

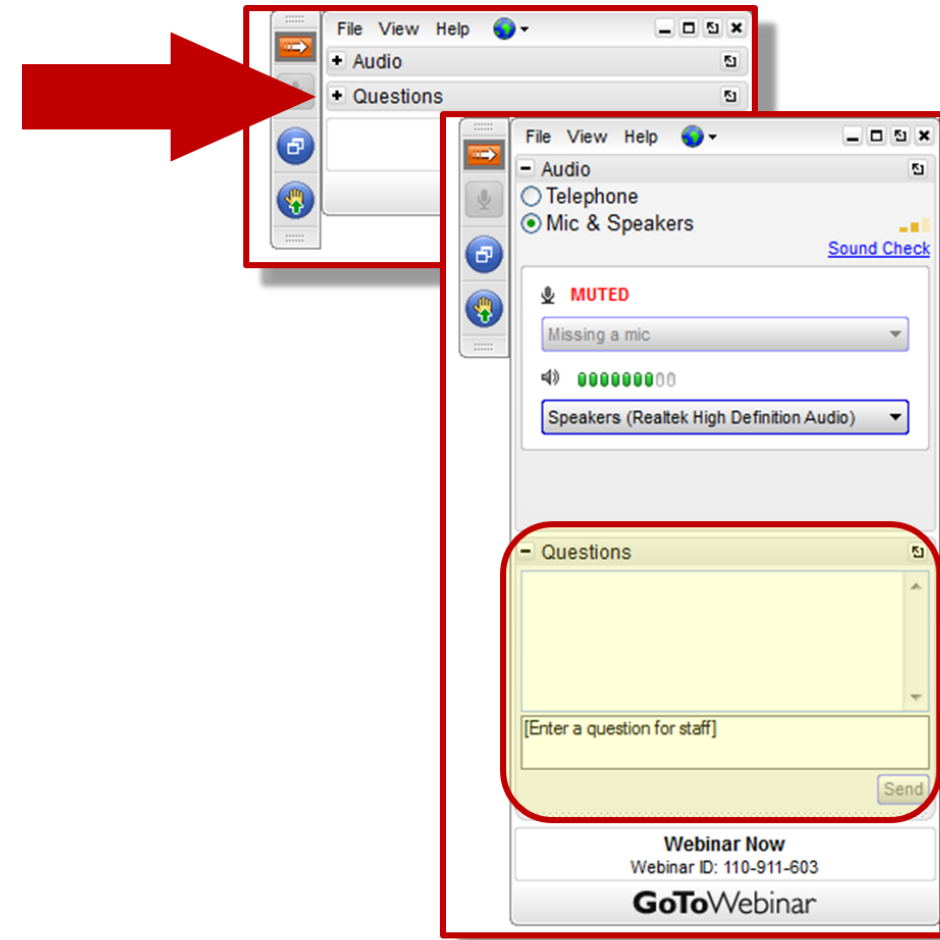


Florida Department of Transportation
State Safety Office
Crash Data Academy

Fatality Analysis Reporting System (FARS)

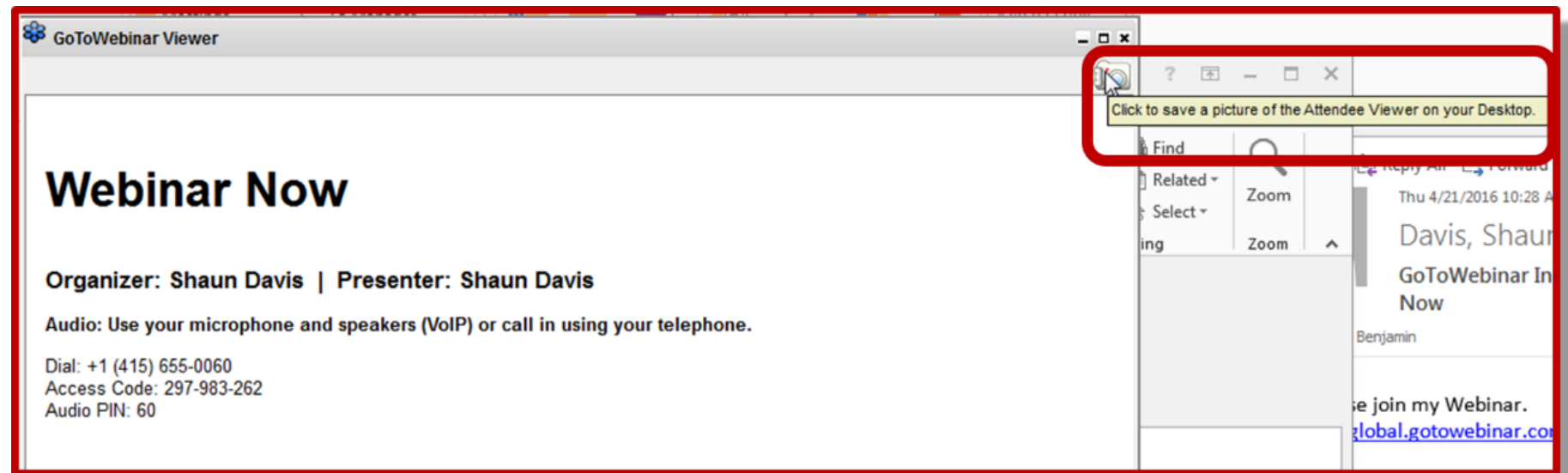
How to ask a question:

- Control panel on right side of screen
- Use question pane
 - Type questions and comments
 - Click send



How to capture the webinar window:

- Webinar viewer
 - Top, right corner
- Camera icon



Crash Data Academy: Fatality Analysis Reporting System (FARS)

Presenter:

TrisAnn Jodon, FARS Program Analyst

National Highway Traffic Safety Administration

US DOT - NHTSA

Fatality Analysis Reporting System

- Executive branch of the Federal government
 - US Department of Transportation
 - National Highway Traffic Safety Administration
 - National Center for Statistical Analysis
 - Office of Data Acquisition
 - State Data Reporting Systems Division
 - Fatality Analysis Reporting System

Fatality Analysis Reporting System (FARS)

- Initiated in 1975 by the U. S. Department of Transportation's National Highway Traffic Safety Administration
- Tasked with developing and maintaining an annual national **census** of traffic crashes:
 - Occurring on a public traffic way (*American National Standards Institute ANSI-D16.1 Manual on Classification of Motor Vehicle Traffic Accidents*)
 - Involving at least one motor vehicle in transport (*ANSI-D16.1*)
 - Resulting in at least one fatal injury sustained as a result of the crash
 - Death of the fatally injured party occurring within 720 hours of the crash

Some familiar statistics:

In 2015, there were 10,265 fatalities in motor vehicle traffic crashes involving drivers with BACs of .08 g/dL or higher. This totaled 29 percent of all traffic fatalities for the year.

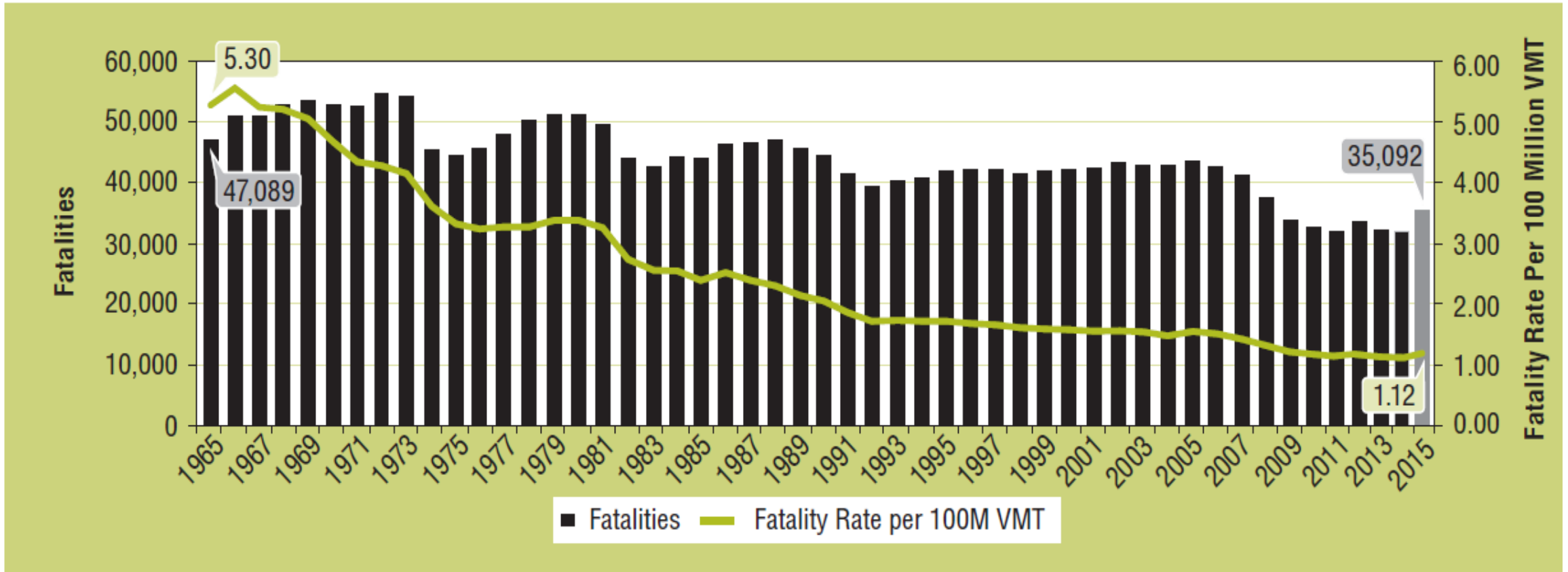
The 2015 pedestrian fatality count (5,376) is the highest number since 1996.

