
EXECUTIVE SUMMARY

Interstate 275 (I-275) is a principal interstate roadway interconnecting the Tampa Bay Region. The I-275 system also provides access to Tampa International Airport, Port of Tampa, and Downtown Tampa, three major economic development hubs in the area. The I-275/SR 60 interchange provides mobility within the Westshore District of Tampa. The Westshore District is Tampa's largest employment center with approximately 4,000 businesses and over 97,000 employees. In addition to the commercial and industrial uses, Westshore has about 15,000 residents and is expected to add another 1,000 units over the next year. Major destinations within the Westshore District include Tampa International Airport, Raymond James Stadium, International Plaza, Westshore Plaza, and George Steinbrenner Field.

FDOT through its commitment to developing comprehensive and multimodal regional transportation systems to modernize infrastructure and prepare for the future, created the Tampa Bay Next (TBNNext) program. Tampa Bay Next priorities include:

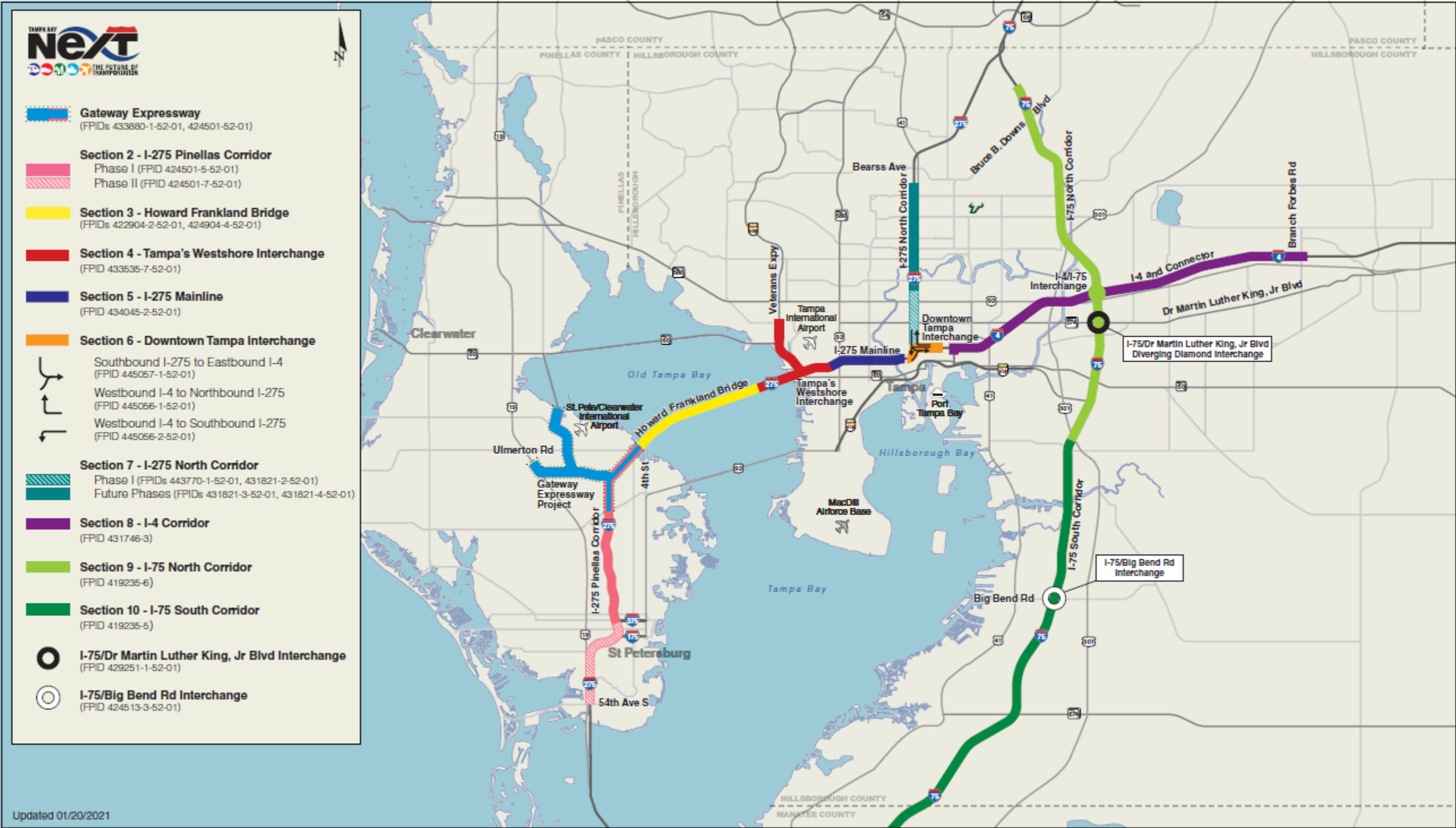
- Move people and goods safely and efficiently
- Build a comprehensive regional transportation system
- Create meaningful opportunities for public input
- Balance regional needs with community concerns
- Commit to sustainable infrastructure decisions

