DATES: The meeting will be at 2:00 p.m. on June 14, 1995.

ADDRESSES: The public meeting will held at: Office of Personnel Management, 1900 E Street NW., Room 1350, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Beverly Fayson, FAR Secretariat, General Services Administration, 18th and F Streets NW., Washington, DC 20405. Telephone: (202) 501–4755; FAX (202) 501–4067.

SUPPLEMENTARY INFORMATION: In order to implement Section 2191 of the Act, the Cost Principles Team drafted a proposed rule which would use the Federal Travel Regulation/Joint Travel Regulation (FTR/JTR) rates as a baseline, while allowing contractors to propose alternative maximum per diem rates based on existing travel cost reimbursement systems. After review and analysis of the public comments on the proposed rule, the team has preliminarily decided to recommend retention of the current cost principle language at FAR 31.205–46 without change and to withdraw the proposed rule.

The team's preliminary determination to retain the current cost principle language is based on the following: (i) Industry and Government agency commentors generally agreed that the proposed rule's alternative maximum per diem rate requirements would place an undue administrative burden on contractor and Government personnel; (ii) commentors proposing a revision to the ''reasonableness standard'' did not provide any empirical data to support claimed inequities or increased administrative burdens under the current rule; and (iii) the commenters' alternatives were considered by the team to be administratively burdensome and inadequate to protect the Government's interests. The team's preliminary conclusion is that retaining the current FAR requirement will reduce disagreements and disputes between contractors and the Government, is less burdensome administratively than any alternative proposed, and results in equitable reimbursement of per diem costs.

To allow the public to present its views on this determination, a public meeting will be held on June 14, 1995. Persons or organizations wishing to make presentations will be allowed 10 minutes to present their views, provided they notify the FAR Secretariat at (202) 501–4745 and provide an advance copy of their remarks not later than June 9, 1995. All participants should be prepared to provide data to support their positions. The team is particularly interested in data which supports the contention that FTR/JTR rates are inequitable or that the current FAR requirements are more administratively burdensome than would be other proposed alternatives, either proposed during the public comment process, or presented at this meeting. Alternatives, other than those previously proposed during the public comment period, may be submitted the consideration. The team will enter into discussion with commentors and the audience during this meeting.

Dated: May 18, 1995.

Edward C. Loeb,

Deputy Project Manager for Implementation of the Federal Acquisition Streamlining Act of 1994.

[FR Doc. 95–12659 Filed 5–23–95; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 575

[Docket No. 94–30, Notice 2]

RIN 2127–AF17

Consumer Information Regulations Uniform Tire Quality Grading Standards

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

ACTION: Notice of proposed rulemaking.

SUMMARY: This notice proposes to amend the Uniform Tire Quality Grading Standards to:

1. Revise treadwear testing procedures to maintain the base course wear rate of course monitoring tires at its current value. That revision should eliminate treadwear grade inflation, reduce testing expenses, and reduce the adverse environmental consequences of operating testing convoys;

2. Create a new traction grading category of ''AA'' in addition to the current traction grades of A, B, and C to differentiate those tires with the highest traction characteristics from lower performing tires;

3. Replace the temperature resistance grade with a rolling resistance/fuel economy grade. This change would provide a measure of a key fuel economy characteristic of tires, and responds to the President's Climate Change Action Plan.

DATES: Comments on this notice must be received on or before July 10, 1995.

ADDRESSES: Comments should refer to the docket and notice number shown above and be submitted to Docket Section, National Highway Traffic Safety Administration, 400 Seventh Street, SW, Room 5111, Washington, DC 20590. Docket room hours are from 9:30 a.m. to 4 p.m., Monday through Friday.

FOR FURTHER INFORMATION CONTACT: Mr. Orron Kee, 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, telephone (202) 366–0846.

SUPPLEMENTARY INFORMATION:

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I. Background

49 U.S.C. 30123(e) requires the Secretary of Transportation to prescribe a uniform system for grading motor vehicle tires to assist consumers in

making informed choices when purchasing tires. NHTSA implemented this congressional mandate by issuing the Uniform Tire Quality Grading Standards (UTQGS) (49 CFR § 575.104). The UTQGS are applicable to most passenger car tires.

The UTQGS require manufacturers to grade their tires for treadwear, traction, and temperature resistance. Those characteristics were adopted by NHTSA after an extended process of study, testing, and public comment. NHTSA believed that those three characteristics provided the best balance of tire properties that would be the most meaningful to consumers. Because those three characteristics interact with each other, however, manufacturers must use care in trying to improve any particular characteristic since improving one characteristic could detract from one or both of the other characteristics. For example, treadwear life could be extended by adjusting the tire compounds to produce a harder tread. That adjustment, however, could detract from traction performance. Tread life could also be extended by adding more rubber compound to the tread. That addition, however, could increase rolling resistance, causing greater internal heating. The increased heating could, in turn, result in temperature buildup and possibly result in tire failure.

II. April 25, 1994 Request for Comments

On April 25, 1994, NHTSA published a Request for Comments in the **Federal Register** (59 FR 19686) requesting public comment on possible improvements to the UTQGS. Specifically, the agency requested comments on ways to cure a problem of treadwear grade inflation, whether to add an additional rating category to provide a means of differentiating tires with the highest traction characteristics, and whether to commence the grading of tires for rolling resistance. In view of the complexity of the subject matter of this notice, the agency is repeating much of the background explanatory discussion in the Request for Comments.

A. Treadwear

In the Request for Comments, the agency described the testing of candidate tires, the role played by course monitoring tires in adjusting the measured wear of candidate tires and the possible sources of treadwear rating inflation.

1. Treadwear Test and Calculation Procedures

a. Candidate tires. The treadwear grade is considered the most meaningful of the three grades to the public, but treadwear is also the most difficult of the three characteristics to grade.

The procedures which NHTSA follows for testing tires for compliance with the UTQGS are specified in 49 CFR 575.104(e), Treadwear grading conditions and procedures. NHTSA tests treadwear by running the tires being tested, called candidate tires, on test vehicles multiple times over a 400-mile test course on public roads in the vicinity of San Angelo, Texas. The test vehicles travel in convoys of two or four passenger cars, light trucks, or multipurpose passenger vehicles, each with a GVWR of 10,000 pounds or less. To equalize operating conditions, the drivers are changed at regular intervals, the tires are rotated to different positions on the vehicles, and the vehicles are rotated to different positions within the convoy.

Candidate tires are subjected to a 6,400 mile test. At the end of the test, the total measured wear is multiplied by a factor that reflects the severity of the environmental conditions during the test (the purpose and derivation of that factor is explained below in the discussion of course monitoring tires). The result of the multiplication is the adjusted wear rate (AWR) of the candidate tires. The AWR is extrapolated to wearout, which is considered to be the point at which 1⁄16th of an inch of tread remains. The extrapolated figure becomes the treadwear grade. A grade of 100 indicates that the tire can be expected to achieve 30,000 miles to wear out, as measured on the San Angelo course. A treadwear grade of 150 should achieve 50 percent more mileage than the one graded 100, if tested on the same course and under the same conditions. NHTSA emphasizes, however, that the treadwear grades are not meant to be indicative of the actual mileage every consumer can expect from a given tire. The grades are intended to be indicators of relative performance rather than absolute performance. Thus, a tire graded at 150 should achieve 50 percent more mileage than one graded at 100. The actual tire mileage achieved by a motorist depends on many variables, such as geographic location, road conditions, individual driving habits, climate, weather, tire maintenance, and so forth.

b. Course Monitoring Tires. Environmental factors like changes in road and climatic conditions can cause course wear rates for the same tire to vary on a daily basis. In order to compensate for the effect of such variables on the amount of wear during a particular treadwear convoy test, candidate tires are tested along with control tires called course monitoring tires (CMT). Four CMT's are placed on one test vehicle and four candidate tires with identical size designations are placed on each other test vehicle in the convoy. CMTs are built to the specifications of American Society for Testing and Materials (ASTM) standard E1136, which specifies tight controls over the production, handling, and storage of those standardized control tires.

Since CMT lots are not precisely identical, even though manufactured to ASTM standards, a base course wear rate (BCWR) is established for each new batch or lot of CMTs procured by the agency. The BCWR is the calculated wear rate of that lot of CMTs under ''average'' conditions and is applied to the CMTs to adjust for the variability in the wear rates between CMT lots. The BCWR for the new lot is determined by running tires selected from that lot over the test course in a convoy along with CMTs from the previous lot. The previous CMTs are run in an attempt to determine whether and to what extent there have been changes in the condition of the course. The measure of those changes is called a course severity adjustment factor (CSAF). The CSAF is determined by dividing the BCWR for the CMTs by the average wear rate of the 4 CMTs in the test convoy. It is assumed that any difference between the BCWR and the wear rate reflects changes in the course. The measured wear rate of the new CMTs is then multiplied by the CSAF to obtain the adjusted wear rate (AWR) of the new CMTs, which then becomes the BCWR for new CMTs. This procedure is intended to make the BCWR of new CMTs comparable to that of the previous CMTs by removing changes in the course as a source of difference between the BCWR of the previous CMTs and that of the new CMTs.

Upon completion of the 6,400-mile test of the candidate tires, the BCWR of the new CMT lot is divided by the average measured wear rate of the new CMTs in the test convoy to determine the CSAF for that convoy. That CSAF is then applied to the wear rates of the candidate tires. The AWR of the candidate tires is extrapolated to the point of wear out, which then becomes the treadwear rating of the candidate tires.

2. Treadwear Grade Inflation

NHTSA has noted significant increases in treadwear ratings since the UTQGS became fully effective in 1980. Early in the UTQGS program, the treadwear ratings remained at roughly the same level. As the years progressed, however, treadwear ratings have drifted steadily upward in both manufacturers' and NHTSA's testing results. In part, this increase reflects the fact that current 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 believes, however, that some of the increase in treadwear grades cannot be explained by improvements in tires. A significant amount of the unexplained increase is traceable to a decline in the BCWRs of each successive lot of CMTs. Under the formula for calculating treadwear, the BCWRs for CMTs and treadwear vary inversely, Thus, as the BCWRs decrease, treadwear increases.

3. Decline in Base Course Wear Rate

Since the first lot of CMTs was procured in 1975, there has been a steady and consistent decline in the BCWRs of each successive lot of CMTs. Although measured wear rates for CMTs have varied, BCWRs have steadily declined from 4.44 mils per thousand miles for the original lot of CMTs to 1.47 mils per thousand miles for the last lot purchased in 1993, as shown in Table 1, below:

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
1987	Uniroyal	40000	5.96	
1987	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 E1136	010000	4.94	1.70
1991	ASTM E1136	010000	6.96	
1992	ASTM E1136	110000	6.65	1.62
1992	ASTM E1136	110000	5.83	
1992	ASTM E1136	210000	5.60	1.56
1993	ASTM E1136	210000	7.21	
1993	ASTM E1136	310000	6.80	1.47

4. Causes of the Decline in BCWRs and Possible Agency Responses

The decline in the BCWRs suggests either that the test course itself is becoming progressively rougher or that other factors, as yet unidentified, are responsible, or both. The agency does not believe that the course has changed to any significant extent. The test course is well maintained by the State of Texas and presumably has changed little in severity over the years.

