

Access 2050 Plan Needs Assessment for Major Projects: Performance Data

2050 Long Range Transportation Plan (LRTP)

May 2024



Discussion Outline

- Objective of Major Projects Assessment
- Project Testing Methodology
- Performance Metrics
- Project Ranking
- Economic Benefits Assessment



Objective of Major Projects Assessment

- Part of the 2050 Needs Plan
- Determine the effectiveness of major investment transportation projects
 - Managed Lanes
 - Interchanges
 - Capacity
 - Premium Transit



Tampa Bay Regional Planning Model (TBRPM)

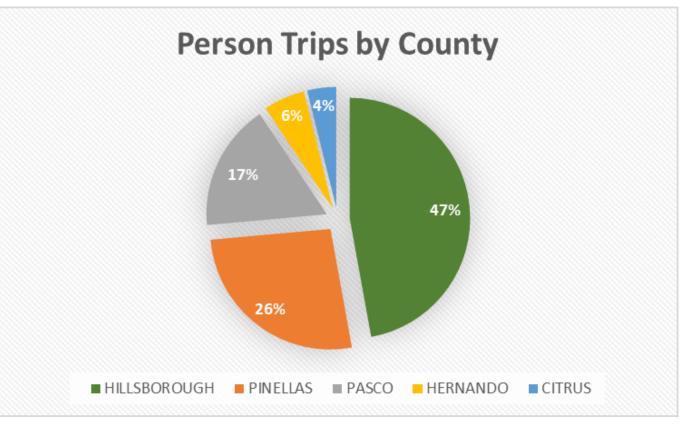
- Year 2050 Forecasts
- 5 Counties
- Over 3,000 highway links
- 2,500 Traffic Analysis Zones
 - Socioeconomic data forecasts
- Includes Transit Network & Mode Choice





Tampa Bay Regional Planning Model (TBRPM)

16.8 Million Person Trips Daily7.2 Million Person Trips 3:30 – 6:30pm

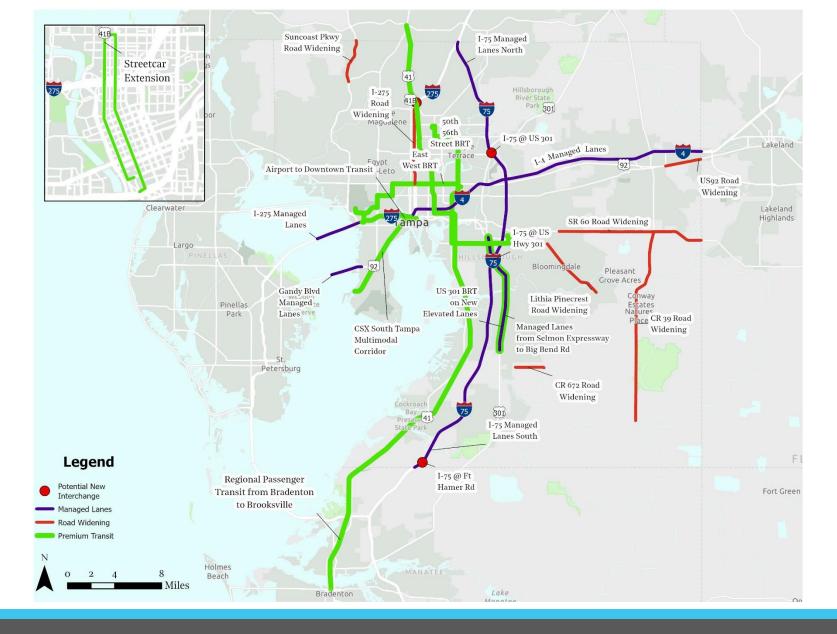


Person trip location based on trip origin. 3 trip types = HB Work, HB Other, Non-Home Based

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Major Investment Projects Evaluated

- 24 separate projects
- 10 model run scenarios





Metrics Used for Project Rankings

- Person Hours of Delay
- Access to Jobs
- •Auto Travel Time
- Transit Travel Time
- Planning Time & Reliability Indices
- •Transit Ridership



Overall Project Rankings (Rank 1 – 10)

