



RMA Concerns with the Tire Efficiency NPRM

Rubber Manufacturers Association
January 22, 2010



Energy Independence and Security Act of 2007

Public Law 110-140, 121 Stat. 1492 (Dec. 18, 2007)

- Requires NHTSA to conduct a rulemaking to establish “a national tire fuel efficiency consumer information program for replacement tires designed for use on motor vehicles to **educate consumers about the effect of tires on automobile fuel efficiency, safety, and durability**”
- The rulemaking components are:
 - A national tire fuel efficiency rating system to assist consumers in making more educated tire purchasing decisions
 - Requirements for providing information to consumers, including point of sale
 - Specification of test methods
 - National tire maintenance program on tire inflation pressure, alignment, rotation and tread wear
- NHTSA was required to promulgate a rule by December 19, 2009, 24 months after the passage of the law



NHTSA Proposal

74 Fed. Reg. 29,542 (June 22, 2009)

- Rolling Resistance Rating
 - Based on RRF
 - Label required on all replacement tires subject to UTQG
 - General program poster required to be hung in retail outlets
- Wet Traction Rating
 - Based on peak coefficient on wet asphalt and wet concrete (based on current UTQG test)
- Treadwear Rating
 - Based on current UTQG test – rating would divide current rating scale by 10
- All ratings
 - Would be on tire tread label
 - 0 to 100 scale
 - Presents rolling resistance, traction and tread wear equally
 - No requirement that label be presented to consumer
- NPRM would require tire manufacturers to comply with the regulation 12 months after promulgation of rule