Accordingly, the agency has considered a number of other factors which could explain the decline, such as effects of aging and storage on tire performance, errors in the BCWR calculation, or some combination of those and perhaps other factors. The agency believes that the decline of the BCWRs may be caused in large part by the aging of the CMTs themselves while in storage. In addition, since the decrease in BCWRs has been so consistent with each new lot of CMTs, the agency believes that the problem may also be caused at least in part by an as-yet unidentified flaw in the formula for calculating the BCWR.

As tires age, their chemical compounds steadily emit minute amounts of gases. The rate of emission may be affected by environmental conditions. Further, environmental conditions, such as extremes of temperature can directly affect the tires. The combined effect of the environmental conditions and the emission of gases can cause changes in the rubber compounds over time. Such changes adversely affect the resiliency of the rubber, increasing wear rates and giving a false indication that the test course could be becoming more severe.

To minimize the aging factor, the agency has in recent years procured CMTs in small lots so as to reduce the interval between determining the BCWR for a given lot and subsequently using tires from that lot in determining the BCWR for the next lot. The agency has also begun to store the CMTs in polyethylene bags in a warehouse in which the temperature, although not controlled to the extent specified in ASTM E1136, normally ranges between 60° and 90°. The agency hopes that by storing the CMTs in the bags they will not be exposed to the atmosphere, thereby diminishing the gas emissions described above and lessening the outgas effect on the tires.

With respect to the formula for calculating BCWR, the agency requested comment on whether the practice of recalculating the BCWR of each new lot of CMTs should be abandoned and the wear rates of candidate tires compared directly with those of the CMTs, that is, without adjusting the wear rate of the new CMTs to reflect differences (theoretically due to aging) between the wear rates of the new CMTs and the CMTs from the previous lot. The intent of the BCWR is to provide a common baseline by which to grade candidate tires. However, NHTSA's practice of relating all new CMTs to the original CMTs in the manner specified in the UTQGS has somehow distorted the treadwear grading procedure to bring about the inflated results now being experienced.

In asking whether the agency should switch to direct comparison, the agency sought available data on whether such direct comparison of the wear rates of CMTs and candidate tires would avoid the effects of flaws in the current treadwear procedures. The switch to direct comparison could result in lower, and perhaps more realistic, treadwear ratings. On the other hand, it could change the original intent of the CMT, which was to provide a common baseline for comparison of wear rates, regardless of when a candidate tire was tested. In addition, it could present a problem for the tires already graded and still in production by having to re-test and re-grade them.

The agency posed four other questions in the notice, i.e., whether the current ratings are misleading, whether a new system should be developed for treadwear grading, whether the test should be changed, and whether the BCWR computation procedure should be changed.

B. Traction

1. Traction Test and Calculation Procedures

Traction grades are established by sliding tires over test pads also located near San Angelo, Texas. One pad consists of a wet asphalt surface; the other, a wet concrete surface. A test trailer is equipped with two control tires manufactured in accordance with ASTM standard E501. The control tires are inflated to 24 pounds per square inch (psi), statically balanced, allowed to cool to ambient temperature with inflation pressure maintained at 24 psi, then installed on the test trailer. Each tire is loaded to 1,085 pounds. The trailer is first towed over the wet asphalt surface at a speed of 40 miles per hour (mph). As one of the wheels with a control tire passes across the asphalt, it is locked. The traction coefficient of the locked wheel is recorded for a period of 0.5 to 1.5 seconds after lockup. The same procedure is then followed for the same wheel/control tire as the trailer is towed across the wet concrete surface. These tests are conducted 10 times on each surface for that wheel/control tire. The same tests are then conducted for the other wheel/control tire. The 20 measurements taken on each surface are averaged to find the control tire traction coefficient for that surface. After the testing of the control tires, those coefficients are used in calculating the traction coefficients of the candidate tires.

In testing the candidate tires, two tires of the same type, construction, manufacturer, line, and size designation are prepared and tested utilizing the same procedures described above for the control tires. The loads on the candidate tires, however, are maintained at 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).

The grades of the candidate tires are designated as ''A'', ''B'', or ''C.'' A tire that achieves both a high level of traction performance on asphalt (above 0.47µ) and a high level on concrete (above 0.35µ) is graded ''A.'' A tire achieving medium traction performance (0.38µ on wet asphalt and 0.26µ on wet concrete) is graded ''B.'' A tire achieving traction performance lower than 0.38µ on asphalt and 0.26µ on concrete is graded ''C.''

2. Ability of Traction Grading System to Differentiate Highest Traction Tires

NHTSA's analysis of traction test data since 1989 indicates that tire traction performance has improved to the extent that the current grading system does not adequately differentiate between tires with different levels of performance, particularly the highest performing tires.

Another issue being examined by NHTSA is the implication of the increasing number of vehicles with antilock braking systems (ABS) for the way in which traction is measured. For non-ABS vehicles, sliding traction is the primary traction force in panic braking since the vehicles' wheels are locked during such braking. However, for ABS vehicles, peak tire traction is the primary traction force since the ABS keeps the tire rolling during panic braking.

3. Possible Solutions to Traction Grading Problems

The agency solicited comments on whether the traction ratings should be revised to differentiate the highest performing tires. One alternative for addressing this problem would be to adjust each grade category so that it would represent a higher band or range of performance than it currently does. For example, the A grade could be adjusted so that it includes tires with traction coefficients above 0.54µ on asphalt and above 0.41µ on concrete, while a B rating could include tires with traction coefficients above 0.48µ and 0.35µ respectively, and a C rating could include tires with performance below that. Another alternative would be to make no adjustment in the level of performance represented by the existing grades, but create a new grade category of ''AA'' for the highest performing tires, i.e., those tires achieving traction coefficients above 0.54µ and 0.41µ respectively.

NHTSA also sought comments on whether to replace or supplement traction grading based on sliding traction with traction grading based on peak tire traction and asked about the cost of measuring peak traction.

C. Temperature and Rolling Resistance/ Fuel Economy

1. Temperature Resistance

The current provisions of the UTQGS require grading tires in a third category, temperature resistance. The temperature resistance grade indicates the extent to which heat is generated and/or dissipated by a tire by measuring the ability of the tire to operate at high speeds without tire failure. Heat is generated by the energy absorbed by the tire from the friction caused by the flexing and slipping of the rubber as it rolls along the road. That energy is wasted and appears in the tire as heat. The more energy that is wasted, the greater the heat buildup. If the tire is unable to dissipate that heat effectively or if the tire is unable to resist the heat buildup, its ability to run at high speeds without failure is reduced. Therefore, its temperature resistance grade is lower.

Heat buildup is generally caused by some combination of tire overloading, high speed operation, and/or improper inflation pressure, all of which contribute to greater flexing and increased heat buildup. Sustained high temperature can cause structural degeneration of the tire compounds resulting in reduced tire life or outright tire failure.

NHTSA tests tires for temperature resistance utilizing the same laboratory test wheel as the high speed performance test of Federal motor vehicle safety standard (Standard) No. 109, *New pneumatic tires.* That test is conducted at speeds up to 85 mph, while the UTQGS temperature resistance test is run at speeds of up to 115 mph. A tire is graded ''A'' if it completes the test at a sustained speed of 115 mph without visual evidence of tread, sidewall, ply, cord, innerliner, or bead separation, chunking, broken cords, cracking or open splices, and the inflation pressure is not less than the specified test pressure. A tire is graded ''B'' if it completes the test at speeds between 100 and 115 mph without the damage mentioned above, and is graded ''C'' if it has successfully completed the test at speeds between 85 and 100 mph.

2. Rolling Resistance/Fuel Economy

NHTSA considers temperature resistance to be a valid safety concern and is unaware of any problems with the accuracy of the ratings. However, despite the agency's efforts over the years to educate the public by means of consumer information bulletins, press releases, and labels affixed to tires explaining the meaning and significance of the UTQGS ratings, NHTSA has found that most of the tire-buying public is not aware of and/or does not understand the significance of the temperature resistance rating.

Conversely, increasing interest has been shown in adding a rating for rolling resistance on the basis that such a rating could be readily understood by the public. The possibility of adding such a rating was discussed at the White House Conference on Global Climate Change on June 10 and 11, 1993 (hereinafter referred to as the Conference). At a meeting of the Auto and Light Truck Workshop of the Transportation Working Group of the Conference, Michelin presented a paper asserting that the average rolling resistance for original equipment all-season radial tires was 22.6 percent less than that for typical replacement tires. Further, it was suggested that a 4 percent improvement in fuel economy could be realized if replacement tires had the same rolling resistance as original equipment tires.

As a result of the Conference, the Administration issued a report on October 19, 1993, entitled The Climate Change Action Plan (Plan), setting forth a series of initiatives to reduce greenhouse gas emissions. The Plan calls for reduction of U.S. greenhouse gas emissions to 1990 levels by the year 2000. One of the initiatives to accomplish that goal calls for DOT, through NHTSA, to issue new rules and test procedures requiring manufacturers to test and label tires relative to their rolling resistance.

NHTSA expressed its belief in the Request for Comments that there is a close relationship between temperature resistance and rolling resistance. One of the causes of heat generation in tires, the action of the tread on the road surface, also causes rolling resistance. In fact, it is the friction resulting from rolling resistance that is the immediate cause of heat generation in the tire. Properties of the road and of tire materials, such as roughness, softness, as well as amount of flexing, determine the amount of friction and therefore the amount of heat generated.

Rolling resistance is measured in a procedure similar to that used for measuring temperature resistance, namely by running a tire under load on a test wheel. The energy consumed in driving the tire is measured and the energy recovered from the tire is measured by the test equipment. The difference is the heat energy lost which is the measure of the rolling resistance.

Safety benefits should not be lost by substituting rolling resistance for temperature resistance since the two are related and determined by similar tests. Standard No. 109 would continue to ensure that all tires are capable of safe operation at speeds of up to 85 mph, which establishes a minimum safety threshold. Further, given that the public is not very responsive to temperature resistance ratings, the elimination of those ratings should not cause the tire manufacturers to lower the temperature resistance performance of their tires.

3. Issues Regarding Temperature/Rolling Resistance/Fuel Economy

The agency invited comments on a wide variety of issues relating to temperature resistance. Among them were whether the rolling resistance can be improved without detracting from the other rated tire performance characteristics, whether the temperature resistance rating should be supplemented by or replaced by a rolling resistance rating, whether such a substitution would have any safety consequences, and how rolling resistance values should be translated into improvements in ''real world'' fuel economy.

III. Summary of Public Comments, Agency Decisions and Benefits and Costs

To preserve the continuity of discussion about each type of UTQGS rating, the agency presents below, as one unit, the summary of public comments, the agency decision in response to those comments, and the costs and benefits of the decision first with respect to the treadwear rating procedures, then traction, and then temperature/rolling resistance.

