

CO-SPONSORS

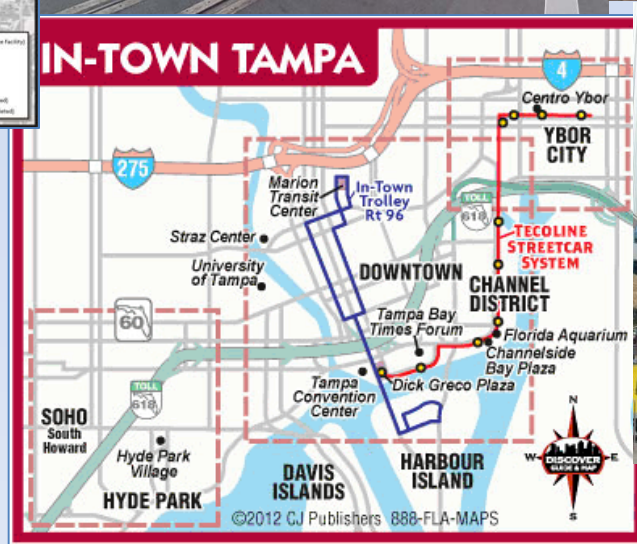
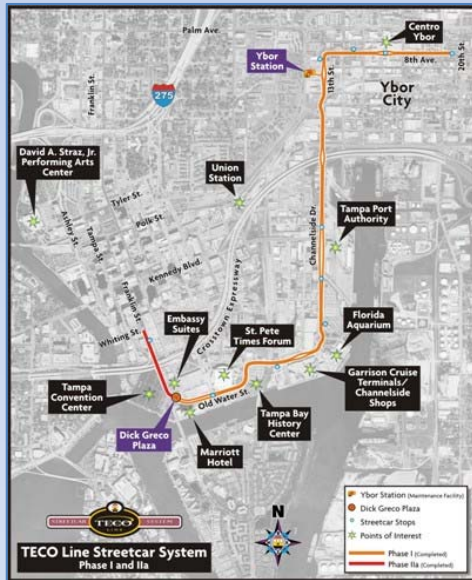


PROJECT MANAGEMENT TEAM



Purpose

Build on assets in urban core:



Goals and Objectives

- Begin regional transit network, starting Downtown
- Leverage existing rail infrastructure
- Find lower cost options
- Identify projects for:
 - 2040 Transportation Plan
 - HART 10-Year Transit Development Plan

Goals and Objectives

- Maximize use of existing transit assets
- Expand transit markets
- Identify opportunities:
 - Integrate rail and bus
 - Maximize flexible use of rail lines
 - Use freight rail corridors