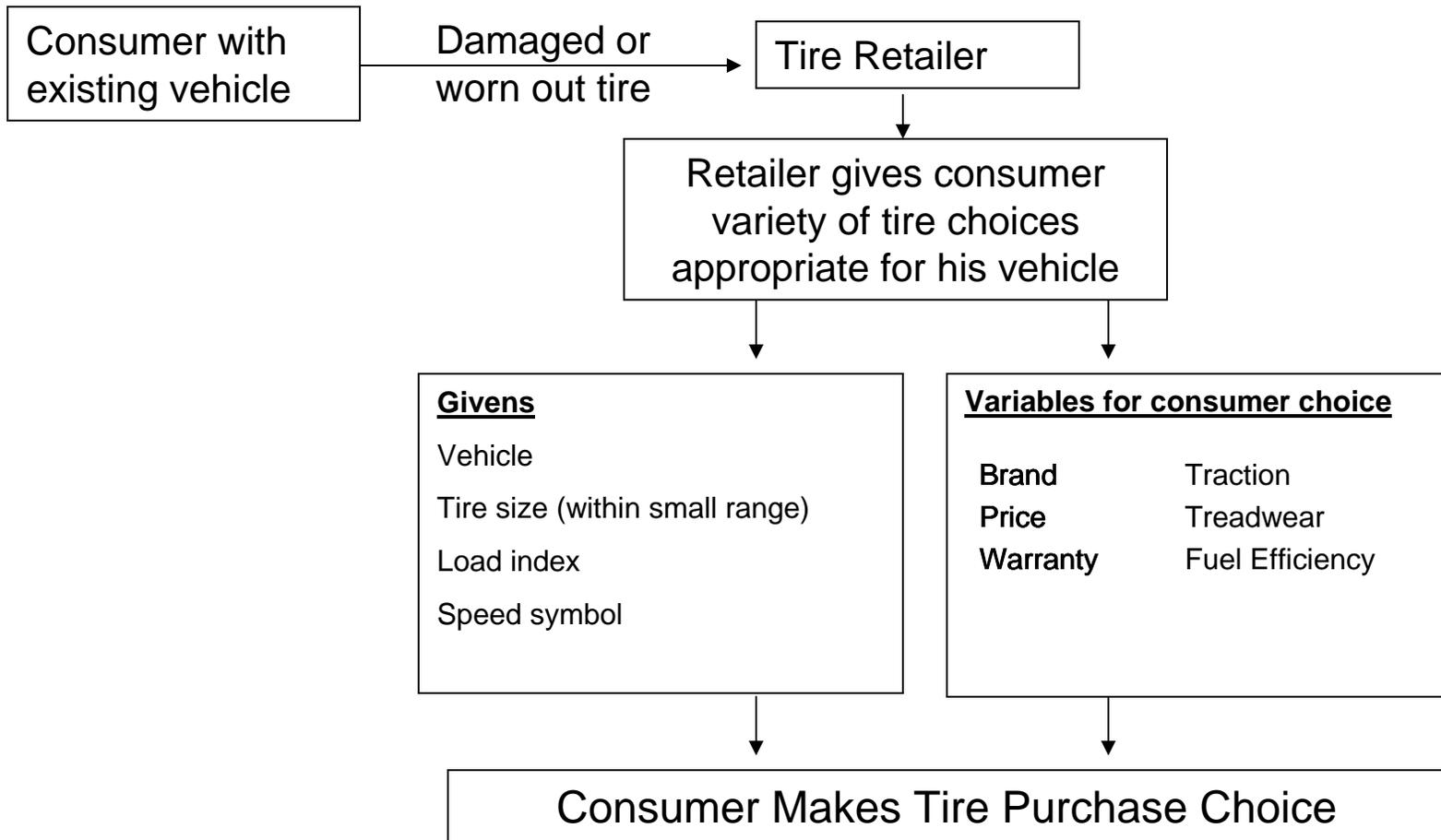


RMA Position on Tire Efficiency Consumer Information

- RMA members supported legislation and support concept of providing tire efficiency ratings of replacement tires to consumers at point of sale
- RMA members believe that in order to establish effective consumer information requirements regarding tire efficiency, the program must meet the following:
 - Provide information at point of sale;
 - Provide meaningful information that is easy to understand by consumers;
 - Provide a wide range of tire efficiency choices across the rating scale to each consumer about replacement tire choices appropriate for the consumer's existing vehicle;
 - Be cost effective to minimize the cost effect of this information to consumers.



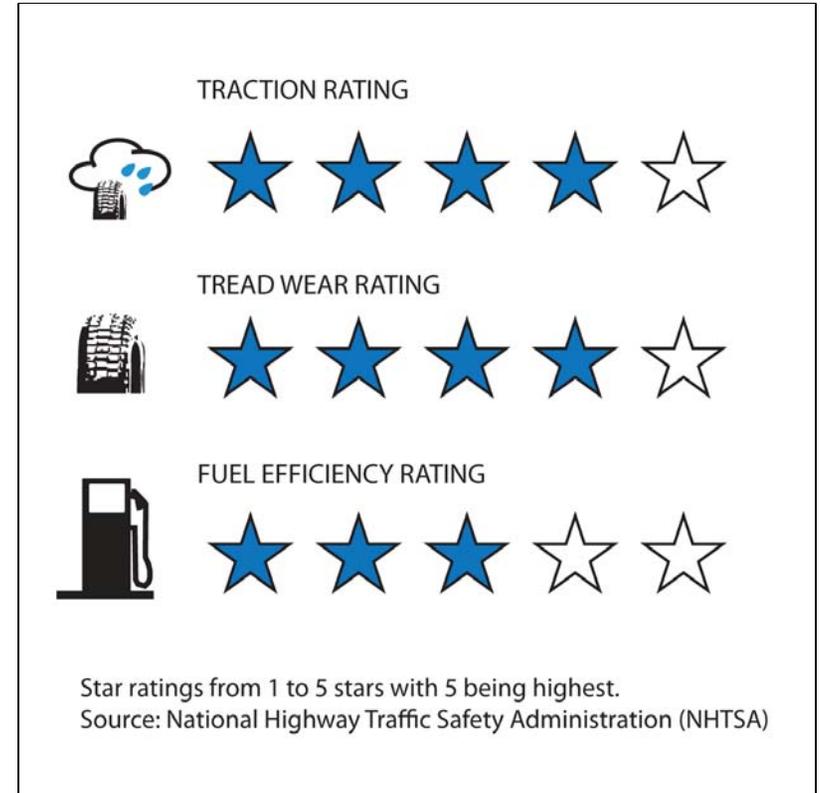
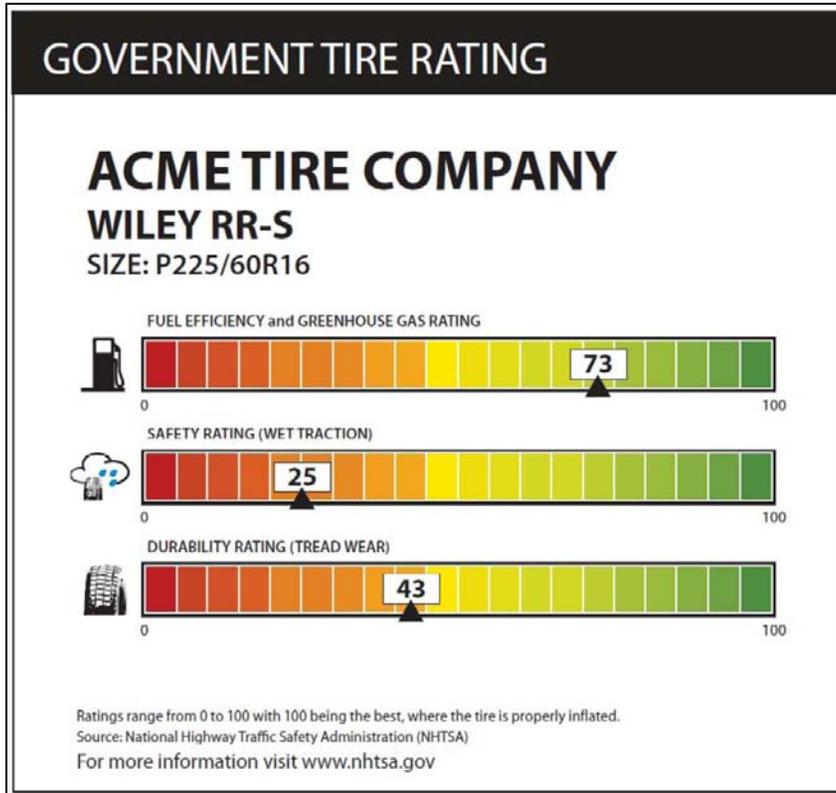
Typical Replacement Tire Purchase Model





