Trading Area.[13] The Commission has held auctions for all 493 licenses, in which it defined ''very small business'' (average gross revenues for the three preceding years of not more than $15 million), ''small business'' (more than $15 million but not more than $40 million), and ''entrepreneur'' (more than $40 but not more than $75 million) bidders.[14] There have been 99 winning bidders that qualified in these categories in these auctions, all of which may be affected by the actions taken in this Sixth NPRM.

30. *Cable Services or Systems.* The SBA has developed a definition of small entities for cable and other pay television services, which includes all such companies generating $11 million or less in revenue annually.[15] This definition includes cable systems operators, closed circuit television services, direct broadcast satellite services, multipoint distribution systems, satellite master antenna systems and subscription television services. According to the Census Bureau data from 1992, there were 1,788 total cable and other pay television services and 1,423 had less than $11 million in revenue.

31. The Commission has developed its own definition of a small cable system operator for the purposes of rate regulation. Under the Commission's rules, a ''small cable company'' is one serving fewer than 400,000 subscribers nationwide.[16] Based on our most recent information, we estimate that there were 1,439 cable operators that qualified as small cable system operators at the end of 1995. Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, we estimate that there are fewer than 1,439 small entity cable system operators.

32. The Communications Act also contains a definition of a small cable system operator, which is ''a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed $250,000,000.''[17] The Commission has determined that there are 66 million subscribers in the United States. Therefore, we found that an operator serving fewer than 660,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all of its affiliates, do not exceed $250 million in the aggregate.[18] Based on available data, we find that the number of cable operators serving 660,000 subscribers or less totals 1,450. We do not request nor do we collect information concerning whether cable system operators are affiliated with entities whose gross annual revenues exceed $250 million, and thus are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act. It should be further noted that recent industry estimates project that there will be a total of 66 million subscribers.

33. *Description of Projected Reporting, Recordkeeping and Other Compliance Requirements:* In this Sixth NPRM we seek comment on whether to allow the existing LMDS eligibility restriction to sunset. These actions impose no reporting, recordkeeping or other compliance requirements.

34. *Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered:* This Sixth NPRM is a broad inquiry into whether there continues to be a need for an LMDS ownership restriction. It seeks comment on the present and likely future nature of the marketplace for various services that may be offered using LMDS spectrum, the costs and benefits of a restriction, and appropriate criteria for evaluating whether to extend the restriction. It also seeks the views of small businesses on the various issues raised.

35. *Federal Rules That May Overlap, Duplicate, or Conflict with the Proposed Rules:* There are no federal rules that overlap, duplicate or conflict with 47 CFR 101.1003(a).

36. *Report to Congress:* The Commission will send a copy of this Sixth NPRM, including this IRFA, in a report to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996.[19] In addition, the Commission will send a copy of this Sixth NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration. Summaries of this Sixth NPRM and IRFA will be published in the **Federal Register**.

[13] 47 CFR 101.1005, 101.1007.

[14] 47 CFR 101.1107(a)-(c), 101.1112.

[15] 13 CFR 121.201, SIC 4841.

[16] 47 CFR 76.901(e). The Commission developed this definition based on its determination that a small cable system operator is one with annual revenues of $100 million or less. *Implementation of Sections of the 1992 Cable Act: Rate Regulation, Sixth Report and Order and Eleventh Order on Reconsideration,* 10 FCC Rcd 7393 (1995), 60 FR 10,534 (Feb. 27, 1995).

[17] 47 U.S.C. 543(m)(2).

[18] 47 U.S.C. 76.1403(b).

[19] See 5 U.S.C. 801(a)(1)(A).

List of Subjects in 47 CFR Part 101

Communications, local multipoint distribution service.

Federal Communications Commission.

Magalie Roman Salas,

Secretary.

[FR Doc. 99–33005 Filed 12–20–99; 8:45 am]

BILLING CODE 6712–01–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. 99–6550]

RIN 2127–AH16

Federal Motor Vehicle Safety Standards: Heavy Vehicle Antilock Brake System (ABS) Performance Requirement

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

ACTION: Notice of proposed rulemaking.

SUMMARY: On March 10, 1995, NHTSA published a final rule amending the hydraulic and air brake standards to require medium and heavy vehicles to be equipped with antilock brake systems (ABS) to improve the directional stability and control of these vehicles during braking. We supplemented the ABS requirements for truck tractors with a braking-in-a-curve performance test on a low-coefficient of friction surface, using a full brake application, in both the unloaded (bobtail) condition and with the tractor loaded to its gross vehicle weight rating (GVWR) using an unbraked control trailer. The braking-in-a-curve test was not applied to single-unit trucks or buses or to air-braked trailers because we had performed only limited testing of ABS-equipped single-unit vehicles. We stated that we would continue research on dynamic performance tests for single-unit trucks, buses, and trailers, and would consider applying performance test requirements to these vehicles in the future.

The agency is now proposing to apply the braking-in-a-curve dynamic performance test requirement to single-unit trucks and buses that are required to be equipped with antilock braking systems. After issuing the March 1995 final rule, we tested several ABS-equipped single-unit trucks and buses equipped with both hydraulic and air

brakes. We tentatively conclude that the test results confirm that the braking-in-a-curve performance test requirement is practicable for those vehicles. Adopting this requirement would complement the ABS equipment requirements and stopping distance requirements. Taken together, these requirements would improve the ability of the affected vehicles to stop in a stable and controllable manner.

DATES: *Comment closing date:* You should submit your comments early enough to ensure that Docket Management receives them not later than February 22, 2000.

ADDRESSES: You should mention the docket number of this document in your comments and submit them in writing to: Docket Management, Room PL–401, 400 Seventh Street, SW, Washington, DC, 20590.

You may call Docket Management at 202–366–9324. You may visit the Docket from 10 a.m. to 5 p.m., Monday through Friday.

FOR FURTHER INFORMATION CONTACT:

For non-legal issues, you may call Mr. Jeff Woods, Safety Standards Engineer, Office of Crash Avoidance Standards, Vehicle Dynamics Division at (202) 366–2720, and fax him at (202) 493–2739.

For legal issues, you may call: Mr. Otto Matheke, Attorney-Advisor, Office of the Chief Counsel at (202) 366–2992, and fax him at (202) 366–3820.

You may send mail to both of these officials at National Highway Traffic Safety Administration, 400 Seventh St., SW, Washington, DC, 20590.

SUPPLEMENTARY INFORMATION:

I. Background

On December 18, 1991, Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA or Act), Pub. L. 102–240. Section 4012 of the Act directed the Secretary of Transportation to initiate rulemaking for improving the braking performance of new commercial motor vehicles, *i.e.,* those with GVWRs of over 26,000 pounds (lbs.), including truck tractors, trailers, and dollies. The Act directed that in that rulemaking, the agency examine antilock brake systems (ABS), means of improving brake compatibility, and methods of ensuring the effectiveness of brake timing.

In response to that congressional mandate, we published an advance notice of proposed rulemaking (ANPRM) on June 8, 1992 announcing our interest in proposing improvements in the directional stability and control of heavy vehicles during braking (57 FR 24212). That notice requested comments on such issues as the occurrence of loss-of-control crashes; the availability and performance of systems to improve directional stability and control; anticipated performance requirements, test procedures, and equipment requirements; diagnostic equipment to ensure in-use functioning of the systems; and anticipated costs of such equipment. The notice also requested comments on whether to include vehicles with GVWRs between 10,000 and 26,000 lbs. in the rulemaking action.

NHTSA received comments in response to the ANPRM from heavy vehicle manufacturers and users, brake manufacturers, safety advocacy groups, trade associations, state entities and individuals. Most agreed that we should take action to improve the stability and control of heavy vehicles during braking to reduce the number of loss-of-control crashes. Commenters also addressed the application of potential rulemaking to certain vehicles, test procedures, warning and diagnostic systems, an implementation schedule for the requirements, and the costs of the hardware.

We next published a notice of proposed rulemaking (NPRM) on September 28, 1993 (58 FR 50738) to amend Federal Motor Vehicle Safety Standard (Standard) Nos. 105, *Hydraulic brake systems* (now titled *Hydraulic and electric brake systems*), and 121, *Air brake systems*, to require all air-braked and hydraulic-braked vehicles with GVWRs over 10,000 lbs. to be equipped with ABS to improve the lateral stability and control of these vehicles during braking. The NPRM also proposed that the ABS requirement be supplemented by a braking-in-a-curve test on a low coefficient of friction surface using a full brake application.

