

Congestion Management Counter Measures

Hillsborough ITS Committee April 4, 2024





A regional collaboration focused on using technology and innovation to improve transportation.

2050 LRTP Needs Assessment

Congestion Management Scenarios

Scenario 1 – TREND (Funding reflecting current spending)

- Annual budget for treatments: \$24 M
- Treatments focused on the most congested roads
 - Freeways: Ramp Metering and Part-time Hard Shoulder Running
 - Arterials & Collectors: Real-Time Traffic Adaptive Signal Control



planhillsborough.org

Source: 2050 LRTP Needs Assessment for Congestion Management & Crash Mitigation November 2023

Congestion Management Scenarios

Scenario 2 – PERFORMANCE (Funding increased to improve system performance

- Annual budget for treatments: \$48 M
- Treatments focused on the most congested roads
 - Freeways: Ramp Metering, Part-time Hard Shoulder Running, Traffic Incident Management
 - Arterials & Collectors: Real-Time Traffic Adaptive Signal Control and Left-Turn Lanes at Intersections where applicable



Congestion Management Tools

Current Investments

Managed Lanes

Demand Management

Multimodal Options

Traffic Operations/ITS

Innovative Design

Planning/Pilot Phase

Smart Corridor

Mobility as a Service

Regional Data Platform

Work Zone Data







CONSTRUCTION COMPLETE

Cypress St/LaSalle St - FPID 447614-1

UNDER CONSTRUCTION

Gateway Expressway

: FPIDs 433880-1, 424501-2 (E7J46)

Howard Frankland Bridge - Section 3

FPIDs 422904-2, 424904-4 (E7R10)

Tampa's Westshore Interchange - Section 4

Causeway Seawall, Trail & SB I-275 - FPID 447534-1 (E7P42)

Veterans Connection WB SR 60 - FPID 447107-1 (E7R39)

Reo Street Widening - FPID 447615-1

Downtown Tampa Interchange - Section 6

FPIDs 445057-1, 445056-1, 445056-2 (E7R70)

I-275 Capacity Improvements - Section 7

Phase I - FPIDs 443770-1, 431821-2 (T7472)

I-75/Dr Martin Luther King, Jr. Blvd Interchange

FPID 429251-1 (E7R26)

I-75/Big Bend Rd Interchange

(FPID 424513-3 (E7R21)

CONSTRUCTION TO BEGIN SOON

Tampa's Westshore Interchange - Section 4

FPIDs 447107-2, 447107-3, 447107-4 (E7R30)