NHTSA Proposal

RMA Proposal





RMA Counterproposal (Overview)

- Overview
 - RMA proposed a categorical rating system, instead of the 0 to 100 scale proposed by NHTSA
 - RMA proposed that the information be provided in the following order: tread wear, traction and fuel efficiency
 - RMA recommended that NHTSA use the terms “tread wear” and “wet traction” instead of the terms “durability” and “safety”
 - RMA proposed that the information should be provided *at point of sale*, rather than on a tire tread label that most consumers are unlikely to ever see



RMA Counter Proposal

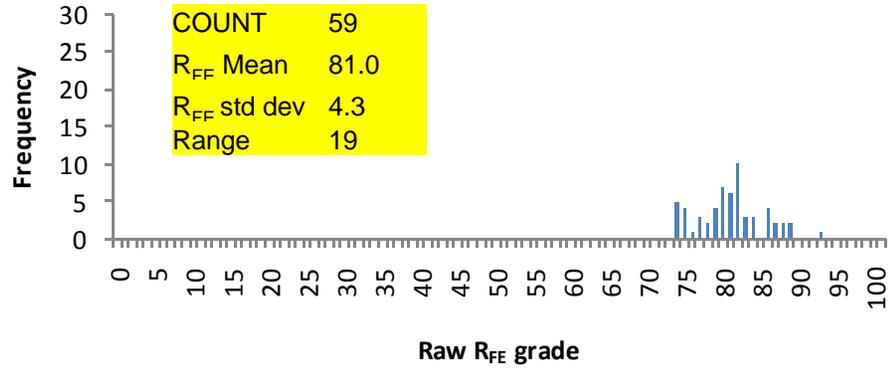
- RMA conducted consumer research to evaluate rating options
 - Consumers favored a five-star rating system
 - Consumers found rating systems other than NHTSA's proposed rating to be easier to understand, better able to communicate information and more visually appealing
 - When told that the 0 to 100 scale would not deliver greater precision than the other rating options, the respondents overwhelmingly stated that another label should be used



