

Advanced Technology Use and Inter-Agency Cooperation for Commercial Vehicle Security

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Outline

- ☐ Background and Motivation
 - ☐ Survey Methodology
 - ☐ Survey Results
 - ☐ Conclusions
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Truck Freight Industry

☐ Security Challenges

- Expansive system
- Multiple responsible agencies
- Little uniformity

☐ Trends

- Trade growth
- Increasing globalization
- Rising fuel costs



Previous Truck Security Research

☐ Carriers

- ATRI
- University of Minnesota

☐ Technologies

- FMCSA Field Operational Tests
- State Technology Tests

Survey Design

- ☐ 25 Questions
 - ☐ Online and paper surveys
 - ☐ Key issues
 - Security practices
 - Advanced technology use
 - Inter-agency cooperation
 - Changes since 9/11
 - Barriers to improvement
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Survey Responses

- ☐ 19 States
 - 2 DOT
 - 2 DMV
 - 15 Police Agencies
 - ☐ Ports/POEs
 - 7 land border
 - 10 major marine
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CV Security Planning and Procedures

- ☐ Few comprehensive plans (4 of 19)
 - ☐ Elevated alert procedures
 - Increased inspection
 - ☐ 24/7 weigh station operations
 - ☐ Checkpoints
 - ☐ Increased and “geographically aligned” mobile patrols
 - ☐ Increased presence at POEs
 - ☐ 100% hazmat pull-in
 - Increased permit reviews
 - Security audits
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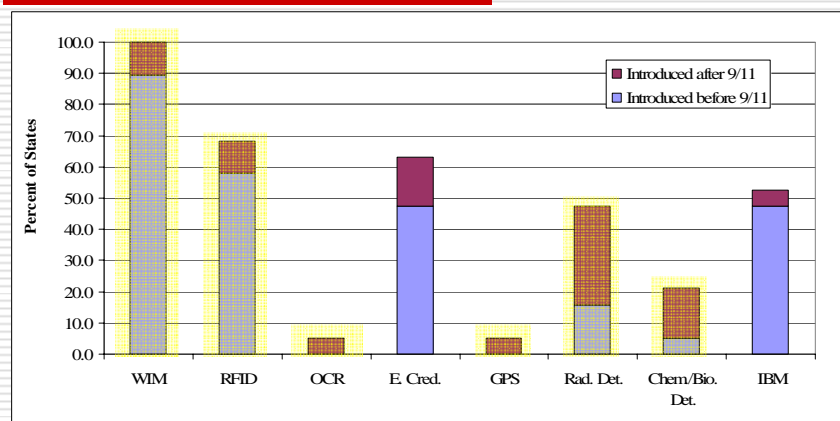
CV Weighing and Inspection

- ☐ All respondents
 - Static weighing
 - Portable weighing
 - Mobile inspection
 - Interstates and major state highways
 - In proximity to land POEs (7 of 7)
 - ☐ Most respondents
 - Cargo inspections (18 of 19)
 - Additional hazmat inspections (16 of 19)
 - Secondary roadways (18 of 19)
 - In proximity to marine POEs (9 of 10)
 - ☐ A few respondents
 - Agricultural inspection facilities (3 of 19)
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Advanced Technology Use

- ☐ Weigh-in-motion (WIM)
- ☐ RFID pre-clearance
- ☐ Camera/OCR vehicle identification
- ☐ Electronic credentialing
- ☐ GPS tracking
- ☐ Radiation detection
- ☐ Chemical/Biological detection
- ☐ Infrared break monitors (IBM)

Advanced Technology Use (2)

