Contemplated Amendments to the Current Uniform Tire Quality Grading Standards to Improve Their Practical Usefulness to Consumers, After Conducting Research to Correct Identified Current Deficiencies; and
- (2) Defer any New, Non-safety-related UTQGS Rulemaking Until After the Current UTQGS Have Been Improved and After Appropriate Safety and Economic Analyses and Consultations Have Been Conducted and the Results Made Available for Public Review.

Dear Administrator Martinez:

This Petition is submitted by Multinational Business Services, Inc. ("MBS") pursuant to 49 U.S.C. §§ 30162(a) and 30123(e), and 49 CFR Part 552, and the Administrative Procedure Act (5 U.S.C. § 553(e)).

I. Legal Basis For This Petition.

Section 30162(a) of Title 49, United States Code, says, in relevant part:

QA 16996 001

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- (a) Any interested person may file a petition with the Secretary of Transportation requesting the Secretary to begin a proceeding-
  - (1) to prescribe a motor vehicle safety standard under this chapter[.]

Section 30111 of Title 49 requires the Secretary to prescribe safety standards for motor vehicles and motor vehicle equipment by issuing regulations.

Section 203 of the National Traffic and Motor Vehicle Safety Act, now codified at Section 30123(e) of Title 49, United States Code (formerly at 15 U.S.C. § 1423), says, in relevant part:

**(e) Uniform quality grading system, nomenclature, and marketing practices.** The Secretary shall prescribe through standards a uniform quality grading system for motor vehicle tires to help consumers make an informed choice when purchasing tires.

NHTSA has implemented that provision by promulgating regulations that are known **as** the Uniform Tire Quality Grading Standards ("**UTQGS**"; 49 CFR § 575.104). The scope and **purpose** of the UTQGS regulations are set forth here:

(a) Scope. This section requires motor vehicle and tire manufacturers and tire brand name owners to provide information indicating the relative performance of passenger car tires in the areas of treadwear, traction, and temperature resistance.

(b) Purpose. The purpose of this section is to aid the consumer in making an informed choice in the purchase of passenger car tires. [49 CFR § 575.104(a) and (b); emphasis supplied.]

The petition process of § 30162 provides an appropriate mechanism for formally requesting NHTSA to:

- (1) proceed with proposed rulemaking on certain contemplated amendments to the current Uniform Tire Quality Grading Standards to improve their practical usefulness to consumers, after conducting research to correct identified current deficiencies; and

- (2) defer any rulemaking that would add new, non-safety-related criteria to the current UTQGS until after:
- (a) the current UTQGS have been improved; and
  - (b) certain safety and economic analyses and consultations have been conducted and the results made available for public review.

If NHTSA determines for whatever reason that 49 U.S.C. § 30162 does not apply to this request for amendments to improve the UTQGS regulations, and to defer any new non-safety-related rulemaking, then MBS requests NHTSA to consider this petition pursuant to the Administrative Procedure Act, particularly 5 U.S.C. § 553(e), which says:

- (e) Each agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule.

## II. Facts Establishing that Amendment of the UTQGS Regulations to Improve Their Practical Usefulness to Consumers Is Necessary and Appropriate.

### A. Introduction.

MBS is submitting this Petition because there is clear evidence, notably from NHTSA itself, that numerous unresolved technical problems in the current **UTQGS** significantly limit the practical usefulness of the information that is supposed to be generated under the UTQGS for the benefit of tire consumers.

MBS agrees that the time has come for NHTSA to thoroughly review and correct the technical foundations of the UTQGS regulatory regime to assure that the information provided to consumers by the UTQGS will in fact significantly help real-world consumers to make “an informed choice” when purchasing passenger car tires, particularly in the “aftermarket”.

Given the clear need to improve the current UTQGS, and given NHTSA’s clear primary purpose to promote motor vehicle safety, as established in the National Traffic and Motor Vehicle Safety Act, NHTSA should devote its finite staff and budgetary resources to the priority of fixing and improving the current UTQGS system.

It is premature and inappropriate to undertake any proposed rulemaking to add to the UTQGS any new criterion (such as labeling for low rolling resistance or fuel economy) that would encourage consumers to make tire-purchasing decisions

based on considerations that have no relationship to tire safety, and that may actually mislead the consumers regarding the economic aspects of the decisions.<sup>1,2</sup>

Several sources, including NHTSA itself, have conducted surveys of real-world consumers to determine to what extent consumers use the UTQGS when planning to purchase tires.<sup>3</sup>

The survey conducted by NHTSA<sup>4</sup> indicates that some 83 % of prospective tire purchasers rated the UTQGS treadwear rating as an “Important” or “Very Important” item of information that they wanted when considering a purchase decision. Similarly, 79 % of prospective tire purchasers rated the UTQGS traction rating as an “Important” or “Very Important” item of information. (See Exhibit 2.)

It stands to reason that NHTSA should place a high priority on assuring: that the information conveyed through the UTOGS is in fact accurate, reliable, and relevant.

Importantly, NHTSA’s own candid assessment of several problematic aspects of the current UTQGS grading system’ provides substantial evidence that the current

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<sup>1</sup> MBS acknowledges that the existing UTQGS treadwear rating has both economics-related and safety-related aspects. It is important that NHTSA not further compound the problem of encouraging the public to buy tires based on economic considerations, to the diminishment of safety-related considerations.

<sup>2</sup> NBS has learned that NHTSA’s contemplated UTQGS **proposed** rulemaking may seek to add a grading system for fuel economy characteristics of tires in addition to or in lieu of the temperature and rolling resistance grading information. MBS requests and urges that NHTSA defer indefinitely any rulemaking relating to any low rolling resistance or fuel economy grading system for tires, which would increase the prominence of non-safety factors as considerations in the consumer’s tire-buying decision-making process, for the reasons explained below.

<sup>3</sup> See Exhibit 1, the comments submitted by the National Tire Dealers & Retreaders Association, Inc. in reply to NHTSA’s April 25, 1994 “Request for comments” in the Federal Register, with regard to surveys of consumers or tire dealers conducted by Booz Allen & Hamilton and by NTDR. (NHTSA’s “Request for comments” is discussed in detail below at p. 5.)

<sup>4</sup> See, “An Evaluation Of The Uniform Tire Quality Grading Standards And Other Tire Labeling Requirements”, DOT HS 807 805, January 1992, at Table 3-11.

<sup>5</sup> NHTSA’s assessment of the UTQGS’ problems, as published in the Federal Register on April 25, 1994, is discussed in detail below beginning at p. 5.

UTQGS are fundamentally flawed and do not serve their intended purpose of assisting the consumer to make an informed choice in the purchase of passenger car tires.

Also, both the incoming Congress and the Clinton Administration are reviewing various regulatory programs, and even entire Cabinet departments, to identify opportunities to streamline the Government's operations and to alleviate regulatory burdens that are not commensurate with the benefits produced. Improving the accuracy, reliability and relevance of the current UTQGS thus is consistent with the theme of making Government work better for the people.

Accordingly, MBS petitions NHTSA to:

- \* proceed with a proposed rulemaking to amend the current Uniform Tire Quality Grading Standards, to improve their practical usefulness to tire purchasers, after conducting research to correct identified current deficiencies, and
- \* defer any proposed rulemaking that involves adding any new non-safety criterion to the UTQGS, until after: (a) the current UTQGS have been improved; and (b) the safety and economic analyses and consultations described in this Petition have been completed and the results have been made available for public review.

B. NHTSA's Candid Acknowledgement that, in Numerous Respects, the Current UTQGS System Is Not Providing Meaningful, Comparative Information to Consumers.

On April 25, 1994, NHTSA published in the Federal Register (59 FR 19686; attached to this Petition as Exhibit 3) a "Request for comments" concerning possible rulemaking to amend the UTQGS in several ways, including:

- \* amending the treadwear grading system in various respects;
- \* amending the traction grading system; and
- \* amending the UTQGS to add rolling resistance as a fourth grading category or as a substitute for the temperature resistance information.

That Federal Register notice includes a brief explanation of why the UTQGS address the characteristics of treadwear, traction, and temperature resistance, and also explains some of the inherent complexity in the UTQGS, notably, that the several

characteristics interact with each other so that improvement of one of them could detract from the rating of another.

The treadwear, traction, and temperature resistance characteristics were chosen by NHTSA for rating under the UTQGS after careful study, testing, and consideration of public comments. Those characteristics were selected because they provide the best balance of tire properties for meaningful evaluation by consumers. Those characteristics interact with each other so that improvement of one of them could detract from the rating of another. For example, treadwear life can be increased by varying the construction compounds to produce a "harder" tire. To do so, however, would have a negative effect on traction performance. Treadwear life also could be increased by adding more rubber to the tread. Increased tread depth, however, would increase rolling resistance because of the additional friction. That would cause the tire to run hotter, thus detracting from its temperature resistance, and increase the possibility of tire failure. [59 FR 19686.1

NHTSA also candidly stated:

Various problems have been encountered in implementing the UTQGS to make them as technically accurate, yet as meaningful and understandable to consumers as possible. Many of those problems have been resolved by changes in test procedures as the program has evolved. Certain problems remain, however, as discussed below. [59 FR 19686.1

It is clear, indeed, that significant problems exist- with respect to each one of the UTQGS characteristics that are required by the regulations to be graded-- which significantly limit the usefulness of the information to the average consumer.

(1) Treadwear ratings.

NHTSA said, with regard to the current system for grading treadwear:

Treadwear has been one of the graded tire characteristics from the inception of the quality grading program (see 33 FR 7261, May 16, 1968). NHTSA concluded, from consideration of public comments early in the program, that consumers were most interested in

evaluations of tire tread life, traction, and high speed performance. Since that time, NHTSA has found that treadwear is understood by the average tire buyer, making it one of the more meaningful of the UTQGS ratings. [59 FR 19686; emphasis added.]

The average consumer may understand the concept of treadwear, but NHTSA admits in the Federal Register notice that the current UTQGS simply do not provide the consumer with usefully realistic estimates of treadwear.

