

2050 Transportation Plan

Preliminary Discussion of Cost-Feasible Scenarios – to be drafted this winter



Trend Spending \$137 M/yr

• 27% of roads achieve goal to resurface once every 12-20 years

Performance Spending \$225 M/yr

- 100% of roads achieve goal to resurface once every 12-20 years
- Typical roads will be resurfaced once every 18 years







Needs Assessment for Good Repair & Resilience **Bridge Maintenance**

Trend Spending

- Annual budget \$23 M
- Continued routine maintenance on bridges
- **86% of bridges achieve goal** of rehabilitation every 40 years
- Funding shortfall applies primarily to County and City of Tampa owned bridges

Performance Spending

- Annual budget \$27 M
- Continued routine maintenance on bridges
- 100% of bridges achieve goal of rehabilitation every 40 years



Needs Assessment for Good Repair & Resilience Vulnerable Roads: Stormwater Capacity & Pavement Hardening

Trend spending for stormwater: ~ \$1.6 M/year

Performance spending: New investments to improve stormwater drainage systems on critical roads that are highly to moderately vulnerable: 71 miles

- ~ \$297 M total or
- + ~\$14.8 M annually for 20 years

Trend spending for pavement hardening: ~ \$0 M/ year (May be incorporated into some construction projects)

Performance spending: New investments in hardening pavement & sub-base, raising profile of road, shoreline preservation, wave attenuation on critical roads that are highly to moderately vulnerable: ~71 miles

- ~ \$1,349.5 M total or
- + ~\$67.4 M annually for 20 years



Safety Treatments:

Costs, Performance Outcomes

Trend Spending

- Annual budget \$25 M
- Miles of road improved 643 (over 20 years)
- Reduction in fatality & serious injury crashes - 35%
- Reduction in walk/bike crashes – 55%

Performance Spending

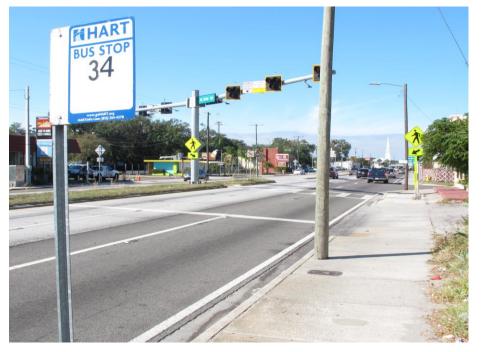
- Annual budget \$50 M
- Miles of road improved 1062 (over 20 years)
- Reduction in fatality & serious injury crashes - 42%
- Reduction in walk/bike crashes— 71%

Assumes that safety treatments are focused on the types of roads with higher crash rates, such as non-limited access arterials.



Needs Assessment for **Safety Treatments**

- Intersection lighting
- Pedestrian crosswalks and signals
- Bike lanes
- Raised median
- Traffic calming and speed reduction
- Reducing driveway density









Traffic Op. Treatments: Costs, Performance Outcomes

Trend Spending

- Annual budget \$24 M
- Roadway miles improved 300 (over 20 years)
- Peak Delay reduction 48%
 - Freeways 64%
 - Collectors 17%
- Speed Increase 14%
 - Freeways 33%
 - Collectors 5%

Performance Spending

- Annual budget \$48 M
- Roadway miles improved 548 (over 20 years)
- Peak Delay reduction 70%
 - Freeways 87%
 - Collectors 59%
- Speed Increase 21%
 - Freeways 50%
 - Collectors 19%

Benefits are as compared to traffic conditions in the year 2050 without traffic op. treatments. On arterials, minimal difference between scenarios. Peak delay reduction ~50%, speed increase ~8%.