Project	Description	Project Limits	Rank
I-4 Managed Lanes	Managed Lanes (4 new)	Downtown (I-275) to Polk County	1
Lithia Pinecrest	Widen 2 to 4 lanes	Fishhawk Blvd to Lumsden Rd	2
Suncoast Parkway	Widening to 8 lanes	Van Dyke Rd to County line	3
Crosstown US 301	Add upper deck lanes; 2 each direction US 301 to Big Bend Road		4
I-75 Managed Lanes South	Managed Lanes (4 new)	Downtown to Manatee County	5
I-275 Managed Lanes	Managed Lanes (4 new)	SR 60 Westshore Int. to Downtown (I-4)	6
SR 60	Widen 4 to 6 lanes	Valrico Rd to Polk County	7
South Tampa Rail (CSX Multimodal Corridor)	Transit (rail)	Downtown to SW Tampa peninsula	8
CR 39	Widen 2 to 4 lanes	SR 60 to SR 674	9
Metrorapid Brandon	BRT on 50th / 56th Street	USF to Brandon	10



Overall Project Rankings (Rank 11 – 20)

Project	Description	Project Limits	Rank
I-75 Managed Lanes North	Managed Lanes (4 new)	Pasco County to Downtown (I-4)	11
US 92	Widen 2 to 4 lanes	Park Rd to Polk County	12
Airport to Downtown Transit	Rail or streetcar	Airport to Downtown	13
I-275	Widen 6 to 8 lanes	Hillsborough Ave to Bearss Ave	14
I-275/US-41 Interchange	New interchange	At US 41	
CR 672 / Balm Rd	Widen 2 to 4 lanes	Clement Pride to Balm Riverview Rd	
I-75 Interchange	New interchange	North of Manatee County line (Ft. Hamer Rd)	
East West BRT	Transit (BRT)	Airport/Westshore to Temple Terrace	
I-75 Interchange	New interchange	US 301 to Harney Rd	
I-75/US 301 Interchange	Interchange Reconstruction	US 301 (south)	20



Overall Project Rankings (Rank 21 – 24)

Project	Description	Project Limits	Rank
US 41 Rail	Regional passenger rail	Bradenton to Brooksville	21
Gandy Bridge	New bridge	Pinellas County to Selmon Gandy extension	22
US 301 BRT	BRT on new road	End of Selmon Xway to US 301 (Big Bend Rd)	23
TECO Streetcar Extension	Along Tampa Ave/FL Ave one-way pairs	Ft. Brooke Garage to Palm Ave	24



Person Hours of Delay Top Projects

PROJECT	DESCRIPTION	PM PEAK HOURS SAVED	DAILY HOURS SAVED
I-4 Managed Lanes	Add 4L – I-275 to Polk Co.	22,425	55,847
I-75 Managed Lanes South	Add 4L – I-4 to Manatee Co.	4,891	20,284
Crosstown US 301	Add 4L (upper deck) – US 301 to Big Bend Rd	2,837	8,475
I-275 Managed Lanes	Add 4L – SR 60 Westshore to I-4	1,823	5,885
I-75 Managed Lanes North	Add 4L – I-4 to Pasco Co.	700	5,458
Lithia Pinecrest Widening	2 to 4L – Fishhawk Blvd to Lumsden Rd	1,287	2,643
SR 60 Widening	4 to 6L – Valrico Rd to Polk Co.	1,323	2,550
I-275 Widening	6 to 8L - Hillsborough Ave to Bearss Ave	742	1,998

Hours of travel time saved system-wide associated with the specific proposed project.



Person Value of Time / Reliability

Category	2015 \$/Hr ⁽¹⁾	2024 \$/Hr ⁽²⁾
Personal	\$13.60	\$17.64
Business	\$25.40	\$32.94
All Trips	\$14.10	\$18.29

Source: USDOT – Revised Guidance on Valuation of Travel Time in Economic Analysis, Sept. 2016
 US Bureau of Labor Statistics, Changes in CPI values Dec. 2015 to Dec. 2023



Person Value of Time / Reliability

PROJECT	RANK	DAILY HOURS SAVED	DAILY PERSON VALUE
I-4 Managed Lanes	1	55,847	\$1,021,442
Lithia Pinecrest	2	2,643	\$48,340
Suncoast Parkway	3	1,057	\$19,332
Crosstown US 301	4	8,475	\$155,008
I-75 South Managed Lanes	5	20,284	\$370,994

Daily person value based on \$18.29 per hour.