The TBNNext Interstate Modernization project is divided into several sections within the Tampa Bay region, as shown in **ES - Figure 1**. This project includes improvements within Sections 4 and 5 of the TBNNext program.

The Final Environmental Impact Statement (FEIS) prepared for the Tampa Interstate Study (TIS) and approved by the Federal Highway Administration (FHWA) in January 1997, documented the need for multi-lane improvements on I-275 from the north end of the Howard Frankland Bridge to the north of Dr. Martin Luther King, Jr. (Dr. MLK, Jr.) Boulevard and on I-4 from I-275 to 50th Street. The FHWA, in cooperation with the Florida Department of Transportation (FDOT), prepared a Supplemental Environmental Impact Statement (SEIS) to examine the impacts and to modify the Locally Preferred Alternative (LPA) for the Tampa Interstate Study (TIS) to improve portions of I-275, I-4, and SR 60 in Hillsborough County, Florida.

FDOT completed a preliminary screening in 2017 to narrow the range of alternatives that would be evaluated in the SEIS. The preliminary screening analysis mainly focused on whether the proposed build alternatives could address the Purpose and Need of the project. In addition, FDOT conducted a public workshop in October 2017 to present preliminary analysis results and gather inputs from stakeholders and the public to finalize the alternatives for the SEIS evaluation.

In May 2019, FDOT held Public Workshops to receive input on the proposed design for the 2018 Express Lanes Alternative (tolled), which includes the Westshore interchange (Sections 4 & 5) and Design Options A, B, C, and D for the Downtown interchange (Section 6). Many factors, including comments and concerns related to the potential impacts to the Perry Harvey Sr. Park, ROW impacts to downtown neighborhoods, and the need to provide safety improvements in the Downtown Interchange area, led FDOT to develop Design Option E.



ES - Figure 1: Tampa Bay Next Interstate Modernization Projects

The Recommended LPA selection process involved numerous considerations, which balanced engineering and environmental considerations and local preference gleaned through the public involvement process and meetings with stakeholders and local officials. FDOT presented the Recommended LPA at the public hearing that FDOT held on February 25 and 27, 2020. As a result of coordination with the City of Tampa and public comments on the TIS Draft SEIS, FDOT made some refinements to the Recommended LPA to mitigate potential safety issues, which resulted in the Preferred Alternative.

Considering all the social, economic, and environmental evaluations contained in the Final SEIS, with input received from other agencies, organizations, and the public, the FHWA has determined that the TIS Preferred Alternative is hereby the selected alternative. On September 15, 2020, the FHWA granted Location and Design Concept Acceptance (LDCA) for the TIS SEIS, Record of Decision (ROD), and Section 4(f) Evaluation. All the improvements considered as part of the SIMR are consistent with the approved SEIS Preferred Alternative.

The Preferred Alternative mainly consists of general-use lane improvements and two express lanes in each travel direction within the Sections 4 and 5 study limits. The I-275 northbound express lanes end before the Tampa Street/Ashley Drive Off-Ramp. The I-275 southbound express lanes begin south of Tampa Street/Ashley Drive interchange and continue through Howard Frankland Bridge into Pinellas County. The operational improvements involve the use of express lanes and access changes between general use and express lanes, expansion of I-275 from Howard Frankland Bridge (HFB) to the south of SR 60 to accommodate express lanes along I-275, and local street improvements, including the relocation of Lemon Street, the extension of Occident Street, modified Trask Street ramp connections, Reo Street extension to Kennedy Boulevard providing connection to the southbound I-275 Ramp, Sherrill Street is being shortened, and Executive Drive has intersection modifications at Reo Street. Additionally, Himes Avenue is connected to express lanes (direct connect from northbound express lanes and direct connect to southbound express lanes).