Even taking into consideration, as NHTSA notes, “that tire treadwear grades are not expected to be indicative of a tire’s actual expected mileage”, and instead the “grades are intended as indicators of relative, not absolute, performance”, the problems NHTSA has identified with the current treadwear grading system raise serious questions as to whether the current system provides any actually useful information to the consumer. [59 FR 19686.1

NHTSA has noticed significant changes in treadwear ratings since the UTQGS became fully effective in 1980. Early in the UTQGS program, the treadwear grading criteria in §575.104(d)(2) produced consistent results. As the years progressed, however, treadwear ratings have drifted steadily upward in both manufacturers’ and NHTSA’s testing results to the point that many of the ratings appear to be questionable. [59 FR 19686.1

NHTSA recounts results of testing on one brand of tire that produced a UTQGS treadwear rating that, when compared to other rated brands, “appears significantly disproportionate to the differences in the likely actual mileage of those tires”. [59 FR 19687.1

[Although improvements in tires have occurred, the] agency does not believe, however, that tires have improved to the point suggested by the test results for brand A, which suggest that, on the San Angelo course, the tire would last over 240,000 miles. This situation suggests either that the characteristics of the course itself are changing or that other factors as yet unidentified are responsible, or both. [59 FR 19687; emphasis supplied.]

NHTSA offers several possible explanations for this ever-rising trend in treadwear ratings, centering on circumstances involving the “course monitoring tires” (CMT) and the “base course wear rate” (BCWR) that may introduce variability in the CMT and the BCWR.

NHTSA also indicates that the basic BCWR and CMT rating-correlation methodology in the treadwear grading system is faulty:

In addition to the aging/environmental degradation of CMTs affecting the BCWR, the agency believes that the method of calculating: the BCWR may be in error. As stated above, the purpose of using a CMT is to provide a common baseline for all candidate tires. However, it appears that the practice of relating all new CMTs to all prior CMTs by the procedure described above has somehow distorted the treadwear grading procedure to the point that treadwear grades of candidate tires are now highly suspect. [59 FR 19687; emphasis supplied.]

The fact that NHTSA itself considers the treadwear grades to be “highly suspect” could well lead some interested person to conclude that the present UTQGS regulatory regime is:

- (1) not helping the consumer to make “an informed choice”; and
- (2) what lawyers call “arbitrary and capricious”.

After discussing some possible remedies, NHTSA concludes:

Nevertheless, improvement in the treadwear grading procedure appears to be needed in order to provide treadwear grades that are realistic, consistent, and meaningful to consumers. [59 FR 19687; emphasis supplied.]

MBS agrees.

MBS believes that the appropriate action for NHTSA to take in this situation is to improve the tire treadwear rating system by:

- \* conducting a thorough re-evaluation of the technical issues that NHTSA itself has identified in the treadwear rating system; and
- \* proceeding with issuing a proposed rule, for public comment, in a rulemaking to modify the treadwear rating system as appropriate.

The goal must be to amend the current treadwear grading system to assure that the UTQGSs will in fact provide tire treadwear information that is actually “realistic, consistent, and meaningful to consumers”.



(2) Traction ratings.

NHTSA said, with regard to the current system for grading traction:

Another area of increasing concern in traction testing is the possible use of a peak tire traction category for testing rather than the sliding traction presently measured.

Contemporary vehicles are increasingly utilizing anti-lock brakes [this system is known as "ABS"] where sliding traction is not the primary traction force in panic braking. Those vehicles rely on peak tire traction, that is, maximum braking action is obtained when the tire is still rolling. Although peak tire traction may be desirable information for consumers with vehicles equipped with anti-lock brakes, high peak traction may compromise other tire characteristics such as degradation of traction when cornering. If peak traction performance of tires differs substantially from sliding traction, an alternative traction grading procedure may be necessary. NHTSA needs additional data on the measurement of peak traction coefficients and on the correlation of peak traction coefficients with stopping distance, which may be available from commenters. The agency is soliciting any such data. [59 FR 19688.1

If NHTSA did not receive satisfactory data in response to the questions posed in the "Request for comments" with regard to traction issues', then NHTSA should immediately conduct appropriate research to obtain the technical information that the agency needs in order to improve the usefulness of the UTQGS traction grading system.

Also, it seems clear that, if a consumer who has a vehicle equipped with an anti-lock braking system relies on the UTQGS traction grading system when he or she purchases replacement tires for the vehicle, the current sliding traction rating tells the person little or nothing; about other relevant traction characteristics. NHTSA

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<sup>6</sup> NHTSA's questions related to matters such as: (a) to what extent the peak traction performance of tires may differ from sliding traction; (b) whether high peak traction may compromise other tire characteristics; (c) whether peak tire traction correlates with stopping distance on ABS-equipped vehicles; and (d) whether the peak tire traction coefficient can be measured reliably. (59 FR 19688, 19690.)

should improve the UTQGS by adding information such as ratings of peak traction performance (which NHTSA indicates is the more appropriate criterion for measuring the “maximum braking action” of a tire on a vehicle with anti-lock brakes).

Worse, if there is not a scientifically-established, consistent correlation between the sliding traction and the peak tire traction that is constant across brands and models of tires, the consumer having a car with anti-lock brakes who relies on the current tire traction grading system (which measures only the sliding traction) may be misled into believing that he or she is buying the best category of best-stopping tires or best-road-handling tires for that car, when in fact they are not.

Because the number of cars on the road with anti-lock braking systems is increasing every day, it is clear that there is a growing number of consumers who are not well served-- and who may be actually misled- by the current tire traction grading system. At a minimum, the **UTQGS** should include a second traction rating addressing tire characteristics that are more relevant to **ABS-equipped** vehicles.

MBS believes that the appropriate action for NHTSA to take in this situation is to improve the tire traction UTQGS by:

- \* conducting scientific research to obtain a much better technical understanding of the correlations among the different tire traction characteristics;
  - \* developing a tire traction grading system that provides more meaningful information to the ever-growing number of consumers who own vehicles equipped with anti-lock braking systems; and
  - \* incorporating that improved tire traction grading system into the UTQGS by proceeding with appropriate proposed rulemaking.
- (3) Temperature ratings, and alternative ratings indicating low rolling resistance or fuel economy.

NHTSA said, with regard to the current system for grading temperature resistance:

The temperature resistance grade is intended to indicate the extent to which heat is generated and/or dissipated by a given tire, and the capability of the tire to withstand the resulting temperature without failure.

[. . .]

NHTSA considers temperature resistance a valid safety concern and is unaware of any problems with the ratings. While important from a motor vehicle safety standpoint, however, the significance of temperature resistance is not so widely understood by consumers as the treadwear and traction ratings.

In light of this fact, and recent interest in a rolling resistance grade, the agency is considering whether a rolling resistance grade could provide equivalent safety information to the temperature resistance grade and thereby negate the need for temperature resistance grading.

[. . .]

[. . .]

NHTSA believes that there is a strong relationship between rolling resistance and fuel consumption. [. . .] The agency would welcome data that could be used to demonstrate how reductions in tire rolling resistance values translate into improvements in “real world” fuel economy. [59 FR 19689.1

(a) Concerns Regarding Measurement and Practical Utility of Low Rolling Resistance Ratings.

Low rolling resistance (“LRR”) of an automobile tire depends on a significant number of independent variables, including tire composition, tire inflation, weather conditions, etc. Even if such variables could be controlled for in standardized testing procedures, it is questionable whether the information that would result from the tests would have substantial practical value in helping the average consumer to assess how particular tires would compare in real-world driving on the consumer’s car.

Until NHTSA can assure the public that the technical aspects of conducting LRR testing can be addressed in a thoroughly satisfactory manner, it seems a clear waste of agency resources to initiate a proposed rulemaking on LRR. MBS requests that NHTSA reevaluate its technical basis for even beginning a LRR rulemaking.

(b) Concerns Regarding Safety Implications.

As the agency responsible for implementing the National Traffic and Motor Vehicle Safety Act, NHTSA has a responsibility to assure that actions by NHTSA do not induce people to take actions or make decisions that will have the effect of

exacerbating any motor vehicle safety problem. In the recent press release<sup>7</sup> announcing NHTSA's newly-issued strategic plan, ***People Saving People, On The Road To A Healthier Future***, you said that:

NHTSA will lead the nation in creating the highest level of road safety in the world. [Press Release, at p. 1.]

The press release also says that:

NHTSA's mission, as stated in the [strategic] plan, is to save lives, prevent injuries, and reduce traffic-related health care and other economic costs. [Press Release, at p. 2.]

It may be that many consumers would be more interested in having a UTQGS criterion that somehow addresses fuel economy, instead of the temperature criterion in the current UTQGS. It is not clear, however, why NHTSA would delete an admittedly valid safety-related standard from the UTQGS simply because the value of the standard has not been communicated well to the general public.

As NHTSA says,

The treadwear, traction, and temperature resistance characteristics were chosen by NHTSA for rating under the UTQGS after careful study, testing, and consideration of public comments. Those characteristics were selected because they provide the best balance of tire properties for meaningful evaluation by consumers. Those characteristics interact with each other so that improvement of one of them could detract from the rating of another. For example, treadwear life can be increased by varying the construction compounds to produce a "harder" tire. To do so, however, would have a negative effect on traction performance. [59 FR 19686; emphasis supplied.]

By introducing a rating for fuel economy, NHTSA will be very significantly altering the "best balance" that NHTSA says is provided by the current ratings for the three characteristics of treadwear, traction, and temperature. The "balance" will be altered because, in the consumer's mind, both the treadwear rating and the fuel

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<sup>7</sup> U.S. Department of Transportation News: "NHTSA Releases Comprehensive Strategic Operations Plan", NHTSA 78-94, December **22**, 1994. Hereafter referred to as "Press Release". (See, Exhibit 4.)

economy rating together would very likely overshadow the traction rating (or any other rating that NHTSA might include that relates to safety rather than monetary considerations). Accordingly, NHTSA should be very wary of any amendment to the UTQGS that would increase the prominence of non-safety factors as considerations in a consumer's tire-buying decision-making process.

For example, the technology for producing a low rolling resistance tire (which NHTSA indicates is the criterion that corresponds to fuel economy) may result simultaneously in a tire that is "harder", to use NHTSA's terminology. One consequence of building the tire "harder" in order to achieve low-rolling-resistance can be, as NHTSA acknowledges, that it "would have a negative effect on traction performance".

A consumer who buys tires based on their contribution to fuel economy may learn an expensive lesson if the tire's less-capable traction, performance, and handling characteristics cause the consumer an accident that could have been avoided if the consumer had selected different (albeit perhaps less fuel-efficient) tires.

Moreover, as is discussed below, consumers may respond to any real or perceived financial savings from using LRR tires, by devoting some of those savings to additional fuel purchases and by driving additional miles. On a nation-wide scale, the additional miles driven would result in some number of additional traffic fatalities and injuries. NHTSA needs to consult its statistical data bases and quantify and consider this safety implication of the contemplated **LRR rulemaking** before proceeding.

The clear intent of the low rolling resistance or fuel economy UTQGS rating is not to promote motor vehicle safety but rather to change buyers' behavior in specific ways, that is, to encourage people to buy tires that are presumed to have fuel economy characteristics, for the purpose of improving fuel economy and thereby reducing motor vehicle engine emissions of carbon dioxide.