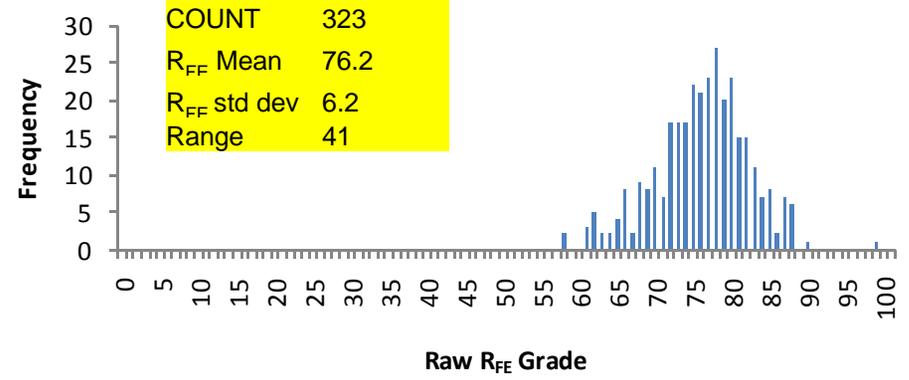
NHTSA Proposed Rating System

- Rolling Resistance Rating
 - NHTSA's proposed rating is based on rolling resistance force, which has the effect of rating large tires worse than small tires overall since rolling resistance force incorporates the load carrying ability of the tire
 - This would give consumers with large vehicles no high rated choices, as rated by the proposed system
 - The following two slides illustrate that using the NHTSA 0 to 100 point scale, a consumer with would have choices of products within a 20 to 40 point range, depending on his vehicle

Sub-Compact Histogram

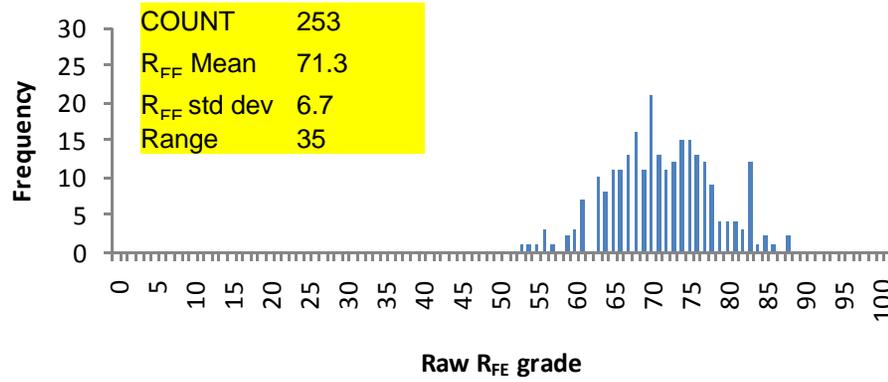


Compact Histogram

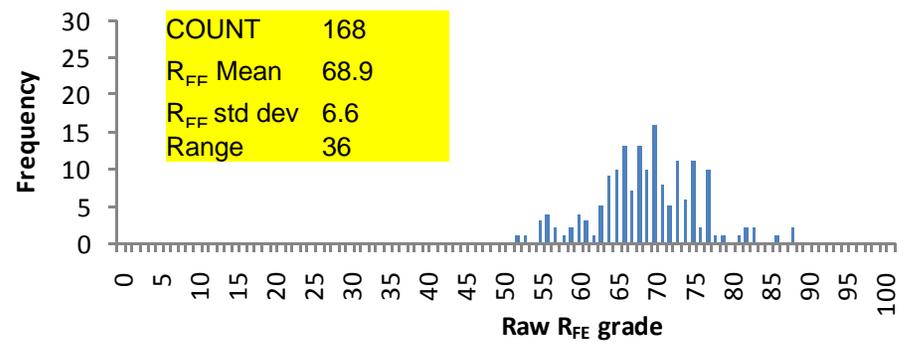


SUBCOMPACT 81*-86 LI
COMPACT 87-93 LI
MIDSIZE 93-97 LI
FULL SIZE 97-99 LI
 * Range based on 2009 models