Due to high AM and PM peak periods demand, I-275 currently experiences recurring congestion within the study limits of Sections 4 and 5. Sections 4 and 5 limit extends along I-275 from north of the Howard Frankland Bridge to Ashley/Tampa Street interchange and along SR 60 from Kennedy Boulevard to the north of Cypress Street. Peak hours travel demand exceeds the available capacity of the I-275 system causing longer travel times, poor travel reliability, and underperforming traffic operations.

Although I-275 is, in general, a north-south limited access facility, the alignment of this roadway within the area of influence is east-west. Throughout the document, the directional orientation of I-275 and SR 60 is described as north-south and east-west, respectively.

The following FHWA policy points serve as primary decision criteria used to approve SIMR for Sections 4 and 5.

1. The proposal does not adversely impact the operational safety of the existing freeway

An operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility (which includes mainline lanes, existing, new, or modified ramps, ramp intersections with crossroad) or on the local street network based on both the current and the planned future traffic projections. The analysis should, particularly in urbanized areas, include at least the first adjacent existing or proposed interchange on either side of the proposed change in access (23 CFR 625.2(a), 655.603(d) and 771.111(f)). The crossroads and the local street network, to at least the first major intersection on either side of the proposed change in access, should be included in this analysis to the extent necessary to fully evaluate the safety and operational impacts that the proposed change in access and other transportation improvements may have on the local street network (23 CFR

625.2(a) and 655.603(d)). Requests for a proposed change in access must include a description and assessment of the impacts and ability of the proposed changes to safely and efficiently collect, distribute and accommodate traffic on the Interstate facility, ramps, intersection of ramps with a crossroad, and local street network (23 CFR 625.2(a) and 655.603(d)). Each request must also include a conceptual plan of the type and location of the signs proposed to support each design alternative (23 USC 109(d), and 23 CFR 655.603(d)).

I-275 currently experiences recurring congestion within the study limits of Sections 4 and 5 during the AM and PM peak periods. Peak hour demands exceed the available capacity of the I-275 system causing longer travel times, poor travel reliability, and underperforming traffic operations. As growth in the region continues, congestion, travel times, and crashes within the study area will increase. Therefore, there is an immediate need for capacity improvements along the I-275 corridor to meet the existing and future peak hour traffic demand. This project proposes general use lane improvements and two express lanes in each travel direction to improve the traffic operations and safety within the Sections 4 and 5 study limits.

Existing field reviews were conducted to observe traffic conditions along the corridor. The following provides a summary of the traffic conditions during the AM and PM peak periods.

- Overall, the traffic delays for PM peak hour are higher compared to AM peak hour. Congestion resulting in more delays was observed along I-275 northbound than I-275 southbound during AM and PM peak hours.
- I-275 northbound, south of SR 60, was observed to be a critical bottleneck segment for both AM and PM peak hours, leading to higher delays due to high exiting traffic volumes to the SR 60 Off-Ramp and due to vehicle slowdowns on the SR 60 northbound flyover ramp.
- Heavy congestion is experienced during the PM peak hour along I-275 northbound, north of SR 60, primarily due to the downstream congestion. The traffic queues from the I-275/I-4 interchange extend beyond the Westshore Boulevard interchange.
- The I-275 southbound segment between Ashley Drive and SR 60 Off-Ramp is experiencing severe traffic delays during the PM peak hours. This is a critical segment for this facility due to high traffic volumes all merging from I-4 westbound, I-275 southbound, and the downtown Tampa area. The majority of the traffic exits to SR 60 westbound via the off-ramp.
- Higher traffic delays observed along the SR 60 eastbound segment for both AM and PM peak hours were caused primarily due to heavy SR 60 eastbound to I-275 northbound On-Ramp demand and existing capacity deficiencies for the SR 60 eastbound to I-275 northbound loop ramp.