The 2015 pedalcyclist fatality count (818) is the highest number since 1995.

Motorcyclist fatalities increased by 382, an 8.3-percent increase. The 2015 motorcyclist fatality count (4,976) is the highest number since 2012.



Fatalities and Fatality Rate per 100 Million VMT, by Year, 1965–2015

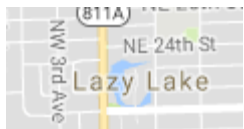
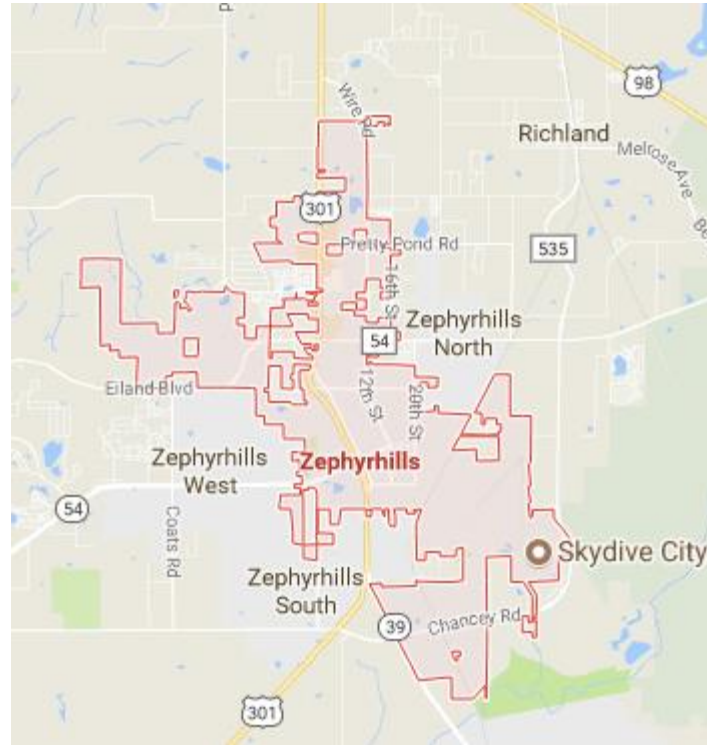


Sources: 1965–1974: National Center for Health Statistics, HEW, and State Accident Summaries (Adjusted to 30-Day Traffic Deaths by NHTSA); FARS 1975-2014 Final File, 2015 Annual Report File (ARF); Vehicle Miles Traveled (VMT): FHWA.

Economic cost of motor vehicle fatalities

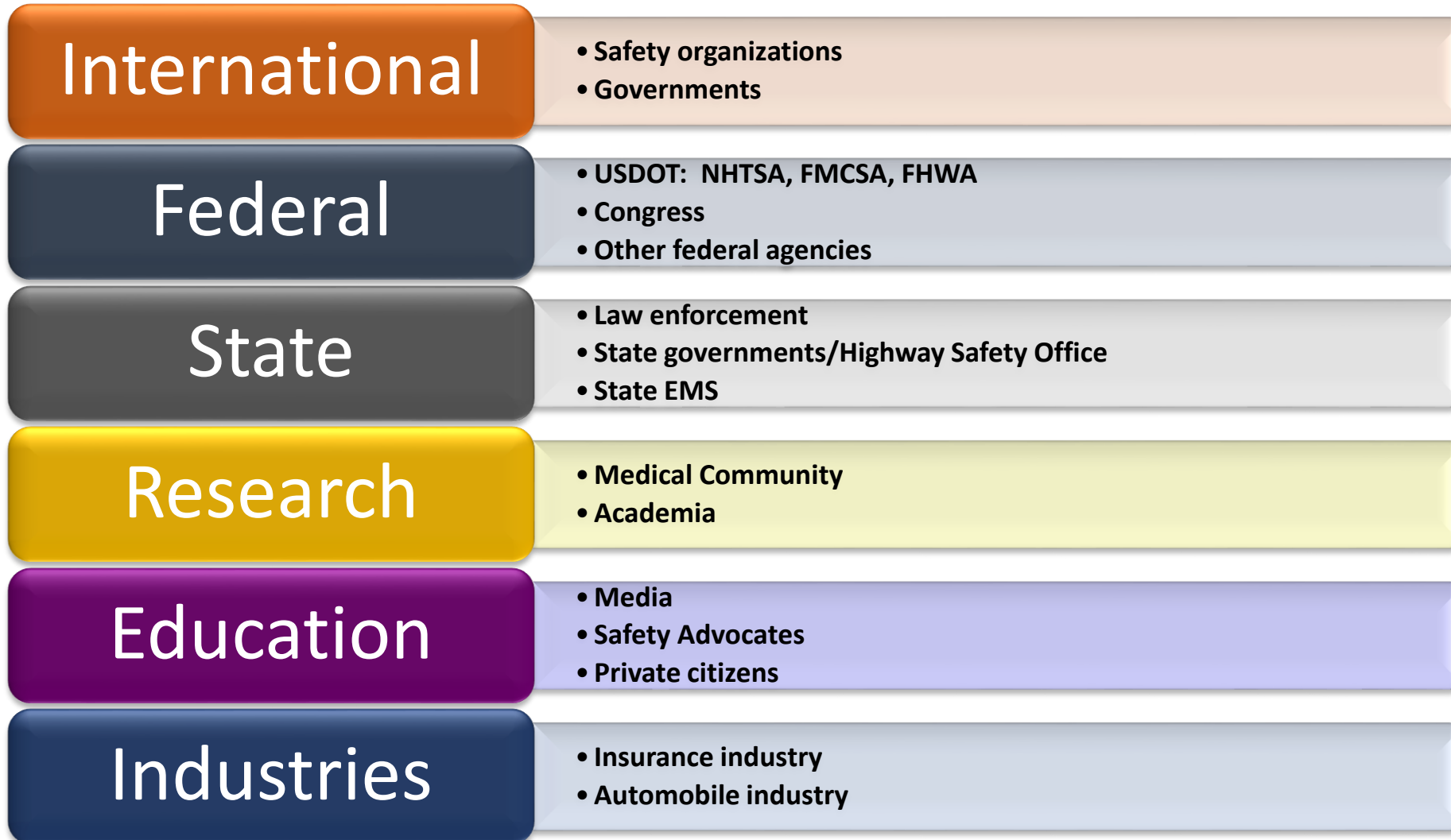
- Each fatality results in an average discounted lifetime cost of \$1.4M *(Blincoe, et. al, May 2015)*
 - **\$49,128,000,000** nationally in 2015 *(35,092 fatalities)*
 - **\$4,113,200,000** for Florida in 2015 *(2,938 fatalities)*