Unfortunately, the LRR or fuel economy ratings likely would have the effect-- if they are successful in changing peoples' tire-buying behavior-- of persuading people to buy tires based exclusively or primarily on fuel economy considerations, to the exclusion or submergence of safety-related factors such as: traction characteristics (which can suffer if the tire has been designed to be "harder" in order to achieve lower rolling resistance); and incremental/statistical risks of fatalities or injuries that could arise simply due to the incremental additional miles that consumers may drive if they think their effective fuel cost is reduced.

Accordingly, in determining whether to address fuel economy in the UTQGS, NHTSA has a moral and legal obligation to perform a safety analysis of the potential effects of adding the fuel economy criterion, which has no affirmative relationship to

motor vehicle safety. (See 49 U.S.C. § 30101.) NHTSA must carefully consider whether the inclusion of a fuel economy rating will cause the consumer to make decisions about purchasing tires solely on the basis of cost, to the exclusion of important safety considerations. That safety analysis should be made available to the public for evaluation and comment before NHTSA formally proposes any UTQGS criterion related to fuel economy.

Also, if NHTSA decides to include consumer information about LRR or fuel economy in the UTQGS, there must also be a corresponding, specific effort to enhance the availability and understandability of safety-related consumer information, lest the consumer be misled into making tire-purchasing decisions without a full understanding of the safety-versus-economy trade-offs and possible consequences.

(c) Concerns Regarding Potential for Confusing, Misleading, Contradictory and/or Incomplete “Economic” Information.

NHTSA needs to conduct additional analysis of the implications for consumer decision-making that arise from the contemplated addition of information regarding LRR or fuel economy ratings.

A threshold question is whether there will be net fuel savings for the average consumer. NHTSA appears to assume that “a 4 percent overall improvement in fuel economy”, and commensurate savings in emissions of carbon dioxide, would result from aftermarket purchases of lower rolling resistance tires. (59 FR at p. 19689.) The source of this estimated 4% savings is not clear.

Moreover, has NHTSA independently validated the calculations and data? What is the baseline from which the “4 percent overall improvement” is projected? Has this figure been confirmed in real-world road tests? What variables (e.g., load, price range, optimized design characteristics such as tread life) were controlled-for and not controlled? What is clear, however, is that NHTSA should make any analyses underlying that 4% estimate (including any analysis by NHTSA, or other sources, of the information that has been submitted to NHTSA alleging the 4% savings) available for public review and comment, before NHTSA proceeds with any LRR rulemaking.

Another threshold question is whether any fuel economy savings (assuming there are measurable net fuel economy savings to the individual consumer) will offset any additional, premium price that the consumer pays initially for a low-rolling-resistance tire.

Even assuming that the consumer actually obtains fuel economy benefits and can in fact measure any such savings, what is to keep the consumer from applying part or all of that savings (i.e., the money saved) to the purchase of additional fuel for additional driving (e.g., the proverbial “Sunday afternoon drive”), thus resulting in a net increase in miles driven and thereby compromising the stated environmental benefits of using low rolling resistance tires? The number of miles driven by consumers clearly is affected by the economic principle of elasticity of demand (i.e., reducing the cost of fuel per mile traveled will result in more miles driven). How can NHTSA be confident that the average consumer will place specific, high importance on savings of a small percentage of CO<sub>2</sub> emissions?

Also, there may well be a complex interplay between the contemplated LRR or fuel economy grading information and the information already provided in the UTQGS regarding treadwear ratings. For example, low rolling resistance characteristics might be achieved by a manufacturer by using less total rubber in the tire (i.e., the tire tread would have less mass), which could result in relatively lower treadwear life expectancy, as compared to other tires available in the comparable price range.

The Government’s addition, and perhaps promotion, of a low rolling resistance or fuel economy criterion easily could mislead consumers to purchase tires based principally on the perceived benefits of savings at the gas pump. The economic trade-off between fuel economy and tire treadwear life involves consideration of initial costs of the LRR tire, relative costs of other available longer-lived tires and other comparable non-LRR tires, the cost of gasoline, total miles driven, the expense of more frequent replacement of lower-mileage-life tires, pay-back periods, etc. Most consumers are simply unprepared to correctly evaluate multiple economic variables that necessitate economic trade-offs.

In short, there is a very real risk that the Government’s inclusion of a low rolling resistance or fuel economy criterion will result in misleading many of the nation’s tire-buying consumers, most of whom will tend to be middle and lower economic class individuals (i.e., people who have to worry about replacing tires rather than simply buying or leasing a new car before the original-equipment tires wear out).

There are other considerations that extend beyond the impact on individuals’ pocketbooks. As noted above, current information indicates that some low rolling resistance tires may tend to be lower-lived and thus likely will have to be replaced more frequently. Without going into calculations, it is intuitively clear that additional petroleum will be required to produce those additional tires, and there will be additional problems regarding the environmentally-appropriate disposal of the additional tires.

Clearly, the economic benefits of adding a low rolling resistance or fuel economy criterion are fairly debatable. MBS urges NHTSA to conduct a thorough analysis of the economic benefits and costs, with clear identification of economic trade-offs inherent in the consumer decision-making process, and to make that analysis available for public review, before NHTSA initiates any proposed rulemaking on LRR or fuel economy criteria.

MBS also requests that NHTSA consult with the Federal Trade Commission in regard to the potential for misleading or unduly influencing consumers- with respect to both the several safety aspects and the alleged consumer economic benefits-- before NHTSA proceeds with any rulemaking to include a LRR or fuel economy criterion in the UTQGS. At a minimum, any contemplated, proposed LRR or fuel economy regulation (with supporting rationale) should be submitted to the FTC Office of General Counsel and Bureau of Consumer Protection- before being proposed in the Federal Register-- for a review to determine whether the contemplated regulation complies with general legal principles governing the provision of accurate, complete, and non-misleading information to consumers.

### C. Conclusions.

#### (1) General.

NHTSA seeks, with good reason, to improve the UTQGS system, which was intended to significantly help consumers make informed choices about tire purchases. The facts- including NHTSA's own candid assessment(s) of the current UTQGS-- demonstrate that attaining that improvement necessarily requires NHTSA to address numerous technical matters and to thoroughly reassess the UTOGS' practical usefulness to the consumer.

NHTSA's contemplated changes to the UTQGS to add the low-rolling-resistance or fuel-economy-related criteria raise serious factual, legal and policy concerns, about both the public safety and economic aspects of such a change.

There clearly are significant fact-related problems with both the current UTQGS and with the new element (whether low rolling resistance or fuel economy) that NHTSA is contemplating. Unfortunately, these problems implicate:

- \* the reliability and credibility, and even the relevance, of the UTQGS (treadwear and traction ratings);
- \* the understandability and thus the practical utility of the UTQGS (traction and temperature ratings);



- \* the public safety if the UTQGS is changed to substantially diminish the role of safety considerations in the UTQGS (the contemplated LRR or fuel economy ratings); and
- \* the potential for misleading consumers about the economic consequences of basing tire purchase decisions on limited or incomplete or conflicting information (the contemplated LRR or fuel economy ratings).

(2) Fixing and Improving the Current UTQGS.

As first priority, the UTQGSs must be reevaluated and improved to provide better, relevant, technically sound factual information, and without diminishing the safety considerations. It is imperative that NHTSA remedy the reliability problems of the treadwear grading system, and remedy current safety-related issues (such as the relevance of the current tire traction information for owners of ABS-equipped cars).

(3) The Contemplated Criteria for LRR or Fuel Economy.

In the Federal Register notice's summation of issues upon which NHTSA sought comments, data, and other input from the public, NHTSA clearly expresses the agency's interest in improving the UTQGS. Among other things, NHTSA said:

[. . .] NHTSA's major concerns are whether to propose changes to deal with treadwear grades that are becoming extremely high and therefore of diminishing credibility; whether to propose raising the thresholds for traction grades; and whether it is more appropriate under the National Traffic and Motor Vehicle Safety Act for the agency to propose adding rolling resistance to the UTQGS as a fourth grading category or substituting it for temperature resistance. [59 FR 19689-19690; emphasis supplied.]

MBS submits that it would be "more appropriate under the National Traffic and Motor Vehicle Safety Act" to first fix the problems in the current UTQGSs before devoting any NHTSA staff or budget resources to adding additional non-safety-related ratings (e.g., low rolling resistance or fuel economy) to the UTQGS system.

Moreover, NHTSA needs to develop a sound scientific and analytic foundation for the administrative record of any future rulemaking to expand the UTQGS. MBS requests that NHTSA, before proceeding with the contemplated low rolling resistance or fuel economy proposed rulemaking (or any other additional non-safety-related UTQGS regulations), conduct-- and make available to the public-- a thorough

analysis of all safety-related and consumer-economics issues that certainly will arise in the rulemaking (including any issues raised by the FTC in the requested consultation).

For NHTSA to proceed with its contemplated LRR or fuel economy characteristics rulemaking, before carefully analyzing the threshold issues of whether the fuel economy information (1) would actively encourage consumers to base their tire-buying decisions on an abundance of cost-related information (even assuming the information is complete and accurate) and a relative lack of meaningful safety-related information (this would be one purpose of consulting with the FTC in advance of any rulemaking on LRR or fuel economy), and (2) actually would help and not mislead consumers making economic-based decisions, would be both a disservice to the public and a clear waste of NHTSA's limited resources.

The contemplated LRR or fuel economy criterion evidently arises mainly from The Climate Change Action Plan. As noted above, even the environmental aspects of the contemplated LRR or fuel economy rating appear less than **well-thought-through**. MBS submits that NHTSA needs to conduct additional economic and other analyses to verify the alleged environmental benefits of a LRR or fuel economy rating before NHTSA proceeds to encumber the UTQGS with additional information of dubious reliability and/or usefulness.

(4) Suggested Approach to Improving the UTOGS.

NHTSA needs to conduct a comprehensive assessment of:

- (1) what information truly would be of use to and in fact used by the average consumer to make "an informed choice" regarding both safety and monetary considerations; and

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<sup>8</sup> MBS has reviewed the description of Transportation "Action #22, Develop Fuel Economy Labels for Tires" in the Global Climate Change Action Plan (at Action Descriptions: Page 24), which says, among other things, that the tire fuel economy labeling program "[. . .] is expected to displace 30 - 40 million barrels of oil per day in 2000 and 50 - 70 million barrels of oil per day in 2010". (See, Exhibit 5.)