A. Treadwear

1. Summary of Comments

Bridgestone/Firestone, Inc. (BF), The Goodyear Tire and Rubber Company (Goodyear), General Tire (GT), Michelin, MTS Systems Corporation (MTS), Dunlop Tire Corporation (Dunlop), Cooper Tire and Rubber Company (Cooper), and the European Tyre and Rim Technical Organisation (ETRTO) responded to the agency's treadwear issues. BF, GT, and Dunlop did not consider the UTQGS treadwear grade misleading to consumers, so long as the grade is used only to compare tires and not project expected mileage to wearout. Goodyear, ETRTO, and Michelin, on the other hand, believed that the treadwear rating is misleading to the public because the treadwear test produces inconsistent results. They argued that the inconsistencies arose from such factors as the steady decline in the BCWR, the relatively short duration of the treadwear test, and the low wear rates of the tires, which cause the treadwear test to overestimate tire life. Michelin further commented that although tire technology has improved considerably in the past few years, treadwear grades have increased faster than technological improvements. Michelin commented that the test course is not sufficiently demanding.

BF, Goodyear, Cooper, and Dunlop commented that the treadwear grade should be deleted altogether, arguing that it is not needed and is not cost effective. Goodyear stated that manufacturers' tire warranties are better and more meaningful to consumers, and BF asserted that NHTSA's own figures indicate that 70 percent of the tire-buying public pay no attention to the treadwear grade. Cooper and Dunlop asserted that the treadwear grade is environmentally unfriendly, Dunlop contending that every test convoy adds 22 tons of greenhouse gases to the environment and costs $27,524.64.

Goodyear, Dunlop, Michelin, BF, and MTS commented that if the treadwear grade remains a part of the UTQGS, a new system should be developed for rating it. They contended that the present rating system is too expensive, unreliable, and has too many variables. Goodyear, Dunlop, and MTS urged development of a standard, repeatable laboratory test, and BF, Cooper and Dunlop recommended that NHTSA participate with the ASTM F9 Committee to develop a new indoor, environmentally friendly test procedure. This refers to a committee of the ASTM, designated the ''F9 Committee,'' which was formed to develop a laboratory test to assess treadwear potential.

Goodyear, Michelin, BF, and MTS all agreed that the test procedure should be changed, contending that the vehicle to vehicle rotation of the candidate tires creates new variables in addition to the existing ones. Finally, Goodyear, Cooper, Dunlop, BF, and GT recommended that the BCWR be fixed at its present figure of 1.47 to achieve more consistent results and save testing costs.

2. Agency Decision

The agency is not persuaded by the commenters' assertions that the treadwear ratings of tires under the UTQGS are inconsistent and mislead the public. The agency does not agree that the treadwear test results are inconsistent. The treadwear grade provides a basis on which to compare the relative treadwear of tires tested under controlled conditions. The agency believes that a road test has the inherent advantage of measuring treadwear rates under actual road conditions. Further, the computations used in calculating the BCWR, CSAF, and the AWR are specifically intended to make the treadwear test results as consistent as possible.

NHTSA does not agree with commenters that suggested that the practice of vehicle to vehicle rotation of candidate tires creates new variables and should be changed. On the contrary. NHTSA has found, and so stated in a previous notice (55 FR 47765) that rotation of the tires throughout the test convoy significantly reduced the variability of treadwear grades resulting from test car and driver factors.

NHTSA believes that the treadwear ratings provide consumers with reliable information on which to distinguish between the relative performance of the different tire types and brands. They are not intended to project the actual expected mileage of a tire. Tire purchasers are specifically advised of this on the label required by 49 CFR 575.104(d)(1)(B)(2), which states that the treadwear rating is a ''comparative rating'' and explains what the rating represents. The voluntary treadwear warranties provided by manufacturers do, by contrast, indicate the amount of mileage that can be expected from a given tire. NHTSA considers the UTQGS treadwear ratings and the manufacturers' warranties to be complementary and, in many instances, confirm each other. NHTSA's surveys show that 74 percent of the public had heard of the treadwear ratings and 29 percent consider such ratings in making their tire purchases. While 29 percent may seem a comparatively small percentage of the tire buying public, it is large enough to be influential. Tire manufacturers continue to make improvements in treadwear. Further, treadwear related information is given prominent treatment in tire advertising.

Cooper and Dunlop commented that the treadwear rating should be deleted because the testing is expensive and ''environmentally unfriendly.'' Since treadwear is the central feature of the statutorily-mandated UTQGS, NHTSA is not proposing to delete treadwear. NHTSA is well aware of the expense of treadwear testing. NHTSA's contract cost of operating a 4-car test convoy for the 7,200 mile test (6,400 miles for the test and 800 miles for the pre-test break-in) is $17,751. Dunlop did not disclose the basis for the $27,524.64 figure it quoted. Regardless of the per convoy cost, the agency notes that the per tire cost is minimal, considering that the test cost is averaged over all the tires produced of the same type. As to greenhouse gas emissions, NHTSA estimates that the emissions into the atmosphere per 4-car convoy is between 14.08 and 15.8 tons. Again, Dunlop did not explain how it arrived at the 22-ton figure.

As discussed in section IIA1, *Treadwear test and calculation procedures*, above, the agency believes that the primary reason for past treadwear grade inflation has been the effects of aging on the CMTs while in storage. The agency believes, however, that wrapping the CMTs in polyethylene bags and storing them in a warehouse where the temperature only varies between 60° and 90° is minimizing the aging effects on the different lots of CMTs.

The agency is persuaded by the suggestions of Goodyear, Cooper, Dunlop, BF and GT that the BCWR be fixed at its present figure, 1.47 mils per thousand. Maintaining the BCWR at the current figure would allow existing treadwear ratings to remain essentially unchanged and prevent future grade creep. Further, the fiscal expense and environmental effects of running test convoys would be eliminated. Accordingly, NHTSA proposes to fix the BCWR of all future lots of CMTs at the current rate of 1.47 mils per thousand, or the value in use on the date of issuance of any final rule resulting from this proposed rulemaking action. If the agency issues such a final rule, it would consider taking the further step of subsequently substituting the BCWR in use on the effective date of the final rule for the BCWR in use on the issuance date of the final rule. The agency believes that fixing the BCWR, in addition to the more strictly controlled storage procedures, would eliminate or significantly reduce treadwear grade inflation and reduce costs both to NHTSA and the industry by not having to test each new lot of CMTs.

3. Costs and Benefits

The agency believes that assigning a fixed value to the BCWR would reduce to insignificance, if not eliminate entirely, the inflation of treadwear ratings. The change in storage procedures is internal to NHTSA and will not result in any costs to tire manufacturers or consumers. Fixing the BCWR at its present rate also would have no cost effect on manufacturers or consumers because it involves no additional testing, retesting or relabeling of tires. The treadwear amendments would, however, benefit both manufacturers and the public by simplifying the required treadwear grading of tires and by making the treadwear grades more realistic and consistent.

B. Traction

1. Public Comments

Goodyear, Dunlop, ETRTO, GT, MTS, and BF recommended maintaining the current traction rating method. GT and Dunlop stated that changing the rating system could cause confusion both to consumers and to the industry, and MTS stated that the current system produces reliable, repeatable results.

Cooper, on the other hand, recommended changing the rating system, arguing, without explanation, that the current system is oversimplified and potentially misleading. Cooper argued further that the traction numbers generated since NHTSA changed the test pads at San Angelo in 1989 are significantly lower than before the pads were changed and that therefore there is no need for an additional traction grade level. Specifically, Cooper cited traction tests conducted on the new skid pads in 1992 and 1993 on 54 tires of 28 different brands from 12 different manufacturers. Cooper stated that those tests showed an arithmetic mean of only 0.48±.04 for traction coefficients on the wet asphalt surface and 0.34±.02 on the wet concrete surface. Cooper stated that these figures showed a significantly different statistical distribution than that cited by NHTSA in support of the suggestion to upgrade the traction grading system. In addition, Cooper noted that none of the 54 tires tested would qualify for NHTSA's suggested ''AA'' traction grade. Finally, Cooper suggested that the agency work with the ASTM F9 Committee to develop a better test method.

Only Michelin supported the suggestion that the traction grade be upgraded. Cooper and Dunlop opposed upgrading the traction rating, arguing that it would confuse the public and increase costs to the industry with no consequent benefit to consumers. Dunlop stated that changes to the traction grading scheme would mean most existing tires and those in production would need to be regraded. Although Goodyear and ETRTO were not enthusiastic about upgrading the traction category, they stated that if the traction grade were changed, they favored creation of the ''AA'' category. MTS agreed that if the traction grade were changed, ''AA'' would be the simplest and most meaningful change.

With respect to whether peak traction should be measured and added to the traction grade, Goodyear, Michelin and MTS expressed support for the suggestion, saying that peak traction correlates with stopping distance and the measurements are reliable. Dunlop, Cooper, and BF opposed the suggestion, however, contending that the majority of motor vehicles currently on the road are not equipped with ABS. They also contended that peak traction data are more variable than sliding traction data and thus not so reliable.

The commenters agreed, however, that the cost of measuring peak traction would be minimal since both peak and sliding traction values could be measured under current test procedures, although data retrieval systems would need to be modified.

2. Agency Decision

NHTSA does not agree with the conclusions that Cooper draws from its figures regarding the traction coefficients of the new skid pads at San Angelo. The agency notes that Cooper's figures are based on a relatively small sample.

NHTSA statistically analyzed larger samples. Its analysis of traction tests of 254 candidate tires tested on the new skid pads showed that the distribution of the traction coefficients of the tested tires had a mean, or average, value of 0.516 on the wet asphalt surface and 0.364 on the wet concrete surface. The standard deviation about the mean values of this tire group was 0.029 on the wet asphalt and 0.017 on the concrete surface.

NHTSA's statistical analysis of 196 candidate tires tested on the old skid pads showed the mean value of the traction coefficients of those tires to be to be 0.533 on the wet asphalt surface and 0.375 on the wet concrete surface. The standard deviation about the arithmetic mean among this group was 0.036 on the old asphalt surface and 0.027 on the old concrete surface. The agency believes that the difference between the traction coefficients of the 196 tires tested on the old skid pads and the 254 tires tested on the new skid pads may be due to differences in the old and the new pads or differences in the tire populations of 1989–1991 and 1992–1994. In any case, all future traction testing will occur on the new pads since the old pads no longer exist.

Based on the average traction coefficient and standard deviation values from the new pads, the agency proposes adding a fourth category, designated as ''AA,'' to the traction grade only for tires with traction coefficients that exceed 0.54 (representing the mean, 0.516, and adding the standard deviation of 0.029) when tested on wet asphalt and 0.38 (0.364, the mean, +0.017, the standard deviation) when tested on wet concrete. Of the 254 tires tested as described above, only 8 would currently qualify for the new ''AA'' grade. The agency believes, however, that an optional new traction rating would provide an incentive for manufacturers to improve the traction performance of other tire lines.

NHTSA disagrees with GT and Dunlop that providing a means for differentiating the highest traction tires would cause confusion among consumers. To the contrary, NHTSA believes that adding the ''AA'' rating would benefit consumers by providing them additional guidance for choosing the proper tires to suit their individual needs.

