



FMCSA Safety and Security Accomplishments

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Analysis Division Highlights

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FMCSA Analysis Division

◆ FMCSA Mission

- Save lives and reduce injuries by preventing large truck and bus crashes

◆ FMCSA Performance Goal

- Reduce the large truck fatality rate by 41% from 1996 to 2008

◆ Analysis Division Support

- Economic Analysis of Regulations
- Data Quality Improvements & Dissemination
- Program Effectiveness Studies
- Special Studies & Crash Data Analyses



Economic Analysis for Regulations

2005 Major Accomplishments

- ◆ Hours of Service (Proposed Rule)
- ◆ Hours of Service (Final Rule)
- ◆ Unified Registration System (Proposed Rule)



Data Quality

2005 Major Accomplishments

- ◆ Involves grant programs, studies, and other initiatives, with the objective to improve the quality of CMV data collected by the States and FMCSA
- ◆ Primary focus is crash data improvement



Program Effectiveness

2005 Major Accomplishments

◆ Compliance Review Model

- Measures direct safety impacts of Compliance Reviews
 - Crashes prevented
 - Injuries avoided
 - Lives saved
- No indirect (deterrent) effects included
- Updated to include CY 2002 Compliance Reviews



Compliance Reviews

CY 2002 – 2003

| Outputs | Results |
|------------------|---------|
| Crashes Avoided | 1,426 |
| Injuries Avoided | 1,087 |
| Lives Saved | 62 |



Roadside Intervention Model

- ◆ Measures safety impacts
 - Roadside inspections
 - Traffic enforcements
- ◆ Output
 - Crashes prevented
 - Injuries avoided
 - Lives saved
- ◆ Results based on crash probabilities
- ◆ Updated to include CY 2004 Interventions



Roadside Interventions

| Intervention Type | Crashes Prevented | Injuries Avoided | Lives Saved |
|----------------------|-------------------|------------------|-------------|
| Roadside Inspections | 9,606 | 7,004 | 371 |
| Traffic Enforcements | 9,067 | 6,611 | 351 |



Special Studies & Crash Data Analyses

2005 Major Accomplishments

- ◆ Motor Carrier Industry Profile Study
 - Safety performance analysis by commodity segment
 - Safety-financial performance linkage study
- ◆ Large Truck Crash Causation Study



Economic Analysis for Regulations

2006 Major Projects

- ◆ Electronic On-Board Recorders (Proposed)
- ◆ HOS Supporting Documents (Final)
- ◆ New Entrant Safety Assurance (Proposed)
- ◆ Intermodal Chassis Roadability (Proposed)



Program Effectiveness

2006 Major Projects

- ◆ **Violations Severity Assessment Study**
 - Relationship between violations and crashes
 - Will serve as input to CSA 2010 Effort
 - May update Roadside Intervention Model



Special Studies and Analyses

2006 Major Projects

- ◆ Large Truck Crash Causation Study
- ◆ Bus Crash Causation Study
- ◆ Motor Carrier Industry Profile Study
 - Complete Industry Technology & Safety Survey



Results of Studies Available

- ◆ <http://ai.fmcsa.dot.gov>
 - "Analysis Results & Reports"
 - "Program Measures" (CR and RI Model Results)
- ◆ Contact:
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