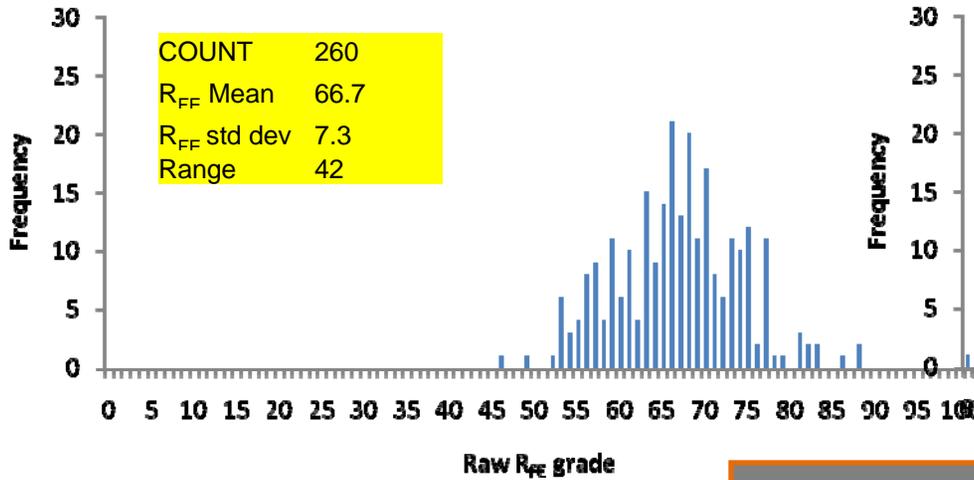
Midsize Histogram



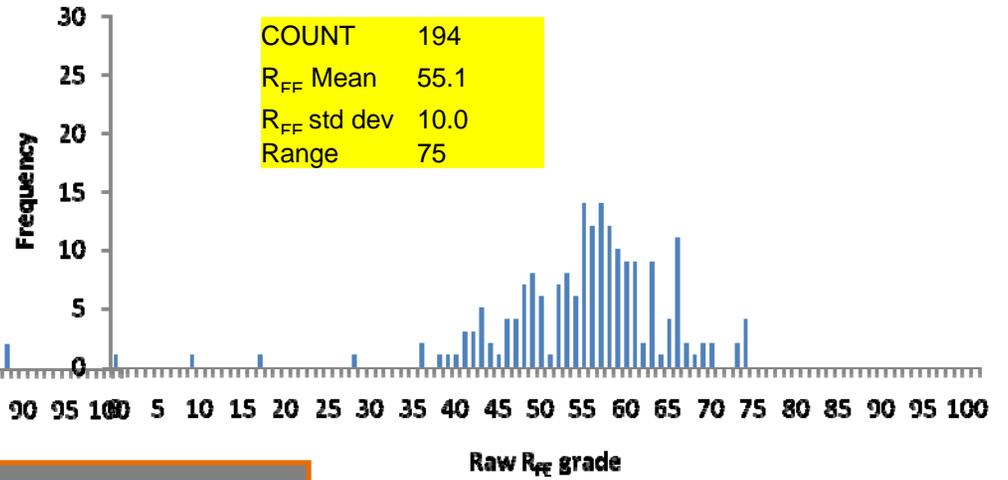
Fullsize Histogram



Small SUV/PU Histogram



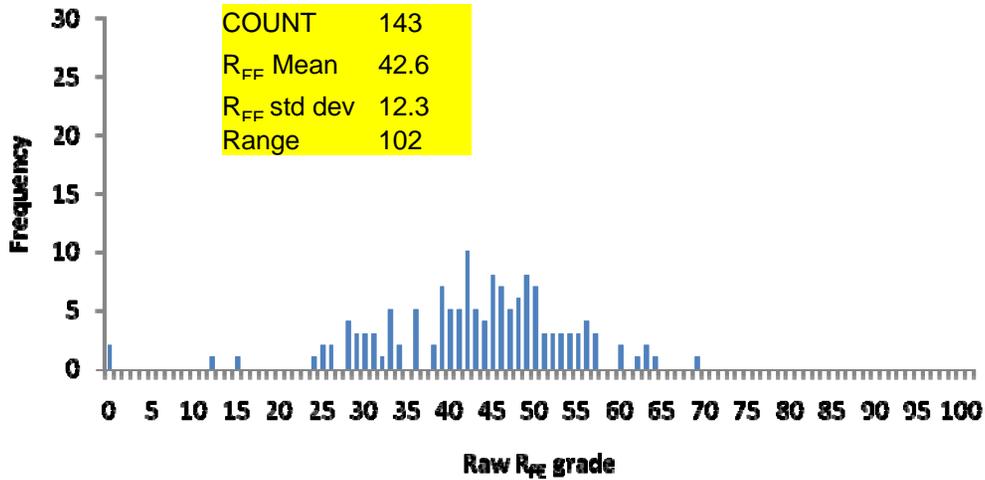
Med SUV/PU Histogram



Small SUV/PU 96-104 LI
 Med SUV/PU 102-111 LI
 Large SUV/PU 109-116* LI

Range based on 2009 models

Large SUV/PU Histogram





NPRM Tire Efficiency Rating

based on rolling resistance force



Rating scale 0-100 with 100 being highest.