Needs Assessment for

Traffic Operation Treatments

Trend Spending

- Freeways: Ramp Metering and Hard Shoulder Running
- Arterials: Computerized Signal Control and Timing

Performance Spending

- Freeways: Ramp Metering and Hard Shoulder Running, Traffic Incident Management
- Arterials: Computerized Signal Control and Timing, Left Turn Lanes at intersections where applicable

Image Courtesy FDOT website



Needs Assessment for Real Choices

Bus Service

Trend Spending

- Annual budget: \$160M
- 9 routes with somewhat frequent service or better (< 30 minutes)
- Longer days on 19 hourly routes



Performance Spending

- Annual budget: \$450M
- 18 routes with somewhat frequent service or better
- About a third of people and jobs in 2050 (1.12 million) are near good/frequent (<=15 minutes) service



Needs Assessment for Real Choices **TD & Paratransit Service**

- ~471,000 residents, growing to ~608,000 in 2050, have a disability, low income, &/or advanced age (at least 2 factors)
- **Trend Spending:** In FY22, Sunshine Line was able to provide **80 thousand** trips for vulnerable people who can't use HART or HART paratransit (~\$1.32 M/ year)
- **Performance Spending:** With TD population growth, we estimate the need for more than **1 million** such door-to-door trips per year (~\$16.5 M/ year)
 - The future need would be ~10% lower if the bus system is expanded



HART provides door-todoor trips for persons with disabilities in the bus service area, per ADA law

Sunshine Line provides bus passes and "last resort" trips, primarily to medical appointments and Aging Services care/nutrition



Needs Assessment for Real Choices

Trails & Sidepaths

Trend Spending

- Annual budget: \$700,000
- 10 new miles of trails & sidepaths (over 20 years)
- Sample projects:
 - Upper Tampa Bay Trail gap
 - Bypass Canal Trail
 - South Coast Greenway
 - South Tampa Greenway

Performance Spending

- Annual budget: \$3.5 M
- 40 new miles of trails & sidepaths (over 20 years)
- Sample projects:
 - I-275 Greenway
 - Cross County Greenway
 - Memorial Highway Trail
 - USF Connection to Downtown
 - Connections to Plant City, Polk County,
 Manatee County & Pasco County





Needs Assessment for Major Projects for Economic Growth

New & Wider Roads, Transit in Dedicated ROW

- 23 USC 106: these major projects require detailed cost estimates and descriptions
- Will be individually listed in the Long Range Plan

List of proposed *Major Projects*



 Public, agency staff, and Board will propose new Major Projects to consider Evaluation

 TPO staff will estimate costs and model each project's performance using 2050 population, employment, and travel conditions Final selection

 Spring – Summer 2024: public and Board weigh in on which projects to consider costfeasible



New & Wider Roads, Transit in Dedicated ROW What does project performance mean?

Project Description	VHD	Vehicle Emissions	Ridership / Mile	Volume / Capacity Ratio	VMT Change	Travel Speeds	Cost	Job Density
ABC Road Widening	-5%	+8%	N/A	onle	+102%	-21%	\$200M	Minor Job Cluster
XYZ Road Extension	-3%	+12%	NAEX	ample	+44%	-8.3%	\$67M	No Job Cluster
BRT Route 123	-1%	+1%	113	0%	N/A	N/A	\$72M	Minor Job Cluster
BRT Route 234	-3%	-1%	1,054	-0.15	N/A	N/A	\$195M	Major Job Cluster

Analytics not limited to what are shown here – submit requests for any performance data to wongj@plancom.org or ramanv@plancom.org

What about freight movement needs?



Some traffic operational treatments



Some Major Projects

	1-275	Howard Frankland Bridge	N/A	Interstate Modernization Program	8	8 +4ML*
E	SR 580 (Hillsborough Ave.)	SR 589	Cargo Rd.	Capacity Improvements	6	8
F Hillsborough Ave.		SR 589	50th St.	Operational Improvements	6	6
		50th St.	1-4	Operational Improvements	4	4
G	CSX @ U.S. 41 (Rockport)	At U.S. 41 (Rockport)	N/A	Grade Separation	0	6
		Madison Ave.	Causeway Blvd.	Capacity Improvements	4	6
Н	US 41	Causeway Blvd.	1-4	Operational Improvements	6	6
Ī	SR 60	West of US 41/ CSX	East of US 41/ CSX	Grade Separation	4	4
J	US 301	Selmon Expressway	1-4	Capacity Improvements	4	6





Traffic Op. Treatments for Freight: Costs, Performance

Trend Spending

- Annual budget \$12 M
- Travel time reliability gets
 16% better on interstates

Outcomes

 The cost of congestion is reduced by \$12 M on interstates

Performance Spending

- Annual budget \$16 M
- Travel time reliability gets 34% better on interstates
- The cost of congestion is reduced by \$16+ M on interstates