We published a final rule requiring ABS on hydraulic and air-braked medium and heavy vehicles on March 10, 1995 (60 FR 13216) (hereinafter referred to as the stability and control final rule). The ABS requirements included a braking-in-a-curve performance test on a low-coefficient of friction surface for truck tractors only. The test includes a full brake application in both the unloaded (bobtail) configuration and with the tractor loaded to its GVWR, the latter using an unbraked control trailer.

The braking-in-a-curve test was not applied to single-unit trucks, buses, or air-braked trailers at that time. Our Motor Vehicle Safety Research Advisory Committee's ABS Task Force had developed the braking-in-a-curve test procedure only for truck tractors. Since neither the agency nor the Task Force had included single-unit vehicles in the test program up to that time, we decided that, in view of the limited available data with respect to such vehicles and the concerns expressed by the American Automobile Manufacturers Association and other commenters about this dynamic performance test, we would apply the braking-in-a-curve test to truck tractors only. We stated, however, that we would continue research on dynamic performance tests for single-unit vehicles and would consider applying performance test requirements to those vehicles at a future time [1] (see section II below for a discussion of the testing of single unit trucks and buses that gave rise to this rulemaking action).

II. Single-Unit Truck and Bus ABS Performance Testing

NHTSA conducted ABS testing of single-unit trucks and buses in 1996 and 1997 at our Vehicle Research and Test

[1] The agency published two companion final rules on the same day, one to reinstate stopping distance requirements for air-braked medium and heavy vehicles (60 FR 13286) and another to implement stopping distance requirements for hydraulic-braked medium and heavy vehicles (60 FR 13297). The cost/benefit information used for the three final rules was based on NHTSA's Final Economic Assessment, *Final Rules, FMVSS Nos. 105 & 121, Stability and Control During Braking Requirements and Reinstatement of Stopping Distance Requirements for Medium and Heavy Vehicles*, published in February, 1995.

Center (VRTC) in East Liberty, OH[2]. Five air-braked straight trucks and two hydraulic-braked buses, all equipped with ABS, were used in the tests to aid in determining if the braking-in-a-curve performance test for tractors could also be applied to single-unit vehicles. The vehicles were subjected to all the requirements of Standards No. 105 and No. 121, including the braking-in-a-curve performance tests.

The braking-in-a-curve tests were conducted by first finding the maximum drive-through speed, then determining the maximum brake-through speed. Maximum drive-through speed is defined in Standard No. 121 as the fastest constant speed that a vehicle can be driven through at least 200 feet of curve arc length without departing the lane. Maximum brake-through speed is defined as the fastest speed at which a full brake application can be made while the vehicle is in the curve, without the vehicle departing the lane. Determination of the maximum brake-through speed provided data on the potential margin of compliance or non-compliance for the test vehicles. More than four stops for the braking-in-a-curve test were performed during the loaded and unloaded tests.

The straight trucks were chassis-cabs without bodies or equipment that would normally be installed by a second-stage manufacturer. The vehicles were equipped with ABS systems that met the equipment requirements of Standard No. 121. In order to simulate the unloaded condition of completed vehicles, a 2,500 lb load frame was installed on the chassis cabs. The load frame, which is used to secure ballast to the vehicle for testing in the loaded condition, includes a built-in roll bar to protect the test driver in the event of rollover during the tests. The instrumentation for collecting the test data, and the test driver, added another estimated 250 pounds to the unloaded vehicle test weight. Tests were conducted with all fuel tanks and fluid reservoirs filled to normal capacity.

To test the straight trucks in the loaded condition, we added steel and/or concrete weights to the load frame so that the total weight of the vehicles was in accordance with their GVWRs and the axle loads were in proportion with their GAWRs. For most of the vehicles, the loads were situated so that the centers of gravity of the loads were 32 inches above the frame. This provided a ballast height which corresponded to the specification in Standard No. 121 that the control trailer used for truck tractor road tests have a ballast center of gravity height not more than 24 inches above the flat bed surface of the control trailer. The 32-inch load height for single unit trucks is eight inches higher than for truck tractors to account for the height from the tractor's frame rails to the top of the control trailer, due to the fifth wheel coupling arrangement. For two of the vehicles, however, we conducted additional tests in the fully loaded condition with the load elevated to the maximum height specified by the manufacturer in their final-stage manufacturer's guidelines. These two tests with elevated center of gravity loadings were conducted to give some indication of the effect center of gravity height has on braking performance in the braking-in-a-curve test.

The two school buses were equipped with ABS systems that met the ABS equipment requirements of Standard No. 105 that became effective on March 1, 1999. Since they were complete vehicles, no load frame or ballast was added for tests in the unloaded condition. However, the test instrumentation and driver added approximately 250 pounds to the unloaded vehicle weight. In addition, all fuel tanks and fluid reservoirs were filled to normal capacity. The loaded tests on the two school buses were conducted by placing sand bags on the floor and seats of each bus such that the total vehicle weight was equal to its GVWR with the axle load in proportion with the vehicle's GAWR.

The braking-in-a-curve tests were conducted on an asphalt surface that was coated with Jennite, a driveway sealer, and wetted using a water truck. A 12-foot-wide lane was marked with the center of the lane having a 500-foot radius of curvature. The lane was marked with traffic cones on both sides spaced at 20-foot intervals. The surface had a cross slope of one percent and approximately zero longitudinal slope. The peak coefficient of friction (PFC) of the surface during the time of the testing ranged from 0.34 to 0.41. The effect of the cross slope was such that the test condition was considered to be worst case, since all road testing may not be able to be conducted on a completely level road surface due to variability and water run-off design requirements. The effect of the lower PFC would also be considered a worst-case test condition.

In conducting the tests, the driver was instructed to begin the test in the center of the lane and to steer as necessary to keep the vehicle within the lane. If any cones were hit, the vehicle was considered to have gone out of the lane. The maximum drive-through speed was determined by making passes through the lane at a constant speed and increasing or decreasing the speed slightly on each successive pass to determine the maximum speed at which the vehicle would remain within the lane. Once this speed was determined, two or three additional passes were made to verify that the speed determined was the maximum speed at which the vehicle would remain in the lane. Similarly, the maximum brake-through speed was determined by making successive stops, increasing the speed gradually each time, to find the maximum speed at which the vehicle would stay in the lane. For these stops, the brake was applied as rapidly as possible to a full pressure application or full travel condition and held until the end of the stop.

The results of the testing at VRTC confirmed that the braking-in-a-curve test is practicable, repeatable, and safe for single unit vehicles. Six of the seven vehicles tested met the performance requirements now in effect for tractors, i.e., they stayed in the lane in at least three out of four stops when subjected to maximum braking at 75 percent of the maximum drive-through speed. In fact, these six vehicles remained in the lane during all four stops at 75 percent of the drive-through speed, all with a large margin of compliance.

The two trucks for which elevated center-of-gravity ballast height comparison tests were conducted showed that the increased height did not have much effect on the vehicle's performance compared with the lower, 32-inch ballast center-of-gravity height testing. The test driver commented that this test condition caused an unsettling feeling during the testing in the vehicle's roll stability. However, to observers watching the testing, there were no indications that the vehicles were nearing rollover, such as lifting of an inside tire.

We note that the one vehicle that did not meet the 75 percent of drive-through speed requirements was equipped with heavy duty axles with GAWR ratings of 20,000 pounds for the steer axle and 30,000 pounds for the single drive axle. Paragraph S3(b) of Standard No. 121 provides that any vehicle with an axle that has a GAWR of 29,000 pounds or more is excluded from Standard No. 121. Therefore, this particular vehicle would not need to comply with the braking-in-a-curve test. If a manufacturer were to produce this vehicle to comply voluntarily with Standard No. 121, regardless of the exclusion for axles over 29,000 pounds, additional ABS development would probably be necessary. We note also that

[2] DOT HS 808941, *Single Unit Truck and Bus ABS Braking-In-A-Curve Performance Testing*, February 1999.

while this vehicle did not meet the proposed requirements when tested in the unloaded condition, it passed the tests in the loaded condition by staying in the lane in all four of the stops at 75 percent of the drive-through speed.