A crash analysis was completed for the five-year period from 2013 to 2017. During the study period, a total of 7,900 crashes, 13 (0.2 percent) fatal crashes, 2,446 (31 percent) injury crashes, and 5,441 (69 percent) property damage only crashes were reported within the Sections 4 and 5 limits. Most of the fatal crashes occurred on I-275 mainline (9 fatal crashes). The predominant crash type was found to be rear-end crashes (59 percent). Rear-end crashes occurring within the peak periods of traffic flow are associated with heavy congestion and high vehicular densities. The high frequency of rear-end crashes can be attributed to the reduced spacing between vehicles and driver behavior, such as distracted driving during peak period congestion. Sideswipe crashes (15 percent) were the second most common crash type, followed closely by other crashes.

Microsimulation models were completed for the No-Build and Build conditions for the Opening Year (2025) and Design Year (2045) for both peak periods. The Build conditions' overall operations improved significantly compared to No-Build conditions within the Sections 4 and 5 study limits. **ES - Table 1** compares demand volumes processed in the No-Build and Build conditions during AM and PM peak hours. The results indicate that more demand vehicles will be processed in the Build conditions with the proposed improvements than the No-Build conditions.

ES – Table 1: Processed Demand

Roadway	Scenario	Opening Year (2025)		Design Year (2045)	
		AM	PM	AM	PM
I-275 NB	No-Build	79%	59%	58%	52%
	Build	91%	79%	71%	86%
I-275 SB	No-Build	74%	60%	65%	53%
	Build	82%	65%	74%	70%

In the Opening Year (2025) and Design Year (2045), a 17 to 70 percent increase in throughput was observed along I-275 northbound during peak hours. Similarly, an 8 to 32 percent increase in throughput was observed along I-275 southbound during peak hours. The comparison of throughput in the No-Build and Build conditions are presented in **ES - Table 2**.

ES – Table 2: Throughput – No-Build Vs. Build

Roadway	Scenario	Average Throughput ¹ (Veh/hour)					
		AM Peak Hour			PM Peak Hour		
		No-Build	Build	Difference (%)	No-Build	Build	Difference (%)
I-275 NB	Opening Year	8,117	9,514	17%	5,399	6,911	28%
	Design Year	6,974	8,397	20%	5,488	9,350	70%
I-275 SB	Opening Year	6,645	7,148	8%	6,069	6,778	12%
	Design Year	6,862	7,954	16%	6,200	8,196	32%

¹ Average vehicle throughput is the total throughput on all study segments divided by the number of segments

Since the proposed Build improvements are mainly focused on freeway facilities, the peak hour traffic operations are similar on arterial corridors for No-Build and Build conditions within the study limits of Sections 4 and 5. However, with additional capacity available through proposed build improvements, more capacity will be available to satisfy demand on the interstate in the Build conditions compared to No-Build conditions. Due to increased traffic near ramp terminal intersections, the traffic delays will be slightly more for some study intersections in Build conditions than the No-Build conditions.

In the Opening Year (2025), the percentage increase in total vehicle miles traveled in Build conditions ranges between 15 percent and 26 percent during peak hours compared to No-Build conditions. The percentage increase in average speed in Build conditions ranges between 46 percent and 62 percent during peak hours compared to No-Build conditions. Simultaneously, the percentage reduction in delay per vehicle-mile ranges between 54 percent and 71 percent during peak hours compared to No-Build conditions. The percentage reduction in travel time per vehicle-mile ranges between 31 percent and 38 percent during peak hours compared to No-Build conditions.

In the Design Year (2045), the percentage increase in total vehicle miles traveled in Build conditions ranges between 31 percent and 54 percent during peak hours compared to No-Build conditions. The percentage increase in average speed in Build conditions ranges between 54 percent and 59 percent during peak hours compared to No-Build conditions. Simultaneously, the percentage reduction in delay per vehicle-mile ranges between 57 percent and 60 percent during peak hours compared to No-Build conditions. The percentage reduction in travel time per vehicle-mile ranges between 35 percent and 37 percent during peak hours compared to No-Build conditions.

In addition to the processed demand, the latent demand at the end of the peak period simulation along the freeway facility entering the study area from I-275 northbound, I-275 southbound, Veterans Expressway southbound, SR 60 eastbound, George Bean Parkway southbound, I-4 westbound, and Selmon Expressway ramp was also analyzed for evaluating the performance of the Build Alternative compared to No-Build Alternative. The results show a decrease in latent demand for the Build Alternative compared to No-Build Alternative as shown in **ES - Table 3**. The reduction in latent demand ranges from 1 percent to 100 percent in the Opening Year (2025) and 14 percent to 99 percent in the Design Year (2045).

