



**Chapter 2**  
**Safety/Security**



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## Supporting Documents

- 2019 Safety Assessment Report
- 2018 Security Assessment Report





## 2.0 Safety/Security

The MPO is working to improve safety for all walkers, bicyclists, and drivers.

The MPO plans for efficient evacuations and safe returns.

Federal and state planning mandates require MPOs to address the safety and security of the transportation system for all motorized and non-motorized users in their planning processes. A major aspect of the Long Range Transportation Plan (LRTP) process is to identify areas of safety and security concerns on the transportation system and program specific initiatives and projects for funding that address these concerns.

The primary documents that guide the Safety and Security goal within the LRTP are the annual Safety and Security Assessments Reports that track performance measures and set data-driven targets to improve those measures. These reports have been compiled in response to federal and state planning goals.

### 2.1 2019 Safety Assessment Report






The intended purpose of the Safety Assessment Report is to understand the current safety trends at the metropolitan level, report on the five federally required safety performance measures, and identify candidate priority corridors for implementing safety countermeasures. The analysis conducted in the report plays a key role in identifying the transportation needs and projects that are considered in the LRTP process.

A key outcome of the Safety Assessment Report is to identify performance measure targets for the five required measures and report on progress in achieving these targets. Under the Highway Safety Improvement Program (HSIP), MPOs, along with the FDOT, are required to report on the following measures:

## Safety/Security

### Objectives

Projects shall...

-  **Decrease** vehicle crashes at hazardous locations
-  **Reduce** crashes and conflicts between all users and modes
-  **Improve** safety for vulnerable users
-  **Improve** system for evacuation and recovery
-  **Provide** education to increase safety and security

### Project Prioritization

Does the project...

- Address** an identified motorized or non-motorized high crash location?
- Improve** safety for vulnerable users?
- Improve** traffic flow on an evacuation route?



- Number of Fatalities;
- Number of Serious Injuries;
- Number of Non-motorized (Bicycle/Pedestrian) Fatalities and Serious Injuries;
- Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT); and
- Rate of Serious Injuries per 100 million VMT

The 2019 Safety Assessment Report set targets for the five year rolling average covering 2016 to 2020 for each safety-related performance measure based on the historic trends and observations as listed in **Table 2-1**. Evaluating each performance measure's trendline allows the MPO to make an informed decision when establishing future safety targets and to identify areas for focused attention and resources to make the transportation system safer. Fatalities and serious injuries have increased through 2018, a trend not unique to the Sarasota/Manatee region as fatalities have increased across the nation after the 2008 Recession.

**Table 2-1: Sarasota/Manatee Five-Year Rolling Averages**

Performance Measure	2012 – 2016 Actual	2013 – 2017 Actual	2014 – 2018 Actual	2015 – 2019 Adopted*	2015 – 2019 Actual	2016 – 2020 Adopted+
Number of Fatalities	102	103	112	109	114 ✘	109
Number of Serious Injuries	1,136	1,283	1,430	1,438	1,481 ✘	1,438
Non-Motorized Fatalities and Serious Injuries	168	168	173	174	176 ✘	170
Fatality Rate	1.32	1.37	1.51	1.63	1.46 ✔	1.46
Serious Injury Rate	14.57	16.65	19.37	21.84	19.59 ✔	19.59

✔ Target Achieved

✘ Target Missed

\*Estimate based on available data through Mid-December 2019 and interpolated for 12 months

+Numbers are based on trends

Source: Signal4 Analytics, 2014-2018 and 2015-2019

Mapping crashes by associating crash data with roadway segments aids the MPO in identifying the high crash corridors and priority areas for funding roadway improvements and safety projects within the region. **Figure 2-1** shows the distribution of fatal and severe injury crashes from 2014 to 2019. This crash analysis contributes to the list of corridors in the 2045 LRTP that have been identified as having the potential to become multi modal corridors due to them being safety concern areas, evacuation routes, and tourism routes, among others. These locations are:



- SR 64/ Manatee Ave
- SR 684/ Cortez Road
- SR 780/ Fruitville Road
- SR 72/ Stickney Point/ Clark Road

In addition to mapping crash data, the 2019 Safety Assessment Report identified 20 crash corridors and 12 top priority locations along US 41 which were evaluated in the US 41 Multi Modal Emphasis Corridor (MMEC) Gap and Safety Analysis. In 2019, the MPO reviewed new crash data and compared it against these previous efforts to identify the most recent top 25 high crash intersections and the top 12 emerging high crash locations in the region. **Table 2-2** shows the top 25 high crash intersections in the area ranked by crash count, fatalities, and serious injuries based on 2015-2019 data; the table also includes a description of the analysis or projects associated with the crash locations.