III. Proposed Braking-in-a-Curve Test for Single-Unit Trucks and Buses

Based on the tests conducted at VRTC, NHTSA proposes a braking-in-a-curve test for single-unit trucks and buses, similar to the stability and control performance test in effect for air-braked tractors. We propose slight modifications, however, to allow for the differences between tractors and single-unit vehicles and to accommodate vehicles with hydraulic braking systems. Specifics of the proposed test are provided in the following subsections.

A. Air-Braked Trailers Not Included

NHTSA is not proposing at this time to apply performance test requirements to air-braked trailers. We have not conducted testing of trailers since the March 1995 final rules, but may resume research concerning trailer dynamic performance tests at a later date.

B. Testing in the Loaded/GVWR Conditions

NHTSA proposes that the braking-in-a-curve test be conducted in both the lightly-loaded vehicle condition and with the vehicle loaded to GVWR. There are several reasons why we are proposing testing in both loading conditions. First, this would be consistent with the test procedure currently in place for tractors. Second, testing in the fully-loaded and empty conditions was specified in the stability and control final rule in order to fully evaluate the vehicle's braking performance at two extreme loading conditions. The intent was to determine the minimum number of test conditions that would provide a thorough evaluation of a vehicle's braking system. Third, we determined that these two loading conditions, evaluated in the single braking-in-a-curve maneuver, provide a sufficient range of test conditions while still providing a minimum level of performance testing.

The agency is aware of a discussion in the SAE Truck and Bus Vehicle Deceleration and Stability Subcommittee that braking-in-a-curve testing of medium and heavy vehicles is only needed in the lightly-loaded condition. The discussion, which took place at the 1995 SAE Truck and Bus Exposition in Winston-Salem, N.C., centered around testing performed by member organizations of the subcommittee indicating that vehicles in the lightly-loaded test condition have a lower margin of compliance than vehicles tested in the loaded condition.

Our testing at VRTC indicated the following for the seven vehicles tested with regard to the proposed 75 percent maximum brake-through to maximum drive-through test requirement: (a) Four vehicles had lower margins of compliance in the lightly-loaded tests than in the loaded tests; (b) two vehicles had the same margin of compliance in both the loaded and lightly-loaded tests; and (c) one vehicle had a higher margin of compliance in the lightly-loaded test than in the loaded test. These results indicate that in general, the lightly-loaded test condition is the most severe test. We note, however, that the margin of compliance was generally high for most of the vehicles tested. The intent of testing vehicles in both the lightly-loaded and GVWR conditions was to simulate the possible braking conditions and maneuvers likely to be encountered by vehicles operated on public roads, while minimizing the number of tests that would have to be conducted to certify compliance. Deleting the loaded-to-GVWR test condition would eliminate the range of test conditions resulting in a single, lightly-loaded test. Although we are not proposing to eliminate testing at GVWR, we welcome comments on this issue.

C. Road Test Geometry

NHTSA proposes the same road test geometry now in effect for tractors, namely a 12-foot-wide lane with a 500-foot radius measured at the center of the lane. We consider this geometry to be representative of an exit ramp with a moderately sharp curve, a type of road that all vehicles could be expected to encounter at some time. One consideration in the use of this test geometry for single-unit vehicles is that the wheelbases of such vehicles can be longer than for tractors or of the control trailer kingpin-to-axle length. Since most heavy vehicles are equipped with a non-steering rear axle(s), the path of the rear axle of a single-unit truck during a slow-speed turning maneuver follows a smaller radius than the wheels on the front steer axle. The tests conducted at VRTC, which included testing vehicles with wheelbases ranging from 148 inches through 311 inches, did not indicate any problems with the inside wheels on the rear axle(s) running off the inside of the curve and departing the lane. We believe, therefore, that the 500-foot radius curve is large enough to avoid that problem during testing of single-unit vehicles.

D. Test Surface

We propose a test surface having a PFC of 0.5, which is a low coefficient of friction surface representative of a wet, worn asphalt roadway. As we noted in the stability and control final rule, maintaining a test surface of 0.5 PFC may not always be possible. However, minor variations in the test surface are not expected to have a major effect on the performance of vehicles in the braking-in-a-curve test, since that test has no stopping distance requirements. We have also determined that specifying PFC test surfaces is more appropriate for both high and low-friction surface testing compared to the older method of specifying skid numbers. This is especially true for ABS-equipped vehicles which, during maximum braking, are prevented from sustained wheel lockup. The testing conducted at VRTC confirmed that this is the case for the medium and heavy single-unit vehicles tested and that specifying a PFC of 0.5 is appropriate for the braking-in-a-curve test.

E. Test Speed

NHTSA proposes a test speed of 75 percent of the maximum drive-through speed or 30 mph, whichever is lower, for the braking-in-a-curve test for single unit trucks and buses.

The requirement for testing tractors at the lower value of either 30 mph or 75 percent of the maximum drive-through speed resulted from the need to have sufficient vehicle speed to adequately evaluate the performance of an ABS-equipped braking system. The test speed needed to be limited, however, to ensure that the test procedure could be safely conducted. In addition, by conducting the maximum drive-through speed determination before the braking-in-a-curve test, the effects of slight variability in test surface friction would be minimized since the drive-through speed would be measured for each combination of test vehicle and test surface just prior to conducting the braking tests.

All of the single-unit trucks and buses tested at VRTC had maximum drive-through speeds in both the empty and loaded conditions ranging between 32 and 37 mph. This range represents the maximum constant speed that the vehicle can be driven through 200 feet of curve arc (for a 500-foot radius curve) without the driver's losing control and the vehicle's departing the lane. None of the vehicles was able to negotiate the curve at 40 mph, which would be the upper limit of the drive-through speed determination required for a braking strategy specified as the lower of 30 mph or 75 percent of maximum drive-through speed. Therefore, these speeds are sufficiently high to place the vehicles at their performance limit for cornering under this test condition. Further, conducting a maximum brake application at 75 percent of this speed is a rigorous test of ABS performance.

The testing at VRTC also indicated that the test speeds were not so high as to pose an unreasonable risk to the test drivers or vehicles. When the vehicles did lose control during the determination of the maximum drive-through speed, the test drivers were able to regain control in a short time and bring the vehicle to a safe stop. The test vehicles were equipped with a roll bar in the event of vehicle rollover during testing. However, no rollovers occurred nor were there any indications of near-rollover, although as noted above, the testing with high-center-of-gravity loadings did result in an unsettling feeling for the test driver.

F. Type of Brake Application.

NHTSA proposes a brake pedal force of 150 pounds that is to be achieved within 0.2 seconds from the initial application of force to the brake control and maintained for the duration of the stop.

We stated in the stability and control final rule that the braking-in-a-curve test evaluates vehicle stability and control during worst case braking applications in an aggressive or ''hard'' stop. In that scenario, full brake applications are more readily repeatable than ''driver best effort'' brake applications. A full treadle brake application for air-braked tractors is defined in Standard No. 121 as the output pressure measured at any of the treadle valve output circuits reaching 85 psi within 0.2 seconds after the application is initiated, or, as amended in the December 1995 final rule, one in which maximum treadle travel is achieved within 0.2 seconds after the application is initiated. Since the actuation of air brakes in single-unit vehicles is similar to that used in tractors, we consider this same approach to be valid for single-unit vehicles as well. The tests at VRTC confirmed that the minor differences in the service braking systems between tractors and the single-unit vehicles tested were not found to have an effect on the ability of achieving the 85 psi application within 0.2 seconds as measured at the treadle valve. We are aware that, because of the wide variety of single-unit vehicles, there may be vehicles that would not be able to achieve this application rate. In those cases, achieving maximum treadle travel within 0.2 seconds would be considered sufficient to define a full brake application.