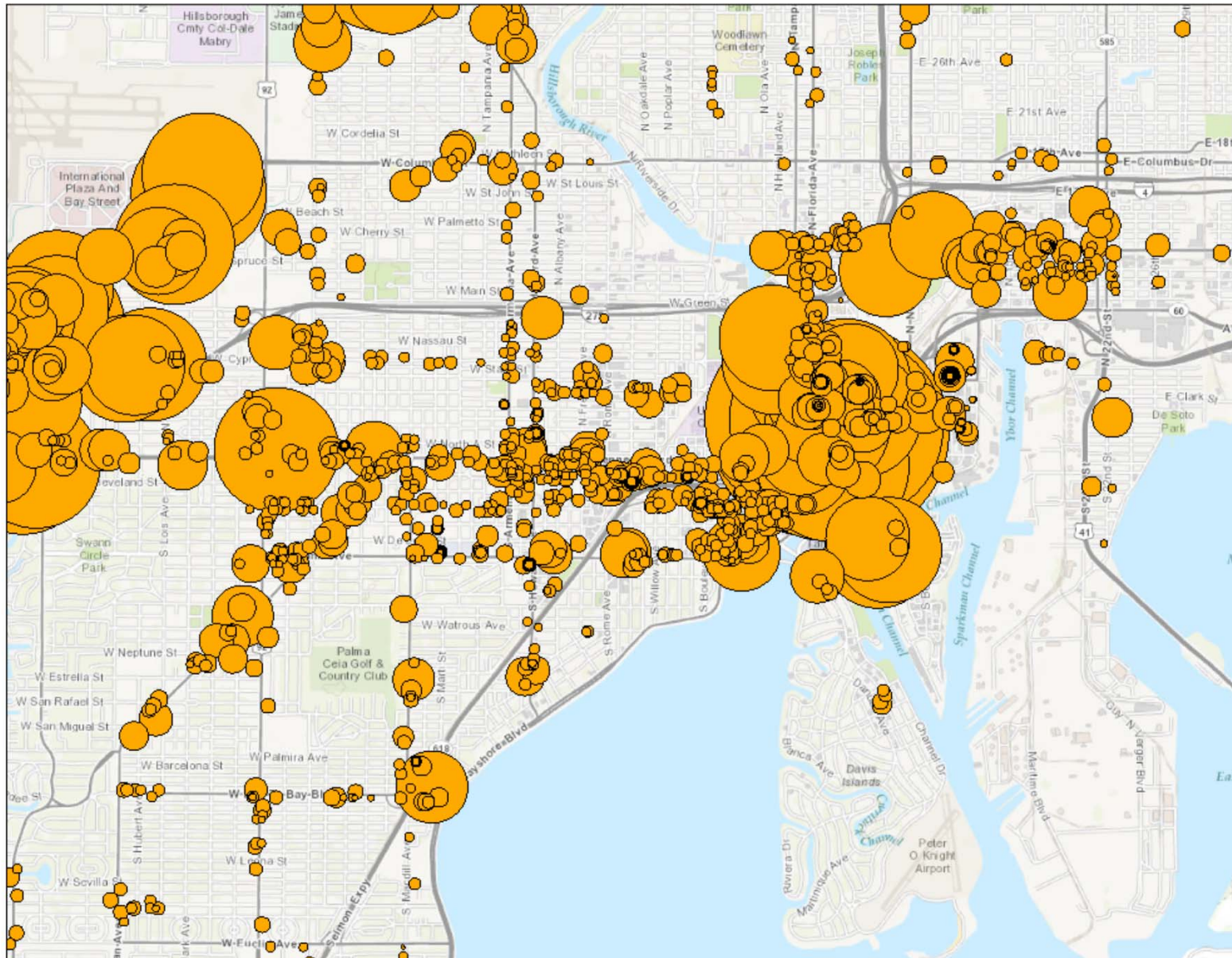
Goals and Objectives

- Create revenue opportunities for streetcar
- Identify opportunities for:
 - Transit oriented development
 - Redevelopment
 - Public-private partnerships
 - Joint development
 - Reducing streetcar liability

Building on Previous Efforts

- HART Alternatives Analysis (2010)
- Tampa Center City Plan (Invision - 2013)
- TBARTA Master Plan (2013)
- HART Tampa Rail Project (Final EIS & Record of Decision - 2004)
- Various studies done for/by
 - Streetcar
 - MPO
 - City of Tampa

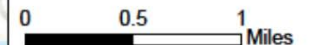
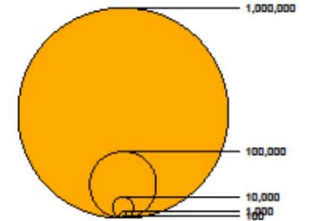
Existing Development Patterns