**Table 2-2: Top 25 High Crash Intersections**

Rank	Facility	Limits	Status	2045 LRTP
1	US 41/ 14th St W	at 53rd Ave W	RSA performed and US 41 Charette	US 41 MMEC
2	US 41/ 14th St W	at Cortez Rd W	RSA performed and US 41 Charette	US 41 MMEC
3	Fruitville Rd	at N Beneva Rd	Recent improvement and Fruitville Study	Multi Modal Corridor
4	SR 70/ 53rd Ave E	at Lockwood Ridge Rd		
4	Bee Ridge Rd	at Beneva Rd		
5	University Pkwy	at Lockwood Ridge Rd		
6	University Pkwy	at Cooper Creek Blvd		
7	US 41/ S Tamiami Trl	at Stickney Point Rd	Construction	US 41 MMEC
8	US 41/ N Tamiami Trl	at University Pkwy	Project development and environment study	US 41 MMEC
9	Fruitville Rd	at N Cattlemen Rd	Fruitville Study	Multi Modal Corridor
10	US 41/ S Tamiami Trl	at Bee Ridge Rd		US 41 MMEC



Rank	Facility	Limits	Status	2045 LRTP
11	US 41/ 14th St W	at 57th Ave W	US 41 Charette	US 41 MMEC
12	University Pkwy	at Honore Ave		
12	US 41/ S Tamiami Trl	at S Sumter Blvd		US 41 MMEC
13	Fruitville Rd	at N Washington Blvd	Fruitville Study	Multi Modal Corridor
14	US 41/ 14th St W	at Bayshore Gardens Pkwy	US 41 Charette	US 41 MMEC
15	Fruitville Rd	at Honore Ave	Fruitville Study	Multi Modal Corridor
16	Bee Ridge Rd	at Cattlemen Rd		
17	Cortez Rd	at 26th St W	RSA performed and recent Improvements	Multi Modal Corridor
17	Clark Rd	at Beneva Rd		Multi Modal Corridor
18	Clark Rd	at Honore Ave		Multi Modal Corridor
19	US 41/ S Tamiami Trl	at River Rd	Safety assessment performed	US 41 MMEC
20	Bee Ridge Rd	at Swift Rd		
21	US 301	at 15th St E		
22	US 41/ S Tamiami Trl	at Jacaranda Blvd	Safety assessment performed	US 41 MMEC
23	SR 70/ 53rd Ave W	at Tara Blvd	Construction	
23	SR 70/ 53rd Ave E	at US 301	Right of way and construction	
24	Bee Ridge Rd	at McIntosh Rd		
25	E Venice Ave	at Jacaranda Commons		

Source: Signal4 Analytics, 2015-2019

Gray rows indicate locations with high bicycle and/or pedestrian crashes.

**Table 2-3** contains the top 12 emerging high crash locations with 5 or more fatalities and serious injuries that have recently appeared in 2018-2019 data. The analysis conducted to identify the high priority crash locations and intersection forms the basis for prioritizing safety corridors which will then be reviewed for safety strategies and projects in the LRTP.



Table 2-3: Top 12 Emerging High Crash Locations

Rank	Facility	Limits	Status	2045 LRTP
1	SR 70 E	at Greenbrook Blvd		
2	SR 70/ 53rd Ave E	at US 301/ 1st St		
3	Cortez Rd W	at 18th St W		Multi Modal Corridor
4	US 41/ Tamiami Trl	at 23rd St E		US 41 MMEC
5	US 301/ 1st St	at 32nd Ave W		
6	US 301	at 36th Ave E		
7	Cortez Rd W	at 37th St W		
8	SR 72/ Stickney Point Rd	at Gateway Ave/ Vacarro Rd		Multi Modal Corridor
9	SR 70/ 53rd Ave E	at Caruso Rd		
10	US 41/ 14th St W	at 30th Ave W		US 41 MMEC
11	US 301	at Old Tampa Rd		
12	17th St	at Lockwood Ridge Rd		

Source: Signal4 Analytics, 2018-2019

Gray rows indicate locations with high bicycle and/or pedestrian crashes.

A spatial review of the fatal and serious injury crash locations is shown in **Figure 2-1**. The locations of these crashes occurred primarily in the urbanized area with greater intensities shown in the darker colors in South Bradenton along US 41 and Cortez Road.