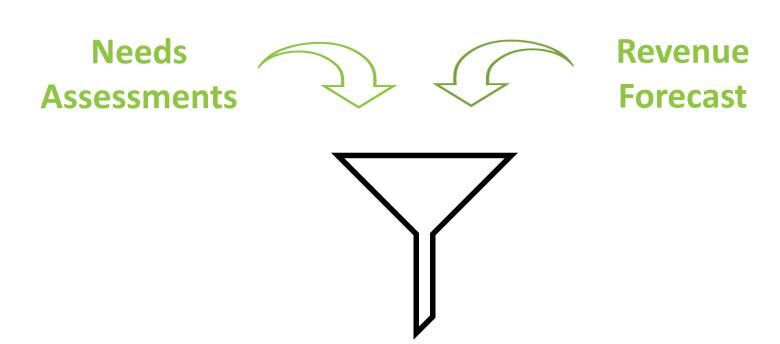
What about equity needs?

Addressing needs in areas where the transportation infrastructure is in poorer condition than the countywide average



PERFORMANCE AREA	TARGET AREA WITH GREATEST DISPARITY	SCORE	COUNTY AVG.	RECOMMENDED TREATMENT
Poor-Failing Pavement Condition Index (PCI)	Sulphur Springs and University Square	79%	18%	Resurfacing of Poor-Failing PCI Roadways
Tree Canopy	Bealsville; Carver City; Palm River-Clair Mel and Progress Village	2%	5%	Tree Canopy Completion
% of crashes that were fatal	Dover	3.88%	0.46%	Corridor Safety Studies
% of crashes that were incapacitating	Ruskin	7.59%	2.27%	Corridor Safety Studies
% of Roadway Miles on HIN	Wimauma	90%	8%	Corridor Safety Studies
Signals per mile	Wimauma	0.23	0.49	Corridor Safety Studies
Presence of PM 2.5	Carver City	8.31	8.12	Transit Improvements, Trail Studies
Percent of Low-Comfort Bike Miles (LTS 3+4)	USF***, Dover, Wimauma	100%	92%**	Bicycle Lane Build, Trail Studies
Percent of Low-Comfort Walk Miles (LTS 3+4)	Wimauma, Dover	100%*	76%**	Sidewalk Build, Trail Studies

The 2050 Plan: Putting the pieces together



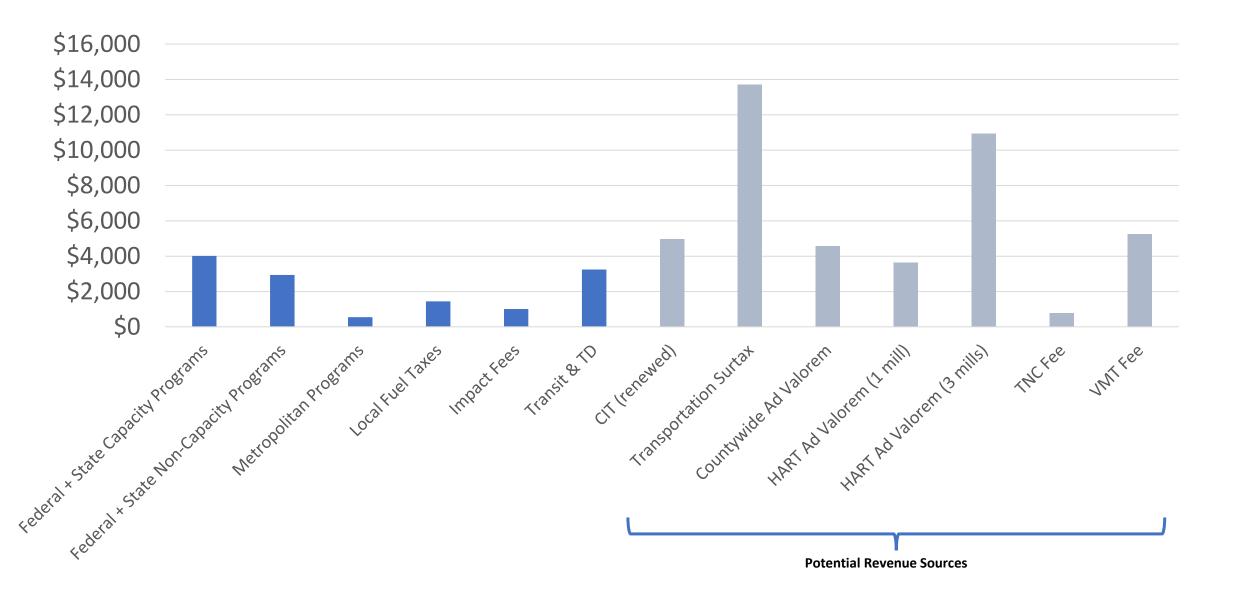
Various scenarios using revenues ("cost feasible scenarios")