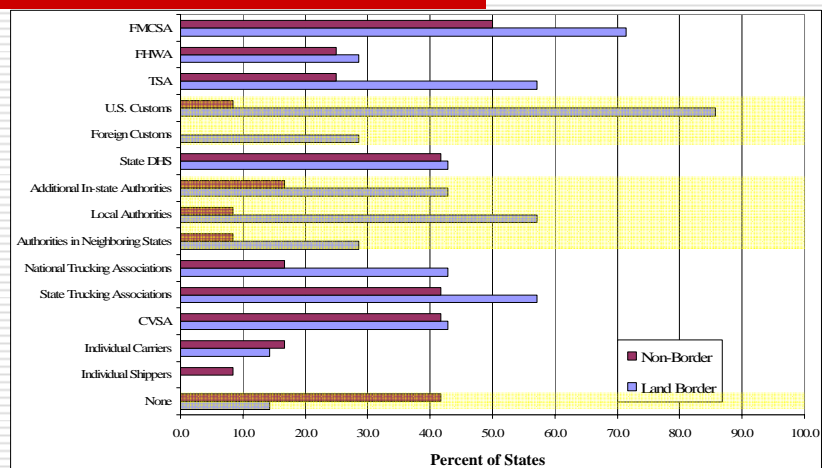


Inter-Agency Communications

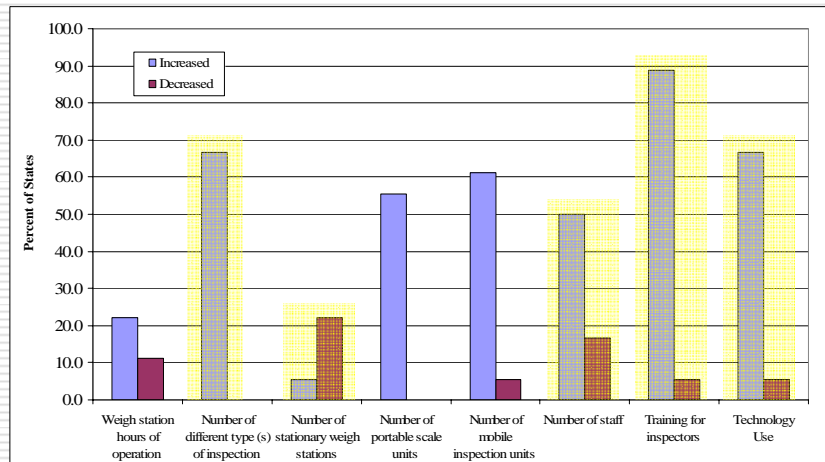
- ☐ Federal
- ☐ State
- ☐ Local
- ☐ International
- ☐ Industry

Cooperating Agencies	Percent of Respondents
FMCSA	57.9
FHWA	26.3
TSA	36.8
U.S. Customs	36.8
Foreign Customs	10.5
State DHS	42.1
Additional In-State Authorities	26.3
Local Authorities	26.3
Authorities in Neighboring States	15.8
National Trucking Associations	26.3
State Trucking Associations	47.4
CVSA	42.1
Individual carriers	15.8
Individual Shippers	5.3
Individual Receivers	0.0
No agency	31.6
Other	15.8

Inter-Agency Communications (2)



Operational changes since 9/11



Barriers to Improvements

- ☐ High cost
- ☐ Inadequate infrastructure
- ☐ Logistics concerns
- ☐ Unproven technology
- ☐ Lack of demonstrated benefits
- ☐ Privacy concerns
- ☐ Data/system insecurity

Acceptable Technology Data Use

	Percent of Responding Authorities			
	Electronic Toll Collection	W.S. Bypass/ ECredentialing	GPS	Smart Card
Locate a vehicle during routine operations	82.4	76.5	64.7	n/a
Locate a stolen vehicle	100.0	100.0	100.0	n/a
Monitor vehicle routes	70.6	76.5	82.4	n/a
Monitor driver speeds	82.4	82.4	82.4	76.5
Monitor driver hours of operation	70.6	88.2	88.2	82.4
Track vehicle mileage for charging of weight-distance tax	23.5	52.9	52.9	52.9

Increased Cooperation Since 9/11

- Federal (13 of 19)
 - Carrier security
 - Cargo inspections
 - Driver screening
 - Inspector training
- State (13 of 19)
 - Joint border inspections
 - Regular meetings
 - Information sharing
 - Technology systems
- Industry (14 of 19)
 - Highway Watch®
 - Education
 - Enforcement details

Future Needs

- ☐ All respondents
 - Increase staff (18 of 18)
 - ☐ Most respondents
 - Increase weigh station hours (15 of 18)
 - Increase training for inspectors (12 of 18)
 - Increase number of mobile inspection units/portable scales (14/11 of 18)
 - Increase federal/state/industry communications (13/10/11 of 19)
 - Increase technology use (16 of 18)
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Conclusions

- ☐ Improvements have been made
 - ☐ Significant advancement is still needed
 - ☐ Financial and technological barriers must be overcome
 - ☐ Enforcement agencies should actively pursue communications improvements
 - ☐ Coordination on specific issues has been most successful
 - ☐ A stronger federal role could improve operational and technological interoperability
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Thank You!



Questions?

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