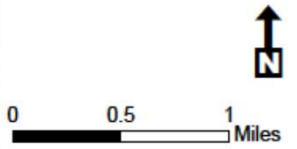
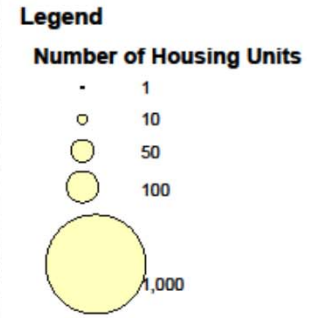
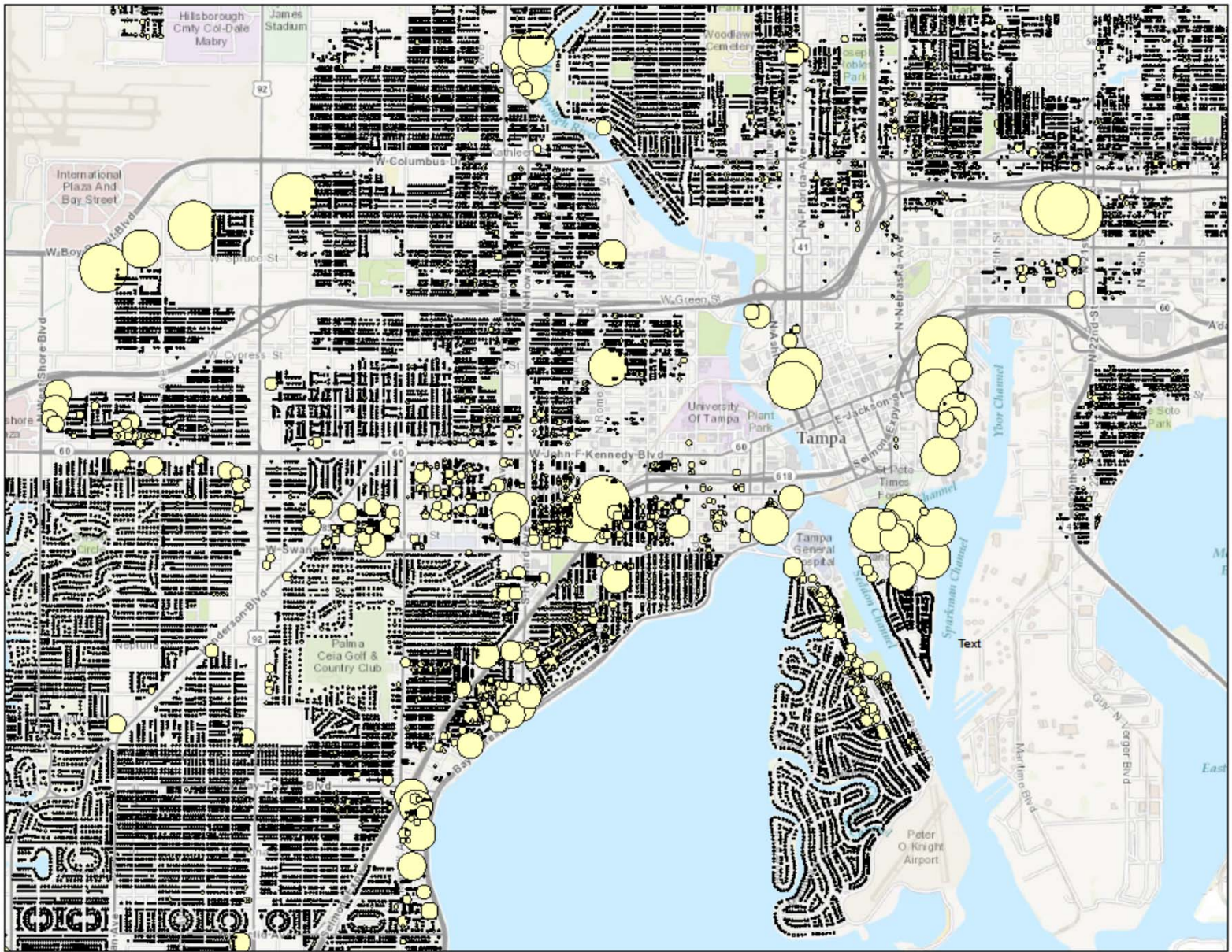


