

# Congestion Management Counter Measures

Hillsborough LRC Committee April 17, 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\*

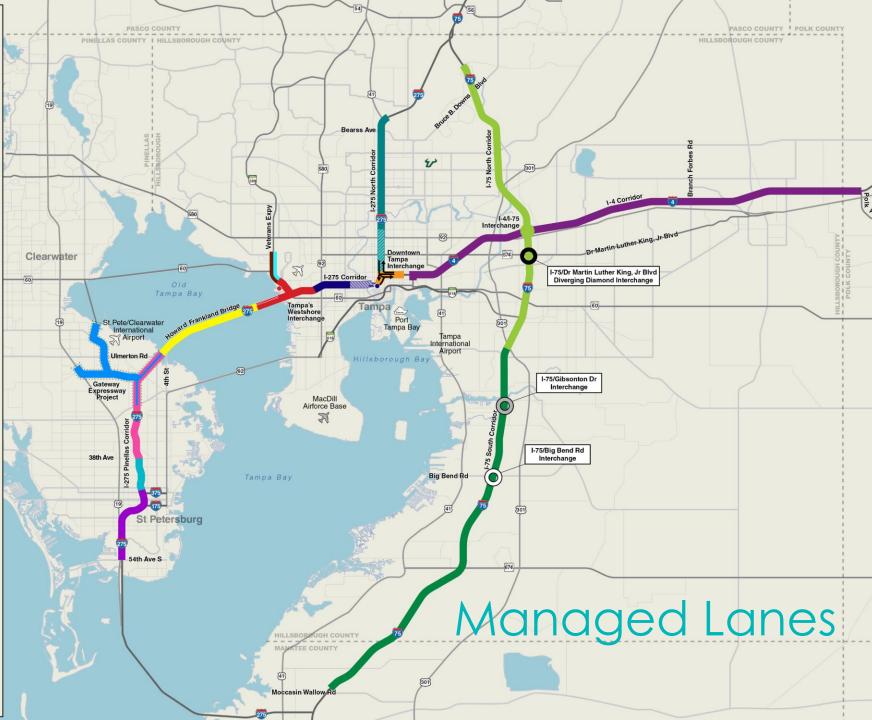
FPIDs 419235-5, 419235-7

#### I-75/Gibsonton Dr Interchange

FPID 437650-2

\* Not currently funded for construction Updat

Updated 02/27/2024

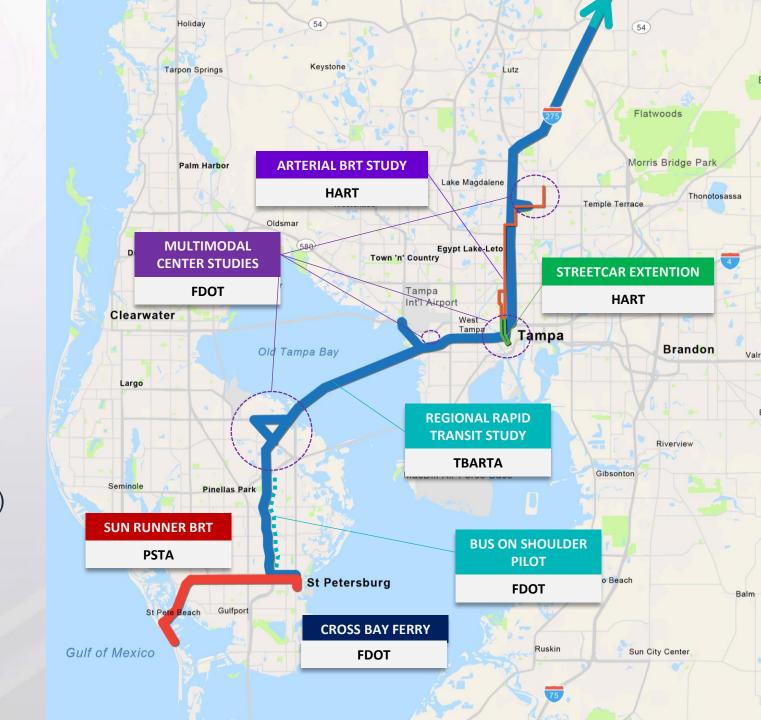


### Demand Management



### 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

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### Innovative Design Strategies

