



Truck Size and Weight Subcommittee on Design

Portland, Maine

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Program Director

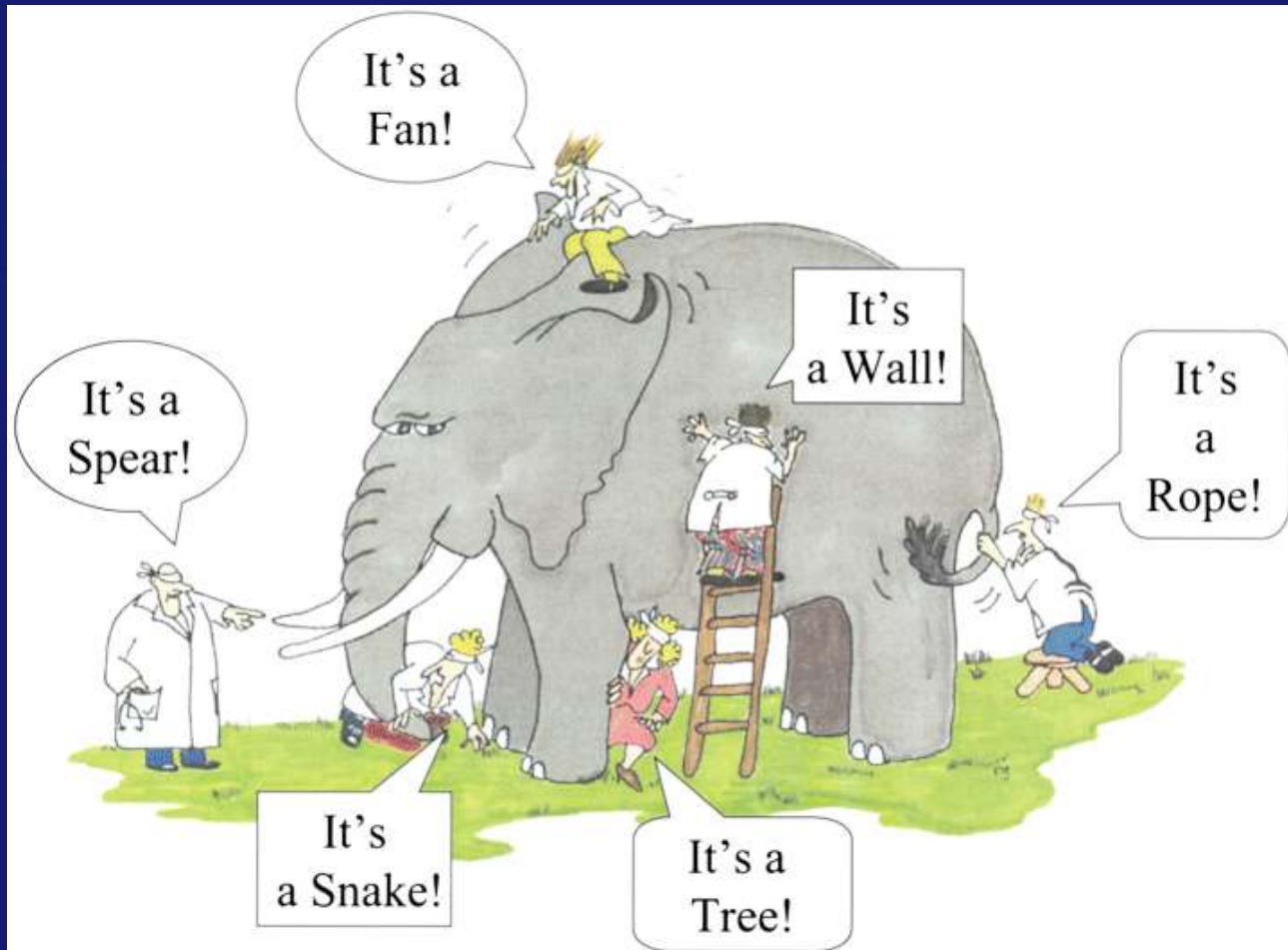
Freight Transportation and Economic Development

"States, in collaboration with the freight transportation industry and the federal government, should investigate the feasibility of regional

AASHTO Board of Directors

"States, in collaboration with the freight transportation industry and the federal government, should investigate the feasibility of regional adjustments in truck size and weight in particular corridors that demonstrate important economic benefits and meet safety, pavement/bridge impact and financing criteria" Adopted October 2008

What is a truck?