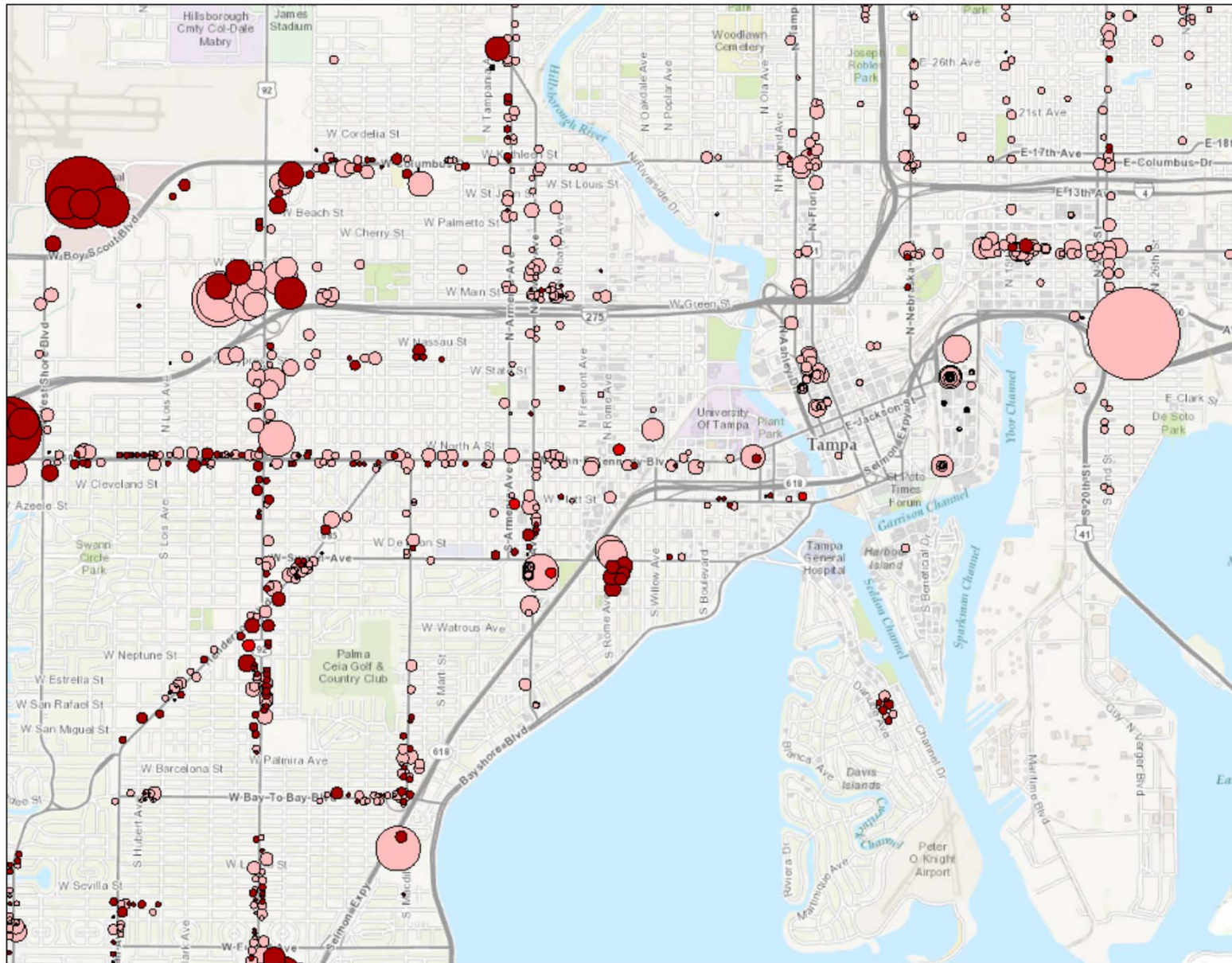
Commercial Office

Legend

Commercial Office







Retail Use

Legend

Drug Store

— 10,000

Supermarket

● 100,000
● 1,000

Regional and Community Shopping

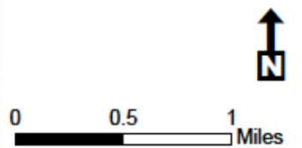
● 1,000,000

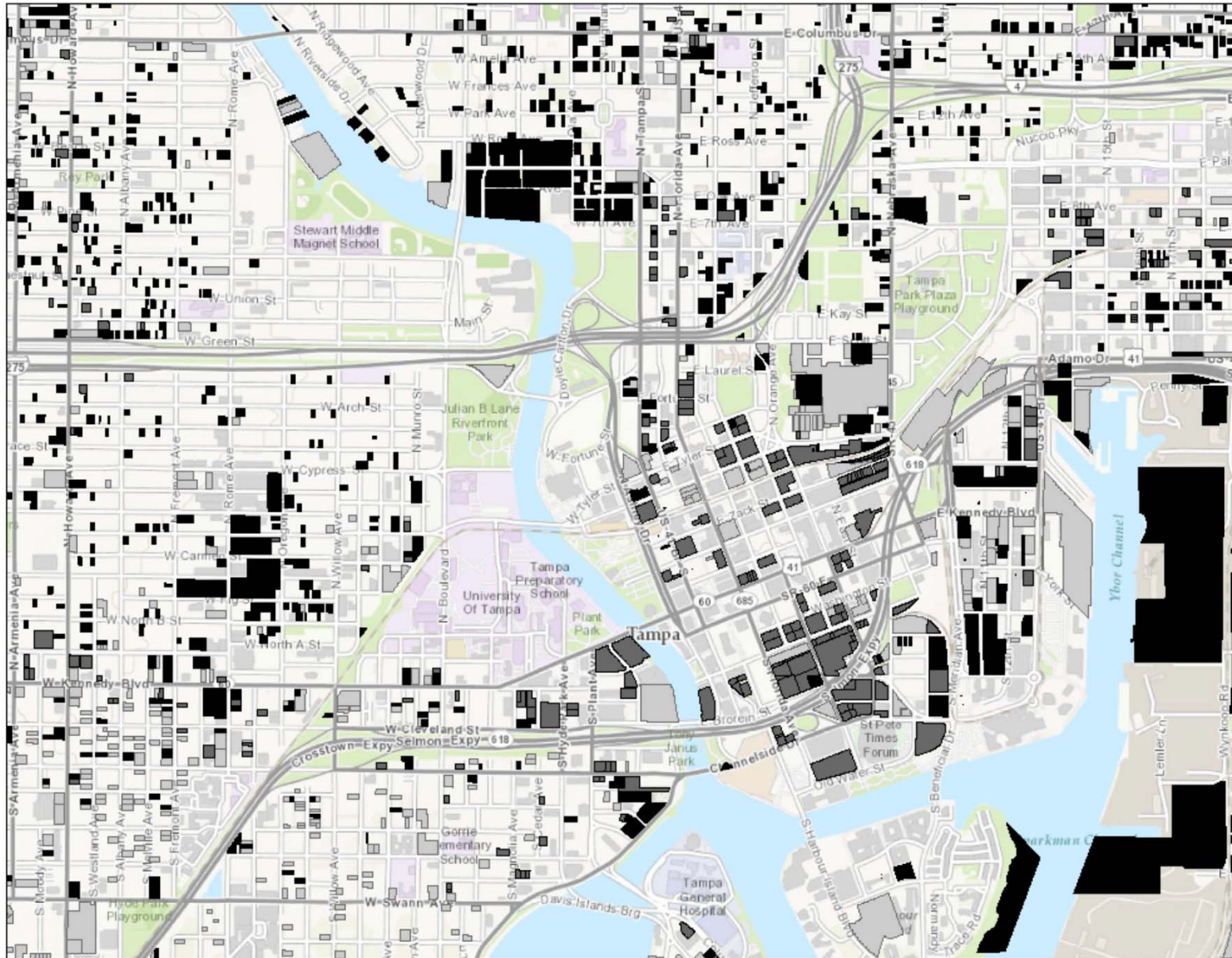
● 100,000
● 10,000

Other Retail

● 100,000

● 10,000

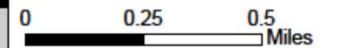




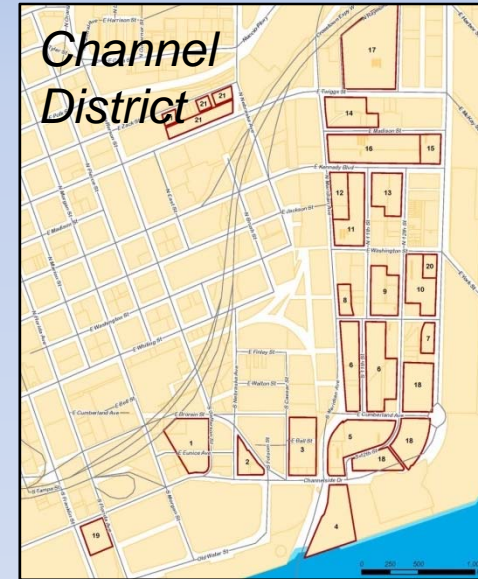
Vacant or Underutilized

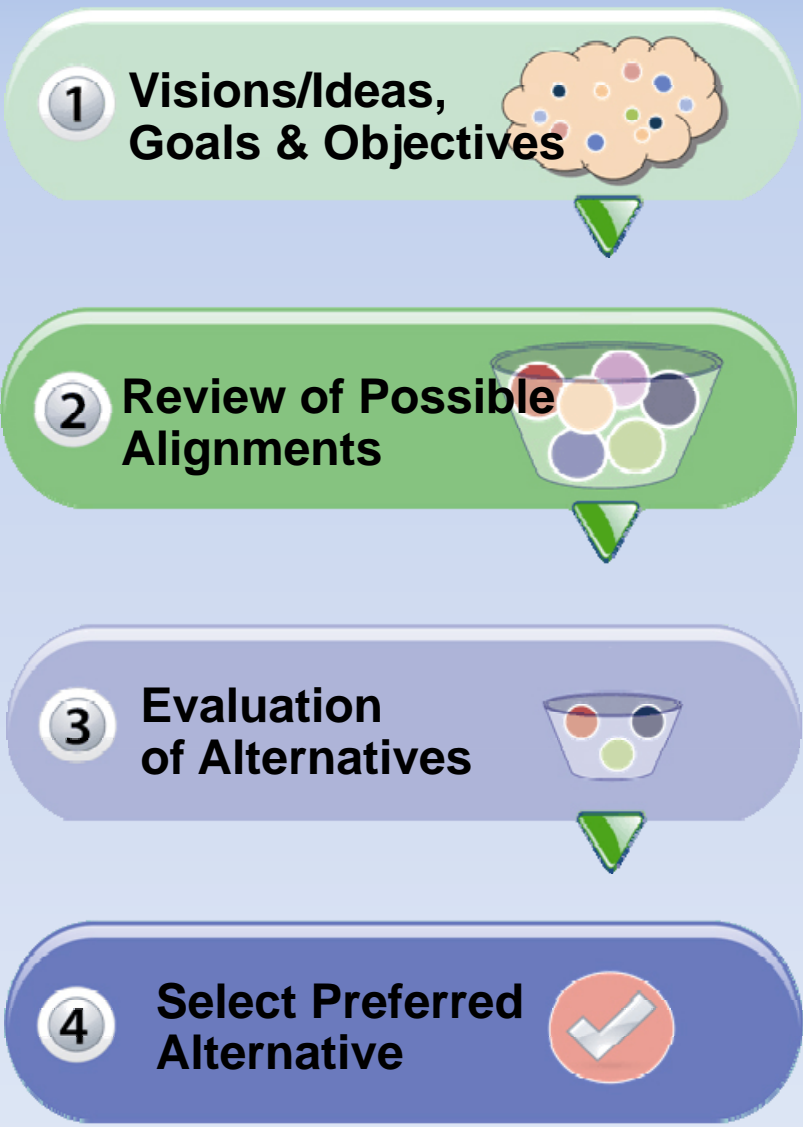
Legend

- Vacant Land
- Parking With Bldg Value < \$250,000
- Land Value $\geq 2.5 \cdot$ Bldg Value



Emerging Development





Stakeholders Meeting #1

Stakeholders Meeting #2

Stakeholders Meeting #3

Stakeholders Meeting #4

Final Report



Alternatives Evaluation

- Started with:
 - Tampa Rail Study
 - HART AA
 - Existing streetcar
- Evaluated:
 - Individual segments
 - 8 system alternatives
- Considered:
 - Findings from previous studies → strongest performers
 - Stakeholder input
 - Scenarios:
 - No use of freight rail
 - Freight rail operating agreement or purchase
 - Use of I-275 median

Evaluation Process

Criteria based on

- Goals and objectives
- Stakeholder input
- Standard transit indicators

Phase 1 – Technical Feasibility (quantitative):

- Engineering constraints
- Cost
- Freight rail liability
- Impact on right-of-way, environment

Evaluation Process

Phase 2 – Transit Success Indicators (qualitative)

- Serves existing & future pop. & job density
- Expands in-fill & redevelopment potential
- Connects activity centers
- Serves disadvantaged populations
- Enhances bus, bike & pedestrians connections

Modes Considered



Light Rail

Modern Streetcar



Modes Considered



DMU (Diesel Multiple Unit)