Freight Value of Time / Reliability

- Fright carriers Value of Reliability = \$51 to \$290/hour ⁽¹⁾
 2024 Average value = \$71.33⁽²⁾
- Freight movement value is 4 times greater than individual person's travel time value

(1) Source: FHWA Transportation Systems Management and Operations Benefit-Cost Analysis Compendium, July 2015
(2) US Bureau of Labor Statistics, changes in CPI values Dec. 2015 to Dec. 2023



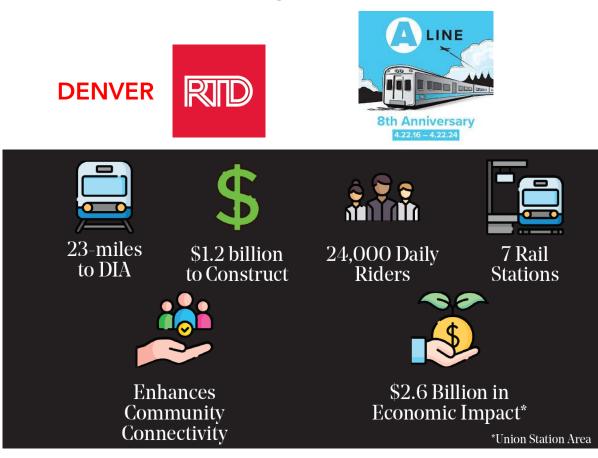
Freight Value of Time / Reliability

PROJECT	RANK	DAILY HOURS SAVED	DAILY TRUCK PERCENTAGE	DAILY FREIGHT MOVEMENT VALUE
I-4 Managed Lanes	1	55,847	12.1%	\$482,012
Lithia Pinecrest	2	2,643	8.8%	\$16,590
Suncoast Parkway	3	1,057	13.6%	\$10,254
Crosstown US 301	4	8,475	8.4%	\$50,780
I-75 Managed Lanes South	5	20,284	9.0%	\$130,217

Daily freight movement value based on \$71.33 per hour.



Economic Value of Major Transit Projects





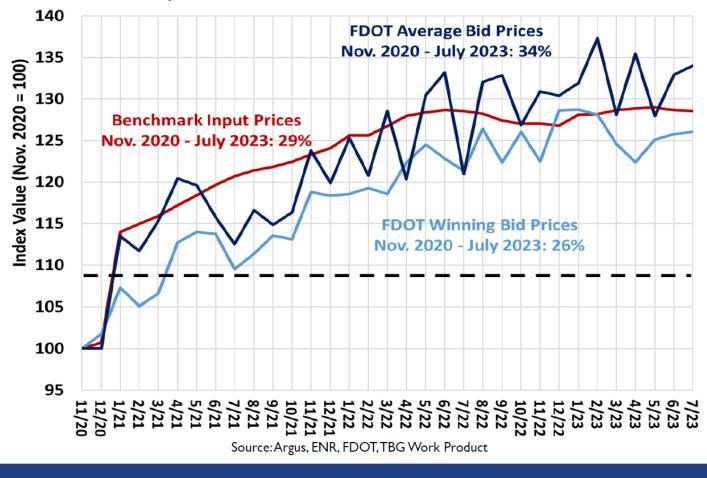


Every \$1 Invested in public transit generates \$5 in economic benefits. Source: American Public Transit Association



Escalating Project Costs

Florida Producer Input Prices vs. FDOT Bid Prices



Source: FDOT Construction Cost Indicators, Sept. 20, 2023

Florida Department of Transportation



Requested Action & Next Steps

- Accept the 2050 Needs Assessment for Major Projects Study and Performance Data
- 2. Forward the Major Project Ranking List for consideration in the 2050 Cost Feasible Plan



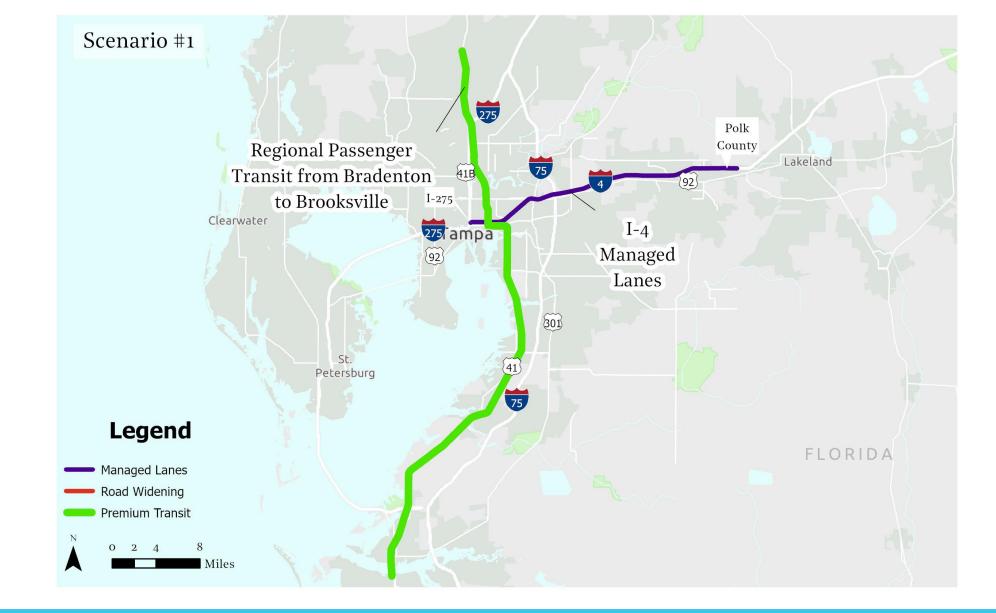
Questions?

