

# SAFETY DISCUSSION/ INTERSTATE 10 CRASH ANALYSIS AND CRTPA HIGH INJURY NETWORK SAFETY PROJECT

## **S**TATEMENT OF **I**SSUE

There are two items that CRTPA staff will be presenting to the Board including Interstate 10 safety and the Safe Streets and Roads For All (SS4A) High-Injury Network (HIN) Project.

## **B**ACKGROUND

At the September 16, 2024 CRTPA Board meeting, staff was requested to bring back an agenda item regarding crashes along <u>Interstate 10 (I-10)</u> due to an increase of crashes in 2024.

Additionally, CRTPA staff initiated a project in December of 2024 to review the High-Injury Network (HIN) and provide an evaluation of several roads for potential solutions.

#### **Interstate 10 Safety**

The evaluation of Interstate 10 (I-10) utilized Signal4Analytics crash reports from 2021, 2022, and 2023, specifically looking at incidents that resulted in a serious injury or fatal crash along the 75 miles of interstate in the CRTPA region. Bulleted below are some of general highlights of the evaluation:

- There were 69 crashes including 24 fatal and 45 serious injury crashes. These 69 crashes produced 28 fatalities and 75 serious injuries.
- Of the 69 crashes, 45 were single vehicles, of which 15 were fatal crashes and 30 were serious injury crashes.
- There were 21 crashes that ended with a vehicle hitting a tree. Of the 21 crashes, 11 were fatal and 10 serious injury crashes.
- Clear weather was a noted condition in 40 crashes, rain in 22 and cloudy in seven crashes.
- There were 51 crashes (74%) during the "daytime hours".
- Of the 69 crashes, 16 (23%) involved "Commercial Vehicles".

#### Influencing Factors

A crash may have multiple factors influencing the driver's actions including Distracted Driving, Aggressive Driving, Alcohol or Drugs. For example, a crash report may provide data to indicate that the driver was "aggressively driving while being distracted and found to have alcohol and drugs in

their system" in a single crash event. At least one of these factors was noted in 19 of the 24 fatal crashes, and 15 of the 45 serious injury crashes.

#### **Observations**

There are a few observations noted in the review of the I-10 crash data, which is detailed below.

#### Wet Conditions

Wet conditions were a factor in 26 of 69 crashes, including eight fatal and 18 serious injury crashes. Of these 26 crashes, 24 of the 26 were lane departures, ten were noted as speeding and aggressive driving, four commercial vehicles, two alcohol-related, and two distracted driving.

The "typical" wet conditions crash occurred during the day and was a single vehicle (14 times). The crash reports consistently mentioned "losing control", "hydroplaning", and "over-corrected" as an action that took place to initiate the crash. There were 24 vehicles traveling 70 mph, or less, and still lost control, hydroplaned, and overcorrected their vehicles. Therefore, when doing the speed limit, or less, vehicles were driven too fast to safely meet the conditions at that time.

It should also be noted that two of the crashes occurred due to poor tire tread conditions and another (a commercial vehicles) had its front tire blow out.

Additionally, three of the crash reports noted "Travel-Polished Surface" which indicates that the road is smooth or shiny making it difficult for vehicles under wet conditions.

Lastly, there are several resurfacing projects in the FY 25 – FY 29 Transportation Improvement Program (TIP) that may resolve of the issues related to "Travel-Polished Surface" issues, including:

- I-10 from Olson Road to Mahan Drive Scheduled for FY 2025
- I-10 from Old Bainbridge Road to Olson Road Scheduled for 2026
- I-10 from SR 267 to US 90 (Midway) Scheduled for 2027

#### Seat Belt Usage

The crash reports include information seat belt usage in crashes. Included in this data is the use by the vehicle that initiated the crash, as well as, all other vehicles. This information in broken down by individuals in each vehicle so there is an accurate recording of the people involved in each and every crash.

For the vehicles (64)\* that initiated the crash there was a total of 113 people with 95 people using seats belts for a usage of 84%. **Table 2** breaks down the 113 people by the severity of their injuries.