Standard No. 105 does not currently include a definition of a full brake application for medium and heavy vehicles equipped with hydraulic braking systems. Performance requirements for the first effectiveness stop for school buses with GVWRs of over 10,000 lbs. and the second and third effectiveness stops for all vehicles with GVWRs of over 10,000 lbs. do not include specifications for maximum brake pedal force during these tests. For the five fade and recovery stops that apply to vehicles with GVWRs of over 10,000 lbs., the maximum permissible pedal force is 150 lbs. during the first four of these stops. The water recovery test requirements also include a 150-lbs. maximum pedal force requirement during the first four stops. These tests do not require that the maximum pedal force be used nor do they specify an application rate. The spike stops required for vehicles with GVWRs of less than 10,000 lbs. include a specification for a 200-lb. brake pedal application within 0.08 seconds, and is representative of a maximum braking condition such as a ''panic'' stop. However, this high level of pedal force may make it necessary to use a mechanical actuator to achieve and maintain the 200-lb. force. Since the purpose of the proposed braking-in-a-curve test for medium and heavy vehicles is to evaluate the stability and control during a ''hard'' stop, rather than specifically a ''panic'' stop, we tentatively conclude that a pedal force of 150 lbs. is sufficient to perform the braking-in-a-curve evaluation, without necessitating specialized test equipment. In addition, since the proposed test surface has a PFC of 0.5, which represents a slippery road surface, we tentatively conclude that the 150 lbs. of pedal force is sufficient to cause instability and loss of control in many medium or heavy vehicles that are not equipped with ABS.

The agency considers the proposed 0.2 seconds for achieving the 150-lbs. brake pedal force to be sufficiently rapid to represent a hard stop in a medium or heavy vehicle equipped with hydraulic brakes, and practicable from the standpoint of conducting performance tests on these type vehicles. While the spike stop requirements for vehicles under 10,000 lbs. GVWR include achieving the pedal application force within 0.08 seconds, the heavier brake components typically used in medium and heavy vehicles equipped with hydraulic brakes may not be able to be actuated as rapidly as in light vehicles. Also, the 0.08 second application rate for the spike stops in light vehicles is often achievable only with a mechanical brake pedal actuator. In all of the braking-in-a-curve tests conducted by VRTC on medium and heavy vehicles with both hydraulic and air brakes, the test driver applied the brakes to minimize test complexity. This may also slightly increase the application time needed compared to a mechanical brake pedal actuator.

NHTSA is not proposing to specify the brake pedal application rate for medium and heavy vehicles equipped with hydraulic brakes to include a reference to maximum pedal travel, as is specified for air-braked vehicles. The brake pedals in hydraulic braking systems do not typically reach their physical limit of travel during ''hard'' or ''panic'' stops. Therefore, we believe that specifying such a brake application rate strategy for hydraulic-braked vehicles would be inappropriate.

G. Number of Test Stops

NHTSA proposes that in 4 consecutive stops, the required performance must be achieved in at least 3 of those stops.

In the stability and control final rule, we required that tractors comply with the braking-in-a-curve test requirements during 3 consecutive stops. In response to several petitions for reconsideration, we amended that requirement in the December 13, 1995 final rule to include one additional stop in which compliance is not required. Thus, the requirement now is that tractors must comply with the braking-in-a-curve test requirements in 3 out of 4 consecutive stops. This allows for minor variability in the performance of the test driver.

Earlier testing of ABS-equipped tractors showed that the ABS provided consistent performance in maintaining stability and control during the braking-in-a-curve test. Although one vehicle could not comply with the braking-in-a-curve test during the VRTC testing of ABS-equipped straight trucks and buses, the vehicles that did stay in the lane during the test were able to do so consistently. We believe, therefore, that it is appropriate to include that same number of test stops for straight trucks and buses as we now require for tractors, namely that during 4 consecutive stops, the required performance must be met in at least 3 of those stops (see H below).

H. Required Performance

NHTSA proposes to require that the test vehicle remain within a 12-foot-wide lane during the braking-in-a-curve test.

We believe that prescribing a 12-foot-wide lane during the braking-in-a-curve test is an appropriate performance measure for single-unit trucks and buses. The lane width of 12 feet is representative of a typical travel lane on a typical U. S. hard-surface road. Therefore, we tentatively conclude that it is appropriate to require that vehicle control within a lane of that width be maintainable by a driver during hard braking.

I. Lightly-Loaded Test Weight

NHTSA proposes that the braking-in-a-curve test in the lightly-loaded condition be conducted at the curb weight of the vehicle plus up to 1,500 pounds, including the driver, instrumentation, and roll bar.

As discussed above, the single-unit trucks tested at VRTC were chassis-cabs which had not been completed by the installation of a body or other equipment. In order to provide some additional weight to the chassis-cabs to better simulate an unloaded completed vehicle, a 2,500 pound load frame was bolted directly to the frame rails of each test vehicle. This load frame was also used to secure ballast for tests conducted in the loaded condition. As noted above, we are aware of the discussion in the trucking industry, through the SAE Truck and Bus Vehicle Deceleration and Stability Subcommittee, as to what suitable weight should be used for a load frame for testing incomplete vehicles. We do not propose that any weight figure be specified in the stability and control requirements for Standard Nos. 105 and 121. We are aware of the wide variety of bodies and equipment that are installed on chassis-cabs and the variability in the weight of that equipment. Selection of one weight for a load frame may be appropriate for one weight class of vehicle, but not for another. Thus, unlike the vehicles we tested at VRTC, we do not conduct compliance testing on incomplete vehicles. For the purposes of compliance testing, we will obtain completed vehicles and expect to test them at their curb weight, plus an allowance for test and safety equipment, as discussed below.

The VRTC tests of buses in the unloaded configuration were performed on completed vehicles, so no additional weight, other than the driver and instrumentation, was added for the unloaded tests. The tests were conducted with the buses at curb weight with full fuel tanks. The combined weight of the test driver and instrumentation was approximately 250 pounds.

A January 6, 1997 petition for rulemaking submitted by the Truck Manufacturers Association (TMA) to amend Standard No. 121 included, among other things, a request for an additional weight allowance for a rollbar of up to 1,000 pounds for the straight line stopping distance tests for tractors, trucks, and buses in the lightly-loaded condition. The rollbar is intended to provide driver protection in the event of a rollover that could occur while testing heavy vehicles in limit-performance maneuvers. [The rollbar portion of the TMA petition was granted. In a notice published in the **Federal Register** on February 3, 1999 we proposed allowing the use of a rollbar in compliance testing (64 FR 5259).] We believe that in order to provide adequate protection for test drivers, the same provision for a rollbar should be permitted for the braking-in-a-curve test for single-unit vehicles. Therefore, we propose that the braking-in-a-curve test in the lightly-loaded condition include the unloaded vehicle weight plus up to 1,500 pounds for driver, instrumentation, and a rollbar. The 1,500 lb figure is based on the existing definition of ''lightly-loaded vehicle weight'' for vehicles with GVWRs of over 10,000 lbs. and the 1,000 lbs. for a rollbar. That term is defined in S4 of Standard No. 105 as the unloaded vehicle weight plus up to 500 lbs., including driver and instrumentation. This weight provision need not be included for tests in the fully-loaded condition since the weight of these items would be included as part of the load.

J. Loaded Test Weight

NHTSA proposes to use the existing definitions of ''loaded test weight'' in Standard Nos. 105 and 121 for the braking-in-a-curve tests for single-unit trucks and buses.

The existing definitions, which are used for straight-line stopping distance tests required for loaded single-unit trucks and buses, specify that the vehicle be loaded to its GVWR in proportion to each GAWR. An exception is provided in Standard No. 105 for cases in which an axle weight in the unloaded condition already exceeds its proportional GAWR with the vehicle loaded to GVWR. In such cases, the vehicle is loaded only over the other axle(s) until the GVWR is reached.

The loading requirements for tractors in Standard No. 121, applicable to both straight line stopping distance and braking-in-a-curve tests, provide that the center of gravity height of the ballast shall be less than 24 inches above the fifth wheel of the tractor. This is a relatively low center of gravity loading that is used to evaluate the braking performance of loaded tractors during the braking-in-a-curve test and minimizes the risk of vehicle rollover during the test. This loading condition also provides a uniform test condition for tractors so that results will be repeatable from one test to another.

The loading of straight trucks during the braking-in-a-curve tests conducted at VRTC included a load frame and ballast with a combined center of gravity height of 32 inches above the frame rail of the chassis cab. This loading scheme was selected to adequately evaluate the braking performance of the trucks while minimizing the risk of rollover. The purpose of the braking-in-a-curve test is to evaluate the vehicle's yaw stability and the driver's ability to maintain steering control, not to evaluate the vehicle's roll stability. Therefore, a reasonable loading scheme with respect to load center of gravity height is needed to ensure the safety of the test procedure.

