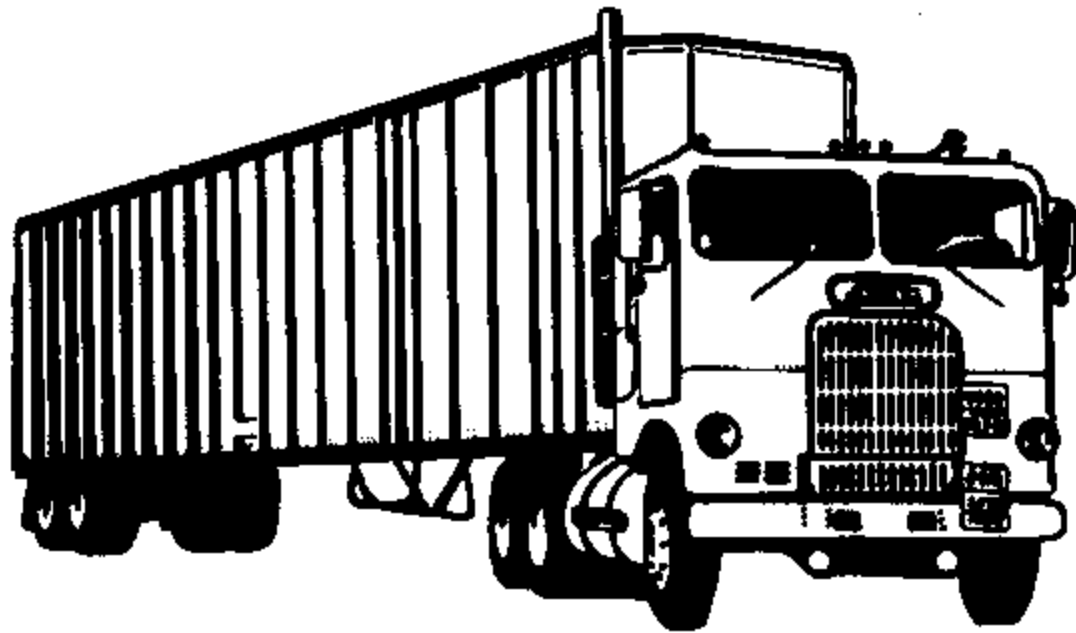


# Regulation of Weights, Lengths, and Widths of Commercial Motor Vehicles

Transportation Research Board  
The National Academies



# Congressional Study Charge

PLA-21, Section 1213i (June 1998):

to study federal regulation of weights, dimensions of commercial vehicles.

regulations, practices, past studies (including TRB's *Truck Weight Limits*).

and any revisions to law and regulations as determined appropriate.

impact on the economy, environment, and communities.

with government, industry, labor, and environmental groups.

# Committee

James W. Poirot, CH2M Hill, chair

John D. Boyer, Michigan State

Ravi Dulla, Sierra Research Inc.

John Garber, University of Virginia

John Gillespie, University of Michigan

John University of Toronto

Mississippi Department of Transportation

University of Illinois, Chicago

David Road, Minnesota DOT (retired)

Council of Deputy Ministers Responsible for

Road and Highway Safety (Canada)

Chicago Area Transportation Study

California DOT (retired)

College of William and Mary

University of Texas

# Study Process

meetings over 2-year period

each differed from earlier TRB, DOT studies

quantitative estimates of impacts

past TS&W studies (TRB, DOT); past

regulatory process, organizational issues

solicited from governments,

groups

academies conducted peer review of

# Context

• Tank size and weight regulations: a complex  
• mix of federal & state rules

• Numerous provisions and exceptions from nominal limits  
• Numerous

• Enforcement is imperfect

# Context (continued)

Key issues:

Safety

Other public costs: traffic, pollution

Other impacts: freight costs, competition

Other pavement and bridge costs

Reasons for federal involvement:

Federal investment in Interstates

Interstate commerce

Safety

# Context (continued)

General regulatory milestones:

1956 - first federal weight limit on Interstates

1975 - weight limit raised

1980 - states required to accept 80k lb trucks,

11.8-ft trailers

1982 - CV freeze

# Present Status of Regulations

Present regulatory system is unsatisfactory:

historical accident

technical features & loopholes

procedures for monitoring performance

procedure for response to regulatory

exemption demands

issues: NAFTA, containers

technologies: e.g., ITS

# Present Status of Regulations (continued)

policy deadlock has blocked reform:

federal regulatory overhaul in 20 years.

causes of deadlock: public antipathy;  
economic interests; state financial fears; diverse  
policy views

## Present Status of Regulations (continued)

Information deficiencies have been one major obstacle to progress; i.e., legitimate uncertainty about impacts

Quantify potential benefits from regulatory liberalization: 30¢ of every dollar spent on freight is for trucking.