Since upgrading traction performance to take advantage of the ''AA'' rating is optional, tire manufacturers would not necessarily incur any additional costs. Those manufacturers that chose to use the AA rating would be free to pass on whatever additional costs they would incur to their customers (see discussion of costs below).

NHTSA agrees with Goodyear, Michelin and MTS that there is a correlation between peak and sliding traction and that both values can be considered equivalent for grading purposes. However, the agency is persuaded by the comments of Dunlop, Cooper and BF that the majority of vehicles currently on the road are not equipped with ABS. Thus, they depend on sliding traction rather than peak traction for maximum stopping action. Accordingly, NHTSA does not propose to include peak traction in the traction ratings at this time.

3. Costs and Benefits

The proposed amendments to the traction grade under the UTQGS would create an additional level of traction rating the use of which would be optional to manufacturers. Therefore, the proposed ''AA'' traction rating would apply only to those manufacturers who elect to produce tires that meet the proposed ''AA'' criteria and label those tires accordingly. As discussed in IIIB above, only 8 of the 254 tires skid-tested by NHTSA would qualify for the proposed ''AA'' rating. The manufacturers' costs of reworking tire molds to accommodate the new traction rating would be minimal and would be necessary only for this small group and only if the manufacturers of those tires opted to give those tires the new, higher grade. The paper labels required by 49 CFR 575.104(d)(1)(i)(B)(2), however, would need to be changed to reflect the 4-grade rating system.

C. Temperature/Rolling Resistance/Fuel Economy

1. Public Comments

All comments on the Request for Comments addressed the temperature/rolling resistance/fuel economy issue. Nine trade and consumer associations responded, including engineering companies and test laboratories, 5 of which supported a rolling resistance grade and 4 of which were opposed. Seven tire manufacturers responded, 6 of which opposed a rolling resistance grade either as a substitute for the temperature resistance grade or as a fourth rating category under the UTQGS. Fourteen private citizens commented, 9 of whom supported a rolling resistance grade, while 5 were opposed.

The members of the public and the private associations and companies that opposed a rolling resistance grade cited various objections to it. For example, Mr. Christopher Smith of Pennsylvania asserted that NHTSA should not be concerned with rolling resistance because it robs consumers of their choices. Mr. Fred Crum of California stated that road surface ratings are more important than rolling resistance ratings if fuel savings are to be achieved. Mr. Robert Burns, President of the Private Brand Tire Group (PBTG) asserted that the government should not force consumers to bear the cost of testing and remolding a new UTQGS symbol which will be passed on to them by manufacturers. Advocates for Highway Safety (AHS) expressed concern that addition of a rolling resistance rating could cause consumers, for reasons of economy, to purchase tires that have a lower overall traction performance.

Cooper, Dunlop, Goodyear, BF and GT argued that rolling resistance and temperature resistance are separate properties. They asserted that rolling resistance measures the energy consumed by the tire, which relates to the efficiency of the tire in converting motive power to distance traveled, while temperature resistance relates to the ability of the tire structure and materials to withstand the temperatures generated by the flexing of the rubber and its reinforcing materials. The PBTG opposed the deletion of the temperature resistance grade, asserting that the temperature resistance characteristics of tires are relevant to such hot climates as the American desert southwest where tire dealers choose their tire lines on this basis. Cooper and Dunlop stated that such desert countries as Saudi Arabia require tires imported into their countries to be rated at least ''B'' for temperature resistance. Goodyear, on the other hand, supported the deletion of the temperature resistance rating because, as NHTSA discussed in the Request for Comments of April 25, 1994, the majority of consumers pay no attention to this rating when purchasing tires. Michelin also supported the deletion of the temperature resistance grade, stating that the voluntary speed ratings placed on some tires by manufacturers in accordance with SAE Recommended Practice J1561, Laboratory Speed Test Procedure for Passenger Car Tires, adequately represent the temperature resistance capability of the tire.

Michelin commented that vehicle manufacturers, in order to meet fuel economy requirements, have long required their tire suppliers to provide low rolling resistance original equipment (OE) tires, while still imposing strict standards on treadwear, traction, and speed durability. Michelin stated that since 1980 tire rolling resistance has in some cases been reduced by as much as 50 percent while still maintaining other performance characteristics. BF asserted that the rolling resistance of OE tires is constantly being improved to meet CAFE standards and that that technology is included in after-market tires through standardization. Therefore, BF argued that there is no need to establish a rolling resistance grade for the UTQGS.

NTDRA, PBTG, Goodyear, and GT argued that a rolling resistance grade would be costly and yield little or no consumer benefit because of lack of consumer interest. NTDRA contended that a rolling resistance grade would constitute an unnecessary cost burden on manufacturers. Goodyear, claiming a the lack of success of its Invicta GFE model low rolling resistance tire, stated that there is little public interest in low rolling resistance/fuel efficient tires because of their increased cost. STL asserted that there are too many variables in measuring rolling resistance to be of any consumer benefit. Goodyear, Michelin, Dunlop and Cooper stated that even tires of the same size designation, construction and load-carrying capacity can have different rolling resistance characteristics. PBTG, Goodyear, GT, BF, and Dunlop argued that rolling resistance cannot be improved without adversely affecting treadwear and traction. Michelin disagreed with this assertion, saying that tire manufacturers have used tire technology to reduce rolling resistance in OE tires without adversely affecting treadwear or traction.

Manufacturers generally agreed that there would be a difference in production and consumer costs between grading for temperature resistance and rolling resistance, but did not specify what such difference might be. Goodyear stated that it costs less to test for rolling resistance than for temperature resistance, but more tests would probably be required. Goodyear estimated that rolling resistance tests cost $175 per test while temperature resistance tests cost $250 per test. BF stated that it would be ''extremely expensive'' to consumers to implement all the changes suggested by NHTSA in the Request for Comments. GT estimated that to achieve reduced rolling resistance without loss of the other tire properties would increase tire costs to consumers by 15 percent, due to the increased cost of redesigning and testing of tire lines. Goodyear asserted that a tire designed to minimize rolling resistance may have a shorter tread life, thereby creating the need for more tires with associated increased energy consumption. The American Retreaders Association expressed concern that such low rolling resistance tires may not be retreadable.

PBTG, Goodyear, BF, GT, Dunlop, NTDRA and Cooper asserted that the best course of action would be for NHTSA to mount a publicity campaign to educate the public with respect to proper tire maintenance and encourage people to maintain proper inflation pressure, proper balance and alignment, and obey speed limits. The commenters asserted that those measures would have a more significant effect on reduction of greenhouse gasses than grading tires for their rolling resistance characteristics. Nevertheless, Dunlop, BF, Goodyear, GT, and Cooper suggested that if NHTSA decides to proceed with the rolling resistance grade, the agency should make the requirement effective for newly-introduced tire lines only.

The lone manufacturer supporting the establishment of a rolling resistance grade was Michelin. That company supported the deletion of the temperature resistance grade, stating that it does not serve the purpose for which it was intended and does not provide useful consumer information. Michelin asserted, on the other hand, that establishment of a rolling resistance grade for all tires would encourage manufacturers to improve the rolling resistance characteristics of replacement tires and bring them up to the capabilities of OE tires. Michelin estimated that the additional consumer cost would be less than $1 per tire, but in any case no more than $2.50 per tire. Michelin believes that those costs would be more than offset by the value of the fuel conservation and reduction of global warming gases that rolling resistance labeling would make possible.

2. Agency Decision

a. *Temperature resistance*. The temperature resistance grade under the UTQGS represents a tire's ability to dissipate and withstand heat buildup that can cause the tire to degenerate and result in a reduction of tire life or even tire failure. Currently, 20.4 percent of new replacement tire lines are rated A, 51.8 percent are rated B, and 26.4 percent are rated C.

The temperature resistance grade is not widely understood by consumers and therefore most do not find it useful when purchasing tires. NHTSA's data indicate that of consumers purchasing tires for their own use, 38 percent have heard of the temperature resistance grade, while only 12 percent consider it in making tire selections. The comparable figures for the other types of ratings are 74 percent and 29 percent for the treadwear ratings and 65 and 27 percent for the traction ratings.

As stated above, in order to create wider knowledge and better understanding of the UTQGS ratings among consumers, including the temperature resistance rating, NHTSA has issued consumer information bulletins, press releases, and has required labels to be affixed to each individual tire. These efforts seemed to arouse little public interest and had no lasting effect. NHTSA has considered expanding its publicity efforts into nationwide publicity campaigns, but such publicity campaigns are very expensive. Further, based on the lack of response to previous publicity on the subject, NHTSA has no reason to believe that a widespread, expensive publicity campaign would produce any more significant results than past efforts. NHTSA believes that the safety purposes of the temperature resistance grade can be essentially met by other existing measures. The high speed performance test specified in section S5.5 of Standard No. 109, New pneumatic tires, assures the minimum temperature resistance performance for all passenger car tires. That section requires that tires be tested at 75 miles per hour (mph) for 30 minutes, at 80 mph for 30 minutes, and again at 85 mph for 30 minutes. At the end of the test, the tire must have not less than the initial inflation pressure and must not show the indications of damage specified in paragraph S4.2.2.5(a) of Standard No. 109. Successful completion of this test equates to a temperature resistance grade of ''C'' under the UTQGS. That meets at least the minimum requirements under the UTQGS.

To accommodate those with special needs, such as law enforcement vehicles that require tires capable of sustained high speeds or those operating in areas of high ambient temperatures, tire speed ratings are available. These ratings are voluntary industry ratings in accordance with the procedures set forth in SAE-J1561. Such ratings are indicated by symbols molded onto or into tire sidewalls which range from the ''S'' category, meaning capability of sustained speeds up to 112 mph, to the ''Y'' category, meaning capability of sustained speeds up to 186 mph. Tires above the ''S'' category would be equivalent to a UTQGS temperature resistance rating of ''A.''

With respect to Michelin's comment, noted above, that the manufacturers' voluntary speed ratings adequately represent the temperature resistance capability of a tire, NHTSA has no data about the number of consumers who know of and consider the industry speed ratings. The agency believes, however, that consumers who need, for reasons such as occupation or climate, tires with higher speed ratings are motivated to obtain information about the industry speed ratings and consider them in selecting replacement tires.

For those reasons, NHTSA proposes to delete the temperature resistance rating from the UTQGS, substituting therefor a rolling resistance/fuel economy rating, as discussed below. NHTSA believes that since the UTQGS are intended to be meaningful and helpful to the tire-buying public in selecting tires that suit their individual needs, the agency should continue its efforts to make the UTQGS as meaningful and helpful as possible to consumers by rating those tire characteristics which the public understands and in which the public is interested.

b. *Rolling resistance/fuel economy.* Based on the public comments in response to the agency's April 25, 1994 Request for Comments, the agency believes that there is a direct correlation between rolling resistance and fuel economy. Michelin commented that a 5 percent reduction in rolling resistance results in a 1 percent fuel savings at highway speeds, regardless of the vehicle's fuel consumption. The agency would welcome comments on the validity of this relationship.