35,092 persons were killed in motor vehicle crashes in the U. S. in 2015
 (US DOT NHTSA Fatality Analysis Reporting System)



The combined population of Destin, Zephyrhills, Minneola, Morriston and Lazy Lake, FL = **35,092**
 (FL Office of Economic & Demographic Research)

Who Uses FARS Data?



Some applications of the FARS data

- Identifying at risk populations
 - Drive technological advancements (e.g. backup cameras)
 - Determine legislative efforts (e.g. graduated licensing)
- Identifying areas to improve safety
 - Through new safety standards (e.g. “quiet car” safety standard)
 - Locating high risk traffic way designs
- Evaluating trends and countermeasures
- Evaluating the effectiveness of new technologies
 - Shift from crashworthiness to crash prevention
- Develop State highway safety plans
- Determine Federal grants for highway safety efforts

NHTSA Organization for Data Collection

- Administered through Cooperative Agreements with state agencies:
 - State Patrol
 - State Highway Safety Offices
 - Dept. of Transportation
 - Dept. of Motor Vehicles
- 52 Individual FARS data collection and reporting units
 - 50 states
 - District of Columbia
 - Puerto Rico



Our shared goal is to reduce the number of motor vehicle deaths, injuries and crashes that occur on our traffic ways.

Florida FARS - Tallahassee

- Located at the Department of Highway Safety & Motor Vehicles
 - Division of Motorist Services
- Staffed by
 - One full-time FARS Supervisor
 - Five full-time FARS analysts dedicated to FL fatal crash data collection, analysis and entry into NHTSA's FARS database