As in the case with the unloaded single-unit truck and bus vehicle tests, we do not conduct compliance testing on incomplete vehicles in the loaded condition. Since there are many configurations of bodies and equipment used in the completion of single-unit trucks, including flatbeds, tankers, van bodies, dump bodies, rollbacks, mixers, etc., and other configurations of vehicles not based on typical chassis-cabs, such as step vans, motor homes, and certain fire trucks, we believe that it would not be possible to specify a loading scheme that would be applicable to all single-unit trucks and buses. We are aware of efforts by the SAE Truck and Bus Vehicle Deceleration and Stability Subcommittee to revise Recommended Practice (RP) J1626, *Braking, Stability, and Control Performance Test Procedures for Air-Brake Equipped Trucks,* to incorporate loading requirements which can be used for testing incomplete chassis-cabs. However, we do not expect that this RP will address testing of completed single-unit vehicles or incomplete/completed vehicles manufactured on other types of chassis. For many types of vehicles, we will need to develop suitable loading schemes on a case-by-case basis, depending on the vehicle type. For example, a passenger bus could be loaded using sand bags or other heavy objects placed in all passenger seating positions and on the floor or in cargo areas to achieve GVWR loading in proportion to the vehicle's GAWRs.

K. Initial Brake Temperature

NHTSA proposes an initial brake temperature between 150 and 200 degrees F.

In the September 1993 NPRM, we proposed using a higher initial brake temperature range of 250 to 300 degrees F. The intent was to reduce the amount of time needed to conduct the road tests by reducing the amount of time that brakes would need to cool between stops. In general, comments on the proposed increased temperature range stated that the increased temperatures would necessitate design changes in the braking system by requiring more aggressive linings, and that this increased initial temperature range would not be consistent with testing that had been conducted in the past using the lower initial temperature range. These negative aspects of the proposed temperature range outweighed the small benefits in reduced testing time, so we retained the 150 to 200 degree initial brake temperature criteria. For those reasons, we believe that this initial temperature range is also appropriate for testing of single-unit trucks and buses for the braking-in-a-curve test.

L. Transmission Position

NHTSA proposes that the braking-in-a-curve test for single-unit trucks and buses be conducted either with the vehicle's transmission placed in a neutral position or with the clutch pedal depressed. This technique minimizes the effects of engine and driveline retardation, which is necessary in order to solely evaluate the performance of the braking system without undue driveline influences. Although the effects of engine and driveline retardation can affect the stability of medium and heavy vehicles when operated on low coefficient of friction road surfaces, this is not the primary purpose of the braking-in-a-curve test. The proposed test condition also helps to ensure test repeatability and reproducibility.

M. Test Sequence

NHTSA proposes that the braking-in-a-curve test for air-braked single-unit trucks and buses be conducted immediately after the burnish procedure as indicated in Table I of Standard No. 121, with the loaded tests followed by the unloaded tests. We further propose that the braking-in-a-curve test for hydraulic-braked single-unit trucks and buses be conducted immediately after the post-burnish brake adjustment in S7.4.2.2, with the loaded tests followed by the unloaded tests.

We originally selected this test sequence for air-braked tractors so that vehicle stability during the braking-in-a-curve test could be checked early in the test sequence. In the final rule of December 13, 1995, we amended the test sequence by placing both braking-in-a-curve tests immediately after the burnish for several reasons: (a) to allow test track wetting to be accomplished more efficiently; (b) to minimize ABS performance variability that might occur after tires are subjected to high-speed stopping distance tests on a high coefficient of friction surface; and (c) to minimize vehicle transfers for those manufacturers that use a different test site for ABS testing. The same sequence is being proposed in this notice. In addition, the loaded test is proposed to be conducted prior to the unloaded test, since the vehicle would already be fully-loaded immediately following the brake burnish.

N. Special Drive Considerations

We propose that single-unit trucks and buses being tested in the braking-in-a-curve test under Standard No. 105 be subjected to the same road test provisions as are currently specified for trucks and buses in subsection S6.1 of Standard No. 121.

Paragraph S6.1.11 specifies that vehicles with interlocking axles or front wheel drive systems which are engaged and disengaged by the driver be tested with such systems disengaged. As in the case of the transmission, the driveline effects of a front wheel drive or interaxle locking system on the performance of the vehicle in the braking-in-a-curve test should be minimized to the extent possible. Since the road test conditions in Standard No. 105 do not include this provision, we propose the same provision under Standard No. 105 as under Standard No. 121. We invite comments on this issue.

IV. Intermediate and Final Stage Manufacturers

In the NPRM of September 28, 1993 and the stability and control final rule of March 10, 1995, we discussed the issue of certification to Standard Nos. 105 and 121 for vehicles manufactured in two or more stages. One concern was that final stage manufacturers would not be able to conduct the road testing for each type of vehicle they manufacture. We stated that in many cases the incomplete vehicle manufacturer could pass through certification to the final stage manufacturer if the final stage manufacturer adhered to specifications provided by the incomplete vehicle manufacturer, for example, by not exceeding the GAWRs, not altering any brake component, and keeping the center of gravity of the completed vehicle within a specified envelope.

In cases for which pass-through certification was not available, such as vehicles built in one stage, the manufacturer could use engineering analysis, actual testing, or computer simulations to certify their vehicles. Moreover, a manufacturer need not conduct such testing or analysis itself, but could base its certification on the services of independent engineers and testing laboratories, or could join together through trade associations to sponsor testing or analysis. Finally, manufacturers could rely on testing and analysis by third parties, such as brake manufacturers, who typically perform extensive analyses and tests of their products. Based on these various options available to vehicle manufacturers, we do not believe that the proposed performance requirements pose any significant certification burdens for final stage manufacturers or other small manufacturers.

Another concern was that the pass-through certification from an incomplete vehicle manufacturer could have design limitations that are so design restrictive that final stage manufacturers would not be able to readily adhere to them. As stated above, however, the testing at VRTC showed that varying the load height on the trucks being tested did not have an appreciable effect on the results of the braking-in-a-curve test. Therefore, based on the testing performed to date, we are not aware of any significant additional requirements that would be necessary as a result of implementing the braking-in-a-curve test for single-unit trucks and buses that would result in the pass-through certification becoming unduly restrictive for final stage manufacturers.

V. Benefits

NHTSA published a detailed estimate of the costs and benefits of equipping medium and heavy vehicles with ABS in the February 1995 Final Economic Assessment (FEA) (see footnote 1 above). This FEA provided estimates for the reduction in fatal, injury-producing, and property-damage-only (PDO) crashes by equipping medium and heavy vehicles with ABS and implementing/reimplementing straight line stopping distance requirements. It also provided a detailed analysis of the projected costs to consumers and vehicle manufacturers to meet the ABS requirements. The projected annual benefits of ABS were summarized for all medium and heavy vehicles as follows:

1. 29,103 crashes prevented per year.
2. 38,227 fewer vehicle involvements in PDO crashes.

3. 15,900 to 27,413 vehicle occupant injuries prevented per year.

4. 320 to 506 vehicle occupant fatalities prevented per year.

5. $457,780,795 to $552,769,946 of property damage prevented.

Table 6 on page V–12 of the FEA provides a breakdown of the estimated benefits of ABS for each vehicle type including combination vehicles, bobtail tractors, single-unit trucks, and buses. That table also shows the reduced fatalities, injuries, and PDO crash damage to other vehicles involved in crashes with these medium and heavy vehicles. The breakdown did not differentiate between single-unit trucks and buses equipped with air versus hydraulic braking systems. In general, the table indicates that for single-unit trucks and buses equipped with ABS, between 16 and 34 truck and bus occupant fatalities will be prevented each year, and between 79 and 117 fatalities among occupants of other vehicles will be prevented each year.

The potential benefits of applying the braking-in-a-curve performance test to single-unit trucks and buses, compared with the benefits of solely requiring the ABS equipment portions in the respective safety standards, were not differentiated in the FEA nor for the purposes of this rulemaking action. The full benefits projected in the FEA are based on having both the equipment requirements and performance tests to ensure that ABS installed on medium and heavy vehicles performs with a maximum level of safety. The benefits projected in the FEA reflect the installation of antilock brake systems that were in use and on the road at the time of the analysis. We have since conducted ABS braking-in-a-curve tests, on six single-unit vehicles—four straight trucks and two buses—that are now required to have ABS installed. All these vehicles passed the performance requirements with a large margin of compliance. While we project no additional benefits by requiring these performance tests, they will help assure that minimum levels of safety are maintained.