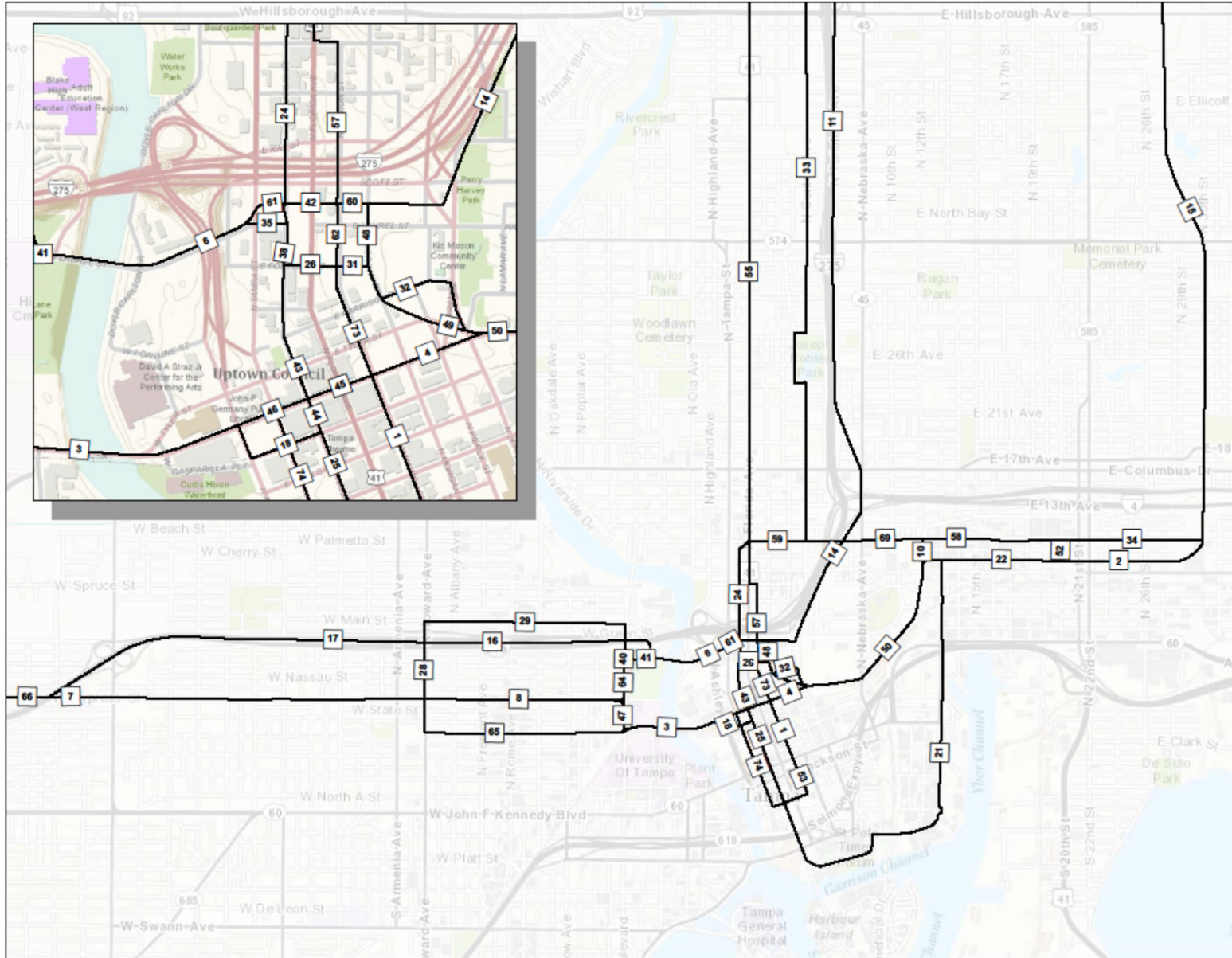


Modes Considered



Rubber-wheeled Circulators





Segment Number

Legend

— Combined Corridors

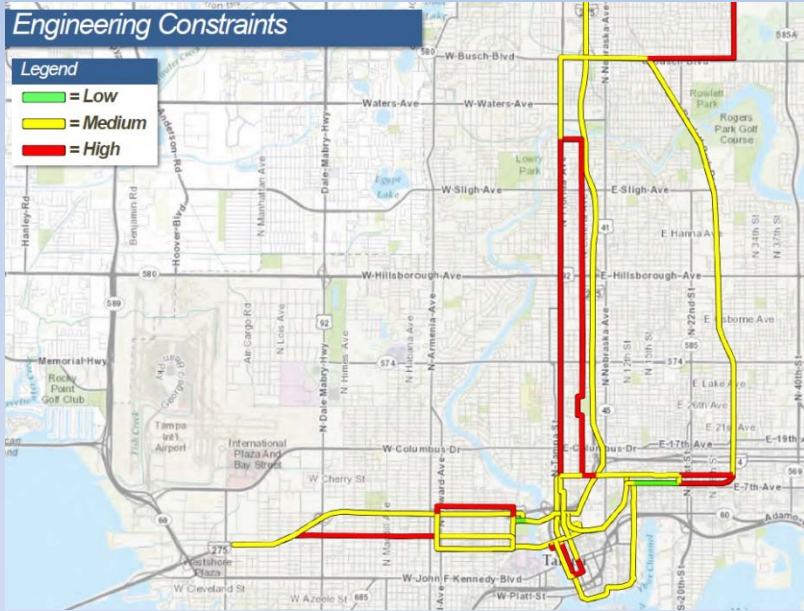
Segments Evaluated



Segment Evaluation