FUTURE PROJECTS

I-275 Pinellas Corridor - Section 2

FPID 449109-1 FPID 449109-2*

FPID 424501-7*

Tampa's Westshore Interchange - Section 4*

Veterans Connection EB SR 60 - FPID 447107-5

I-275 Corridor from Westshore to Downtown Tampa - Section 5*

I-275 Mainline - FPID 434045-2

I-275 Downtown Connection - FPID 434045-3

1-275 Off-ramp to Scott St/Tampa St - FPID 451462-1

Downtown Tampa Interchange - Section 6*

Scott St/Orange Ave - FPID 447616-1

I-275 North of Downtown Tampa - Section 7*

Future Phases - FPIDs 431821-3, 431821-4

I-4 Corridor - Section 8*

FPIDs 431746-3, 431746-4, 431746-5

I-75 North Corridor - Section 9*

FPID 419235-6

I-75 South Corridor - Section 10*

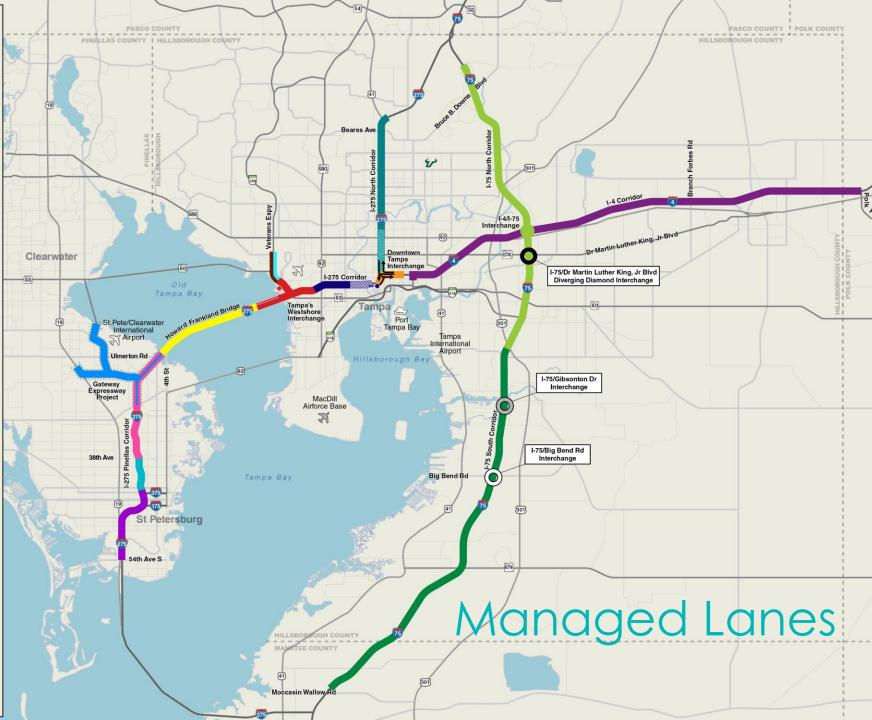
FPIDs 419235-5, 419235-7

I-75/Gibsonton Dr Interchange

FPID 437650-2

* Not currently funded for construction Updat

Updated 02/27/2024

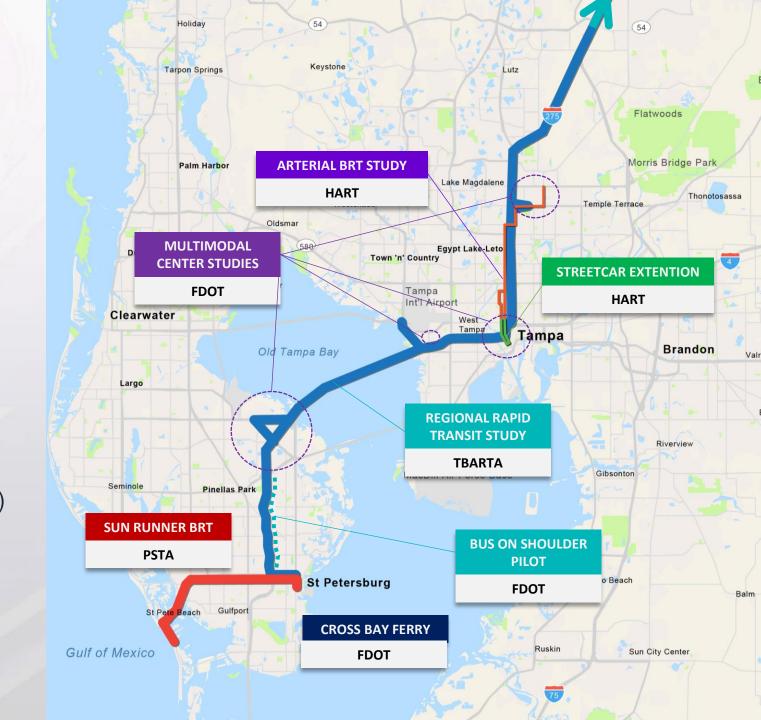


Demand Management



Multimodal Improvements

- SunRunner BRT (PSTA)*
- Regional Rapid Transit (TBARTA/FDOT)
- Bus on Shoulder (FDOT/PSTA)
- Streetcar Extension (HART/City of Tampa)**
- Arterial BRT (HART)
- Multimodal Center Studies (FDOT)
- Cross Bay Ferry (FDOT)
- *Received federal grant from FTA
- **Seeking federal grant from FTA



Traffic Operations/ITS 424213-6: City of Tampa USF Area/Busch Blvd Pebble Creek ATMS Signals - Phase 4 ARBOR REENE 424213-4: City of Tampa TAMPA'S WESTSHORE INTERCHANGE ATMS Signals - Phase 3 NEW TAMPA AND DOWNTOWN TAMPA INTERCHANGE IPA PALMS **EARLY WORKS PROJECTS** PID 447107-1 - WB SR 60 from N of Spruce St. Greater Carrollwood Temple Lake-Leto Del Rio WB SR 60 from N of Spruce Street (41) to Memorial Highway FPID 447107-1 Letting 6/2022 Lake Or YBOR CITY Tampa Brandor SOUTH TAMPA 424213-3: City of Tampa **Downtown Tampa** ATMS Signals - Phase 2 SUN BAY SOUTH Riverview **Integrated Corridor** University of South Florida Management (ICM) **Arterial Traffic** Florida Southern **Management System** (ATMS)

Florida's Regional Advanced

Mobility Elements (FRAME)

Turnpike Toll Roads

Non-State Roads

---- State Arterials

8

Innovative Design Strategies

Diverging Diamond Interchange



I-75 at SR 56 (Pasco)