VI. Costs

In the February 1995 FEA, NHTSA provided an extensive evaluation of the estimated costs to vehicle manufacturers and consumers associated with requiring ABS on medium and heavy vehicles. The majority of costs to consumers were the increased purchase price of vehicles equipped with ABS, in-service costs to perform maintenance and repairs to the ABS, and lost revenue and increased fuel consumption due to the extra weight of the ABS equipment. The FEA also included the costs to vehicle manufacturers to comply with the ABS requirements and the stopping distance requirements in the companion final rule. Although specific costs were not identified for conducting the braking-in-a-curve test for tractors, the costs to vehicle manufacturers (excluding the cost for the ABS equipment which would be passed on to the consumer) for all medium and heavy vehicles to comply with the new stopping distance requirements were estimated as follows:

Air-braked vehicles—Total cost of $11.71 million, including $6.0 million for compliance testing costs and $5.71 million related to vehicle modifications necessary to improve vehicle stopping distance performance. For the estimated 208,500 air-braked vehicles produced each year, the total estimated cost per vehicle for the first year after the final rules was $56. For the remaining years after the first year, the estimated cost per vehicle was $37.

Hydraulic-braked vehicles—Total cost of $1.0 million, all for compliance testing. During the first year after the final rules, an estimated 194,400 vehicles would be affected for a cost per vehicle estimated at $5. In the years following the first year, the cost per vehicle was estimated at $2 per vehicle.

The first-year costs are higher because the additional road test requirements imposed by the control and stability final rule and the stopping distance final rule would require compliance testing of all affected vehicles that are already in production, while in the later years, only new vehicle designs or vehicles with modifications to their braking systems would need to be tested. Complete compliance tests for both hydraulic-and air-braked vehicles were estimated to cost $5,000 per vehicle per test.

NHTSA provides the following estimates for the cost of implementing the braking-in-a-curve test for single-unit trucks and buses. A stand-alone braking-in-a-curve test is estimated to cost $1500, and the incremental cost to incorporate the braking-in-a-curve test into a complete Standard No. 105 or 121 compliance test is estimated at $1,000.

For air-braked single-unit vehicles: As shown in Table 13 of the FEA, an estimated 53,900 single-unit trucks and 7,000 buses would be affected annually. For all air-braked vehicles, including tractors, the FEA estimated that twelve medium and heavy vehicle manufacturers would need to conduct 100 compliance tests each, for a total of 1200 compliance tests. If only single-unit trucks and buses are to be tested, there are fewer numbers of these vehicles produced compared to tractors, but there are more vehicle types that would need to be tested. We estimated, therefore, that the twelve manufacturers would need to conduct 60 compliance tests each, for a total of 720 tests, in the first year that the braking-in-a-curve test would become effective, at a cost of $1,080,00 (720 × $1,500). This assumes that compliance testing for the stopping distance requirements would have already been conducted. The cost per air-braked vehicle is estimated to be about $18 ($1,080,000 ÷ 60,900). In the later years, it is estimated that 30 compliance tests would be required annually, for a total cost of $360,000 (12 × 30 × $1,000). The cost per air-braked vehicle in the later years would be about $6 ($360,000 ÷ 60,900).

Hydraulic-braked single-unit vehicles: As shown in Table 13 of the FEA, an estimated 194,400 single-unit vehicles would be affected annually. Assuming that the timing of the braking-in-a-curve test is such that all of the affected vehicles would have this test requirement included in a complete compliance test to all of the requirements in Standard No. 105, the $1,000 per test cost is used. The estimates in the FEA were that 10 vehicle manufacturers would need to conduct 20 compliance tests each, for a total of 200 compliance tests, at an annual cost of $200,000 (200 × $1,000). The cost per vehicle is then estimated at about $1 ($200,000 ÷ 194,400). This cost per vehicle would be the same in the later years.

Implementing the braking-in-a-curve performance test for single-unit vehicles with either hydraulic or air brakes is not expected to result in any increases in vehicle equipment or manufacturing costs, since these vehicles are already required to be equipped with ABS. As long as the antilock braking systems that are being installed on affected vehicles perform as they are supposed to, that is, preventing wheel lockup under a variety of road and load conditions, then these vehicles should be able to comply with the braking-in-a-curve test without additional development or equipment costs to the vehicle manufacturer. Thus all costs associated with requiring the braking-in-a-curve test are limited to the cost of vehicle manufacturers performing road tests and do not include equipment costs.

VII. Compliance Date

NHTSA proposes that the compliance date for the braking-in-a-curve test requirements, for both air and hydraulic-braked single unit trucks and buses, be two years after publication of the final rule in the **Federal Register**. Due to the operating conditions of these trucks, which often call for specialized designs, manufacturers produce a large number of different truck configurations. The proposal would provide sufficient leadtime to ensure that the manufacturers can test a relatively large number of vehicle types and configurations. At the same time, it would also ensure that this important check of vehicle stability is implemented in a timely manner to ensure the safe operation of these vehicles. Optional early compliance would be permitted on and after the date of publication of the final rule in the **Federal Register**.

VIII. Rulemaking Analyses and Notices

A. Executive Order 12866 and DOT Regulatory Policies and Procedures

This document has not been reviewed under Executive Order 12866, *Regulatory Planning and Review.*

We have analyzed the impact of this rulemaking and have determined that it is not "significant" within the meaning of DOT's regulatory policies and procedures. This action proposes to amend the air and hydraulic brake standards applicable to medium and heavy vehicles to provide for a braking-in-a-curve test for single-unit trucks and buses to enhance the stability and control of those vehicles. As discussed in Section VII above, we estimate that the total cost of the braking-in-a-curve test for manufacturers of single-unit vehicles equipped with air brakes would be approximately $1,080,000 the first year, for a per-vehicle cost about $18. In the later years, we estimate that the per-vehicle cost would be approximately $6, for a total cost of about $360,000. For hydraulic-braked single-unit vehicles, we estimate the annual cost to manufacturers of the braking-in-a-curve test to be about $200,000, for a per-vehicle cost of about $1. We estimate that this cost would be the same in the later years.

As discussed above, NHTSA evaluated in detail the costs and benefits of equipping medium and heavy vehicles with ABS. We believe that the full array of costs and benefits discussed in the FEA will not be fully attained until 10 years or more since it will take that long until all existing non-ABS medium and heavy vehicles have been replaced by newer vehicles equipped with ABS. Accordingly, we believe that the projected figures in the FEA are still valid and on that basis, we have concluded that preparation of another full regulatory evaluation is not warranted.

B. Regulatory Flexibility Act

NHTSA has considered the effects of this rulemaking action under the Regulatory Flexibility Act, 5 U.S.C. 601, *et seq.* I hereby certify that this notice of proposed rulemaking would not have a significant impact on a substantial number of small entities.

The following is our statement providing the factual basis for this certification (5 U.S.C. 605(b)). The amendments proposed in this action would primarily affect manufacturers of medium and heavy vehicles, including single-unit trucks and buses. The Small Business Administration (SBA) regulation at 13 CFR part 121 defines a small business as a business entity that operates primarily within the United States (13 CFR 121.105(a)).

SBA's size standards are organized according to Standard Industrial Classification (SIC) codes. SIC code No. 3711, *Motor Vehicles and Passenger Car Bodies,* prescribes a small business size standard of 1,000 or fewer employees. SIC code No. 3714, *Motor Vehicle Parts and Accessories,* prescribes a small business size standard of 750 or fewer employees.

The amendments proposed in this rulemaking add an additional test procedure to the air and hydraulic brake standards, applicable only to medium and heavy single-unit trucks and buses. These amendments do not apply to trailers. The amendments, if adopted, would impose minimal testing costs to manufacturers of the affected vehicles, most if not all of which would not qualify as small businesses under SBA guidelines. We estimate that the proposed amendments, if adopted, would result in minimal, if any, additional costs to small businesses or consumers. Accordingly, there would be no significant impact on small businesses, small organizations, or small units by these amendments. For those reasons, the agency has not prepared a preliminary regulatory flexibility analysis.