Full sized SUV/pickup truck



Full Sized



Midsized



Compact



Subcompact



- Rating system does not give individual consumer full range of choices for existing vehicle
- Serves to rate vehicles rather than provide useful information about replacement tires
- Does not give all consumers choices of high rated tires



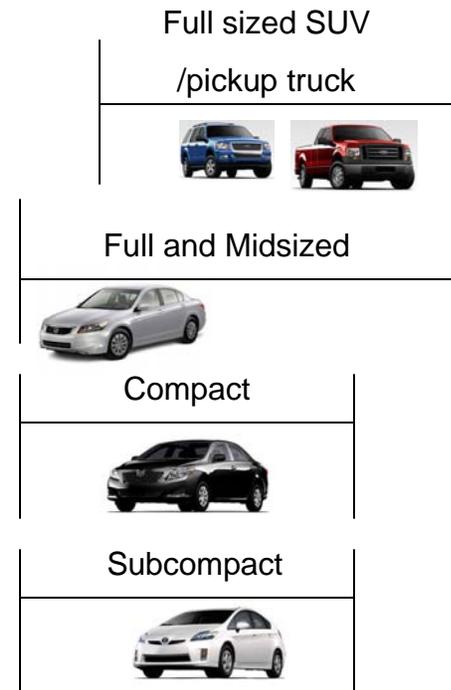
Rating scale 0-100 with 100 being highest.



RMA Proposed Tire Efficiency Rating

based on rolling resistance coefficient

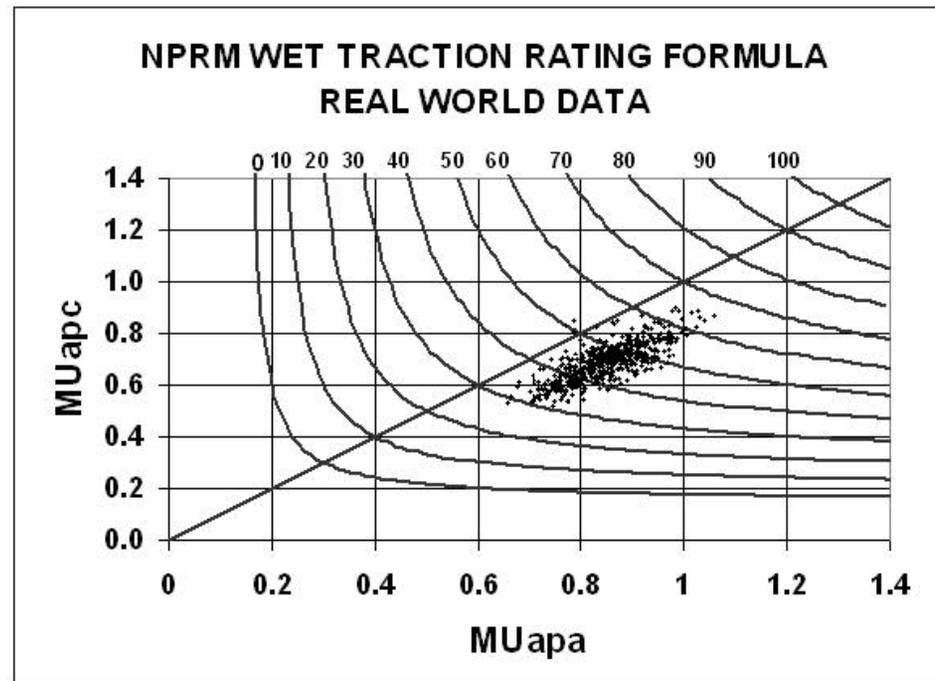
- Categorically rates tires
- Gives each consumer a range of options, including high rated products, appropriate for vehicle he owns