According to the U.S. Department of Energy, the current U.S. consumption of oil (as of November 1994) is approximately 17.2 million barrels per day. Accordingly, the expectation that the tire fuel economy labeling program is going to displace 30 - 40 million barrels of oil per day by the year 2000 is highly unrealistic. The estimates of economic or environmental benefits that are based on those estimated reductions in U.S. oil consumption need to be recalculated.

- (2) what technical parameters must be measured, and what technique(s) produces accurate measurement of each such parameter, to produce comparative information that is both (a) accurate from a technical standpoint, and (b) meaningful and understandable to consumers.

To do those assessments properly, NHTSA should immediately undertake both technical research, to improve the technical aspects of developing appropriate grading systems, and market- or user-oriented research, to determine what information truly would be useful to, and actually used by, the average consumer, and how best to communicate that information to the individual consumers. It also is important that the technical research and the user-oriented research be coordinated and synthesized, so that the result is a consumer information-communication system that is technically accurate, logical, understandable, and useful to the consumer.

In short, NHTSA needs to address the basic, threshold issue of whether the UTQGSs are in fact meeting the statutory goals of promoting motor vehicle safety and assisting the consumer to make “an informed choice”, with sufficient, accurate, relevant information.

### III. Brief Description of the Orders (Regulations) that the Secretary Should Issue, and other Actions that the Secretary Should Take.

MBS is petitioning NHTSA to take several rulemaking-related actions that follow logically from:

- (1) the existing evidence that many consumers want to be able to look to, and rely upon, UTQGS information when making decisions to purchase tires; and
- (2) NHTSA’s recognition that the current UTQGS system is significantly deficient in many different ways.

Given the reality that the issues that NHTSA has identified as problematic in the current UTQGS are numerous and technical in nature, MBS requests NHTSA to:

- \* begin proposed rulemaking to improve the current Uniform Tire Quality Grading Standards, after conducting research to correct identified current deficiencies, for the reasons explained above, and
- \* defer any other proposed non-safety-related rulemaking involving the UTQGSs, until after the safety and economic analyses and the FTC consultation described in this Petition have been completed and the results have been made available for public review.

Both the law and sound public policy favor the establishment of a sound scientific basis for federal regulations. As the Clinton Administration seeks to streamline and improve the Government and reduce the sheer volume of less-than-useful regulations, the UTQGS should be a leading candidate for improvement, which can only flow from the completion of the technical research and the safety and economic analyses and consultations described above.

The results of those studies and consultation, if properly conducted, would substantially assist the agency, the tire and automobile industries, and the consuming public in fashioning amendments to the current UTQGS that would improve the technical accuracy while providing the consumer with meaningful and understandable information that pertains to both safety and economy.<sup>9</sup>

#### IV. NHTSA's Consideration of This Petition.

MBS believes that the evidence included in this Petition clearly establishes that "... there is a reasonable possibility that the order[s] requested in the petition" will be issued at the conclusion of the appropriate proceeding". (See 49 C.F.R. § 552.8; emphasis supplied.)

Therefore, this Petition satisfies the test set forth in NHTSA's own regulations for granting a petition to begin proceedings for the issuance of motor vehicle equipment safety standards, or, in this instance, the improvement of existing regulations and the deferral of any new non-safety-related rulemaking pending the completion of technical research and safety-related and economic analyses and consultation.

If you have any concern whether this Petition satisfies that test, then I request, pursuant to 49 U.S.C. § 30162(c) and 49 C.F.R. § 552.7, and the Administrative Procedure Act, NHTSA to hold one or more public hearings or public meetings

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<sup>9</sup> MBS respectfully suggests that NHTSA consider carefully how best to proceed if the technical research, studies, etc., indicate that the laudable goal of significantly improving the practical utility of the current UTQGS for consumers is not achievable. Clearly, NHTSA must not proceed to add new UTQGS criteria that may well confuse or mislead the consumer, but instead must be prepared to consider suspending the current UTQGS until such time as likely-successful improvements to the current UTQGS are developed and are ready for scrutiny in further rulemaking.

<sup>10</sup> I.e., a decision to proceed with a proposed rulemaking to amend the current UTQGS to improve their practical usefulness to the consumer, and a decision to defer any new, non-safety-related UTQGS rulemaking.

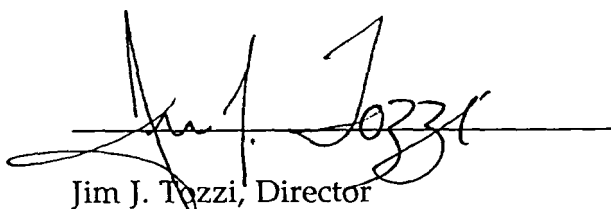
regarding the need to improve the operation of the current UTQGSs and to defer future non-safety-related rulemaking pending completion of needed research and analyses, as requested in this Petition.

If NHTSA decides to hold a public hearing/meeting on this Petition, then MBS suggests that, in order to provide NHTSA with the most informed views of the public, the hearing(s)/meeting(s) should be held only after such research and analyses as are feasible to conduct on an expedited basis can be concluded. Of course, the public must be given a reasonable opportunity to review and evaluate such research and analyses prior to the hearing.

I request that a copy of this Petition be entered into the NHTSA rulemaking docket that is identified in the April 25, 1994 Federal Register notice as "Docket No. 94-30, Notice 01".

Finally, I request, pursuant to 49 U.S.C. § 30168(e), the Freedom of Information Act (5 U.S.C. § 552), and other applicable law, that NHTSA provide MBS with a copy of all information that NHTSA obtains in the course of its investigation of whether to grant this Petition.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim J. Tozzi", is written over a horizontal line. The signature is stylized and cursive.

Jim J. Tozzi, Director  
Multinational Business Services, Inc.  
11 Dupont Circle, Suite 700  
Washington, D.C. 20036

Attachments: Exhibits 1 through 5.

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# NTDRA

# FILE

NATIONAL TIRE DEALERS & RETREADERS ASSOCIATION, INC.

Suite 400, 1250 "I" Street, NW, Washington, DC 20005-3989 (202)789-2300 (800)876-8372 FAX (202)682-3999

Office of the Executive Vice President

94-30-NO1-028

June 24, 1994

Docket Section  
National Highway Traffic Safety Administration  
400 Seventh Street, S.W., Room 5109  
Washington, D.C. 20590

JUN 24 1994 3:03

RECEIVED  
NHTSA DOCKET

RE: Docket No. 94-30, Notice 01 --  
*Consumer Information Regulations*  
*Uniform Tire Quality Grading Standards*

NTDRA is a national non-profit trade association representing roughly 4,500 independent tire dealers and retreaders in all 50 states. Independent tire dealers account for approximately 52 percent of replacement tire sales in the United States. NTDRA's members operate some 13,000 retail outlets nationwide. NTDRA appreciates the opportunity to respond to NHTSA's request for comments (*Federal Register*, April 25, 1994) regarding possible changes in the Uniform Tire Quality Grading Standards (UTQGS). The present UTQGS system specifies testing procedures by which tire and motor vehicle manufacturers and tire brand name owners grade their products for treadwear, traction and temperature.

NHTSA is requesting public comments on how the Agency might revise the UTQGS to make tire quality ratings more meaningful to the tire-buying public, and thereby assist them in making more informed tire purchases. NHTSA acknowledges that certain modifications may be needed to make the UTQGS more "accurate and meaningful." The Agency cites a number of problem areas that have arisen with the UTQGS system (e.g., steadily rising treadwear ratings have become suspect; the method of calculating the Base Course Wear Rate (BCWR) and, perhaps, difficulties associated with the San Angelo test track, itself, have come into question; and, the possible need for new tire traction grading procedures is now recognized). Beyond these concerns, NHTSA is considering the merits of either (1) adding a 'rolling resistance' grade to the UTQGS as a substitute for the current temperature grade, or (2) adding it as a fourth grade to the UTQGS in addition to the temperature grade. NHTSA states: "The addition of rolling resistance grading

023

to UTQGS has the potential to influence consumers to buy low rolling resistance aftermarket tires; this in turn will increase vehicle fuel economy while reducing vehicle emissions."

NTDRA opposes the inclusion of rolling resistance as a new or substitute grade under the UTQGS. At issue are factors of cost, the usefulness and credibility of the UTQGS, and the implementation of a changed system.

The inclusion in the UTQGS of a rolling resistance grade would place an unnecessary financial burden on tire manufacturers who would have to test and re-stamp all of their passenger tire molds. Some portion of these added production costs would be passed along to consumers with no assurance of a commensurate benefit. Smaller tire manufacturers would likely be impacted more severely in the marketplace than larger manufacturers, who probably could more easily absorb added production costs. If minimum LRR standards are adopted, as some have advocated, manufacturers who have used their research and development dollars for technological advancements other than lowering rolling resistance might be placed at a distinct disadvantage in the marketplace.

NTDRA's independent retailers and wholesalers could feel a direct economic impact as a result of increased manufacturing costs related to changes in the UTQGS. Dealer/wholesaler inventory costs would assuredly increase.

The motoring public, for its part, would encounter more expensive replacement tire lines. The increased cost of low rolling resistance tires could only be recovered over the tires' life in the form of fuel savings. Michelin Tire North America (in its July 1, 1993, report to the White House Conference on Global Climate Change) estimates that LRR tires would cost approximately \$22 more per tire than regular passenger tires. Over a 45,000 tread life LRR tires would yield an estimated \$68 fuel savings -- resulting in a net cost to motorist of about \$20 on a set of four tires. These figures could be conservative.

As NHTSA, itself, acknowledges, what would be the fuel savings if fewer than four tires are replaced on a vehicle? This question aside, why would a consumer wish to buy more expensive LRR replacement tires for an older model automobile? The added cost of such tires likely could NOT be recouped through fuel savings since the vehicle owner would likely not keep the car for the tread life of the tires. Most owners of older vehicles would have no valid economic basis for choosing LRR replacement tires.

Michelin Tire asserts (in its above-cited report to the White House) that vehicle manufacturers customarily specify low rolling resistance tires as original equipment (to meet CAFE fuel economy requirements). Vehicle owners replace these tires with aftermarket tires, according to Michelin, that typically exhibit a



22% higher rolling resistance (i.e., a 4% loss in fuel economy). However, LRR replacement tires are available for consumers who prefer LRR tires.

NTDRA has serious misgivings about substituting a rolling resistance grade for the current temperature grade. Temperature resistance is a safety-related factor. The temperature grade assist some tire dealers in choosing tire lines for their customers who live in arid areas of our country, where high speed driving in hot weather is the rule. The significance of temperature resistance is not as well understood by consumers as the traction and treadwear ratings. Since rolling resistance is measured in a similar way to that used for determining temperature resistance, it may be feasible, without loss of safety benefits, to subsume temperature ratings within a new rolling resistance grade. However, one cannot be sure that traction would not be compromised. Moreover, the temperature grade is the only rating under the UTQGS that has proven to be relatively problem-free.