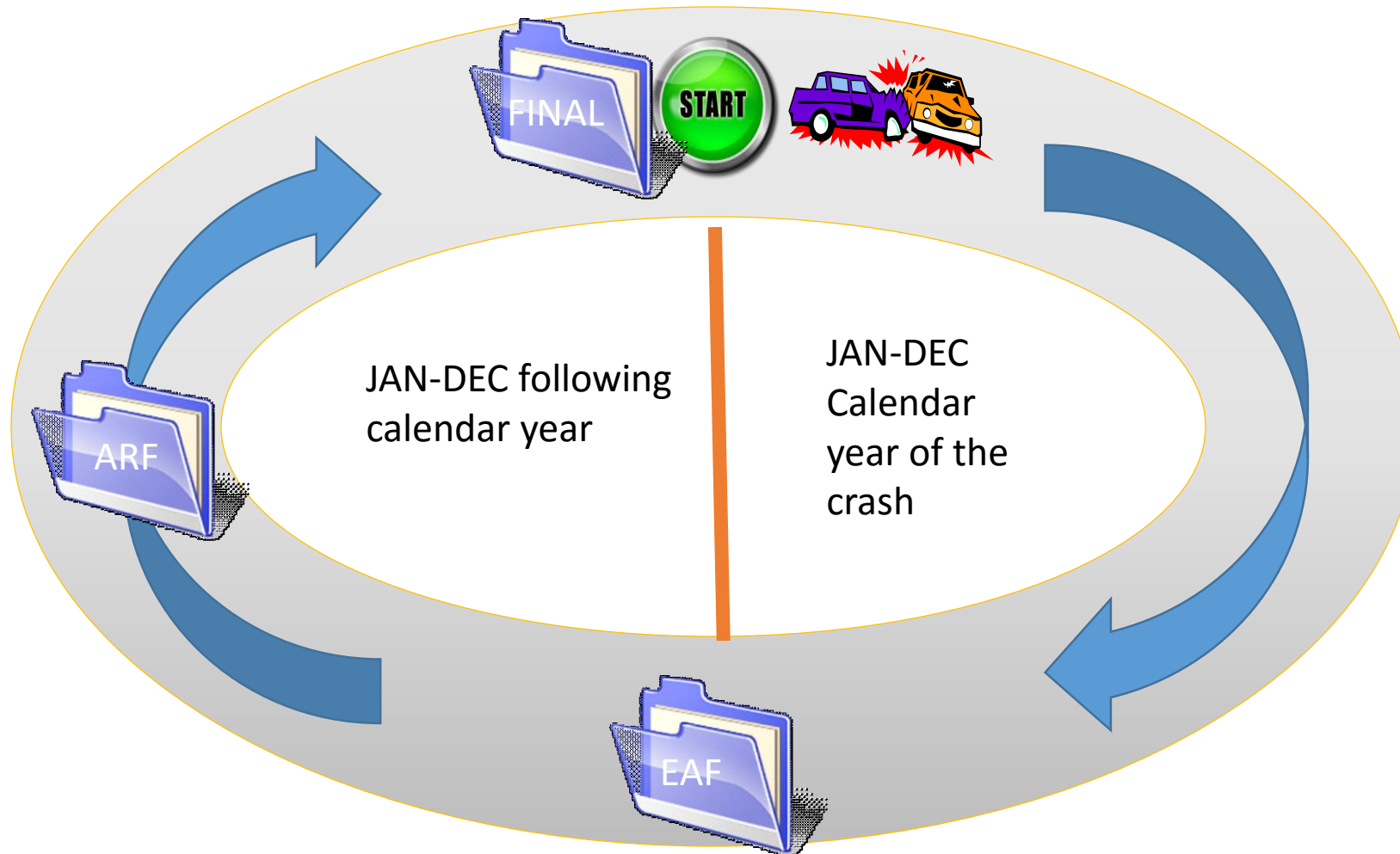
For the 2015 FARS file, FL FARS analyzed 2699 cases involving 2938 fatalities

FARS Core Data Elements

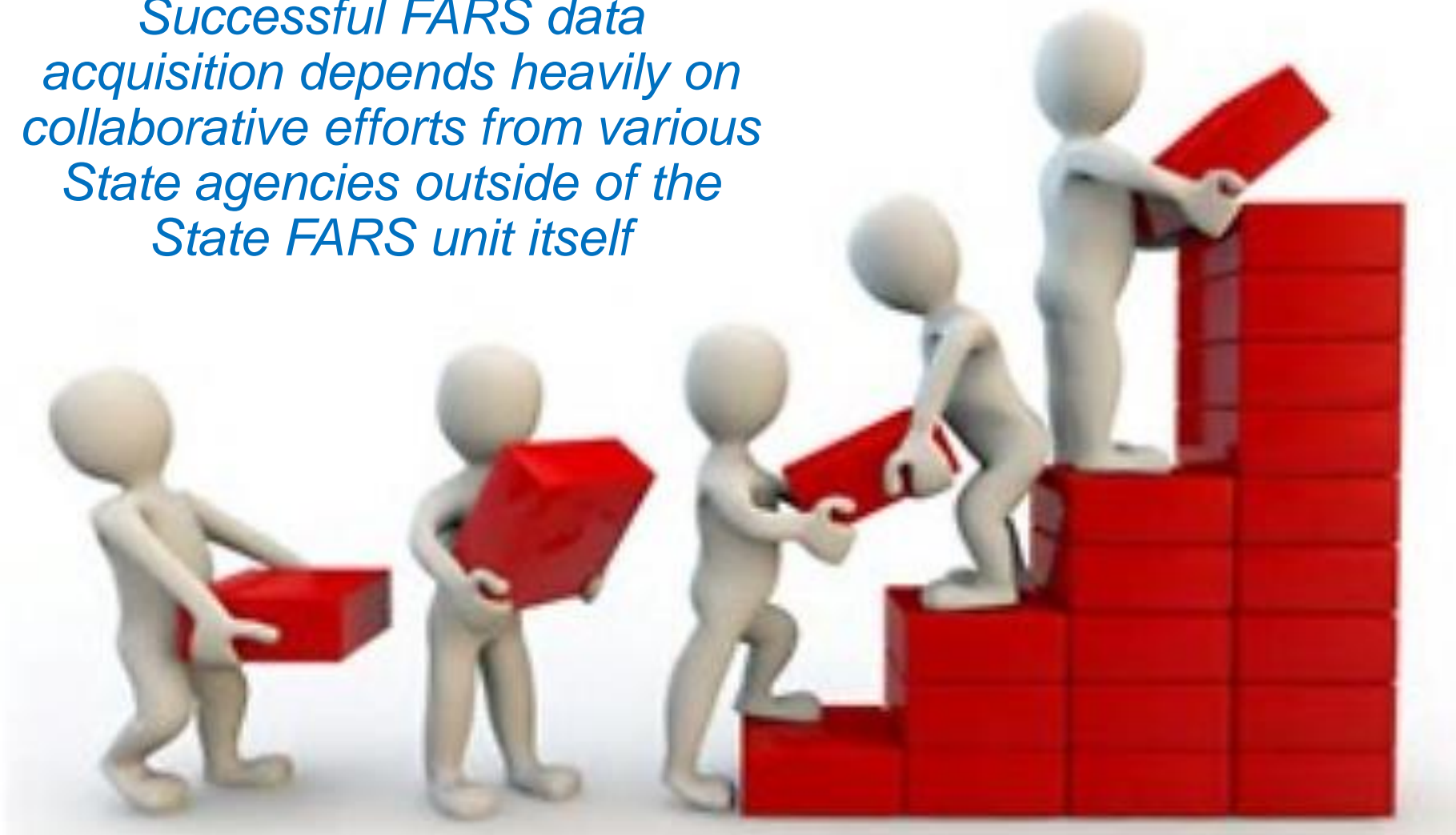
- **CRASH LEVEL** – location and environmental description of crash scene and EMS involvement
- **VEHICLE LEVEL** – vehicle description, ownership, and use
- **DRIVER LEVEL** – operator licensing, history and contributing factors (including impairment)
- **PRECRASH LEVEL** – environmental, behavioral and situational description just prior to the first harmful event for a particular vehicle/driver – geared toward crash prevention
- **PERSON LEVEL** – describes demographics, restraint systems use, status of drug and alcohol use, and injury status
- **NON-MOTORIST LEVEL** – person level descriptors for pedestrians, cyclists, et. al.