#### **Diverging Diamond Interchange**



I-75 at SR 56 (Pasco)



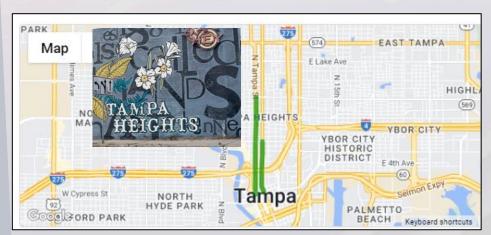
I-75 at MLK Jr. Blvd. (Hills)

#### 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







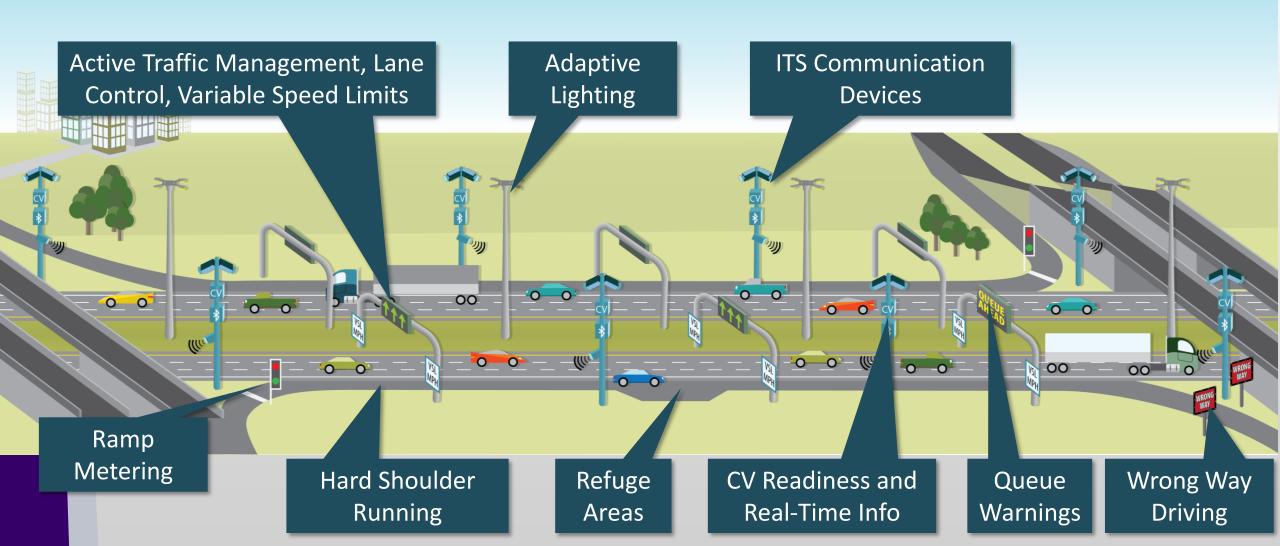






### What is a Smart Corridor?







### **Smart Corridors – Phase 2**

#### **Schedule**

TBD

#### Scope

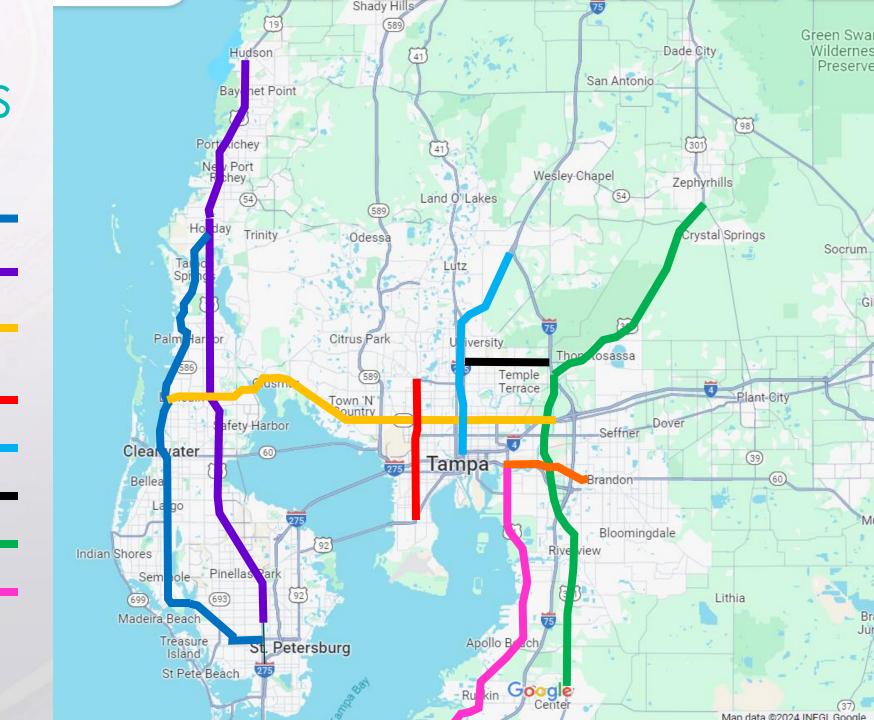
- Focus **on specific corridor** suitable smart technologies.
- Analyze existing and proposed traffic conditions and projected volumes via modeling efforts.
- Create **concept designs and operations** for smart corridors along the roadway segments.
- Finalize the branding/communications plan and public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