One of the basic problems confronting NHTSA is that tire consumers apparently have limited understanding of, and make limited use of, the UTQGS. Thus, one must question whether further changes in the UTQGS can be productive. What, for example, will be done to alay future public confusion over the UTQGS when previously graded tires still in inventory are marketed alongside the new LRR tires?

NTDRA has always questioned the value of the UTQGS. Testifying before Congress in 1966 on the *National Traffic and Motor Vehicle Safety Act*, NTDRA raised no objections to the call for a feasibility study on a uniform quality grading system for tires. The Association stated at that time that "we believe the study will prove a grading system to be completely unworkable and unrealistic." Unreliable test procedures for determining treadwear ratings, a false impression among consumers that it is the 'government' rather than the manufacturers that grade tires, and a false impression that the treadwear grade tells consumers what mileage to expect, have done nothing to undermine NTDRA's early concerns about the usefulness of the UTQGS. No wonder most consumers have been misled, confused and are, generally, indifferent toward the UTQGS system.

Over the years, NTDRA has frequently heard from its members about the UTQGS' marginal benefit relative-to-cost. A recent survey by NTDRA of its dealers members yielded the following illustrative comments: (a) "I feel that we have a very small segment of buyers that use the grading system. By the time they finally make a purchase, they are more confused than when they started." (b) "The current grading system has confused tire purchasers and misled many. I don't believe they need more of the same." (c) "The customer understands tread, mileage and price. These factors are the customer's upmost concern when purchasing a set of tires." and (d) "As always, most customers purchase the tire that is recommended to them by the salesperson, after taking into consideration the customer's driving habits,

etc. The buying public has little or no interest in additional information like rolling resistance." In response to the question of whether a rolling resistance grade should be added to the UTQGS, 90 percent of the survey respondees said "NO"; and, 80 percent opposed utilizing a rolling resistance grade in place of the current temperature grade -- which, of all the current grades, retains some value.

This finding, that most consumers today have little or no interest in the UTQGS rating mirrors DOT/NHTSA's own January, 1992, report (DOT HS 807 805): *An Evaluation Of the Uniform Tire Quality Grading Standards And Other Tire Labeling Requirements*. It noted: "Less than 50 percent of the surveyed recent consumers rated information about the UTQGS items important in influencing their last tire purchase decision (treadwear rating - 29 percent, traction rating - 27 percent, and temperature resistance rating - 12 percent)." The underlying reason for the UTQGS' irrelevance may be attributed to the higher mileage, quality and performance of today's tires as compared to tires produces just a few years ago! Today's consumer is primarily interested in finding the "best price" among a host of high quality competitive products -- and, very likely, in finding a tire dealer upon whose expertise the consumer can rely. (According to a consumer study by Booz Allen & Hamilton, "tire salespeople, unlike car salespeople, are trusted to recommend the appropriate product to meet the buyer's needs.") Consumer reliance upon a local tire dealer's expertise is highlighted by NHTSA's own statement that "Actual tread life depends on conditions of use such as driving habits, road characteristics, climate and service practices." The trade-offs that are implicit between the various UTQGS grades demand more than the buyer's scanning of uniform tire codes -- that is why consumers ask tire dealers to suggest the best tire for their own individual driving circumstances.

NTDRA recognizes the government's interest in increasing fuel economy of motor vehicles for environmental and economic reasons. And, certainly, tires can play a role in this effort. However, additional changes in the UTQGS affecting replacement tires may not be the most cost-effective method of reaching this goal. The development of lower rolling resistance (LRR) tires is evolving within the industry. Their availability is already common in the original equipment tire market. As tire manufacturers proceed to market third generation LRR tires, this process will continue. But the federal government should not advance new regulations governing LRR tires at this time. Rather, additional data should be evaluated from the further testing of these tires. Tire manufacturers have indicated that lower rolling resistance may reduce a tire's traction capabilities, especially in wet weather. This raises legitimate concerns in terms of safety. And, although LRR tires are being technologically improved by various changes in tread compounding, it should be emphasized that assorted poor maintenance practices by the motoring public (e.g., improper tire inflation, mixed matching, overloading, tires in need of alignment) may negate the expected fuel economy dividend of LRR tires.

If the federal government is looking for a role to play in promoting improved vehicle fuel economy, perhaps, it should encourage greater public awareness of the relationship between good tire maintenance practices and fuel savings. As revealed in a 1990 study by Firestone Tire, "... half of all cars on the road today have tires that are underinflated by an average of four pounds per square inch (psi) of air.... [therefore, each year] . . . the average driver uses about eight gallons of gasoline more than necessary." The U.S. Department of Energy, in its September, 1993, publication (EPA420-K-83-001), *Your Car (or Truck) and the Environment*, concludes that "Americans could save 100,000 barrels of oil a day [four million gallons of gasoline] by properly inflating their tires . . . . If your tires are underinflated by just 4 pounds, it will cost you a half-mile-per-gallon." As one NTDRA survey respondent put it: Inflate, inflate, inflate and inflate the tire to recommended psi. The tire will take care of (a) rolling resistance, (b) heat build-up, (c) increase fuel economy, and (d) increase treadwear."

With reference to the goal of the White House "Climate Change Action Plan," NHTSA states: "If consumers buy tires that have a lower rolling resistance, they will achieve higher fuel economy and lower greenhouse gas emissions..." But, once again, the goal of clean air attainment may be better achieved by other actions such as decreasing harmful emissions through the use of blended fuels and the development of alternative fuels. Also, according to EPA, sophisticated emission control systems on new motor vehicles will likely play a significant role in this regard.

In summary, it is NTDRA's position that the UTQGS has not played a meaningful role in consumers' selection of tires. Changes presently being discussed in the UTQGS system are unlikely to alter this fact. Today, any tire buyer can find a tire to meet his needs, almost exactly, at an affordable price. As the earlier noted Booz Allen study concludes: "Tire information will be helpful to some, but almost never responds to an explicit need...Consumers have developed satisfactory methods of shopping for tires, and are rarely disappointed by their choice." -- moreover -- "There is currently only a very limited need for further information about tires...we [ i.e., the Booz Allen survey interviewers] were struck by the relative lack of horror stories about finding a good, reliable tire. Although there is a sense that some tires are, in fact, better than others, there seem to be very few tires which do not meet expectations."

This association also concludes that other policy steps might prove more successful in promoting fuel economy and advance cleaner air objectives in a more cost-effective manner. By allowing the natural economic forces within the tire market to prevail, we will witness continued development of LRR tires -- without consumers being burdened with the passed-on costs from tire manufacturers who have been required by the government to test and remold their full line of tire products. If there is consumer demand for LRR replacement tires, traditional

market forces **can** be expected to ensure supply along with consumer information through competitive consumer advertising.

Sincerely,

A handwritten signature in black ink, reading "Philip P. Friedlander, Jr." in a cursive style.

Philip P. Friedlander, Jr.  
Executive Vice President

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U.S. Department  
of Transportation  
**National Highway  
Traffic Safety  
Administration**

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DOT HS 807 805  
Final Report

January 1992

# **An Evaluation Of The Uniform Tire Quality Grading Standards And Other Tire Labeling Requirements**

030

TABLE 3-I 1

PERCENT' OF RECENT AND POTENTIAL CONSUMERS WHO RATED  
 UTQGS, SELECTED FMVSS, AND OTHER INFORMATION  
 AS BEING IMPORTANT OR VERY IMPORTANT IN TIRE PURCHASE DECISIONS

<u>INFORMATION</u>	<u>CONSUMERS</u>	
	RECENT (n = 369) <u>PERCENT</u>	POTENTIAL (n = 140)
<u>UTQGS</u>		
Treadwear Rating	29	83
Traction Rating	27	79
Temperature Resistance Rating	12	54
<u>FMVSS</u>		
Tire Body Material	31	75
Radial	57	83
Belt Material	35	67
Number of Plies	34	65
Manufacturer/Brand	42	55
Speed Restriction	12	57
Maximum Load Rating	25	55
Load Range Rating	18	52
Tube-Type or Tubeless	46	65
DOT Certification	6	54
Regroovable	4	24
<u>OTHER</u>		
All-Weather	49	50
Puncture Resistance	16	84
Self-Sealing	9	78
Warranty	61	88
Price	70	86
Maintenance Information	43	72

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 ' Percents are rounded to the nearest whole number.

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Dated: April 19, 1994.  
 Margaret H. McFarland,  
 Deputy Secretary.  
 [FR Doc. 94-9848 Filed 4-2-94; 8:45 am]  
 BILLING CODE 8010-01-M

## DEPARTMENT OF TRANSPORTATION

### National Highway Traffic Safety Administration

#### 49 CFR Part 575

(Docket No. 94-30, Notice 01)

RIN 2127-AF17

#### Consumer Information Regulations Uniform Tire Quality Grading Standards

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).  
 ACTION: Request for comments.

**SUMMARY:** The Uniform Tire Quality Grading Standards (UTQGS) require tire manufacturers to grade their tires for **treadwear**, traction, and temperature resistance to assist consumers in making informed decisions when purchasing passenger car tires. NHTSA is soliciting comments on ways in which the agency might propose amending the UTQGS to make the quality ratings more meaningful to the tire-buying public.

In addition, the Administration's Climate Change Action Plan calls for DOT, through NHTSA, to establish tire labels measuring the tires' impact on fuel economy due to rolling resistance and an information program to encourage consumers to purchase aftermarket tires with lower rolling resistance. Accordingly, NHTSA requests comments on whether to propose amending the UTQGS by adding a rolling resistance grade, either while retaining the temperature resistance grade or by substituting the rolling resistance for the temperature resistance grade.

DATES: Comments must be received by June 24, 1994.

ADDRESSES: Comments should refer to the docket and notice number set forth above and be submitted, preferably in 10 copies, to: Docket Section, National Highway Traffic Safety Administration, 400 Seventh Street SW., room 5109, Washington, DC 20590. Docket room hours are from 9:30 a.m. to 4 p.m., Monday through Friday.