STATE GOVERNMENT VIEW OF TRUCKS





AASHTO
THE VOICE OF TRANSPORTATION

AMERICAN ASSOCIATION OF
STATE HIGHWAY AND
TRANSPORTATION OFFICIALS

NCHRP 20-07 Task 303



DIRECTORY OF SIGNIFICANT
TRUCK SIZE AND WEIGHT RESEARCH



MOTIVATION

Decision-makers are challenged to identify/utilize state of knowledge from truck size and weight research

- Extensive volume of related research, dating back nearly 80 years
- Breadth of related topic areas including infrastructure preservation, enforcement, safety, congestion, environment, industry costs, modal share, etc.
- Diverse interests of public and private sponsoring agencies/ organizations

| TOPIC | RESEARCH RECORDS | |
|-----------------------------|------------------|---------------|
| | Total | Last 10 Years |
| Infrastructure Preservation | | |
| Pavements | 2,490 | 788 |
| Bridges | 1,912 | 659 |
| Enforcement | 961 | 364 |
| Highway Safety | 10,403 | 3,424 |
| Industry Costs | 1,523 | 702 |
| Economic Impacts | 1,166 | 492 |
| Infrastructure Financing | 56 | 20 |
| Highway Congestion | 983 | 249 |
| Modal Share | 114 | 14 |
| Environment | 2,415 | 429 |
| Public Opinion | 82 | 7 |

Highway Geometrics citations pg. 124

- Design features most affected
 - Horizontal curves
 - Intersection turning radii
 - Passing sight distance
 - Sight distance at intersections/railroad grade crossings
 - Ramp interchanges
- Increased trailer lengths increase vehicle off-tracking
- Wider trucks on rural 2-lane highways elicit undesirable/unsafe actions by oncoming drivers
- Upgrade costs are highly variable and depend upon
 - truck configuration
 - extent of roadway network to be redesigned

AASHTO Board of Directors

- *“NOW, THEREFORE BE IT RESOLVED THAT, The AASHTO Board of Directors establishes a Truck Size and Weight Working Group to coordinate the effort needed to: (1) develop recommendations to carry out existing AASHTO policy;*
- *(2) develop additional policy recommendations as deemed necessary; and,*
- *(3) develop the capacity needed by AASHTO and member state DOTs to assess and respond to proposals for changes in truck size and weight laws”*
Adopted November 2010

AASHTO Truck Size and Weight Working Group

SCOH Subcommittees

- Highway Transport
- Bridges and Structures
- Design
- Geometric Design
- Maintenance
- Materials
- Pavements
- Systems Operation and Management

Working Group, cont..

Other Committees

- Special Committee on Intermodal Transportation and Economic Expansion
- Safety (SCOHTS or Safety Management)
- Standing Committee on Rail Transportation
- Standing Committee on Planning
- Subcommittee on Transportation Finance Policy

Evaluation Criteria

- Safety—Will the proposal improve safety on the interstate
- Economic Benefit—Will the proposal produce a positive economic outcome?
- Infrastructure preservation, renewal, and capacity—Will the proposal adversely affect the condition and/or the performance of highway infrastructure?
- Congestion reduction—Will the proposal reduce highway congestion?

Criteria cont..

- Modal diversion—Will the proposal cause a shift of traffic to highway from rail or waterways that will have adverse impacts on infrastructure, safety or the environment?
- Financing assurance—Will the proposal provide guaranteed funding to equal the costs of necessary infrastructure improvements and increased enforcement?

Conditions

- Route Selection—Routes suitable for increased size and/or weight on the interstate will be determined by the state based on the evaluation criteria above and the conditions below.
- Infrastructure Assessment—No interstate route (including access) will be approved for increased size and weight before an assessment determines that it can be done without serious adverse impacts on highway infrastructure (including access) or before necessary improvements are made.

Conditions, cont.

- **Cost Estimate**—A cost estimate must be carried out to determine the total cost and timing of investments made necessary by the change in truck size and weight.
- **Safety Requirements**—Vehicles operating under the increased size and weight limits will be required to be of the highest available quality, including all of the standard safety technology; drivers will be required to have outstanding safety records; and the companies will be required to have strong safety histories.

Conditions, cont.

- Monitoring and reporting—A rigorous monitoring system must be established to produce regular reports to determine whether the outcome of the change in federal truck size and weight limits on the interstate are consistent with the evaluation criteria.
- Infrastructure funding—A mechanism must be in place that will guarantee that the cost of any improvements determined to be necessary by the Infrastructure Assessment will be met by revenues from the benefiting carriers and shippers.
- Implementation funding—the federal government must provide the funds necessary for enforcement, monitoring and administration necessary for the state DOTs to implement the changes in truck size and weight on the Interstate system.

AASHTO Guidance

1. Guidance for states on assessing proposals for change in truck size and weight
2. Performance standards for design and construction

H.R. 7

- State option for 97k, 6 axles on interstate
- Expanded LCV routes
- Coal (126k), auto transporters, fire trucks, twin 33s, towaway trailer transporter

- Study (Barletta amendment)

States

- Maine and Vermont
- Minnesota and Wisconsin studies
- others

Other Countries

| Country | GV |
|----------------|---------|
| United Kingdom | 98,800 |
| Denmark | 105,600 |
| Australia | 100,100 |
| Mexico | 106,700 |
| Canada | 102,300 |
| United States | 80,000 |

Performance Standards—Canada, Australia

Discussion

If the Congress enacted a law that allowed heavier and larger trucks on all segments of the Interstate in three years, what would you have to do?

AASHTO

www.transportation.org

AASHTO Freight Transportation Network

www.freight.transportation.org

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