NHTSA also solicits comments on how the relationship would be affected by various real-world driving conditions, such as temperature, precipitation, vehicle speed, and road conditions, and vehicle conditions such as wheel alignment, tire balance, and inflation pressures. Even if that relationship would not be affected by those conditions, NHTSA assumes that any such fuel savings would be reduced in direct proportion to the number of tires on the vehicle that do not have low rolling resistance. For example, under this assumption, a vehicle equipped with 2 low rolling resistance tires and 2 tires with rolling resistance typical of current replacement tires would achieve only half the savings of the same vehicle equipped with 4 low rolling resistance tires. The agency requests comment on that assumption.

The agency does not agree with the assertions of some commenters that rolling resistance cannot be improved without detracting from the other tire characteristics. NHTSA agrees with commenters on the Request for Comments that although rolling resistance and temperature resistance are separate properties, there is a correlation between rolling resistance and heat generation. Rolling resistance contributes to heat buildup which can ultimately result in tire failure. Thus, a tire with lower rolling resistance will normally run cooler, and therefore safer, than a tire with higher rolling resistance. In addition, a tire with lower rolling resistance creates less friction, thus contributing to tire efficiency which in turn results in less fuel consumption.

Michelin and other commenters pointed out that the rolling resistance of OEM tires has been significantly reduced in recent years to assist vehicle manufacturers in meeting corporate auto fuel economy (CAFE) standards, without loss of traction or treadwear. Since the achievement of rolling resistance reductions without adverse safety consequences is a significant issue, NHTSA solicits more specific data on the differences in rolling resistance and traction characteristics between OEM and replacement tires at the manufacturers' recommended pressures and at typical inflation pressures.

While the cheapest way of reducing rolling resistance would also reduce traction, there are other ways, such as alternative tread compounds, that are reasonable in cost and that may not affect traction. Further, the UTQGS traction ratings would inform purchasers when making a particular tire choice that would involve a reduction in traction. Therefore, there should logically be no inherent detraction from treadwear or traction capabilities by the production and purchase of low rolling resistance replacement tires. Nevertheless, the agency solicits comments on the extent to which, if at all, there is or could be a trade-off between safety characteristics such as traction and low rolling resistance. If such trade-offs do exist— (1) to what extent would this occur in real-world driving and vehicle conditions and typical inflation pressures? (2) how do tire manufacturers trade off those characteristics between OEM and replacement tires? (3) to what extent to the trade-offs vary for the different ways of reducing rolling resistance?

NHTSA has no data regarding Goodyear's assertion that low rolling resistance tires may have a shorter tread life, thus requiring more tires with associated increased energy consumption and the adverse environmental consequences of more scrap tires for disposal. NHTSA has not received any reports or indication that low rolling resistance OEM tires tend to have lower treadwear grades. To the contrary, as discussed above, treadwear grades have steadily increased over the past several years. Nevertheless, information is requested on any differences in treadwear ratings between OEM and replacement tires.

Several comments suggested that there was no public interest in lower rolling resistance. This suggestion appears to be based largely on speculation. One commenter did rely on the lack of success of its reduced rolling resistance tire. The agency does not believe that much reliance can be placed on that experience. When that tire was being sold, there was no comparative information available to the public regarding the rolling resistance of other tires.

NHTSA believes that while significant improvements have been made in the rolling resistance of OEM tires in the last 15 years, changes in replacement tire rolling resistance have lagged behind somewhat. The agency has no data, and Michelin provided no specifics, regarding that company's assertion that the rolling resistance of OEM tires has been reduced by 50 percent since 1980. Similarly, NHTSA has no data indicating that, as BF contended, the low rolling resistance technology of OEM tires is being applied to replacement tires. Although that might eventually happen, NHTSA believes that there is an equally strong possibility that it will not. The agency would welcome data on the amount of reduction in rolling resistance in OEM tires since 1980 and to what extent, if any, such technology has been applied to currently available replacement tires.

Tire manufacturers have been producing low rolling resistance OEM tires for vehicle manufacturers since 1980 and equivalent low rolling resistance tires are available on the replacement market to some extent. However, comparative information on the fuel economy benefits of such tires is not available to consumers. The agency seeks to expedite the availability of low rolling resistance tires by encouraging tire manufacturers to produce low rolling resistance replacement tires and emphasize the economic and environmental advantages of such tires in their promotional advertising. NHTSA will also publicize the advantages of low rolling resistance tires and encourage the public to purchase them.

NHTSA disagrees with commenters that suggested that a public education program encouraging proper tire maintenance would result in as much fuel conservation as requiring a rolling resistance grade. The agency is aware that a great deal of fuel is unnecessarily consumed by improper tire maintenance, particularly improper inflation pressure. However, the agency believes that even if the motoring public did properly maintain all tires, there would continue to be potential fuel savings available by reducing the rolling resistance of replacement tires.

ARA did not explain why it thought low rolling resistance tires would not be retreadable. In response to the ARA comment, however, Michelin stated that low rolling resistance tires have routinely been retreaded without any problems. NHTSA has not received any information or complaints on this issue, which could indicate that there is no significant problem with retreading low rolling resistance tires. The agency also notes that it is not aware that many car tires are currently retreaded. NHTSA would welcome comments on this issue, however, particularly if there are problems with retreadability, including the types and sizes of tires involved.

Some commenters stated that the rolling resistance of larger tires is less than that of smaller tires under the same loading conditions. For instance, Cooper commented that tire size makes a difference in rolling resistance measurements because tire loading is not precisely proportional to tire size. Michelin reported rolling resistance values of 8.3 kilograms per ton to 9.8 kilograms per ton for tires in a given tire line having the same rim diameter and aspect ratio, but of different width.

NHTSA does not believe that the variation in the rolling resistance of different sized tires would be so great as that reported by Michelin under the procedures of SAE J–1269. The agency believes that, as measured under test loading conditions, rolling resistance should remain approximately the same for all tire sizes in a tire line. If certain tire lines do show substantial differences in rolling resistance among sizes, testing of each size may be necessary to determine fuel economy grades. Depending on the number of tires and lines involved, manufacturers might choose to grade each size individually or assign the lower value to all tires within the same line. At the extreme, there may be two or three rolling resistance values for a tire line, just as there is presently for temperature resistance or treadwear.

For the reasons discussed above, the agency proposes to delete the temperature resistance grade from the UTQGS and substitute a fuel economy grade. The agency considers fuel economy more understandable and more meaningful to the tire-buying public than the temperature resistance rating. As pointed out above, the latter is not widely understood or utilized by the public in their tire purchases. Finally, addition of the fuel economy grade furthers the initiatives in the Climate Change Action Plan issued by the Administration in a national effort to reduce greenhouse gas emissions.

The agency is proposing to base the new fuel economy rating on a rolling resistance coefficient instead of rolling resistance itself since this will partially normalize rolling resistance variations by tire size within a tire line. The rolling resistance coefficient (C_r) is calculated by dividing the rolling resistance by the load on the tire when tested in accordance with SAE J–1269. Michelin stated that this coefficient ranges from 0.0073 to 0.0156, while Goodyear assessed the range as being between 0.0067 and 0.0152, and STL fixed it at 0.005 to 0.015.

Using 0.010 as the midpoint of the range, one method of rating fuel economy based on the rolling resistance coefficient would be by rating tires with a coefficient of less than 0.010 as ''A'' for fuel economy. Tires with a coefficient of 0.010 to 0.015 could be graded ''B'', while tires with a rolling resistance coefficient greater than 0.015 could be rated ''C''. This approach would be consistent with the views of those commenters who stated that if a rolling resistance/fuel economy rating were established, the A, B, and C ratings would be simpler, and therefore preferable.

Michelin, on the other hand, prefers a more differentiated, quantitative expression of the amount of potential fuel savings than would be provided by a general indication as in the case of the letter ratings. The agency believes that some consumers might also prefer this method. For example, a rolling resistance coefficient of 0.0080 would be graded as a 9 percent increase in fuel savings (100(0.0150–0.0080)/(0.0150)(5)) compared to a rolling resistance coefficient of 0.0150 (the number (5) in the preceding calculation represents a 5 percent change in rolling resistance, corresponding to a 1 percent change in fuel economy). A rolling resistance coefficient of 0.0150 or greater would be graded as 0 percent, indicating no fuel savings.

The agency seeks to make the rolling resistance/fuel economy rating as meaningful as possible to consumers. Accordingly, the agency solicits comments on the feasibility and preferability of the two methods of expressing the rating as discussed above, namely the A, B, and C method or the method quantifying the amount of potential fuel savings of the tire.

Note: All amendments related to the former method are identified in the regulatory text as ''alternative 1'' and all those related to the latter method are identified as ''alternative 2.''

3. Costs and Benefits.

The requirement to test and label all tires for rolling resistance could add to the testing costs associated with the production of tires. NHTSA believes that some of the costs of grading tires for rolling resistance would be offset by the deletion of testing for temperature resistance. Some commenters stated that although the rolling resistance test is less costly than the temperature resistance test, tire manufacturers may need to conduct more rolling resistance tests on different tire sizes to determine accurate fuel economy grades.

GT estimated the cost of rolling resistance testing at $250 per test, while Goodyear estimated $175 and BF estimated $100. Considering those comments, NHTSA believes that, as stated in the Request for Comments of April 25, 1994, the cost of a rolling resistance test should not exceed $250. The commenters variously estimated the cost of rolling resistance testing machines at between $400,000 and $1.2 million. Cooper stated that if rolling resistance tests were required, it would require a capital investment of $1.2 million to purchase 4 test machines. Considering the data submitted by commenters, NHTSA estimates that a single tire station rolling resistance test machine can be purchased for $500,000. NHTSA also notes, however, that tire manufacturers have the option of contracting with independent testing laboratories for their testing requirements, thereby avoiding a large capital outlay.

NHTSA estimates that the costs of labeling for fuel economy would be minimal, probably no more than pennies per tire. That conclusion is based on Cooper's statement that its total UTQGS labeling costs are $0.10 per tire, and Michelin's statement that its total UTQGS labeling could cost up to $0.15 per tire. On this issue, NHTSA agrees with Michelin that if given sufficient lead time to change tire molds during a regular replacement cycle, the proposed labeling changes would have negligible cost impact.

NHTSA estimates that the consumer cost of improving rolling resistance would be no more than $5 per tire, or $20 per set of 4. However, those figures are based on the projected cost of reducing the average rolling resistance of OEM tires by 10 percent, not on the cost of reducing average aftermarket tires' rolling resistance values to the level of average OEM tires. NHTSA solicits additional and more specific comments on the cost per tire of decreasing the rolling resistance of typical replacement tires to that of typical OEM tires, including the magnitude of that reduction in rolling resistance (Michelin asserted that the average rolling resistance of OEM tires is 22.6 percent lower than that of average replacement tires) and a description of the specific materials and design changes on which the cost estimate(s) is based. Further, are any alternative materials or designs that would significantly lower costs? To what extent are the answers to this question affected by typical tire and vehicle maintenance habits by consumers, such as inflation pressure, wheel alignment and tire balance?