FOR FURTHER INFORMATION CONTACT: Mr. Nelson Gordy, Office of Market Incentives, Office of the Associate Administrator for Rulemaking, National Highway Traffic Safety Administration,

400 Seventh Street SW., room 5320, Washington, DC 20590, (202) 366-4797.

**SUPPLEMENTARY INFORMATION:** Section 203 of the National Traffic and Motor Vehicle Safety Act of 1966, 15 U.S.C. 1381, et seq. (Safety Act), requires the Secretary of Transportation to prescribe a uniform quality grading system for motor vehicle tires. The purpose of the system is to assist consumers in making informed decisions when purchasing tires. NHTSA implemented that statutory mandate by issuing the UTQGS (49 CFR 575.104). Those standards, applicable to passenger car tires, require motor vehicle and tire manufacturers and tire brand name owners to provide consumers with information about their tires' relative performance regarding **treadwear**, traction, and temperature resistance. Excluded from the standards are deep tread, winter-type snow tires, space-saver or temporary use spare tires, tires with nominal rim diameters of 10 to 12 inches, and limited production tires.

The **treadwear**, traction, and temperature resistance characteristics were chosen by NHTSA for rating under the UTQGS after careful study, testing, and consideration of public comments. Those characteristics were selected because they provide the best balance of tire properties for meaningful evaluation by consumers. Those characteristics interact with each other so that improvement of one of them could detract from the rating of another. For example, treadwear life can be increased by varying the construction compounds to produce a "harder" tire. To do so, however, would have a negative effect on traction performance. Treadwear life could also be increased by adding more rubber to the tread. Increased tread depth, however, would increase rolling resistance because of the additional friction. That would cause the tire to run hotter, thus detracting from its temperature resistance, and increase the possibility of tire failure.

Various problems have been encountered in implementing the UTQGS to make them as technically accurate, yet as meaningful and understandable to consumers as possible. Many of those problems have been resolved by changes in test procedures as the program has evolved. Certain problems remain, however, as discussed below.

#### I. Treadwear

Treadwear has been one of the graded tire characteristics from the inception of the quality grading program (see 33 FR 7261, May 16, 1968). NHTSA concluded, from consideration of public comments early in the program, that

consumers were most interested in evaluations of tire tread life, traction, and high speed performance. Since that time, NHTSA has found that treadwear is understood by the average tire buyer, making it one of the more meaningful of the UTQGS ratings.

In its compliance testing, NHTSA measures treadwear by running the tires being tested, called candidate tires, over a 400-mile course of public roads near San Angelo, Texas. Candidate tires are first "broken-in" by running them over two circuits of the test course. Treadwear measurements are taken after that initial break-in and after each 800-mile segment thereafter or, optionally, only at the beginning and at the end of the complete 6,400 mile test. The test vehicles' wheels are aligned to manufacturers' specifications, correct tire pressure is maintained throughout the test, and tire loading is maintained at 85 percent of the tires' maximum load ratings. The test cars travel in convoys, at posted speed limits, with regular changes of drivers and with changes in the positions of the cars and tires.

Upon completion of the 6,400-mile test, the adjusted wear rate for a candidate tire is extrapolated to the point of wearout, which is  $\frac{1}{16}$  inch of tread remaining, and the treadwear grade established. A grade of 100 represents a tire capable of achieving approximately 30,000 miles to the wearout point, as measured on the San Angelo course. A tire graded at 150 should achieve approximately 50 percent more mileage than the one graded at 100, assuming both are run on the same course and under the same conditions. It should be noted, however, that tire treadwear grades are not intended to be indicative of a tire's actual expected mileage. The tire quality grades are intended as indicators of relative, not absolute, performance. The actual mileage a tire achieves will depend on many factors, such as geographic location, individual driving habits, maintenance of proper tire pressure, load, type of road surfaces, climatic conditions, and road configurations.

NHTSA has noted significant changes in treadwear ratings since the UTQGS became fully effective in 1980. Early in the UTQGS program, the treadwear grading criteria specified in § 575.104(d)(2) produced consistent results. As the years progressed, however, treadwear ratings have drifted steadily upward in both manufacturers' and NHTSA's testing results to the point that many of the ratings appear to be questionable. For example, one brand of tires (brand A) recently tested on the San Angelo course resulted in a test

grade of 832 which, when rounded off to the next lower 20-point increment as required by 49 CFR 575.104(e)(2)(ix)(F), would be labeled with a treadwear grade of 820. That figure suggests a degree of relative superiority in treadwear of brand A tires over lower tested brands that appears significantly disproportionate to the differences in the likely actual mileage of those tires. NHTSA understands that tires are of higher quality, perform better and last longer than tires produced even a few years ago. Such improvements result from industry developments such as improvements in rubber compounds, cord materials, tire designs, and tread configurations. The agency does not believe, however, that tires have improved to the point suggested by the test results for brand A, which suggests that, on the San Angelo course, the tire would last over 240,000 miles. This situation suggests either that the characteristics of the course itself are changing or that other factors as yet unidentified are responsible, or both.

#### Course Monitoring Tires

As noted above, the wear rates of tires can change on a daily basis because of

such conditions as road surface, temperature, humidity, and precipitation. To compensate for those changes in conditions when conducting agency compliance testing, candidate tires are tested concurrently with course monitoring tires (CMT). Before 1991, CMTs were built to strict NHTSA specifications. Since that time, NHTSA has required that CMTs be built to the specifications of the American Society for Testing Materials (ASTM) standard E1136. CMTs are specially designed to have narrow limits of variability and, in fact, are assumed to be invariant among tires of a given batch, or lot.

CMTs are procured by NHTSA in lots of 500–1500. Whenever a new lot is procured, a new base course wear rate (BCWR) is established for that lot. This is accomplished by treating the new CMT as a candidate tire and determining its adjusted wear rate in the same manner prescribed in § 575.104 for candidate tires. The new CMT is tested in a convoy along with the old CMTs. A course severity adjustment factor (CSAF) is determined by dividing the BCWR for the old CMTs by the wear rate of the old CMTs in the test. The wear

rate of the new CMT in the convoy is then multiplied by the CSAF to obtain the adjusted wear rate of the new CMT which then becomes the BCWR for the new CMTs.

Once the BCWR for a new lot of CMTs is established, those new CMTs can then be used to grade candidate tires. Upon completion of the 6,400-mile test, the BCWR is divided by the average wear rate of the 4 new CMTs in the test convoy to determine the course severity adjustment factor. That factor is then applied to the wear rates of the candidate tires being graded in the same convoy. The adjusted wear rate of the candidate tire is then extrapolated to the point of wearout (1/16th inch tread remaining) which is then converted to the treadwear rating for that tire.

NHTSA has noted over the years that significant changes have occurred in the BCWRs. Although the actual measured treadwear rates of CMTs have varied from 3.27 to 6.96 mils per 1,000 miles since 1975, the adjusted BCWRs have steadily decreased from 4.44 in 1975 to 1.56 in 1992, as shown in Table 1, as follows:

TABLE 1.—CMT WEAR RATES AND BASE COURSE WEAR RATE ADJUSTMENT FACTORS

Year tested	Manufacturer	Series	Wear rate (mils per 1,000 miles)	BCWR
1975	Goodyear	Batch 1	4.44	4.44
1979	Goodyear	Batch 1	4.08	
1979	Goodyear	Batch 2	3.82	4.16
1980	Goodyear	Batch 2	5.29	
1980	Goodyear	Batch 3	4.76	3.74
1984	Goodyear	Batch 3	4.22	
1984	Uniroyal	40000	3.27	2.89
1967	Uniroyal	40000	5.96	
1967	Uniroyal	71000	4.56	2.21
1989	Uniroyal	71000	5.01	
1989	Uniroyal	91000	4.84	2.14
1991	Uniroyal	91000	6.24	
1991	ASTM E1 136	010000	4.94	1.70
1991	ASTM E1 136	010000	6.96	
1992	ASTM E1136	110000	6.65	1.62
1992	ASTM E1 136	110000	5.83	
1992	ASTM E1 136	210000	5.60	1.56
1993	ASTM E1136	210000	7.21	
1993	ASTM E1 136	310000	6.80	1.47

The BCWR and the actual wear rate theoretically should correlate reasonably well. Any differences may be due to climatic variations, changes in course severity, non-uniformity of wear rates between individual tires within the same lot, effects of aging and storage on the wear rates of the CMTs, errors in the calculation for adjusting BCWRs, or perhaps some combination of those factors

The test course is well maintained by the State of Texas and does not appear to have changed appreciably since testing first started there in 1975. That suggests that a significant part of the change in BCWRs may be attributed to the CMTs instead of course variability. NHTSA has noted that in every case in which one lot of CMTs is replaced by another, the new lot invariably shows a lower BCWR than the former.

The first batch of CMTs were procured from Goodyear Tire and Rubber Company in 1975 and had a wear rate of 4.44. Tires from that same lot were tested again in 1979 and showed a wear rate of 4.08. A new CMT batch was purchased in 1979 which showed a wear rate of 3.82. By 1980, however, tires tested from that batch showed an increased wear rate of 5.29. In each batch, the wear rate varied when

tested at a later date, from one to four years after purchase.

A possible explanation for those changes in wear **rate** among tires in the same lot could be attributed to aging **and/or** environmental degradation of the tires. To minimize those factors, the agency now purchases a one-year supply of **CMTs** at a time and stores **them** in the basement area of a warehouse which is **typically 20** degrees cooler than ambient **summer** temperature.

In addition to the aging/**environmental degradation of CMTs** affecting the **BCWR**, the agency believes that the method of calculating the **BCWR** may be in error. As stated above, the purpose of using a **CMT** is to provide a common **baseline** for all candidate tires. However, it appears that **the practice of relating all new CMTs to all prior CMTs by the procedure described above** has somehow distorted the **treadwear** grading procedure to the **point that treadwear grades** of candidate tires are now highly suspect.

If, instead of utilizing the **BCWR** to establish treadwear grades, the **wear** rates of the **CMTs** were compared directly to **those** of the candidate tires to determine the projected mileage of the candidate tires, much lower and perhaps more **realistic** grades **would** result. In the case of the **previous** example, the **average** wear rate for these candidate tires was 4.90 mils per **1,000** miles when tested. For the **CMTs** that accompanied these tires, with the same convoy, the average wear **rate** was 6.49 mils per 1,000 miles. The actual **wearout** rate for radial **CMTs** tested in 1975 was 67,900 miles, which is equivalent to a grade of 223. By assuming that the **wearout** for the **CMTs** remains the same, the calculated **wearout** for the tires in question would be 88,700 miles (**6.49/4.90 x 67,000**). This would be equivalent to a grade of 295 or 280 when rounded off to the nearest lower **20-point** increment.