Table 2 – Seat Belt Usage by Severity of Injury of the Vehicle that Initiated the Crash

Severity of Injury	Occupants	Seat Belted Occupants	Percentage
Fatal	22	16	73%
Serious Injury	61	51	84%
Non-Incapacitating	14	12	86%
None	16	16	100%
Total	113	95	84%

<sup>\*-</sup> There were two crashes not included due to a "hit and run", with the other vehicle driver outside of their vehicle. Additionally, there were three motorcycle crashes that included two with helmets and one without, but they were not included in the totals because helmets are not "restraint" devices and are not required safety equipment.

There was a total of 31 vehicles involved that did not initiated the crash with 60 total occupants. Of the 60 people, 55 had their seat belts on for usage of 92%. **Table 3** provide details of the "other" vehicles seat belt usage.

Table 3 - Seat Belt Usage by Severity of Injury of "Other" Vehicles in Crash

Severity of Injury	Occupants	Seat Belted Occupants	Percentage
Fatal	5	4	80%
Serious Injury	11	9	82%
Non-Incapacitating	6	5	83%
Possible	9	9	100%
None	29	28	97%
Total	60	55	92%

# **CRTPA High Injury Network (HIN)**

The CRTPA developed a Safety Action Plan in 2023 in alignment with the United States Department of Transportation (USDOT) Safe Streets and Roads for All (SS4A) program. The Safety Action Plan built upon an extensive analysis of historical crash data from January 1, 2017 through December 31, 2021, during which time more than 1,200 fatal and serious injury crashes were reported within Leon, Gadsden, Wakulla, and Jefferson Counties. The Safety Action Plan also incorporated an equity component and solicited public feedback through multiple in-person and virtual engagement mechanisms to understand the safety concerns of the communities above and beyond those apparent from crash data. Ultimately, the crash data and public feedback were evaluated to develop a priority list of potential safety projects within the four county region.

In an effort to determine the projects that may have the most meaningful safety benefit to the traveling public within the City of Tallahassee, City staff and CRTPA staff are seeking to update the historical crash analysis at 10 sites from the previously identified high-injury network (HIN) and develop site-specific safety countermeasures that will be strong candidates for an SS4A implementation grant in the 2025 grant cycle.

#### **Project Tasks**

The Project Team will analyze the five-year crash history on the priority segments and/or priority intersections for crash patterns, including crash types, crash directions, and contributing factors. The crashes will be presented in tabular and graphical formats to illustrate the crash history and help define specific issues that may need addressed to improve safety outcomes. Additionally, site visits will be made to review conditions on the priority segments and/or priority intersections and take site photos documenting existing conditions that may be contributing to the documented crash history.

The Project Team will refer to the industry resources such as the Federal Highway Administration's (FHWA's) Proven Safety Countermeasures to identify site-specific safety countermeasures that would address the occurrence of crashes on priority segments and/or priority intersections. This will also include the development of planning-level cost estimates for the improvements.

The Project Team will prepare individual site memoranda for the priority segments and/or priority intersections evaluated in this Task, including a crash summary, field review photos and notes, and recommended safety improvements for each.

#### **Project Length**

The project has an anticipated completion date of May 2025.

# **Projects for Evaluation**

Utilizing the High Injury Network (HIN) from the Safety Action Plan, the following are the projects that will be evaluated.

Roadways				
Road	From	То		
Adams Street	Paul Russell Road	Orange Avenue		
Apalachee Parkway	Blair Stone Road	Capital Circle, SE		
Bronough Street	Gaines Street	Brevard Street		
Duval Street	Gaines Street	Brevard Street		
Gadsden Street	Apalachee Parkway	East 7th Avenue		
Macomb Street	Gaines Street	Brevard Street		
Monroe Street	Gaines Street	Tennessee Street		
Tharpe Street	Ocala Road	Monroe Street		

Vulnerable User				
Road	From	То		
West Tennessee Street	Aenon Church Road	Junco Ct		
Apalachee Parkway/ Capital Circle, SE	Intersection			