Board consideration of preferred scenario



Summary of Available & Potential New Revenues, FY 2031-FY 2050

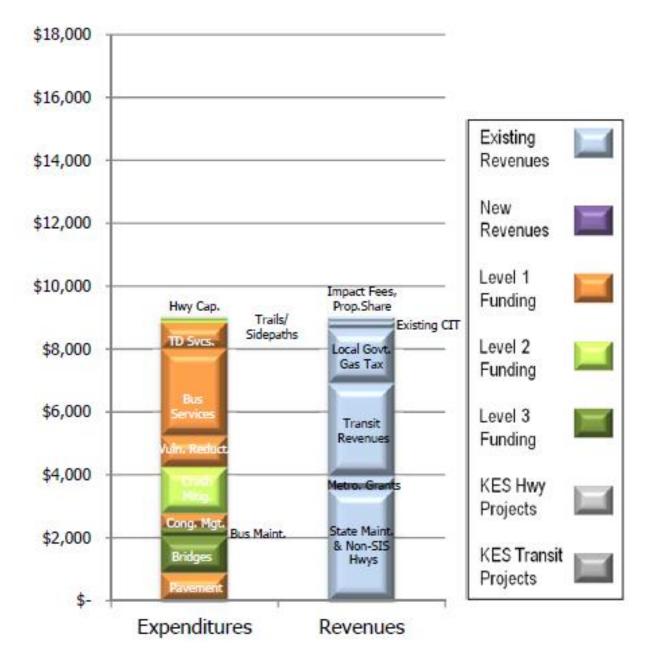


Potential Local Funding



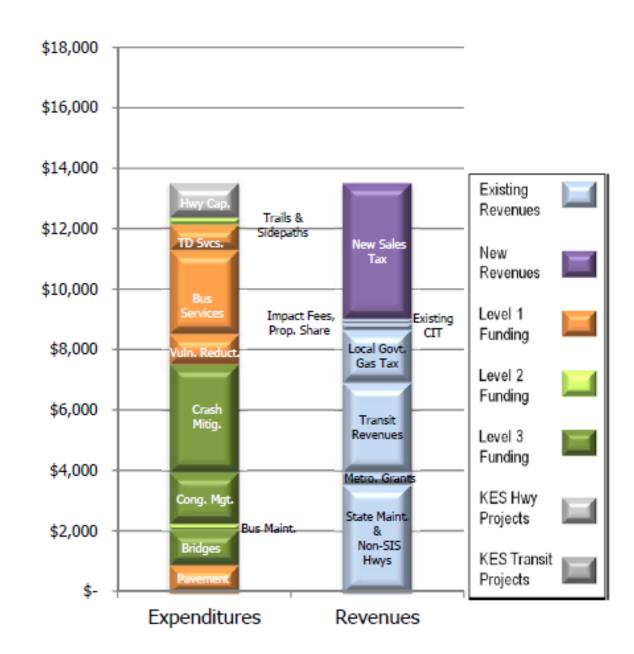
Example Scenarios from the 2040 LRTP

Scenario:
Existing
Revenues,
refocused on
programs
rather than
road
widening



Example Scenarios from the 2040 LRTP

Scenario: ½
Cent Sales Tax
with Focus on
Roads (local
and state
priority road
projects)



Feedback Requested

Input on spending priorities and/or funding strategies to explore

- 2024 spring: ten cost-feasible scenarios for discussion & public feedback
- 2024 fall: Board adoption of preferred/hybrid scenario