**The** direct comparison of wear rates between **CMTs** and candidate tires may produce lower and more realistic grades **for** tires. It would, however, change the original intent of the **CMT**, which was to provide a common baseline for comparison, regardless of when a candidate tire is tested. Further, it would present a problem for the marketing of tires that **are** already graded and still in production. Nevertheless, improvement in the treadwear grading procedure appears to be needed in order to provide **treadwear** grades that are realistic, consistent, and meaningful to consumers

## II. Traction

Traction grades are established on test pads also located at San Angelo, Texas. Two surfaces are used in the test: wet asphalt and wet concrete. A test trailer is equipped with **ASTM E501** standard tires utilized in the tests as control tires. Two standard tires are inflated to 24 pounds per square inch (psi), statically balanced, allowed to cool to ambient temperature (with inflation pressure readjusted as necessary), and mounted on the test trailer. Each tire is then loaded to **1,085** pounds. The trailer is towed by a light truck over the wet asphalt surface at a speed of 40 miles per hour (**mph**). One wheel is locked, and the locked-wheel traction coefficient is recorded for that wheel for a period of 0.5 to 1.5 seconds after lockup. **The test is then repeated on the wet concrete surface, locking the same wheel. Those** procedures are repeated 10 times on each surface for each wheel. The **20** measurements taken on each surface are averaged to find the standard traction coefficient for each surface. **Those** standard traction coefficients are then utilized to determine the adjusted traction coefficients of the candidate **tires**.

Two candidate tires of the **same construction type**, manufacturer, line, and size designation are prepared and tested utilizing the same test procedures described above for the standard tires, except that the candidate tires are loaded to 85 percent of the test loads specified in **§ 575.104(h)**. The adjusted traction coefficients of the candidate tires are determined in accordance with **§ 575.104(f)(2)** (ix) and (x).

Once tested, candidate tires are assigned grades "A", "B", or "C". A tire that achieved a high level of performance on both asphalt (above **0.47μ**) and concrete (above **0.35μ**) is graded "A". A tire achieving at least medium performance on both surfaces is graded "B" (above **0.38μ** on asphalt and above **0.26μ** on concrete). A tire achieving relatively low performance on either or both surfaces (below **0.38μ** on asphalt or below **0.26μ** on concrete) is graded "C". From examining traction test data, NHTSA has observed that while **nearly** all tires achieve high **traction values** on the wet asphalt surface, very few achieve high values on the wet concrete surface.

NHTSA conducted a statistical analysis of the traction test data since 1989 to determine the frequency distribution of the traction **coefficients** of tires tested on **both** surfaces. The analysis showed that the arithmetic mean of the **traction** coefficients of tires on the wet asphalt surface was **0.51μ**,

and the standard deviation was  $\pm 0.03\mu$ . Assuming a normal distribution in a normal or bell-shaped distribution, one standard deviation on both sides of the arithmetic mean represents 68.27% of the values included within the limits indicated (see **"Statistical Methods,"** by **Arkin and Colton**, 4th Ed. (Rev.) 1958, pages 37 and 38). It follows that approximately 68 percent of the tires tested **on** the asphalt surface would have a traction coefficient greater than **0.48μ**, but less than **0.54μ**. The arithmetic mean of traction coefficients of tires tested on the wet concrete surface was **0.38μ, ±0.03μ**, indicating that approximately 68 percent of the tires tested on the wet concrete surface would have a traction coefficient greater than **0.35μ**, but less than **0.41μ**.

**That** analysis suggests that tire traction has improved to the point that it may be appropriate to upgrade the standard by raising the minimum traction values for each category. For example, an "A" rating could call for a traction coefficient **above 0.54μ** on asphalt and above **0.41μ** on concrete; a "B" rating could be above **0.48μ** on asphalt and above **0.35μ** on concrete; and for "C", below **0.48μ** on asphalt and below **0.35μ** on concrete. Alternatively, a new category "AA" could be created, the lower limit of which could be **0.54μ** for asphalt and **0.41μ** for concrete, with the "A", "B", and "C" categories remaining as they are. Either of these alternatives would result in a more balanced distribution of tires among grades "A", "B", and "C".

Another area of increasing concern in traction testing is the possible use of a peak tire traction category for testing rather than the sliding traction presently measured.

Contemporary vehicles are increasingly utilizing anti-lock brakes where sliding traction is not the primary traction force in panic braking. Those vehicles rely on peak tire traction, that is, maximum braking action is obtained when the tire is **still** rolling. Although peak tire traction may be desirable information for consumers with vehicles equipped with anti-lock brakes, high peak traction may compromise other tire characteristics **such as** degradation of traction when cornering. If peak traction performance of tires differs substantially from sliding traction, an **alternative** traction grading procedure may be necessary. NHTSA needs additional data on the measurement of peak traction **coefficients** and on the correlation of peak traction coefficients with stopping distance, which may be available from commenters. The agency is soliciting any **such** data

### III. Temperature Resistance

The temperature resistance grade is intended to indicate the extent to which heat is generated **and/or** dissipated by a given tire, and the capability of the tire to withstand the resulting temperature without failure. **The** heat that is generated depends on the amount of energy absorbed by the tire in the flexing of the rubber and its reinforcing materials. That energy is wasted and appears in the tire as heat. **The more** energy wasted, **the** greater the amount of heat that is generated and, if the tire is not capable of dissipating that greater amount of heat and/or if the tire is not able to resist the effects of the higher operating temperature that results from that greater amount of heat, the lower the temperature resistance grade.

Heat buildup in **tires** is generally caused by vehicle overloading, **high** speed operation, **and/or** tire underinflation. Sustained high temperature can cause structural degeneration of the material of the tire and result in reduced tire life or potential catastrophic tire failure. A tire's resistance to temperature buildup is graded under **the** UTQGS as "A", "B", or "C", with "A" being the best and "C" being **the** minimum standard of performance. Tires of high quality, as a result of superior design and construction, can be expected to last longer without failure when subjected to sustained high speed operation.

NHTSA tests **tires** for temperature resistance using the same laboratory test wheel utilized in testing a **tire's** high speed performance under Federal Motor Vehicle Safety Standard (FMVSS) No. 109, *New Pneumatic Tires*. The high speed performance test under **FMVSS 109** is run at speeds of up to 85 mph. The temperature resistance test under **the** UTQGS, however, is run at speeds of up to 115 mph. A tire graded "A" has successfully completed **the** test procedure at a sustained speed of 115 mph on the test wheel. A grade of "B" means that the tire has **successfully** completed the test procedure at speeds between 100 mph and 115 mph; and a "C" grade indicates satisfactory completion of **the** test at speeds exceeding 85 mph but at or below 100 mph. Of **the** 2,100 tires graded in 1993, 30 percent were graded "C", 50 percent were graded "B", and 20 percent were graded "A".

NHTSA considers temperature resistance a valid safety concern and is unaware of any problems with the ratings. While important from a motor vehicle safety standpoint, however, the significance of temperature resistance is

not so widely understood by consumers as the treadwear and traction ratings.

In light of this fact, **and** recent interest in a rolling resistance grade, the agency is considering whether a rolling resistance grade could provide equivalent safety information to the temperature resistance grade and thereby negate the need for temperature resistance grading. **The** issue of a rolling resistance grade arose at **the** White House Conference on Global Climate Change on June 10 and 11, 1993.

At **the** White House Conference, a number of measures to reduce greenhouse gases were discussed. One of the many measures related to vehicle fuel economy was the increased use of low rolling resistance tires in the aftermarket. Michelin presented a paper on that issue at a meeting of the Auto and Light Truck Workshop of the Transportation Working Group of the White House Conference on Global Climate Change on July 1, 1993. Michelin asserted that **the** average rolling resistance for all-season **radial** original equipment manufacturer (OEM) tires was 226 percent less than that for all-season radial replacement tires. **Further**, if replacement tires had **the** same rolling resistance as OEM tires, a 4 percent overall improvement in fuel economy could be realized. Finally, Michelin announced a manufacturing process by **which** low rolling resistance tires could be produced with no increase in inflation pressures.

As a result of **the** conference, the Administration issued a report on a series of initiatives to reduce greenhouse gas emissions, entitled **The** Climate Change Action Plan, on October 19, 1993. Among other things, the Plan calls for reduction of U.S. greenhouse gas emissions to 1990 levels by the year 2000. The Plan contains nearly 50 initiatives to accomplish that goal. One of those initiatives calls for DOT, through NHTSA, to issue new rules and test procedures requiring tire manufacturers to test and label tires relative to their rolling resistance.

This request for comments is part of NHTSA's commitment to The Climate Change Action Plan. Because the UTQGS are not applicable to truck tires, NHTSA's Office of Research and Development will, in a separate but related action, work with truck tire manufacturers and truck fleet and owner organizations to promote a **voluntary truck** tire rolling resistance program.

**The** agency also notes that one of the factors **that** causes heat generation in tires also causes higher rolling resistance. Indeed, the friction resulting from a tire's rolling resistance is the

immediate cause of heat generation in the tire. Rolling resistance is measured in a procedure similar to that used for determining temperature resistance. The rolling resistance test consists of running a tire under load on a laboratory test wheel. The energy consumed in and recovered from running the tire is measured **and the** difference is the heat energy lost which is a measure of rolling resistance. The smaller the difference, **the** more fuel efficient **the** tire.

Since rolling resistance and temperature resistance are related and are measured by similar tests, it is necessary to determine whether any safety benefits would be lost by substituting rolling resistance for temperature resistance in the UTQGS. FMVSS No. 109 would continue to ensure that all tires are capable of operating safely at speeds up to 85 mph, thereby establishing a minimum safety **threshold**. Further, fuel efficiency could be expected to generate more interest and be more easily understood by consumers **than** temperature resistance, thereby enhancing **the** usefulness of the UTQGS to **the** consumers it is intended to assist. However, the agency requests comments on this issue.

**NHTSA** believes that there is a strong **relationship** between rolling resistance and fuel consumption. Rolling resistance data generated under existing SAE test **procedures** could be used for quantifying **the** correlation with fuel consumption. SAE Recommended Practices J1269 and **J1270** specify **rollin** resistance measurement procedures for passenger car tires. The agency would welcome data that could be used to demonstrate how reductions in tire rolling resistance values translate into improvements in "real world" fuel economy.

### IV. Issues for **NHTSA** Evaluation

As stated above, the objective of the UTQGS is to provide meaningful, comparative information to consumers that will assist them in making **informa** selections when purchasing passenger car tires. In addition, the UTQGS should stimulate competitive forces in the marketplace, resulting in better tire performance. By improving **the** UTQGS, **NHTSA** believes it can achieve those goals.