W policy studies (DOT, TRB): predict benefits from liberalization; little policy impact

# Premises

Underlying committee's recommendations

Highway management policies: maximize benefits from the highway system.

Information is possible and essential, and for credibility.

Break policy impasse, but will help.

# Premises (continued)

Regulation should be dynamic:

Leave room for innovation

Accommodate changing circumstances:

Technology, trade, highway conditions

Continuously seek improvements:

Evaluation--> implementation-->

Monitoring-->refinement.

# Conclusions

Opportunities exist for improving efficiency of the highway system through reform of federal regulations, which may entail allowing trucks.

State objectives for federal TS&W

## Conclusions (continued)

For greatest benefit, coordinate changes in  
W with changes in:

structure design & management

s

user safety and traffic regulations

## Conclusions (continued)

Most studies' methods do not provide good estimates of bridge costs.

These outcomes can't be predicted reliably, monitoring is vital.

Primary research and monitoring are not sufficient.

# Recommendations

Commercial Traffic Effects Institute

at Studies

anges in Federal Regulations: Permit  
m

Combination Vehicles

Where Federal Standards Should

h

# Recommendation 1. Commercial Traffic Effects Institute

Congress should create an independent public organization to observe comm. vehicle performance and effects of TS&W regulation.

on

...a board; public funding; private cost

...a resource to regulators.

# Rec. 1. Institute(continued)

Charge:

Professional statement of goals would be vital  
to the pilot studies (Recommendation 2)

state permitting program  
(Recommendation 3)

Research on impacts of truck traffic

Monitoring, evaluation of federal TS&W

relations (federal and state)

federal regulatory changes to

and Secretary

## Rec. 1. Institute (continued)

### **Organizational Models:**

Road Transport Commission (Australia)

Weights and Dimensions Study (Canada)

Trucks Institute (US)

## Recommendation 2. Evaluation of the Consequences of Changes in EPA's Regulations Through Pilot Studies

Congress should authorize Secretary to approve  
pilot studies:

Controlled experiments to measure effects of  
changes in vehicles, practices

Temporary exemptions from federal  
regulations

Manufacturers agree to participate in evaluation

Studies conducted under actual operating conditions

## Rec. 2 Pilots (continued)

with state approval

country, states, or federal government could  
use pilots

results tied to regulatory change

screens proposals; oversees pilots;  
ends regulatory changes

# Recommendation 3

## Immediate Changes in Federal Regulations

State law should allow any state to participate in a nationally supervised permit program for the use of vehicles heavier than present federal regulations.

States should be authorized to certify, on advice of the EPA, that a state meets requirements of the program.

States are responsible for monitoring performance of vehicles.

# Rec. 3 Permit Program (continued)

## and Weight Provisions

should be allowed to issue permits for:

tractor-semitrailers up to 90,000 lb

trailers up to 33 ft each trailer within

ula

rim limits would be subject to review

ion, grandfather trucks subject to

# Rec. 3. Permit Program (continued)

## Implementation Provisions

ement

es

requirements

management

## Rec. 3. Permit Program (continued)

S

deral/state relationship in size & weight

e for innovation in public interest

for multistate cooperation

# Recommendation 4

## Trailer Combination Vehicles

State law should allow LCVs within provisions of the permit program (Recommendation 3) and weight limits (Recommendation 2).

# Recommendation 5

## Routes and Roads to Which Federal Standards Should Apply

The committee does not see present justification for revision of federal rules regarding the roads where federal regulations apply.

# Recommendation 6

## Research

1. Evaluation of the effectiveness of the enforcement of regulations

2. Safety impacts of changes in truck characteristics

3. Relationship of truck performance to crash involvement

4. Bridge costs

5. Transportation market research

6. Mixed car and truck traffic arising from

7. Road stress

8. Infrastructure development and truck-only