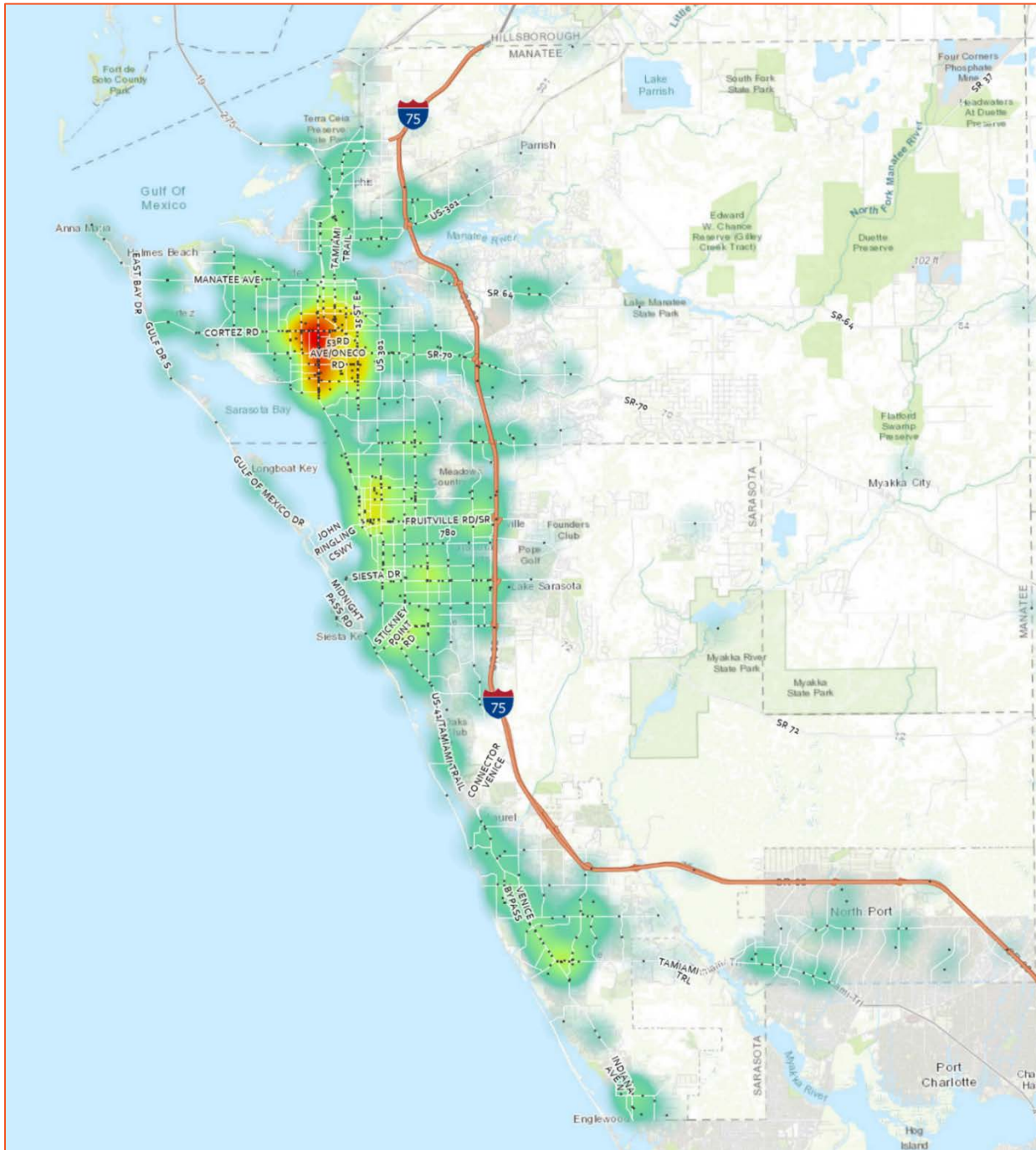


Figure 2-1: Fatal and Serious Injury Crash Frequency Distribution (2014-2019)





### 2.2 Evacuation Network

The transportation system provides necessary emergency evacuation routes for citizens and serves as a deployment facility for first responders in the event of a natural disaster. The Sarasota-Manatee region has numerous low-lying and coastal communities that are vulnerable to the impacts of storm surge and are placed into designated evacuation zones. The LRTP has specifically pledged to plan for efficient evacuations and returns, therefore considering shortcomings in the existing evacuation network is paramount. Projects that address bottlenecks, stormwater issues, and capacity can improve traffic flow along evacuation routes during an emergency. Designated hurricane evacuation routes and evacuation zones located within the Sarasota-Manatee region are identified in Figure 2-2.