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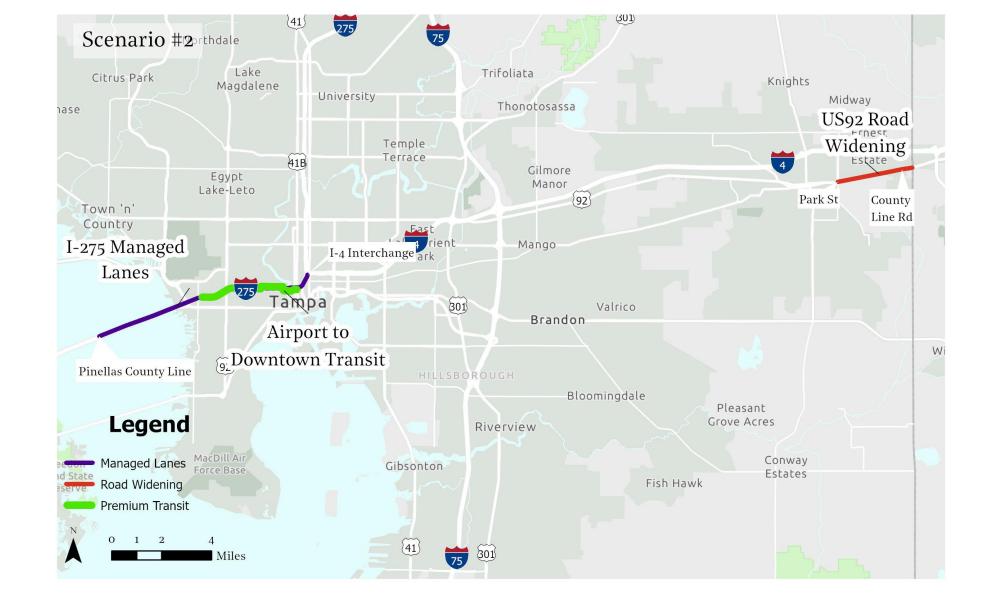