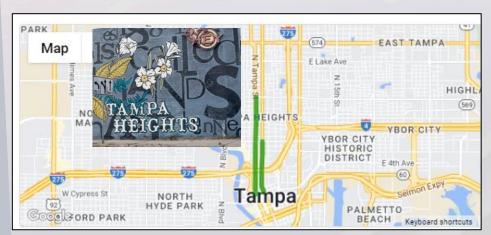
I-75 at MLK Jr. Blvd. (Hills)

Roundabouts



SR 679 at Madonna Ave. (Pine)

Complete Streets



Jackson Street Cycle Track

Protected Bikeways



Heights Mobility Improvements



Smart Corridor - Phase 1

Schedule

- Began Winter 2020
- Completed Fall 2021

Deliverables

- A clear description of smart corridor for FDOT District 7
- Unique toolkits to support project development and pilots
- A **specific brand** for the smart corridor concept
- A flexible approach that leverages existing technologies, but is also future proofed for new and emerging solutions such as autonomous







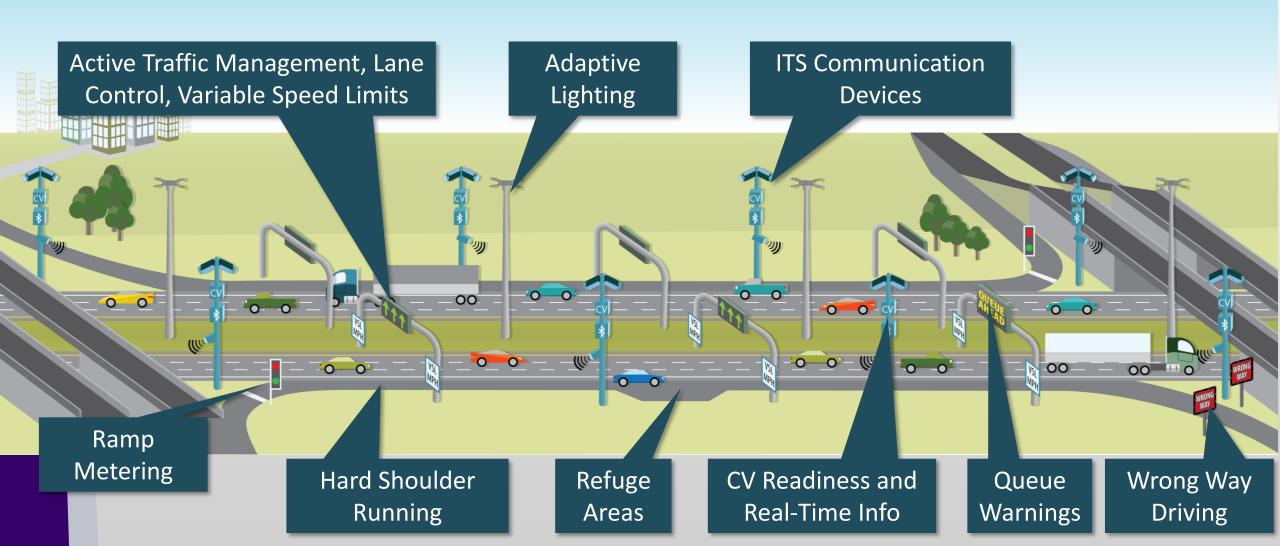






What is a Smart Corridor?







Smart Corridors – Phase 2

Schedule

TBD

Scope

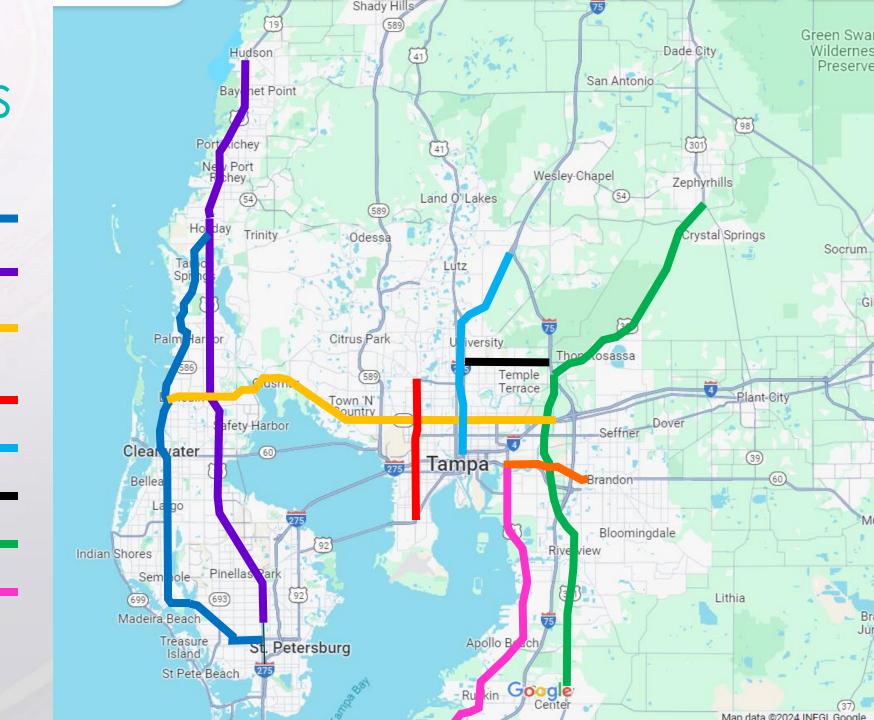
- Focus **on specific corridor** suitable smart technologies.
- Analyze existing and proposed traffic conditions and projected volumes via modeling efforts.
- Create **concept designs and operations** for smart corridors along the roadway segments.
- Finalize the branding/communications plan and public outreach plan, including staff interviews.
- Produce recommendations concerning the **prioritization** and long-term investment of these technologies.