C. Executive Order No. 12612, Federalism

NHTSA has analyzed this rulemaking action in accordance with the principles of E.O. 12612 and has determined that this rule does not have sufficient federalism implications to warrant preparation of a Federalism Assessment.

D. National Environmental Policy Act

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

E. Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1980, Pub L. 96–511, NHTSA states that there are no information collection requirements associated with this rulemaking action.

F. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (Pub L. 104–4) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by state, local, or tribal governments, in the aggregate, or by the private sector, of more than $100 million annually. This proposed rule does not meet the definition of a Federal mandate because, if adopted, annual expenditures by the stated entities will not exceed the $100 million threshold.

G. Civil Justice Reform

The amendments proposed in this rulemaking action 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 of a state may prescribe or continue in effect a standard applicable to the same aspect of performance of a motor vehicle only if that 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. Section 30161 of Title 49, U.S. Code 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 proceeding is not required before parties may file suit in court.

IX. Comments

How Do I Prepare and Submit Comments?

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

Your comments must not be more than 15 pages long. (49 CFR 553.21). We established this limit to encourage you to write your primary comments in a concise fashion. However, you may attach necessary additional documents to your comments. There is no limit on the length of the attachments.

Please submit two copies of your comments, including the attachments, to Docket Management at the address given above under **ADDRESSES**.

How Can I Be Sure That My Comments Were Received?

If you wish Docket Management to notify you upon its receipt of your comments, enclose a self-addressed, stamped postcard in the envelope containing your comments. Upon receiving your comments, Docket Management will return the postcard by mail.

How Do I Submit Confidential Business Information?

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

Will the Agency Consider Late Comments?

We will consider all comments that Docket Management receives before the close of business on the comment closing date indicated above under DATES. To the extent possible, we will also consider comments that Docket Management receives after that date. If Docket Management receives a comment too late for us to consider it in developing a final rule (assuming that one is issued), we will consider that comment as an informal suggestion for future rulemaking action.

How Can I Read the Comments Submitted by Other People?

You may read the comments received by Docket Management at the address given above under **ADDRESSES.** The hours of the Docket are indicated above in the same location.

You may also see the comments on the Internet. To read the comments on the Internet, take the following steps:

- Go to the Docket Management System (DMS) Web page of the Department of Transportation (*http://dms.dot.gov/).*
- On that page, click on ''search.''
- On the next page (http://dms.dot.gov/search/), type in the four-digit docket number shown at the beginning of this document. Example: If the docket number were ''NHTSA–1998–1234,'' you would type ''1234.'' After typing the docket number, click on ''search.''
- On the next page, which contains docket summary information for the docket you selected, click on the desired comments.
- You may download the comments. However, since the comments are imaged documents, instead of word processing documents, the downloaded comments are not word searchable.

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

List of Subjects in 49 CFR Part 571

Imports, Incorporation by reference, Motor vehicle safety, Motor vehicles, Rubber and rubber products, Tires.

In consideration of the foregoing, 49 CFR part 571 would be amended as follows:

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

1. The authority citation for part 571 would continue 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 571.105 would be amended by adding definitions of ''Full brake application'' and ''Maximum drive-through speed'' to S4; by revising S5.1, S6.9.2 the introductory text of S7, S7.5, and Table I; and by adding S5.1.7 and S6.14, to read as follows:

§ 571.105 Standard No. 1059, Hydraulic brake and electric systems.

* * * * *

S4 *Definitions.*

* * * * *

Full brake application means a brake application in which the force on the brake pedal reaches 150 pounds within 0.2 seconds from the point of application of force to the brake control.

* * * * *

Maximum drive-through speed means the highest possible constant speed at which the vehicle can be driven through 200 feet of a 500-foot radius curve arc without leaving the 12-foot lane.

* * * * *

S5.1 *Service brake systems.* Each vehicle must be equipped with a service brake system acting on all wheels. Wear of the service brake must be compensated for by means of a system of automatic adjustment. Each passenger car and each multipurpose passenger vehicle, truck, and bus with a GVWR of 10,000 pounds or less must be capable of meeting the requirements of S5.1.1 through S5.1.6 under the conditions prescribed in S6, when tested according to the procedures and in the sequence set forth in S7. Each school bus with a GVWR greater than 10,000 pounds must be capable of meeting the requirements of S5.1.1 through S5.1.5, and S5.1.7 under the conditions specified in S6, when tested according to the procedures and in the sequence set forth in S7. Each multipurpose passenger vehicle, truck and bus (other than a school bus) with a GVWR greater than 10,000 pounds must be capable of meeting the requirements of S5.1.1, S5.1.2, S5.1.3, and S5.1.7 under the conditions specified in S6, when tested according to the procedures and in the sequence set forth in S7. Except as noted in S5.1.1.2 and S5.1.1.4, if a vehicle is incapable of attaining a speed specified in S5.1.1, S5.1.2, S5.1.3, or S5.1.6, its service brakes must be capable of stopping the vehicle from the multiple of 5 mph that is 4 to 8 mph less than the speed attainable in 2 miles, within distances that do not exceed the corresponding distances specified in Table II. If a vehicle is incapable of attaining a speed specified in S5.1.4 in the time or distance interval set forth, it must be tested at the highest speed attainable in the time or distance interval specified.

* * * * *

S5.1.7 *Stability and control during braking.* When stopped four consecutive times under the conditions specified in S6, each vehicle with a GVWR greater than 10,000 pounds and manufactured on or after (COMPLIANCE DATE, if adopted) must stop from 30 mph or 75 percent of the maximum drive-through speed, whichever is less, at least three times within the 12-foot lane, without any part of the vehicle leaving the roadway. Stop the vehicle with the vehicle:

(a) Loaded to its GVWR, and

(b) At its unloaded weight, plus up to 500 pounds (including driver and instrumentation), or at the manufacturer's option, at its unloaded weight plus up to 500 pounds (including driver and instrumentation) and plus not more than an additional 1000 pounds for a roll bar structure on the vehicle.

* * * * *

S6.9.2 (a) For vehicles with GVWRs greater than 10,000 pounds, road tests are conducted on a 12-foot-wide, level roadway, having a peak friction coefficient of 0.9 when measured using an American Society for Testing and Materials (ASTM) E 1136 standard reference test tire, in accordance with ASTM Method E 1337–90, at a speed of 40 mph, without water delivery. Burnish stops are conducted on any surface. The parking brake test surface is clean, dry, smooth, Portland cement concrete.

(b) For vehicles with GVWRs greater than 10,000 pounds, stability and control during braking tests are conducted on a 500-foot-radius curved roadway with a wet level surface having a peak friction coefficient of 0.5 when measured on a straight or curved section of the curved roadway using an American Society for Testing and Materials (ASTM) E1136 standard reference tire, in accordance with ASTM Method E1337–90, at a speed of 40 mph, with water delivery.

* * * * *

S6.14 *Special drive conditions.* A vehicle with a GVWR greater than 10,000 pounds equipped with an interlocking axle system or a front wheel drive system that is engaged and disengaged by the driver is tested with the system disengaged.

* * * * *

S7. *Test procedure and sequence.* Each vehicle must be capable of meeting all the applicable requirements of S5 when tested according to the procedures and in sequence set forth below, without replacing any brake system part or making any adjustments to the brake system other than as permitted in the burnish and reburnish procedures and in S7.9 and S7.10. For vehicles only having to meet the requirements of S5.1.1, S5.1.2, S5.1.3, and S5.1.7 in section S5.1, the applicable test procedures and sequence are S7.1, S7.2, S7.4, S7.5, S7.9, S7.10, S7.11 and S7.18. However, at the option of the manufacturer, the following test procedure and sequence may be conducted: S7.1, S7.2, S7.3, S7.4, S7.5, S7.6, S7.7, S7.8, S7.9, S7.10, S7.11, and S7.18. The choice of this option must not be construed as adding to the requirements specified in S5.1.2 and S5.1.3. Automatic adjusters must remain activated at all times. A vehicle shall be deemed to comply with the stopping distance requirements of S5.1 if at least one of the stops at each speed and load specified in each of S7.3, S7.5, S7.8, S7.9, S7.10, S7.15 and S7.17 (check stops) is made within a stopping distance that does not exceed the corresponding distance specified in Table II. When the transmission selector is required to be in neutral for a deceleration, a stop or snub must be obtained by the following procedures:

(a) Exceed the test speed by 4 to 8 mph;

(b) Close the throttle and coast in gear to approximately 2 mph above the test speed;

(c) Shift to neutral; and

(d) When the test speed is reached, apply the service brakes.