ADDITIONAL SLIDES SCENARIO PROJECT MAPS

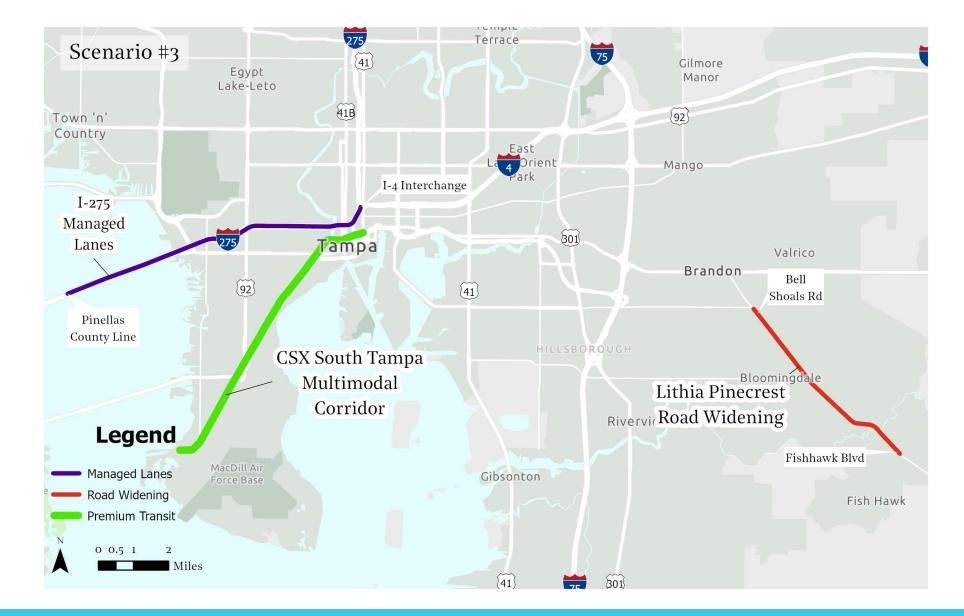




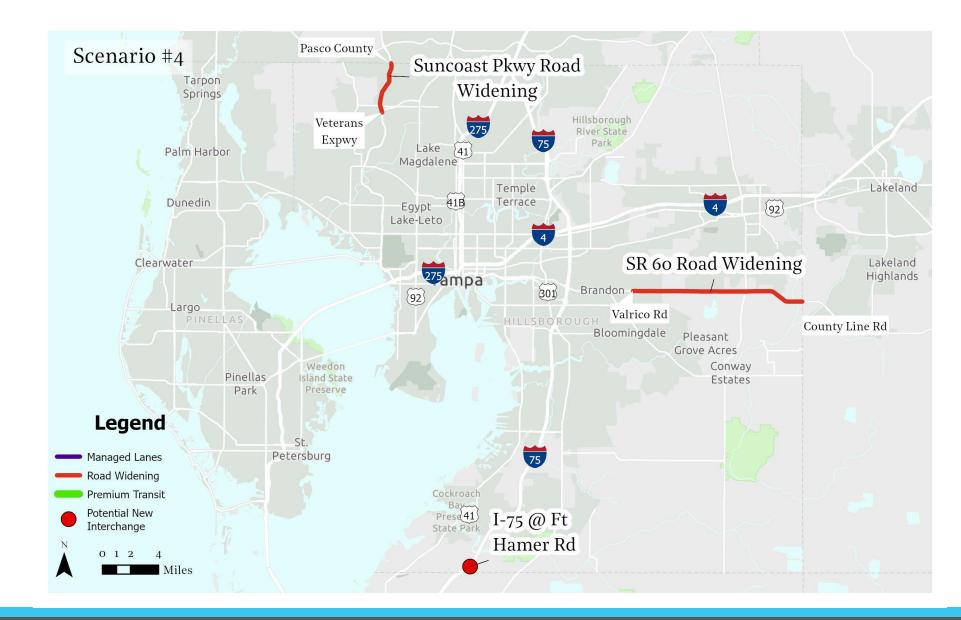




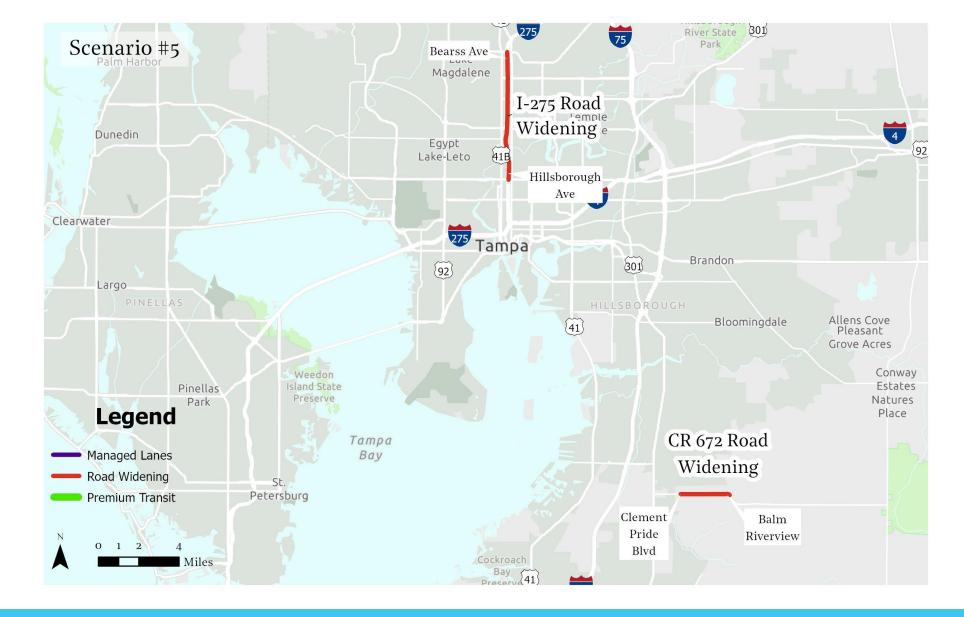












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