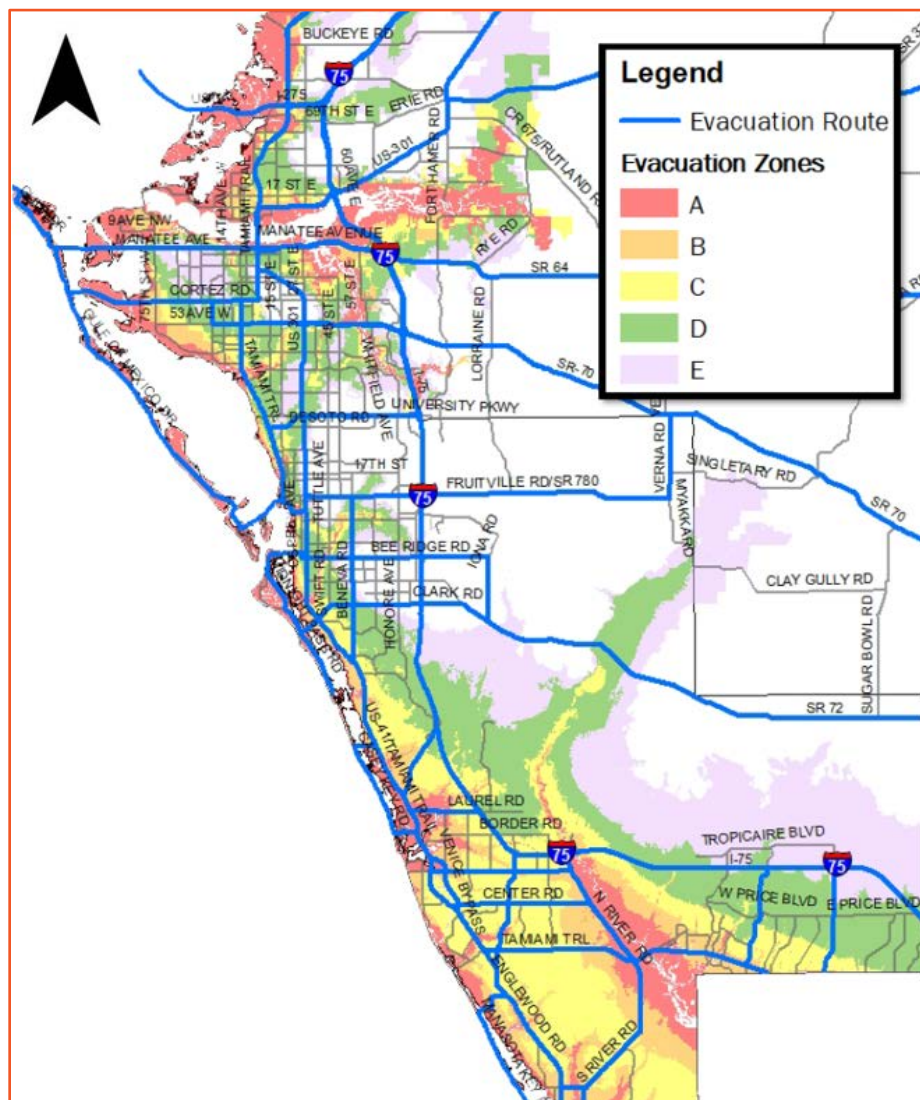


Figure 2-2: Flood Zones and Evacuation Routes



### **2.3 2018 Security Assessment Report**

The Security Assessment Report was developed in response to emergency recovery planning training the MPO received in 2018. The report documents existing regional hazard planning efforts, outlines current MPO practices, and identifies recommendations for the MPO moving forward. The information and recommendations from this report inform the long-term hazard mitigation and recovery planning process in the LRTP.

Hazard mitigation plans at a county level were identified to provide guidance on how the MPO can build on existing efforts to further engage with and aid the hazards planning process for the area. The county level hazard planning documents the MPO reviewed included:

- Comprehensive Emergency Management Plans (Manatee County 2018, Sarasota County [Southwest Florida] 2018)
- Post Disaster Redevelopment Plans (Manatee County 2009, Sarasota County 2015)
- Local Mitigation Strategies (Manatee County 2019, Sarasota County 2016)
- Transportation Disadvantaged Service Plans with emergency preparedness components (Manatee 2019, Sarasota County 2019)

After reviewing regional hazard planning strategies, the MPO took inventory of its current practices that provide data, analysis, and prioritization indicators that are relevant for hazards planning. These efforts included freight and project prioritization efforts, economic development planning, and Advanced Traffic Management Systems (ATMS). Ultimately, the report ended with recommendations to provide guidance for future steps for the MPO to take to engage in hazard planning.

One of the main recommendations of the 2018 Security Assessment Report was to consider a more robust vulnerability/mitigation analysis of regional assets and infrastructure. The purpose of this analysis is to develop and apply new methods that integrate resilience corridor planning with transportation planning and decision making in order to assess and mitigate risks from all hazards that affect the Sarasota/Manatee region's transportation system. The resulting methods, tools, processes and recommendations from this analysis will be documented and training will be included for MPO staff and jurisdictions so that the methods, tools, and processes can be incorporated in future efforts to develop transportation resilience plans for the Sarasota/Manatee transportation system and to enhance local and regional hazard mitigation plans. This recommendation is described in more detail in Goal 8 – Project Delivery.