NHTSA estimates that, assuming the realization of fuel economy gains of 4 percent, the use of 4 low rolling resistance replacement tires on a typical passenger car could result in fuel savings of 67 gallons over an assumed 40,000 mile tread life. The present value of such fuel savings, excluding Federal and state taxes, would be approximately $58. The average cost-benefit ratio of fuel savings per tire purchase would therefore be 2.9 to 1 ($58/$20) for passenger cars. Given these assumptions, the improved rolling resistance of the tires could in most cases pay for itself in slightly more than 1 year.

However, NHTSA notes that the imposition of rolling resistance grading would not include any obligation for tire manufacturers to reduce the rolling resistance of their tires. In fact, if the manufacturers believe that there is no consumer interest in low rolling resistance tires, they need not make any changes in their tires other than adding the grade marking on the sidewall.

D. Lead Time

The agency is proposing to make these amendments effective one year after issuance of the final rule. The agency believes that this would be sufficient for the following reasons. None of the amendments would require tire manufacturers to redesign their tires. Further, neither the treadwear nor the traction amendments would require the retesting of any tires. The rolling resistance/fuel economy amendments would require the testing of all existing tires. However, the agency believes that that testing could be readily completed in time to begin labeling tires with rolling resistance information at the end of a year.

Several tire manufacturers urged that the rolling resistance requirement be made effective for newly introduced tire lines only. The agency lacks authority to establish effective dates in the requested fashion. It could phase-in the requirement by percentage of production, as it has various vehicle standards, or by type of tire. However, NHTSA believes that a year should be sufficient lead time and that a phase-in would not be necessary. Nevertheless, the agency requests comment on these lead time issues.

IV. Rulemaking Analyses and Notices

A. E.O. 12866 and DOT Regulatory Policies and Procedures

This notice has not been reviewed under E.O. 12866, Regulatory Planning and Review. The agency has considered the impact of this rulemaking action and has concluded that it is not ''significant'' under the DOT's Regulatory Policies and Procedures. The amendments proposed in this notice are intended to make the UTQGS more meaningful and helpful to consumers in selecting tires to meet their needs. The amendments to the provisions regarding the treadwear and traction ratings are intended to reduce the treadwear rating inflation experienced in the past, and to add a traction grade category that differentiates the highest traction tires from lower traction tires. Neither of those testing and labeling amendments inherently involves any additional costs either to manufacturers or to consumers. The testing costs for a fuel economy grade would be offset by the savings realized by not having to conduct temperature resistance testing. The rolling resistance test is cheaper than the temperature resistance test, but more tire sizes may need to be tested. Additional discussion of these issues is contained in the agency's Preliminary Regulatory Evaluation, a copy of which has been placed in the public docket with this rulemaking action.

B. Regulatory Flexibility Act

NHTSA has considered the impacts of this rulemaking action under the Regulatory Flexibility Act. I hereby certify that the proposed amendments would not have a significant economic impact on a substantial number of small entities. Accordingly, the agency has not prepared a preliminary regulatory flexibility analysis.

The agency believes that no passenger car tire manufacturers qualify as small businesses. Small businesses, small organizations, and small governmental units would be affected by this rulemaking only to the extent that initially they may voluntarily pay as much as $5 more per tire for low rolling resistance tires in order to obtain the fuel savings associated with such tires.

C. National Environmental Policy Act

NHTSA has analyzed this rulemaking for purposes of the National Environmental Policy Act and has determined that implementation of this action would have no significant impact on the quality of the human environment.

Rolling resistance labeling could indirectly result in some modest environmental benefit, to the extent that such labeling encourages consumers to buy more fuel efficient aftermarket tires. However, the agency currently is unable to estimate the extent of any increase in sales of such tires. For illustrative purposes, the agency estimated the impacts that would result from 5, 10, and 15 percentage point increases in the sales of tires with low rolling resistance (NHTSA believes that the current market share for low rolling resistance tires in the aftermarket is about 15 percent). Such sales increases could reduce fleet fuel consumption by 155, 309, and 464 million gallons, respectively, over the assumed 40,000 mile tread lives of tires. This range of reductions is equivalent to oil savings of 10 to 30 thousand barrels per day. Further, such reductions in fuel consumption would result in vehicle carbon dioxide emission reductions of approximately 1.4, 2.7, and 4.1 million metric tons over the tread lives of the tires.

D. Federalism

NHTSA has analyzed this proposal in accordance with the principles and criteria contained in E.O. 12612 and has determined that the proposals in this notice do not have sufficient federalism implications to warrant preparation of a Federalism Assessment. No state laws would be affected.

E. Civil Justice Reform

The proposed amendments in this notice would not have any retroactive effect. Under 49 U.S.C. 30103(b), whenever a Federal motor vehicle safety standard is in effect, a state or political subdivision thereof may prescribe or continue in effect a standard applicable to the same aspect of performance of a motor vehicle only if the state's standard is identical to the Federal standard. However, the United States government, a state or political subdivision of a state may prescribe a standard for a motor vehicle or motor vehicle equipment obtained for its own use that imposes a higher performance requirement than that required by the Federal standard. 49 U.S.C. 30161 sets forth a procedure for judicial review of final rules establishing, amending or revoking Federal motor vehicle safety standards. A petition for reconsideration or other administrative proceedings is not required before parties may file suit in court.

V. Comments

A. Comment Closing Date

NHTSA has determined that it is in the public interest to provide a comment period of less than 60 days in this instance because of the importance of the President's Climate Change Action Plan to fuel conservation and the reduction of greenhouse gas emissions into the environment. In addition, the Joint Conference Report on the Department of Transportation's Fiscal Year 1995 Appropriations directed the agency to issue a rolling resistance tire labeling rule by June 1, 1995.

B. General

Interested persons are invited to submit comments on the amendments proposed in this rulemaking action. It is requested but not required that any comments be submitted in 10 copies each.

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

If a commenter wishes to submit certain information under a claim of confidentiality, 3 copies of the complete submission including the purportedly confidential business information should be submitted to the Chief Counsel, NHTSA at the street address shown above, and 7 copies from which the purportedly confidential information has been expunged should be submitted to the Docket Section. A request for confidentiality should be accompanied by a cover letter setting forth the information specified in 49 CFR part 512, the agency's confidential business information regulation.

All comments received on or before the close of business on the comment closing date indicated above for the proposal will be considered, and will be available to the public for examination in the docket at the above address both before and after the closing date. To the extent possible, comments received too late for consideration in regard to the final rule will be considered as suggestions for further rulemaking action. Comments on the proposal will be available for public inspection in the docket. NHTSA will continue file relevant information in the docket after the closing date, and it is recommended that interested persons continue to monitor the docket for new material.

Those persons desiring to be notified upon receipt of their comments in the rules docket should enclose a self-addressed stamped postcard in the envelope with their comments. Upon receiving the comments the docket supervisor will return the postcard by mail.

List of Subjects in 49 CFR Part 575

Consumer protection, Motor vehicle safety, Reporting and recordkeeping, Tires.

In consideration of the foregoing, 49 CFR Part 575 would be amended as follows:

PART 575—CONSUMER INFORMATION REGULATIONS

1. The authority citation for Part 575 continues to read as follows:

Authority: 49 U.S.C. 322, 30111, 30115, 30117, and 30166; delegation of authority at 49 CFR 1.50.

2. Section 575.104 would be amended by revising paragraphs (a); (d)(1)(i)(B); (d)(1)(ii); (d)(1)(iii); (d)(2)(i), and (d)(2)(ii) introductory text; adding paragraph (d)(2)(ii)(D); revising paragraphs (d)(2)(iii); (e)(2)(ix)(C); and (g); Table 1; and Figure 1; and in Figure 2, by revising Part I and in Part II, by removing the paragraph for ''Temperature'' and adding a paragraph for ''Fuel Economy''; and by removing Table 2A and sections (i) through (l).

§ 575.104 Uniform tire quality grading standards.

(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 fuel economy.

* * * * *

(d) Requirements—(1) Information. * * *

Alternative 1 to paragraph (d)(1)(i)(B)

(i)(B) Each tire manufactured on and after the effective date of these amendments, other than a tire sold as original equipment on a new vehicle, shall have affixed to its tread surface so as not to be easily removable a label or labels containing its grades and other information in the form illustrated in Figure 2, Parts I and II. The treadwear grade attributed to the tire shall be either imprinted or indelibly stamped on the label containing the material in Part I of Figure 2, directly to the right of or below the word ''TREADWEAR''. The traction grade attributed to the tire shall be indelibly circled in an array of the potential grade letters AA, A, B, or C, directly to the right of or below the words ''TRACTION'' in Part I of Figure 2. The fuel economy grade attributed to the tire shall be indelibly circled in an array of the potential grade letters A, B, or C directly to the right of or below the words ''FUEL ECONOMY'' in Part I of Figure 2. The words ''TREADWEAR'', ''TRACTION'', and ''FUEL ECONOMY,'' in that order, may be laid out vertically or horizontally. The text of Part II of Figure 2 may be printed in capital letters. The text of Part I and the text of Part II of Figure 2 need not appear on the same label, but the edges of the two texts must be positioned on the tire tread so as to be separated by a distance of no more than one inch. If the text of Part I and the text of Part II of Figure 2 are placed on separate labels, the notation ''See EXPLANATION OF DOT QUALITY GRADES'' shall be added to the bottom of the Part I text, and the words ''EXPLANATION OF DOT QUALITY GRADES'' shall appear at the top of the Part II text. The text of Figure 2 shall be oriented on the tire tread surface with lines of type running perpendicular to the tread circumference. If a label bearing a tire size designation is attached to the tire tread surface and the tire size designation is oriented with lines of type running perpendicular to the tread circumference, the text of Figure 2 shall read in the same direction as the tire size designation.

ALTERNATIVE 2 TO PARAGRAPH (d)(1)(i)(B)

(i)(B) Each tire manufactured on and after the effective date of these amendments, other than a tire sold as original equipment on a new vehicle, shall have affixed to its tread surface so as not to be easily removable, a label or labels containing its grades and other information in the form illustrated in Figure 2, Parts I and II. The treadwear grade attributed to the tire shall be either imprinted or indelibly stamped on the label containing the material in Part I of Figure 2, directly to the right of or below the word ''TREADWEAR.'' The traction grade attributed to the tire shall be indelibly circled in an array of the potential grade letters AA, A, B, or C, directly to the right of or below the word ''TRACTION.'' The fuel economy grade attributed to the tire shall be either imprinted or indelibly stamped on the label containing the material in Part I of Figure 2, directly to the right of or below the words ''FUEL ECONOMY.'' The words ''TREADWEAR,'' ''TREADWEAR,'' and ''FUEL ECONOMY,'' in that order, may be laid out vertically or horizontally. The text of Part II of Figure 2 may be printed in capital letters. The text of Part II of Figure 2 may be printed in capital letters. The text of Part I and the text of Part II of Figure 2 need not appear on the same label, but the edges of the two texts must be positioned on the tire tread so as to be separated by a distance of no more than one inch. If the text of Part I and the text of Part II of Figure 2 are placed on separate labels, the notation ''See EXPLANATION OF DOT QUALITY GRADES'' shall be added to the bottom of the Part I text, and the words ''EXPLANATION OF DOT QUALITY GRADES'' shall appear at the top of the Part II text. The text of Figure 2 shall be oriented on the tire tread surface with lines of type running perpendicular to the tread circumference. If a label bearing a tire size designation is attached to the tire tread surface and the tire size designation is oriented with lines of type running perpendicular to the tread circumference, the text of Figure 2 shall read in the same direction as the tire size designation.