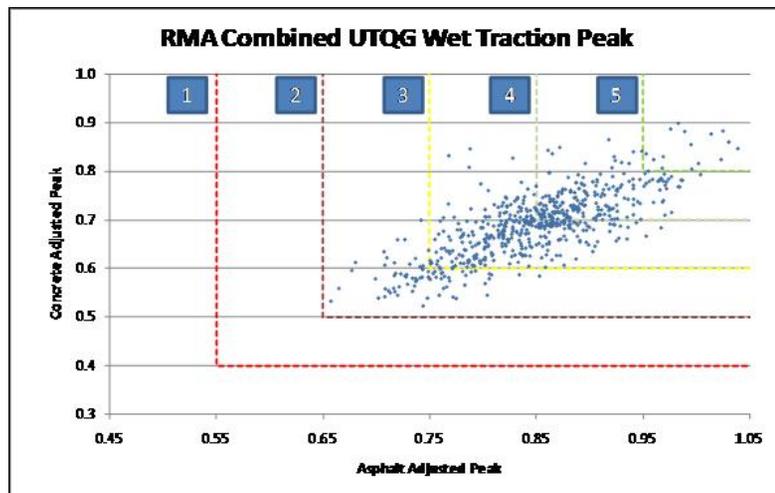
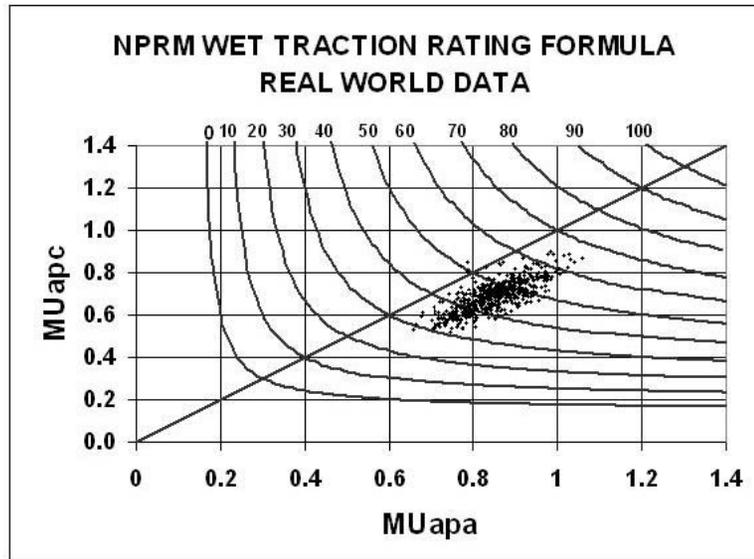
Wet Traction Rating

- RMA was unable to validate the NHTSA proposed wet traction rating ranges
- RMA provided wet traction data on over 600 tires to demonstrate the range in the market
- RMA recommended that NHTSA revise its range
- RMA also recommended that NHTSA not weight traction performance on wet asphalt and concrete surfaces equally or provide a justification for doing so





Wet Traction Rating



- Both charts to the left are based on the RMA wet traction database of over 600 tires
- Top figure shows a categorical rating system using NHTSA's proposed wet traction performance ranges on asphalt and concrete
- Bottom figure shows RMA counterproposal that modifies the scale so as to allow for greater product differentiation, which is representative of tire performance



NHTSA Proposed Test Method for Tire Efficiency

- NHTSA proposed ISO 28580 test to measure tire efficiency
- RMA supports use of this test but NHTSA misapplied the test method by requiring use of rolling resistance force when test method measures rolling resistance coefficient
- Test method requires reference lab to be selected in order for manufacturers to develop comparable data but NPRM does not identify reference lab
- NHTSA must also select reference laboratory in order for industry generate data and ratings to comply with rule
- Compliance clock for rule should not start until reference lab is proposed, subject to notice and comment and finalized



NHTSA Proposed Compliance Approach

- NHTSA proposed that tire manufacturers report to NHTSA test values in addition to ratings
- Would require NHTSA program poster hung in tire retail shops
- Would require tire rating label to be placed on tread of new subject replacement tires
- No requirement to show label to customer at all or give consumer rating information about their specific tire options



RMA Proposal for Tire Manufacturer Requirements

- **Self-certify and report tire ratings to NHTSA**
- **Develop consumer information and make available tire ratings to tire dealers**
- **Do not require reporting of test values in addition to ratings**
- Do not require tire rating graphic on tire tread label, but if NHTSA does require this, RMA recommends that NHTSA not require a color graphic or the date of manufacture on the label



RMA Proposal for Tire Retailer Requirements

- **Display the NHTSA poster** discussed in the NPRM in the tire retail outlet showroom or customer waiting area.
- **Make available consumer information on applicable tires at point of sale** (e.g., counter brochures, product catalogues, in-store online access to NHTSA website, tire manufacture websites or tire retailer website with ratings information, etc.).
- **Link to NHTSA's website** on tire retailer's website if retailer has website.