ES – Table 3: Latent Demand – No-Build Vs. Build

Location	Peak Period	Opening Year (2025)			Design Year (2045)		
		No-Build	Build	Percent Change	No-Build	Build	Percent Change
I-275 Northbound	AM	6257	14	-100%	14160	7284	-49%
	PM	7072	7	-100%	15248	243	-98%
I-275 Southbound	AM	5123	5061	-1%	9118	7805	-14%
	PM	1996	1157	-42%	920	41	-96%
Veterans Expressway Southbound	AM	50	49	-3%	9831	75	-99%
	PM	6754	0	-100%	12052	74	-99%
SR 60 Eastbound	AM	15	8	-48%	5	4	-20%
	PM	15	2	-88%	9	6	-33%
George J. Bean Parkway Southbound	AM	26	6	-78%	1350	8	-99%
	PM	4345	8	-100%	9902	3298	-67%
I-4 Westbound	AM	2525	19	-99%	5423	132	-98%
	PM	22556	11655	-48%	28753	10709	-63%
NB Selmon Expressway Ramp to WB I-4	AM	1171	0	-100%	2789	2080	-25%
	PM	4388	2753	-37%	8983	6688	-26%

The predictive analysis results indicate that the study corridor (I-275) will experience fewer crashes in Build conditions than No-Build conditions with the proposed Build improvements. Even though there is an increase in the Annual Average Daily Traffic (AADT) and the number of lanes, I-275 is expected to experience a reduction in crashes of 27 percent, and SR 60 is expected to experience a decrease of 49 percent. This reduction is likely due to volumes now being split between the general use lanes and express lanes. With the volumes split, crashes are decreased on the general use lanes.

The I-275 corridor is expected to experience a reduction in individual severity types, with the largest decrease in property damage only (PDO) crashes at 27 percent. SR 60 is expected to experience significant reductions in possible injury and PDO crashes, both at 49 percent. The Build Alternative is also expected to reduce the number of total multiple vehicles crashes along the I-275 and SR 60 corridors by 37 percent and 61 percent, respectively. This is likely due to a reduction in rear-end and side-swipe crashes due to splitting the volumes between general use lanes and express lanes. However, the I-275 and SR 60 corridors are expected to experience an increase in total single-vehicle crashes by 13 percent and 17 percent, respectively. This is likely due to an increased amount of barrier walls and delineators throughout the study limits due to separating the general use lanes from the express lanes.

With the proposed improvements along the study corridor (I-275), the Build Alternative will observe increased travel speeds and throughput, reduced delays, and decreased crashes compared to No-Build Alternative. Therefore, the proposed improvements will improve the traffic operations and safety along the I-275 within the study area.

2. A full interchange with all traffic movements at a public road is provided

The proposed access connects to a public road only and will provide for all traffic movements. Less than "full interchanges" may be considered on a case-by-case basis for applications requiring special access such as managed lanes (e.g., transit, HOVs, HOT lanes) or park and ride lots. The proposed access will be designed to meet or exceed current standards for federal-aid projects on the interstate system (23 CFR 625.2(a), 625.4(a)(2), and 655.603(d)). In rare instances where all basic movements are not provided by the proposed design, the report should include a full-interchange option with a comparison of the operational and safety analyses to the partial interchange option. The report should also include the mitigation proposed to compensate for the missing movements, including wayfinding signage, impacts on local intersections, mitigation of driver expectation leading to wrong-way movements on ramps, etc. The report should describe whether future provision of a full interchange is precluded by the proposed design.

This project retains all traffic movements currently available for commuters within the study area. Also, the proposed Build improvements will provide additional opportunities for access into the Westshore Area. Reo Street, Occident Street, and Trask Street will provide access north and south of I-275. I-275 will have access to Reo Street to and from the south and Trask Street to and from the north. Himes Avenue will have a direct express lane connection to and from the south.

These modifications have been coordinated with the City of Tampa and local residential and business groups. Access Management on the cross streets will not be affected beyond the limits of this project. The Access Management Evaluation Memorandum developed for Sections 4 and 5 is provided in **Appendix N**.

Overall, comparing operational and safety performance of No-Build and Build Alternatives, the Build Alternative provides improved performance. Therefore, the Safety, Operational, and Engineering (SO&E) approval is requested for the Build Alternative.