The agency is hopeful, therefore, **the** **this** notice will elicit useful comments and suggestions on the UTQGS issues discussed above. NHTSA's major concerns are whether to propose changes to deal with treadwear grades that are becoming extremely **high** and therefore of diminishing credibility: whether to propose raising **the**

thresholds for traction grades; and whether it is more appropriate under the National Traffic and Motor Vehicle Safety Act for the agency to propose adding rolling resistance to the UTQGS as a fourth grading category or substituting it for temperature resistance. NHTSA specifically requests comments on the following issues:

1. Does the existing system for measuring treadwear result in misleading grades? Why?
2. Should a new system be developed for establishing treadwear grades? What system?
3. Should the treadwear test procedure be changed? What specific changes should be made? Why? What data are available to support such changes? How should such changes be implemented?
4. Should the test course calibration procedure be changed? What changes should be made?
5. How should traction grades be determined or improved? Does traction change significantly with wear for any tire lines?
6. Should the traction grades be upgraded? By raising the minimum values for each category (A, B, C)? By creating a new category, such as "AA"? By other means?
7. Should the UTQGS include peak tire traction ratings? Does peak tire traction correlate with stopping distance on ABS-equipped vehicles? Can the peak tire traction coefficient be measured reliably? How could/should it be expressed?
8. What would be the cost of measuring peak traction? In addition to sliding traction? Instead of sliding traction?
9. Are the characteristics related to a tire's ability to dissipate heat and to withstand higher operating temperatures that affect a tire's temperature resistance rating directly related to a tire's rolling resistance?
10. Should the temperature resistance grade be deleted from the UTQGS? Is it adequately represented by the voluntary tire industry speed rating?
11. Should a rolling resistance grade replace temperature resistance? How would such a grade be expressed? How would it be labeled on the tire?
12. Should a rolling resistance grade be added to the UTQGS as a fourth category?
13. How would the agency explain to consumers the correlation between rolling resistance and fuel economy?
14. Can rolling resistance be improved without detracting from the other graded characteristics? What is the additional cost per tire? Do you agree

with the costs projected in The Climate Change Action Plan?

15. Can tires of the same size, construction, and load carrying capacity which have the same rolling resistance, exhibit significantly different temperature resistance performance?
16. Would any safety values be affected if rolling resistance replaced temperature resistance?
17. How should data based on the test procedures of SAE-J1269 and SAE-J1270 be utilized to compare the rolling resistance performance of different tires?
18. What data regarding rolling resistance of different tire designs currently exist?
19. What is the range of rolling resistance performance available both to OEM and aftermarket passenger car tires today? What is the potential for further reductions in rolling resistance for tires of various types, such as all-season, mud/snow, rain, and conventional?
20. Are there improvements that should be made in the current procedures for measuring rolling resistance? If so, please describe how those measures could be improved, and at what additional cost.
21. What should be done about tires already graded?
22. What would be the most effective campaign to publicize the low rolling resistance/fuel efficiency program?
23. What procedures would be most effective in monitoring the low rolling resistance/fuel efficiency program to assure maximum results?
24. What is the estimated incremental consumer cost increase for low rolling resistance tires of various types?
25. What is the estimated cost effectiveness for low rolling resistance tires of various types? How cost effective would low rolling resistance tires have to be to motivate consumers to buy them?
26. What is the current cost of tire labeling for treadwear, traction, and temperature resistance combined on a per tire basis, assuming a high volume production line? How would this cost change if rolling resistance replaced temperature resistance? If it were added, without replacing any of the existing UTQGS requirements?
27. What are current equipment and per test costs to measure temperature resistance according to UTQGS? Rolling resistance according to SAE guidelines?
28. Is it necessary to replace all 4 tires to achieve the benefits of lower rolling resistance tires? What are the fuel savings if fewer than 4 tires are replaced?

29. What is the frequency with which consumers replace 4 tires at once? Three tires? Two tires?

30. Are there other or additional measures NHTSA should consider to aid in reducing greenhouse gases? What are the costs and benefits of these measures?

## V. Rulemaking Analyses and Notices

### A. Executive Order 12866 (Regulatory Analysis and Review) and DOT Regulatory Policies and Procedures.

This notice was not reviewed under E.O. 12866. NHTSA has considered the impacts associated with this request for comments and has concluded that it is not significant under DOT's Regulatory Policies and Procedures. As explained above, this document requests comments to aid the agency in determining whether to propose improvements in the UTQGS and whether to propose either adding a rolling resistance grade or substituting a rolling resistance grade for the currently-required temperature resistance grade. Improvements in the UTQGS would make them more meaningful and understandable to consumers and contribute to energy conservation in accordance with the President's Climate Change Action Plan.

### B. Executive Order 12612 (Federalism)

NHTSA has analyzed this action under the principles and criteria of EO 12612. The agency has determined that this request for comments does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

## VI. Comments

Interested persons are invited to submit comments. It is requested, but not required, that comments be submitted in 10 copies.

Comments must not exceed 15 pages in length (49 CFR 553.21). Necessary attachments may be appended to such submissions without regard to the 15-page limit. This limitation is intended to encourage commenters to state their primary arguments in a concise fashion.

All comments are retained in the NHTSA Docket Section and are open and available to the public for review and copying. If a commenter wishes to submit certain information under a claim of confidentiality, 3 copies of the complete submission, including the business information for which confidentiality is requested, should be submitted to the Chief Counsel, NHTSA, at the address shown above. Seven copies from which the purportedly confidential business information has

been deleted should be submitted to the NHTSA Docket Section. A request for confidentiality should be accompanied by a cover letter setting forth the information specified in 49 CFR part 512. Confidential Business Information.

Those commenters desiring to be notified upon receipt of their comments in the NHTSA Docket Section should

enclose a self-addressed stamped postcard in the envelope with their comment. Upon receipt of the comment in the Docket Section, the docket supervisor will return the postcard by mail.

List of Subjects in 49 CFR Part 575

Consumer Information Regulations:  
Vehicle stopping distance, Truck-

camper loading. Uniform tire quality grading standards. Utility vehicles.

Issued on April 20, 1994.

*Barry Felrice,*

*Associate Administrator for Rulemaking.*

[FR Doc. 94-9916 Filed 4-22-94; 8:45 am]

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U.S. Department of  
Transportation

# News:

Office of the Assistant Secretary for Public Affairs  
Washington, D.C. 20590

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**FOR IMMEDIATE RELEASE**

December 22, 1994

NHTSA 78-94

Contact: Ellen Berlin

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**NHTSA RELEASES COMPREHENSIVE  
STRATEGIC OPERATIONS PLAN**

The National Highway Traffic Safety Administration (NHTSA) released a comprehensive, first-of-its-kind strategic plan today, providing a vision for the agency's operations into the 21st century.

According to **NHTSA** Administrator Ricardo Martinez, M.D., "NHTSA will lead the nation in creating the highest level of road safety in the world; This plan, ***People Saving People, On The Road To A Healthier Future***, lays out an innovative, long-range approach to injury control. It provides fresh direction to the science, management and public service of our mission."

Dr. Martinez said, "**Traffic** deaths are a 'neglected epidemic.' Vehicle crashes kill more people than die **from** AIDS, drugs or guns. More people are killed and maimed in road crashes than as crime victims."

Dr. Martinez, a board-certified emergency physician, said the plan is a mix of traditional and new goals. Since its founding in 1966, **NHTSA** has worked to reduce the incidence and consequences of crashes, providing research and data collection to support safety improvements, and state and community highway safety assistance.

Among the newly-presented goals are:

- making motor vehicle injury prevention a priority on the nation's health care agenda.
- serving customers and partners better.
- managing and using the best information resources and technology available.
- maintaining a work force that is professional, innovative and diverse.

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The plan also reiterates the agency's commitment to greater efficiency and effectiveness, Dr. Martinez said. "The agency commits itself to working with other organizations and with citizens in an open and cooperative atmosphere. The values articulated in the plan are characterized by integrity, professionalism, service and respect for the people involved in its mission," he emphasized.

NHTSA's mission, as stated in the plan, is to save lives, prevent injuries, and reduce traffic-related health care and other economic costs. The agency will develop, promote and implement effective educational, engineering and enforcement programs toward ending preventable tragedies and reducing the economic costs associated with vehicle use and highway travel.

Dr. Martinez said the plan was developed with extensive input from the public and the employees of the agency. More than 100 comments were received in response to a notice that the agency was developing the plan, and employees from all levels participated in committees that developed specific issues that formed the basis of the plan. Details of the plan were worked out in a series of retreats held by the leadership of the agency.

NHTSA is now developing an implementation plan that will translate the mission, vision, values, and goals of the Strategic Plan into specific programs and activities. A Strategic Execution Plan, which covers the next three to five years, will spell out the priorities, programs, resource needs, and milestones that will lead the agency toward attaining its vision. NHTSA invites further suggestions from the public on how to make this plan a reality.

Copies of the plan are available from NHTSA Distribution Services, NAD-5 1, 400 Seventh Street, S.W., Washington, D.C. 20590.

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EXCERPTS

# THE CLIMATE CHANGE ACTION PLAN

President William J. Clinton  
Vice President Albert Gore, Jr.

October 1993

# **TRANSPORTATION ACTIONS**

## Develop Fuel Economy Labels for Tires

DESCRIPTION: DOT will increase vehicle fuel economy by establishing tire labels for the replacement market. These labels will be based on a measure of their impacts on vehicle fuel economy (due to rolling resistance). The labels and the DOT-initiated publicity campaign will encourage both consumers and businesses to purchase -- and manufacturers to produce -- more fuel-efficient tires to respond to the labeling requirements. Efficient tires increase fuel economy by 4 percent over average replacement tires with comparable performance.

IMPLEMENTATION: DOT, through the National Highway Traffic Safety Administration, will adopt test procedures and new DOT rules requiring tire manufacturers to test and label. DOT will also create a consumer-focused publicity program and a monitoring program in order to realize maximum benefits. The Administration is proposing to obligate \$0.3 million in FY 1995 for this action and \$2 million through 2000.

MARKET IMPACT: This program is expected to result in the purchase of about 20 million additional fuel efficient tires (out of a total replacement market of about 120 million units) in the year 2000. These purchases will be made at an average incremental cost of \$20 per tire for cars and light trucks, and \$60 per tire for heavy trucks. The new tires more than pay for themselves through improved fuel economy. This action is expected to displace 30 - 40 million barrels of oil per day in 2000 and 50 - 70 million barrels of oil per day in 2010. This action stimulates \$22 billion in private sector investment for the period 1994-2000 (undiscounted 1991 dollars). This investment yields energy savings worth \$2.7 billion through 2000, and continues to pay off over the next decade, for an additional savings worth \$1.2 billion over the period 2001-2010 (undiscounted 1991 dollars).

EMISSIONS REDUCTION: This action reduces greenhouse gas emissions from projected 2000 levels by 1.5 MMT of carbon equivalent.