* * * * *

S7.5 (a) *Stability and control during braking* (vehicles with GVWRs greater than 10,000 pounds). Make four stops in the loaded condition specified in S5.1.7(a) and then four stops in the unloaded condition specified in S5.1.7(b). Use a full brake application for the duration of the stop, with the clutch pedal depressed or the transmission selector control in the neutral position, for the duration of each stop.

(b) *Service brake system—second effectiveness test.* Repeat S7.3. Then (for passenger cars and other vehicles with GVWRs of 10,000 pounds or less) make four stops from 80 mph if the speed attainable in 2 miles is not less than 84 mph.

* * * * *

TABLE I—BRAKE TEST PROCEDURE SEQUENCE AND REQUIREMENTS

Sequence	Test load		Test procedure	Requirements
	Light	GVWR		
1. Instrumentation check	....	....	S7.2	
2. First (preburnish) effectiveness test	....	X	S7.3	S5.1.1.1
3. Burnish procedure	....	X	S7.4	
4. Braking-in-a-curve test	X	X	S7.5(a)	S5.1.7
5. Second effectiveness test	....	X	S7.5(b)	S5.1.1.2
6. First reburnish	....	X	S7.6	
7. Parking brake	X	X	S7.7	S5.2
8. Third effectiveness (lightly loaded vehicle)	X	....	S7.8	S5.1.1.3
9. Partial failure	X	X	S7.9	S5.1.2
10. Inoperative brake power and power assist units	....	X	S7.10	S5.1.3
11. First fade and recovery	....	X	S7.11	S5.1.4
12. Second reburnish	....	X	S7.12	
13. Second fade and recovery	....	X	S7.13	S5.1.4
14. Third reburnish	....	X	S7.14	
15. Fourth effectiveness	....	X	S7.15	S5.1.1.4
16. Water recovery	....	X	S7.16	S5.1.5
17. Spike stops	....	X	S7.17	S5.1.6
18. Final inspection	....	....	S7.18	S5.6
19. Moving barrier test	....	X	S7.19	S5.2.2.3

* * * * *

3. Section 571.121 would be amended by revising S5.3, S5.3.6, S5.3.6.2 introductory text and paragraph (a), S6.1.15, and Table I to read as follows:

§ 571.121 Standard No. 121; Air brake systems.

* * * * *

S5.3 *Service brakes—road tests.* The service brake system on each truck tractor must, under the conditions of S6, meet the requirements of S5.3.1, S5.3.3, S5.3.4, and S5.3.6, when tested without adjustments other than those specified in this standard. The service brake system on each bus and truck other than a truck tractor must, under the conditions of S6, meet the requirements of S5.3.1, S5.3.3, and S5.3.4 when tested without adjustments other than those specified in this standard. The service brake system on each bus and truck other than a truck tractor manufactured on or after [Compliance date to be inserted] must, under the conditions of S6, meet the requirements of S5.3.1, S5.3.3, S5.3.4, and S5.3.6, when tested without adjustments other than those specified in this standard. The service brake system on each trailer must, under the conditions of S6, meet the requirements of S5.3.3, S5.3.4, and S5.3.5 when tested without adjustments other than those specified in this standard. However, a heavy hauler trailer and the truck and trailer portions of an auto transporter need not meet the requirements of S5.3.

* * * * *

S5.3.6 *Stability and control during braking—trucks and buses.* When stopped four consecutive times for each combination of weight, speed, and road conditions specified in S5.3.6.1 and S5.3.6.2, each truck tractor must stop at least three times within the 12-foot lane, without any part of the vehicle leaving the roadway. When stopped four consecutive times for each combination of weight, speed, and road conditions specified in S5.3.6.1 and S5.3.6.2, each bus and truck other than a truck tractor manufactured on or after [Compliance date to be inserted], must stop at least three times within the 12-foot lane, without any part of the vehicle leaving the roadway.

* * * * *

S5.3.6.2 Stop the vehicle, with the vehicle:

(a) Loaded to its GVWR so that the load on each axle measured at the tire-ground interface is most nearly proportional to the axles' respective GAWRs, without exceeding the GAWR of any axle, and

(b) * * *

* * * * *

S6.1.15 *Initial brake temperature*. Unless otherwise specified, the initial brake temperature is not less than 150°F and not more than 200°F. The temperature of each brake is measured by a single plug-type thermocouple installed in the center of the lining surface of the most heavily loaded shoe or pad as shown in Figure 2. The thermocouple is outside any center groove.

* * * * *

TABLE I—STOPPING SEQUENCE

1. Burnish.

2. Stops on a peak friction coefficient surface of 0.5:

(a) With the vehicle at gross vehicle weight rating (GVWR), stop the vehicle from 30 mph using the service brake, for a single-unit vehicle or for a truck tractor with a loaded unbraked control trailer;

(b) With the vehicle at unloaded weight plus up to 1,500 lbs, stop the vehicle from 30 mph using the service brake, for a truck tractor or a single-unit vehicle;

3. Manual adjustment of the service brakes allowed for truck tractors and single-unit vehicles within the limits recommended by the vehicle manufacturer.

4. Other stops with vehicle at GVWR:

(a) 60 mph service brake stops on a peak friction coefficient surface of 0.9, for a truck tractor with a loaded unbraked control trailer, or for a single-unit vehicle;

(b) 60 mph emergency brake stops on a peak friction coefficient of 0.9, for a single-unit vehicle. Truck tractors are not required to be tested in the loaded condition.

5. Parking brake test with the vehicle loaded to GVWR.

6. Manual adjustment of the service brakes allowed for truck tractors and single-unit vehicles, within the limits recommended by the vehicle manufacturer.

7. Other stops with the vehicle at unloaded weight plus up to 1500 lbs:

(a) 60 mph service brake stops on a peak friction coefficient surface of 0.9, for a truck tractor or for a single-unit vehicle;

(b) 60 mph emergency brake stops on a peak friction coefficient of 0.9, for a truck tractor or for a single-unit vehicle.

8. Parking brake test with the vehicle at unloaded weight plus up to 500 lbs.

9. Final inspection of service brake system for condition of adjustment.

* * * * *

Issued on December 14, 1999.

Stephen R. Kratzke,

Acting Associate Administrator for Safety Performance Standards.

[FR Doc. 99–32889 Filed 12–20–99; 8:45 am]

BILLING CODE 4910–59–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 622

[Docket No. 991112303–9303–01; I.D. 100499A]

RIN 0648–AM01

Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic; 1999–2000 Catch Specifications for Gulf Group King and Spanish Mackerel

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

ACTION: Proposed rule; request for comments.

SUMMARY: In accordance with the framework procedure for adjusting management measures of the Fishery Management Plan for the Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic (FMP), NMFS proposes to increase the total allowable catch (TAC) and the bag limit for Gulf group Spanish mackerel and to establish a new fishing season for the Gulf group king mackerel gillnet fishery. The intended effects of this rule are to enhance the economic and social benefits from the Gulf group king and Spanish mackerel fisheries while maintaining healthy stocks.

DATES: Written comments must be received at the appropriate address or fax number, (see **ADDRESSES**), no later than 5:00 p.m., eastern standard time, on January 20, 2000.

ADDRESSES: Written comments on the proposed rule must be sent to Steve Branstetter, Southeast Regional Office, NMFS, 9721 Executive Center Drive N., St. Petersburg, FL 33702. Comments also may be sent via fax to 727–570–5583. Comments will not be accepted if submitted via e-mail or Internet.

Requests for copies of the environmental assessment and regulatory impact review (RIR) supporting this action should be sent to the Gulf of Mexico Fishery Management Council, 3018 U.S. Highway North, Suite 1000, Tampa, FL, 33619–2266, PHONE: 813–228–2815, FAX: 813-225-7015.

FOR FURTHER INFORMATION CONTACT: Steve Branstetter, 727–570–5305.

SUPPLEMENTARY INFORMATION: The fisheries for coastal migratory pelagic resources are regulated under the FMP. The FMP was prepared jointly by the