ALTERNATIVE 1 TO PARAGRAPH (d)(1)(ii)

(ii) In the case of information required in accordance with § 575.6(c) to be furnished to prospective purchasers of motor vehicles and tires, each vehicle manufacturer and each tire manufacturer or brand name owner shall, as part of that information, list all possible grades for traction and fuel economy, and restate verbatim the explanations for each performance area specified in Figure 2. The information need not be in the same format as in Figure 2. In the case of a tire manufacturer or brand name owner, the information must indicate clearly and unambiguously the grade in each performance area for each tire of that manufacturer or brand name owner offered for sale at the particular location.

ALTERNATIVE 2 TO PARAGRAPH (d)(1)(ii)

(ii) In the case of information required in accordance with § 575.6(c) to be furnished to prospective purchasers of motor vehicles and tires, each vehicle manufacturer and each tire manufacturer or brand name owner shall, as part of that information, list all possible traction grades and restate verbatim the explanations for each performance area specified in Figure 2. The information need not be in the same format as in Figure 2. In the case of a tire manufacturer or brand name owner, the information must indicate clearly and unambiguously the grade in each performance area for each tire of that manufacturer or brand name owner offered for sale at the particular location.

ALTERNATIVE 1 TO PARAGRAPH (d)(1)(iii)

(iii) In the case of information required in accordance with § 575.6(a) to be furnished to the first purchaser of a new motor vehicle, other than a motor vehicle equipped with tires manufactured prior to the effective date of these amendments, each manufacturer of motor vehicles shall, as part of the information, list all possible grades for traction and fuel economy, and restate verbatim the explanation for each performance area specified in Figure 2. The information need not be in the format of Figure 2, but it must contain a statement referring the reader to the tire sidewall for the specific tire grades for the tires with which the vehicle is equipped.

ALTERNATIVE 1 TO PARAGRAPH (d)(1)(iii)

(iii) In the case of information required in accordance with § 575.6(a) to be furnished to the first purchaser of a new motor vehicle, other than a motor vehicle equipped with tires manufactured prior to the effective date of these amendments, each manufacturer of motor vehicles shall, as part of the information, list all possible grades for traction and fuel economy, and restate verbatim the explanation for each performance area specified in Figure 2. The information need not be in the format of Figure 2, but it must contain a statement referring the reader to the tire sidewall for the specific tire grades for the tires with which the vehicle is equipped.

(2) Performance—(i) Treadwear. Each tire shall be graded for treadwear performance with the word ''TREADWEAR'' followed by a number of two or three digits representing the tire's grade for treadwear, expressed as a percentage of the NHTSA nominal treadwear value, when tested in accordance with the conditions and procedures specified in paragraph (e) of this section. Treadwear grades shall be in multiples of 20 (for example, 80, 120, and 160).

(ii) Traction. Each tire shall be graded for traction performance with the word ''TRACTION,'' followed by the symbols C, B, A, or AA, when the tire is tested in accordance with the conditions and procedures specified in paragraph (f) of this section.

* * * * *

(D) The tire may be graded AA only when its adjusted traction coefficient is both:

(*1*) More than 0.54 when tested in accordance with paragraph (f)(2) of this section on the asphalt surface specified in paragraph (f)(1)(i) of this section; and

(*2*) More than 0.38 when tested in accordance with paragraph (f)(2) of this section on the concrete surface specified in paragraph (f)(1)(i) of this section.

ALTERNATIVE 1 TO PARAGRAPH (d)(2)(iii)

(iii) Fuel economy. Each tire shall be graded for fuel economy performance with the words ''FUEL ECONOMY'' followed by the letter A, B, or C, based on its performance when the tire is tested in accordance with the procedures specified in paragraph (g) of this section.

(A) The tire may be graded A only if its rolling resistance coefficient is less than 0.010.

(B) The tire may be graded B only if its rolling resistance coefficient is equal to or greater than 0.010 but less than 0.015.

(C) The tire may be graded C if its rolling resistance coefficient equal to or greater than 0.015.

ALTERNATIVE 2 TO PARAGRAPH (d)(2)(iii)

(iii) Fuel economy. Each tire shall be graded for fuel economy performance with the words ''FUEL ECONOMY'' followed by the tire's rated percentage of increase in fuel savings, such as ''5%'', based on the tire's performance when tested in accordance with the procedures specified in paragraph (g) of this section.

* * * * *

(e) Treadwear grading conditions and procedures. * * *

(2) Treadwear grading procedure. * * *

(ix) * * *

(C) Determine the course severity adjustment factor by assigning a base wear rate of 1.47 to the course monitoring tires and dividing that rate by the average wear rate for the four course monitoring tires.

* * * * *

ALTERNATIVE 1 TO PARAGRAPH (g)

(g) Fuel economy grading. The fuel economy grade is calculated as follows:

(1) The tire's rolling resistance coefficient is determined in accordance with the procedures of SAE Recommended Practice J–1269, Rolling Resistance Measurement Procedure for Passenger Car, Light Truck, and Highway Truck and Bus Tires, revised March, 1987 (SAE J–1269).

(2) The rolling resistance coefficient (C_r) is the ratio of rolling resistance force (F_r) to the normal load on the tire: (F_n) or $C_r=F_r \div F_n$.

Example No 1. F_n=1,100 pounds of force (lbf); F_r=8 lbf; then $C_r=8 \div 1{,}00=0.00727$.

A rolling resistance coefficient of 0.00727 would result in a grade of ''A'' for fuel economy.

Example No. 2. F_n=1,100 lbf, and F_r=18 lbf, then $C_r=18 \div 1{,}100=0.01636$.

A rolling resistance coefficient of 0.01636 would result in a grade of ''C'' for fuel economy.

ALTERNATIVE 2 TO PARAGRAPH (g)

(g) Fuel economy grading. The fuel economy grade is calculated as follows:

(1) The tire's rolling resistance coefficient is determined in accordance with the procedures of SAE Recommended Practice J–1269, Rolling Resistance Measurement Procedure for Passenger Car, Light Truck, and Highway Truck and Bus Tires, revised March, 1987 (SAE J–1269).

(2) The rolling resistance coefficient (Cr) is the ratio of rolling resistance force (Fr) to the normal load on the tire: (Fn) or Cr=Fr÷Fn.

Example No 1. Fn=1,100 pounds of force (lbf); Fr=8 lbf; then Cr=8=÷1,100=0.00727.

Example No. 2. Fn=1,100 lbf, and Fr=18 lbf, then Cr=18÷1,100=0.01636.

(3) Determine the tire's fuel economy grade by subtracting its rolling resistance coefficient from 0.0150, then multiply by 1,333. The resulting number, rounded to the nearest whole number, is the fuel economy grade, expressed as a percentage.

(i)(A) Using the numbers in Example No. 1 in paragraph (g)(2) of this section, given the rolling resistance coefficient (Cr) of 0.00727, the fuel economy grade (Fg) would be calculated as follows:

$Fg=(0.0150-0.00727)\times1{,}333=(0.00773)\times1{,}333=10.30$ percent, rounded to 10 percent.

(B) This would represent an increase of 10 percent in fuel economy, expressed as a fuel economy grade of ''10%''.

(ii) Using the numbers in Example No. 2 in paragraph (g)(2) of this section: If Fn=1,100 lbf, and Fr=18 lbf, then
Cr=18÷1,100=0.01636
$Fg=(0.0150-0.01636)\times1{,}333=(-0.00136)\times1{,}333=-1.82$ or 0 percent A negative value represents a 0 percent increase in fuel economy, and would be expressed as a fuel economy grade of ''0%''.

TABLE 1.—TEST INFLATION PRESSURES

Maximum permissible inflation pressure for the treadwear test												
Tires other than CT tires									CT Tires			
Psi				kPa					kPa			
32	36	40	60	240	280	300	340	350	290	330	350	390
24	28	32	52	180	220	180	220	230	230	270	230	270

* * * * *

ALTERNATIVE 1 TO FIGURE 1

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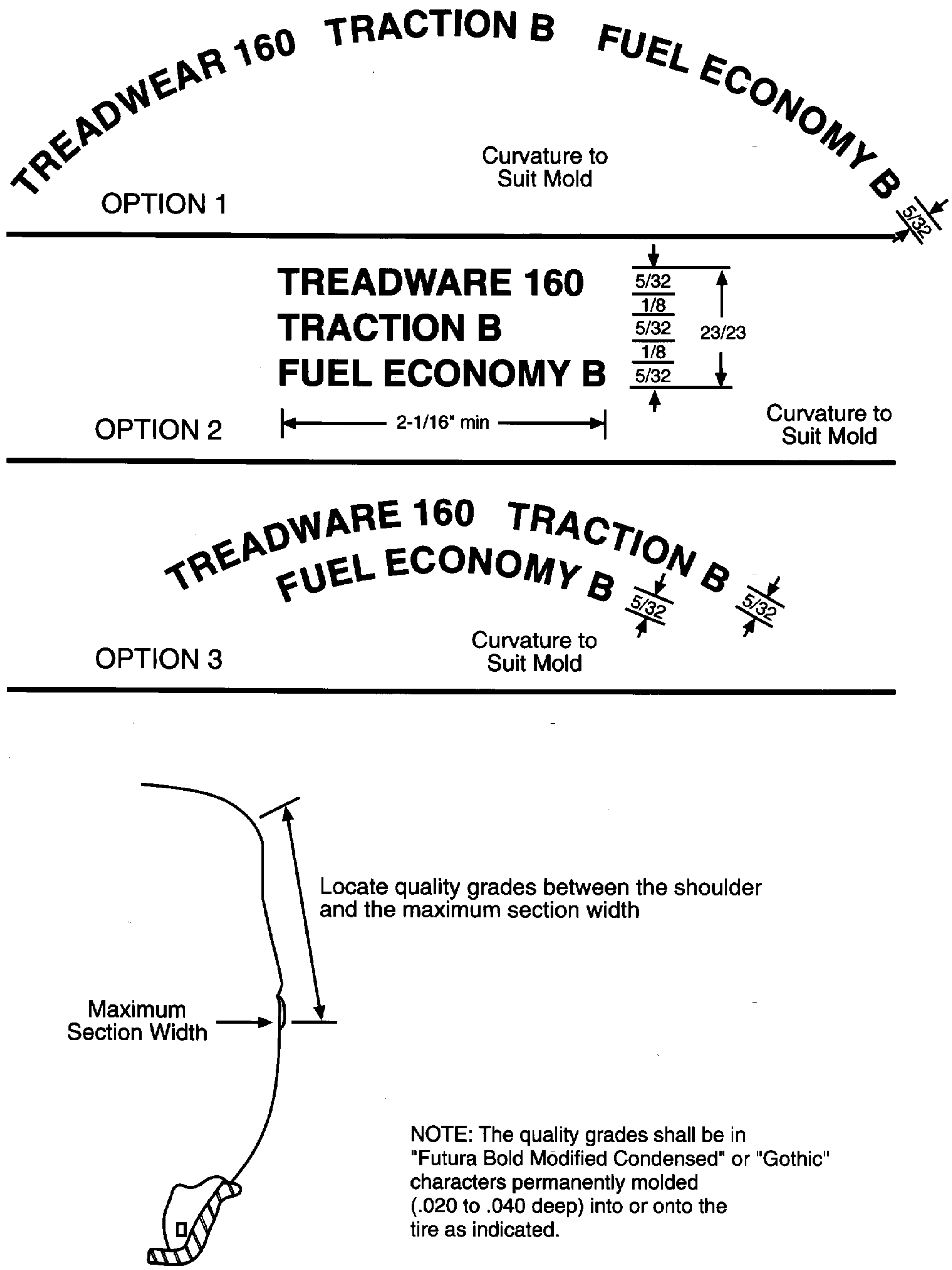