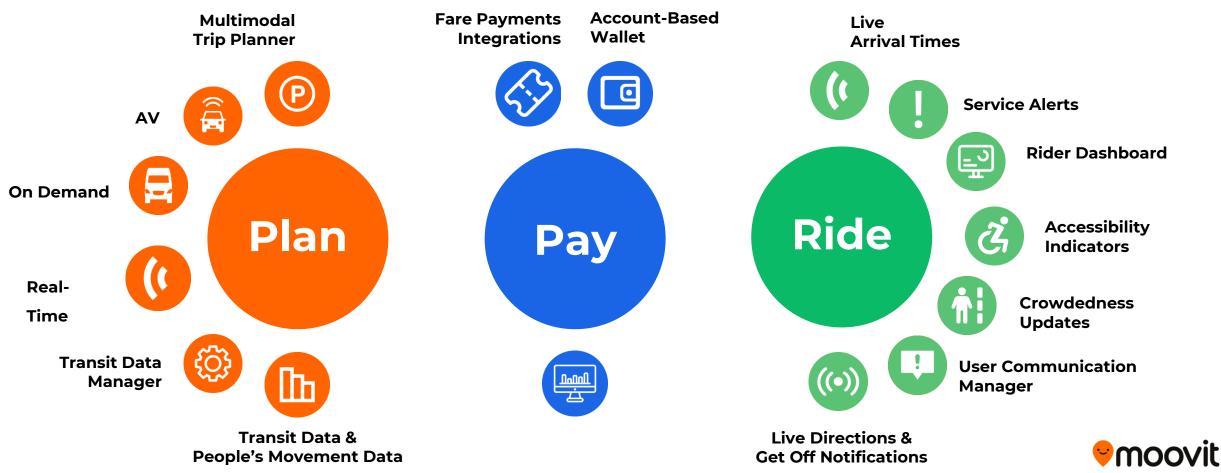
### Candidates

- 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:







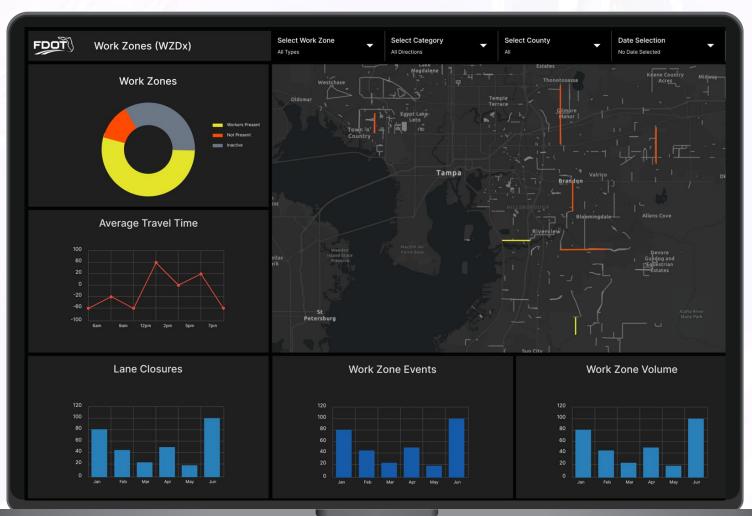






### Work Zone Data Exchange (WZDx)

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** 



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