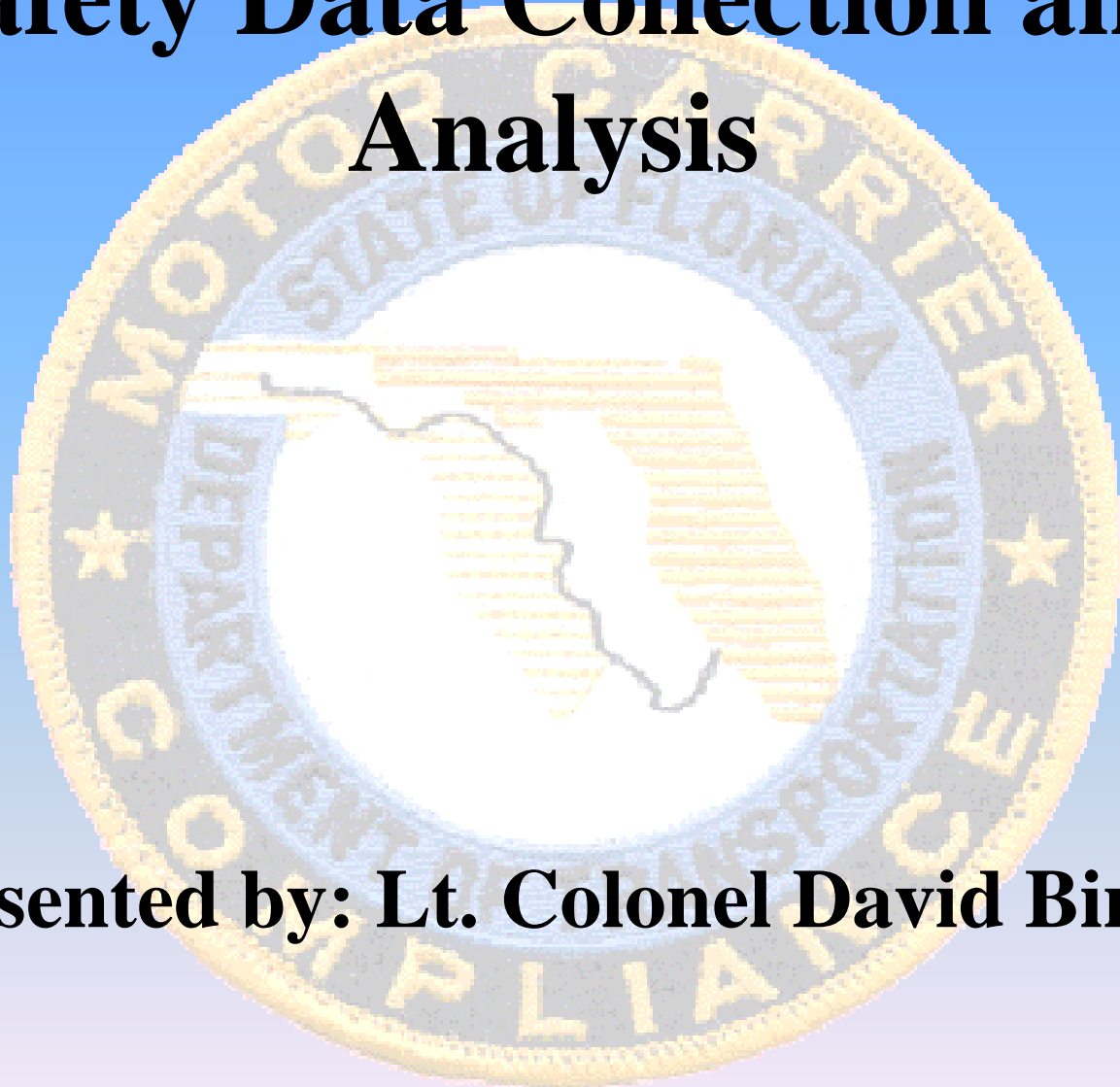


Commercial Motor Vehicle Safety Data Collection and Analysis



Presented by: Lt. Colonel David Binder

Three Studies Recently Completed

1. Effectiveness of Compliance Reviews
2. Hours of Service Findings as a Result of a Review of Post-Crash Inspections
3. FAMU-FSU School of Engineering Study of Crashes in DOT Region 2

The Effectiveness of Compliance Reviews in Commercial Vehicle Safety: Florida's Experience

- A group of carriers who were subjected to a Compliance Review in 2000 were compared to a group that was randomly selected that had not been subjected to a compliance review in the preceding seven (7) years.

The Effectiveness of Compliance Reviews in Commercial Vehicle Safety: Florida's Experience cont.

- The group that had been subjected to a Compliance Review in 2000 had a mean out of service rate of 1.86%. The national mean out of service rate is 7.21%.
- An additional finding was that based on the name of the company that had been subjected to a compliance review, many were not primarily involved in the transportation industry but used trucks ancillary to their primary business.

Hours of Service Violations as Detected in Post-Crash Inspections

- The study covered Federal Fiscal Year 02/03.
- DHSMV reports that there were 225 fatal CMV related crashes during that period.
- MCCO conducted 214 Post-Crash Inspections during that period for a 95% coverage rate.

Hours of Service Violations as Detected in Post-Crash Inspections cont.

- MCCO conducted an additional 79 Post-Crash Inspections on crashes that involved life threatening injuries.
- Of the 293 total Post-Crash Inspections, 90 indicated the CMV was at fault in the crash (31%).

Hours of Service Violations as Detected in Post-Crash Inspections cont.

- Of the 90 at fault crashes, only one crash had a driver who exceeded the federal hours of service. That driver was an interstate operator who violated the 10 hour rule.
- None of the reports indicated driver fatigue was a factor.

FAMU-FSU Study of Crashes in DOT District 2

- This study region included the urbanized Jacksonville area and surrounding rural areas.
- 35% of the crashes were found to be the fault of the CMV driver.
- The study normalized the crash rate between CMV's and cars to determine if a population was over or underrepresented.

FAMU-FSU Study of Crashes in DOT District 2 cont.

- CMV's were overrepresented in fatal rear-end collisions and were at fault in these types of collisions with greater frequency.
- CMV's were also overrepresented in being at fault in crashes at signalized intersections.
- In 42% of crashes where the CMV was at fault the vehicle was traveling in excess of 70 MPH.

FAMU-FSU Study of Crashes in DOT District 2 cont.

- CMV's were underrepresented in single vehicle crashes but overrepresented in crashes involving 3 or more vehicles.
- CMV's were underrepresented in being at fault in run off the roadway type crashes.
- Fatal CMV crashes are overrepresented on rural roads and underrepresented on urban roads.

FAMU-FSU Study of Crashes in DOT District 2 cont.

- CMV crashes are overrepresented on Interstates, particularly rural Interstates.
- 86% of fatal CMV crashes occur on roadway segments with less than 60,000 VTD.
- Tandem trailer operations accounted for only 7% of CMV's involved in fatal crashes while 13% were not pulling a trailer.

FAMU-FSU Study of Crashes in DOT District 2 cont.

- 5% of the vehicles were found to have a safety defect. Only one third of those were the CMV.
- Excluding three Ford Explorer tire separation cases, the defect was not the cause of the crash.
- None of the CMV drivers were found to be using alcohol or drugs vs. 39% of the total study population.