Figure 1

Revsion 1

ALTERNATIVE 2 TO FIGURE 1:

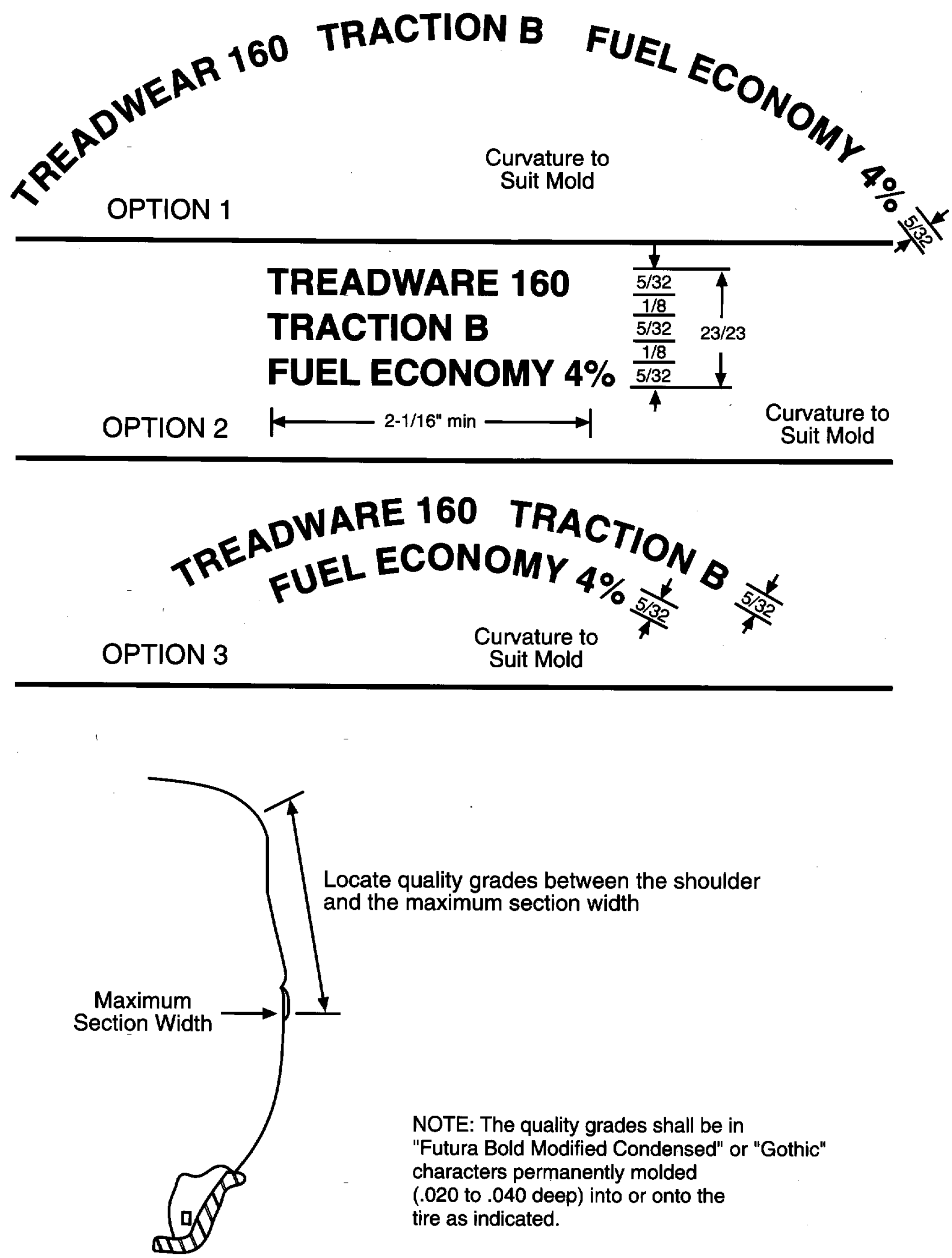

Figure 1

Revsion 2

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ALTERNATIVE 1 TO FIGURE 2—[PART I]

Figure 2—[Part I]—DOT Quality Grades

TREADWEAR
TRACTION AA A B C
FUEL ECONOMY A B C

ALTERNATIVE 2 TO FIGURE 2—[PART I]

TREADWEAR
TRACTION AA A B C
FUEL ECONOMY

ALTERNATIVE 1 TO FIGURE 2—[PART II]

[Part II] * * *

* * * * *

FUEL ECONOMY

The fuel economy grade gives a relative value of the tire's potential to affect a motor vehicle's fuel economy. For example, a vehicle with four tires rated ''A'' for fuel economy would have lower rolling resistance and therefore greater fuel efficiency than a vehicle with four tires rated ''B'' or ''C''. Saving fuel reduces carbon dioxide emissions which contribute to global warming. It should be noted, however, that actual fuel savings depend on driving habits, proper vehicle and tire maintenance, proper tire inflation pressure, road conditions, and climate. The fuel economy grade is based on testing the tire for rolling resistance under controlled conditions using specified test procedures. Only tires of the size appropriate for your car should be compared.

[ALTERNATIVE 2 TO FIGURE 2—[PART II]

[Part II * * *]

* * * * *

FUEL ECONOMY

The fuel economy grade gives a relative value of the tire's potential to affect a motor vehicle's fuel economy. For example, a vehicle with four tires rated ''2%'' for fuel economy would achieve 2% higher fuel economy than a vehicle with four tires rated ''0%.'' A vehicle with two tires rated ''2%'' and two tires rated ''0%'' would achieve 1% higher fuel economy than a vehicle with four tires rated ''0%.'' Saving fuel reduces carbon dioxide emissions which contribute to global warming. It should be noted, however, that actual fuel savings depend on driving habits, proper vehicle and tire maintenance, proper tire inflation pressure, road conditions, and climate. The fuel economy grade is based on testing the tire for rolling resistance under controlled conditions using specified test procedures. Only tires of the size appropriate for your car should be compared.

* * * * *

Issued on May 17, 1995.

Barry Felrice,

Associate Administrator for Safety Performance Standards.

[FR Doc. 95–12513 Filed 5–18–95; 1:52 pm]

BILLING CODE 4910–59–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 675

[Docket No. 950206040–5040–01; I.D. 051595J]

Groundfish of the Bering Sea and Aleutian Islands Area; Apportionment of Reserve

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration, Commerce.

ACTION: Apportionment of reserve; request for comments.

SUMMARY: NMFS proposes to apportion reserve to certain target species in the Bering Sea and Aleutian Islands management area (BSAI). This action is necessary to allow for ongoing harvest and account for previous harvest of the total allowable catch (TAC). It is intended to promote the goals and objectives of the North Pacific Fishery Management Council.

DATES: Comments must be received at the following address no later than 4:30 p.m., Alaska local time June 7, 1995.

ADDRESSES: Comments may be sent to Ronald J. Berg, Chief, Fisheries Management Division, Alaska Region, NMFS, 709 W. 9th, Room 453, Juneau, AK 99801 or P.O. Box 21668, Juneau, AK 99802, Attention: Lori Gravel.

FOR FURTHER INFORMATION CONTACT: Nick Hindman, 907–586-7228.

SUPPLEMENTARY INFORMATION: The groundfish fishery in the U.S. BSAI exclusive economic zone is managed by NMFS according to the Fishery Management Plan for the Groundfish Fishery of the Bering Sea and Aleutian Islands Area (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson Fishery Conservation and Management Act. Fishing by U.S. vessels is governed by regulations implementing the FMP at 50 CFR parts 620 and 675.

The Director, Alaska Region, NMFS, has determined that the initial TACs specified for pollock, Greenland turbot, and Pacific ocean perch (POP) in the Bering Sea (BS) subarea; for pollock, Greenland turbot, POP, and sharpchin/northern rockfish in the Aleutian Islands (AI) subarea; for Atka mackerel in the combined Eastern Aleutian District and BS subarea; for Atka mackerel in the Central and Western Aleutian Districts; and for Pacific cod, arrowtooth flounder, and the ''other species'' category in the BSAI; need to be supplemented from the non-specific reserve in order to continue operations and account for prior harvest.

Therefore, in accordance with § 675.20(b), NMFS proposes to apportion from the reserve to TACs for the following species: (1) For the Bering Sea subarea —93,750 metric tons (mt) to pollock, 700 mt to Greenland turbot, and 277 mt to POP; (2) for the AI subarea—4,245 mt to pollock, 350 mt to Greenland turbot, 1,575 mt to POP; and 765 mt to sharpchin/northern rockfish; (3) for the combined Eastern Aleutian District and BS subarea—2,025 mt to Atka mackerel; (4) for the Central Aleutian District—7,500 mt to Atka mackerel; (5) for the Western Aleutian District—2,475 mt to Atka mackerel; and (6) for the BSAI—37,500 mt to Pacific cod, 1,534 mt to arrowtooth flounder, and 3,000 mt to the ''other species'' category.

These proposed apportionments are consistent with § 675.20(a)(2)(i) and do not result in overfishing of a target species or the ''other species'' category, because the revised TACs are equal to or less than specifications of acceptable biological catch.

Pursuant to § 675.20(a)(3)(i) the proposed apportionments of pollock are allocated between the inshore and offshore components: (1) For the BS subarea - 32,812 mt to vessels catching pollock for processing by the inshore component and 60,938 mt to vessels catching pollock for processing by the offshore component; (2) for the AI subarea—1,486 mt to vessels catching pollock for processing by the inshore component and 2,759 to vessels catching pollock for processing by the offshore component.

Pursuant to § 675.20(a)(3)(iv) the proposed apportionment of the BSAI Pacific cod TAC is allocated 750 mt to vessels using jig gear, 16,500 mt to vessels using hook-and-line or pot gear, and 20,250 mt to vessels using trawl gear.

In accordance with the 1995 final specifications for the BSAI (FR 60 8479, February 14, 1995) the allocation of Pacific cod to hook-and-line/pot gear will result in seasonal apportionments as follows: For the period January 1 through April 30—80,300 mt, for the period May 1 through August 31—20,900 mt, and for the period September 1 through December 31—8,800 mt.

Classification

This action is taken under 50 CFR 675.20 and is exempt from review under E.O. 12866.

Authority: 16 U.S.C. 1801, *et seq.*