Over 6 million data points collected per annual FARS file

Lifecycle of the FARS data:

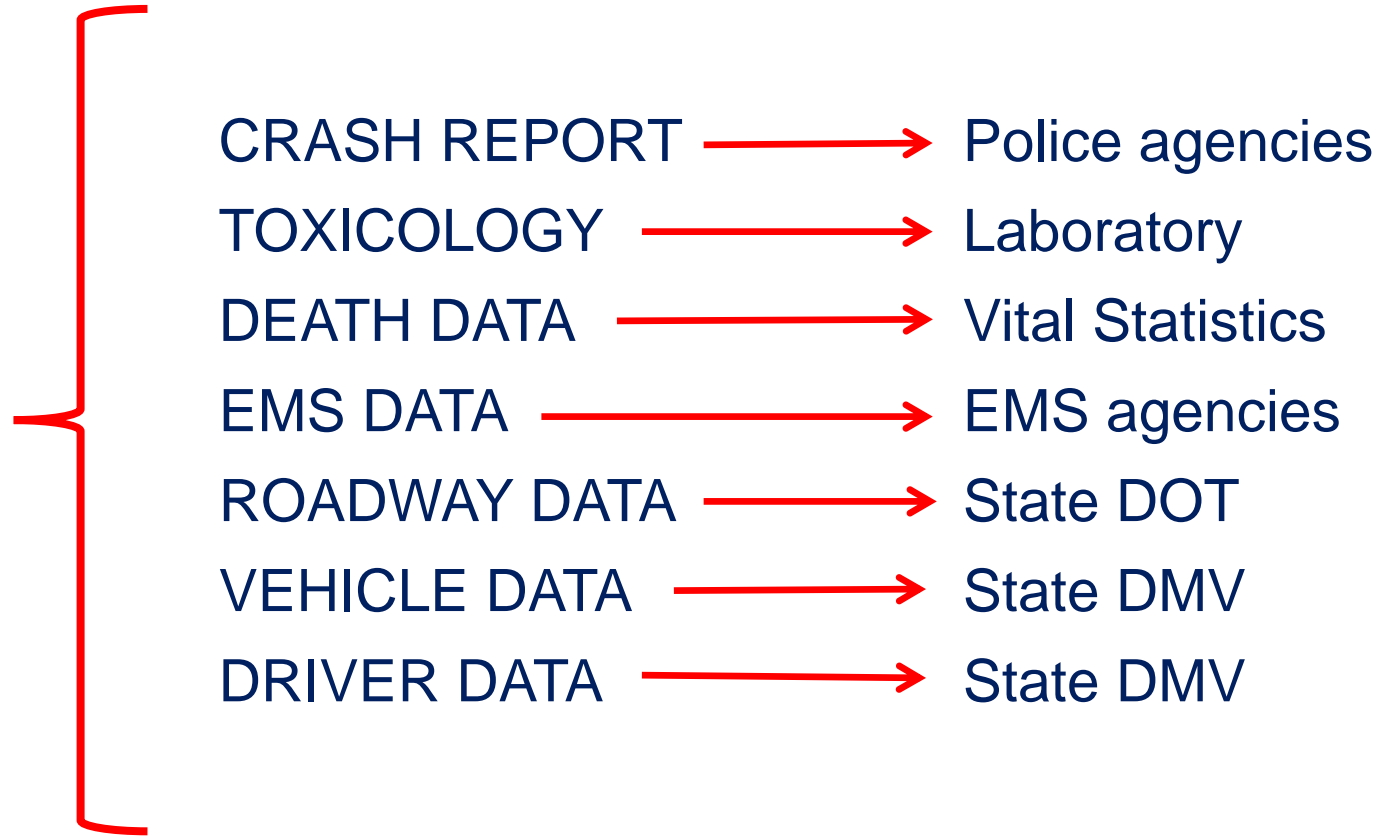


Successful FARS data acquisition depends heavily on collaborative efforts from various State agencies outside of the State FARS unit itself



Collaboration is Essential to FARS Case Compilation

FARS CASE MATERIALS



Primary Data Objectives

- Timeliness
 - Notified of fatal crash within 30 days
 - Supports NHTSA early estimates process
 - Entered in database within 90 days
- Accuracy
 - Free of errors
 - Free of inconsistencies
- Completeness
 - Data fields contain actual descriptive values
 - Minimal use of “unknown” or “not reported”

Primary activities that support data objectives

- **Timeliness**
 - Reliable early notification reporting process
 - Monthly quality benchmarks (quality maps)
 - ***Electronic data transfer (crash reports only)***
 - Case coding assistance through NHTSA to mitigate backlogs
- **Completeness**
 - Monthly quality benchmarks (quality maps)
 - Established data sharing relationships with other state agencies
- **Accuracy**
 - Case recoding project
 - Array of quality control processes at all stages of data preparation
 - Training that employs feedback loop from QC activities

FL FARS – EDT early adopter

- Data variables on the FL HSMV 90010S crash report mapped to FARS data variables
 - Naming convention & underlying definitions
 - Typically “transcription” variables that do not require interpretation
- Mapped data variables attributes populate the FARS data base record
- All data populated by EDT process is subject to inspection and verification by the FL FARS analysts

Recent Schedule for Processing FARS Data

- May 2016: States completed majority of coding of 2015 data
- May-Jun 2016: Quality control by NHTSA/Working with States
- Jul 2016: 2015 FARS “Annual Report File” released
- Early Fall 2017: Release of 2015 “Final” FARS File (planned)

Accessing the FARS Data

<https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>

How to Access FARS Data

Create your own fatality data run online by using the FARS Query System. Or download all FARS data from 1975 to present from the FTP Site.

Requests

[ACCESS DATABASE](#)

- [Run a Query Using the FARS Web-Based Encyclopedia](#)
- [2010 FARS/NASS GES Standardization – Posted 12/8/2011](#)
- [FARS and GES Auxiliary Datasets Q & A – Posted 9/9/2010](#) These files will complement the standard FARS and GES files by providing new variables that have been derived from all the commonly used NCSA analytical data classifications (e.g. speeding related, race and ethnicity, etc).
- [FARS Manuals and Documentation](#)
- [Download Raw Data from FTP Site](#)
- [Trucks in Fatal Accidents \(TIFA\) and Buses in Fatal Accidents \(BIFA\)](#) The TIFA database contain records for all the medium and heavy trucks that were involved in fatal traffic crashes in the 50 states and District of Columbia. The BIFA database was similarly created for buses in fatal crashes.

Public availability of FARS data

<https://www-fars.nhtsa.dot.gov/Main/index.aspx>

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

NCSA DATA RESOURCE WEBSITE

FATALITY ANALYSIS REPORTING SYSTEM (FARS) ENCYCLOPEDIA

Pubs/Data Requests
FARS Data Tables
Query FARS Data
State Traffic Safety Info
Help

Summary
Trends
Crashes
Vehicles
People
States

NEW [File Versions](#)
2015 data based on FARS data publication, 1st release
NEW [GIS Map features](#)
NEW [Vehicle Registration and VMT Changes](#)

Did You Know?

[View Archive](#)

- Midnight to 3 a.m. on Saturdays and Sundays proved to be the deadliest 3-hour periods throughout 2010, with 955 and 981 fatal crashes, respectively. *[Crashes 2010]*
- Of the persons who were killed in traffic crashes in 2010, 31 percent died in alcohol-impaired driving crashes. *[People 2010]*
- Regardless of crash severity, the majority