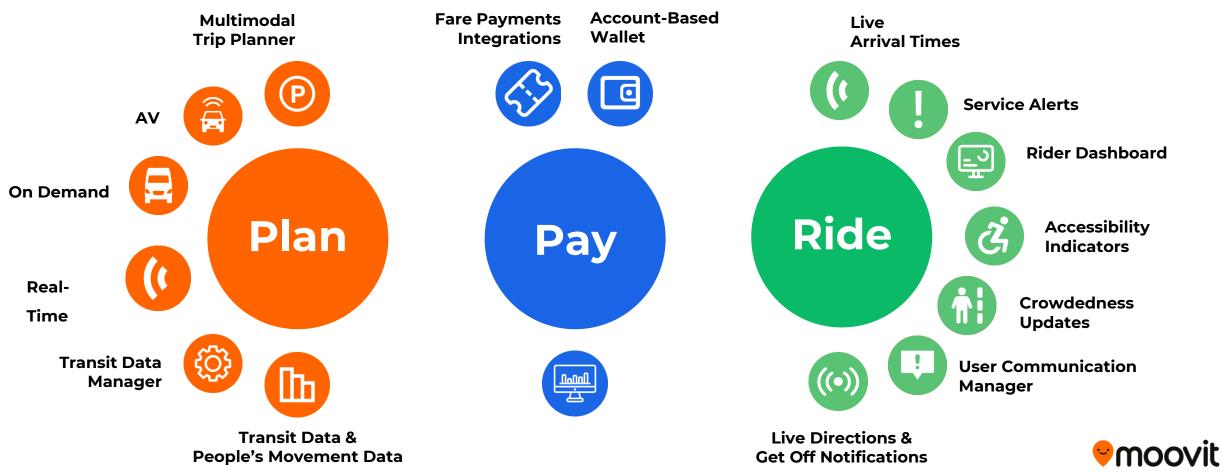
Candidates

- Alt 19
- US 19
- SR 580/ Hillsborough
- Dale Mabry
- I-275 North
- Fowler Ave. •
- US 301
- US 41

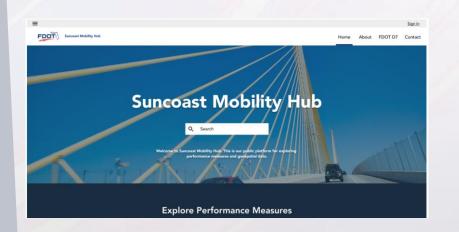


City of Tampa - Mobility as a Service (MaaS) App

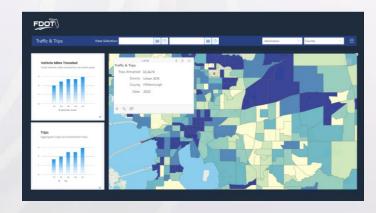




Suncoast MobilityHub A Regional Data Platform for Tampa Bay









In partnership with:













Work Zone Data Exchange (WZDx)

The Work Zone Data Exchange enables cross agency partners to share work zones information and access real-time information.



On the Horizon

DIGITAL TRANSFORMATION

ADVANCED AIR MOBILITY

AUTOMATED VEHICLES

CONSTRUCTION MITIGATION

BEHAVIORIAL SCIENCE

ALTERNATIVE FUELS



PREDICTIVE ANALYTICS

SMART PARKING

ARTIFICIAL INTELLIGENCE



tbsmartcities.com