RMA Compliance Assurance Proposal

- **RMA supports compliance through self-certification, which is a low cost way to assure high rates of compliance**
 - **Self-certification mandated for all vehicle safety regulations (including those for tires), successfully assuring high rates of compliance while lowering industry costs**
 - **Submitting data will not lead to higher rates of compliance, only adds industry costs**
 - **Self-certification assures higher positive net benefits**



RMA Compliance Assurance Proposal

- **NHTSA should conduct periodic audits** through testing to assure compliance
- **NHTSA should investigate for potential non-compliance** if audit test data would result in a rating that is lower than that certified by the tire manufacturer
- **NHTSA should seek data from the tire manufacturer supporting the rating certified by the manufacturer** in the case of alleged non-compliance based on a NHTSA audit
- **RMA opposes the concept of compliance tolerance bands**



RMA Lead Time Proposal

- **24-month compliance lead time for tire manufacturers** to conduct necessary testing, rate applicable tires, self-certify ratings to NHTSA and provide ratings to tire dealers for use in educating consumers at point of sale.
- **Compliance date for existing tires should be based on tire manufacture date** instead of tire sell date.
- **Compliance date for new tires introduced should be six months after new product is introduced**, consistent with current UTQGS requirements.



NPRM Estimated Costs

- NPRM estimates that small positive net benefits would be achieved by this rule
- NHTSA assumes proposed 0 to 100 scale would achieve higher benefits than other rating alternatives
- NHTSA estimates no testing cost to manufacturers for traction or treadwear testing to comply with this rule



RMA Concerns with Benefits Analysis

- NHTSA test data in docket shows negative correlation among tire fuel efficiency, traction and treadwear performance
- Cost analysis does not take into account these findings by quantifying potential disbenefits to traction and treadwear if consumers select fuel efficiency
- As well, the cost analysis does not quantify lower potential fuel savings benefits if consumers select for higher traction and treadwear at the expense of fuel economy



RMA Concerns with Costs Analysis

- NHTSA assumes no additional costs for traction and treadwear testing, which vastly underestimates testing costs to manufacturers
 - Same tests currently used for Uniform Tire Quality Grading Program BUT specifies different data collected in these tests be the basis of the new grading system
 - Full spectrum of collected data are not available from tests conducted previously on existing product – only the portion needed to comply with current requirements is retained
 - Both current and new products would need to be retested to comply with the proposed rules, which would greatly increase costs
 - Previous compliance with UTQG has been done on a tire line basis (often 25 or more tire sizes), whereas this proposal would require rating each unique tire product (each line, in each size) separately and necessitating much more testing than assumed in the NPRM
- NHTSA does not take into account the full costs of producing and applying tread labels to tires



Costs of Manufacturer Testing, Reporting and Labels: RMA Estimates Compared with NHTSA Estimates (in millions of 2008 \$)

	RMA Members		Total Industry		NHTSA
	Best Case	Worst Case	Best Case	Worst Case	
TESTING AND REPORTING					
Initial costs	\$14.7	\$51.1	\$18.3	\$63.9	\$4.1
Ongoing annual costs	\$10.2	\$27.2	\$12.7	\$34.0	\$0.1
LABELS					
Initial costs		\$21.9		\$27.4	\$0.0
Ongoing annual costs		\$11.5		\$14.4	\$9.1
Total annualized costs	\$26.9	\$49.1	\$33.7	\$61.4	\$9.8

- Industry cost estimates are 3 to 6 times higher than NHTSA estimates



Annualized Costs and Benefits: NHTSA Benefits, RMA Costs (Millions of 2008 dollars/yr)

	RMA Cost Estimates		NHTSA Benefit Estimates	Net Benefits
	Tire Costs	Mfr. Program Costs		
If 1% of target tires and 5% improvement in RR	\$4.2	\$33.7 to \$61.4	\$11	-\$26.9 to -\$54.6
If 2% of target tires and 10% improvement in RR	\$8.4	\$33.7 to \$61.4	\$44	+\$1.9 to -\$25.8

- Using industry costs and NHTSA benefit estimates, the regulation would achieve negative net benefits



RMA Cost Benefit Analysis Summary

- In order to increase the likelihood that benefits exceed costs for this rule, the rule should be as efficient, effective and balanced as possible
 - Keep testing and related costs to a minimum
 - Information requirements for labels should be limited to only those that can be justified for use by the consumer prior to sale
 - Information should be designed to get information to replacement tire purchases in a time and manner that will be most helpful to them in making decisions
 - NHTSA should work creatively to educate consumers about tire maintenance