National Statistics		2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994
Motor Vehicle Traffic Crashes																							
Fatal Crashes		32,166	30,056	30,202	31,006	29,867	30,296	30,862	34,172	37,435	38,648	39,252	38,444	38,477	38,491	37,862	37,526	37,140	37,107	37,324	37,494	37,241	36,254
Traffic Crash Fatalities																							
Vehicle Occupants																							
Drivers		17,466	16,470	16,520	16,838	16,474	16,864	17,670	19,279	21,717	22,831	23,237	23,158	23,352	23,625	22,914	22,914	22,971	22,654	22,730	22,572	22,370	21,596
Passengers		6,158	5,766	5,896	6,106	5,972	6,451	6,793	7,441	8,716	9,187	9,750	10,042	10,171	10,370	10,227	10,451	10,325	10,327	10,765	10,860	10,576	10,294
Unknown		71	71	67	73	64	56	63	71	94	101	83	76	104	110	102	86	96	107	114	102	118	108
Sub Total1		23,695	22,307	22,483	23,017	22,510	23,371	24,526	26,791	30,527	32,119	33,070	33,276	33,627	34,105	33,243	33,451	33,392	33,088	33,609	33,534	33,064	31,998
Motorcyclists		4,976	4,594	4,692	4,986	4,630	4,518	4,469	5,312	5,174	4,837	4,576	4,028	3,714	3,270	3,197	2,897	2,483	2,294	2,116	2,161	2,227	2,320
Nonmotorist																							
Pedestrians		5,376	4,910	4,779	4,818	4,457	4,302	4,109	4,414	4,699	4,795	4,892	4,675	4,774	4,851	4,901	4,763	4,939	5,228	5,321	5,449	5,584	5,489
Pedalcyclists		818	729	749	734	682	623	628	718	701	772	786	727	629	665	732	693	754	760	814	765	833	802
Other/Unknown		227	204	190	227	200	185	151	188	158	185	186	130	140	114	123	141	149	131	153	154	109	107
Sub Total2		6,421	5,843	5,718	5,779	5,339	5,110	4,888	5,320	5,558	5,752	5,864	5,532	5,543	5,630	5,756	5,597	5,842	6,119	6,288	6,368	6,526	6,398
Total**		35,092	32,744	32,893	33,782	32,479	32,999	33,883	37,423	41,259	42,708	43,510	42,836	42,884	43,005	42,196	41,945	41,717	41,501	42,013	42,065	41,817	40,716

Download raw data from the FARS FTP site

← → ↻ <ftp://ftp.nhtsa.dot.gov/fars/>

Index of /fars/

Name	Size	Date Modified
[parent directory]		
1975/		12/14/11, 7:11:00 AM
1976/		12/14/11, 7:12:00 AM
1977/		12/14/11, 7:12:00 AM
1978/		12/14/11, 7:13:00 AM
1979/		10/9/09, 8:06:00 AM
1980/		10/13/09, 7:48:00 AM
1981/		10/13/09, 7:47:00 AM
1982/		10/7/10, 1:25:00 PM
2013/		9/9/16, 6:26:00 AM
2014/		9/9/16, 6:26:00 AM
2015/		9/9/16, 6:25:00 AM
Auxiliary_FARS_Files_Formats/		1/14/15, 10:27:00 AM
Change_log.html	43.9 kB	8/29/16, 12:29:00 PM
Change_log_files/		5/23/16, 6:21:00 AM
FARS-DOC/		11/1/16, 5:01:00 PM
FileList.pdf	94.1 kB	9/6/02, 6:02:00 AM
NLETS/		3/26/09, 9:04:00 AM
README-BAC.pdf	54.2 kB	9/6/02, 6:02:00 AM

State Traffic Safety Information (STSI)

<https://cdan.nhtsa.gov/stsi.htm#>



Performance Measures ▼

NHTSA Highway Safety Funding

Economic Impact of Motor Vehicle Crashes

Florida ▼

Select a County ▼

Data Source: FARS 2011 - 2014 Final and Fars 2015 ARF

Home Printer Friendly

Traffic Safety Performance (Core Outcome) Measures* For Florida

[3 Year moving average \(PDF\) \(Excel\)](#)

[5 Year moving average \(PDF\) \(Excel\)](#)

Core Outcome Measures		Year									
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Traffic Fatalities	Total (C-1)	3,357	3,213	2,980	2,560	2,444	2,400	2,431	2,403	2,494	2,939

Questions?

TrisAnn Jodon
FARS Program Analyst
NHTSA
trisann.jodon@dot.gov



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- <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812069>
- Blincoe, L. J., Miller, T. R., Zaloshnja, E., & Lawrence, B. A. (2015, May). *The economic and societal impact of motor vehicle crashes, 2010*. (Revised) (Report No. DOT HS 812 013). Washington, DC: National Highway Traffic Safety Administration.

Next FDOT Webinars

We are currently creating a new instance of the series in GoToWebinar. Stay tuned for a new registration link

The webinars generally occur on the last Thursday of the month from 2:30 pm to 3:30 pm ET.

For more information, including links to past webinars, please visit our website at: <http://www.fdot.gov/safety/11A-SafetyEngineering/crash%20data%20academy/academy.shtm>

Further questions?

Benjamin Jacobs

(850) 414-4007 benjamin.jacobs@dot.state.fl.us

Rupert Giroux

(850) 414-4072 rupert.giroux@dot.state.fl.us