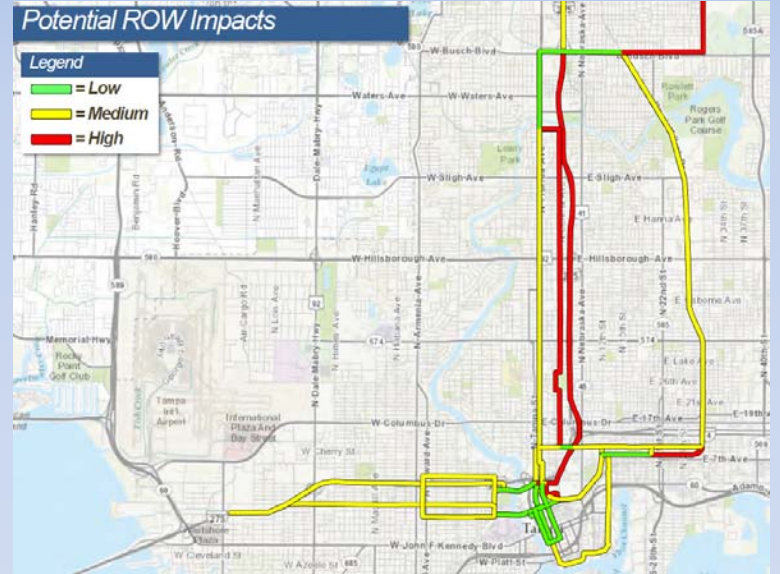
Engineering Constraints

- Legend**
- Green = Low
 - Yellow = Medium
 - Red = High



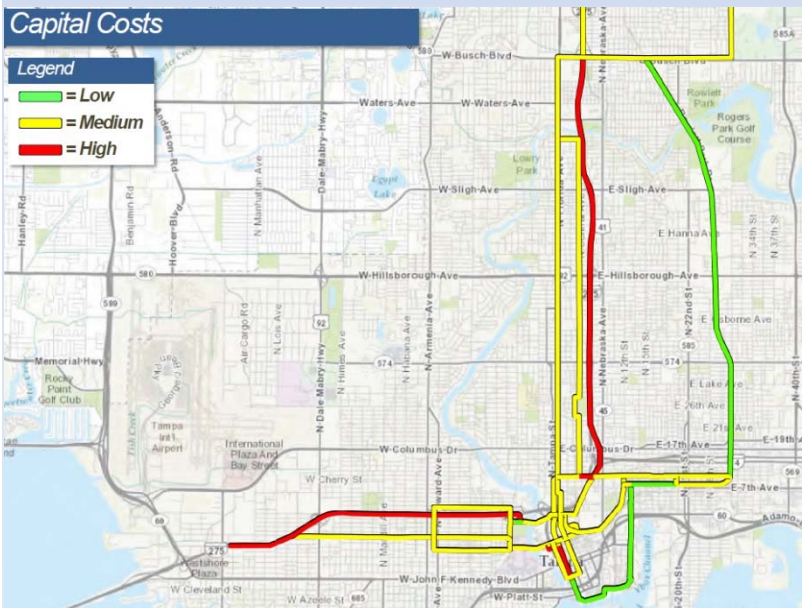
Potential ROW Impacts

- Legend**
- Green = Low
 - Yellow = Medium
 - Red = High



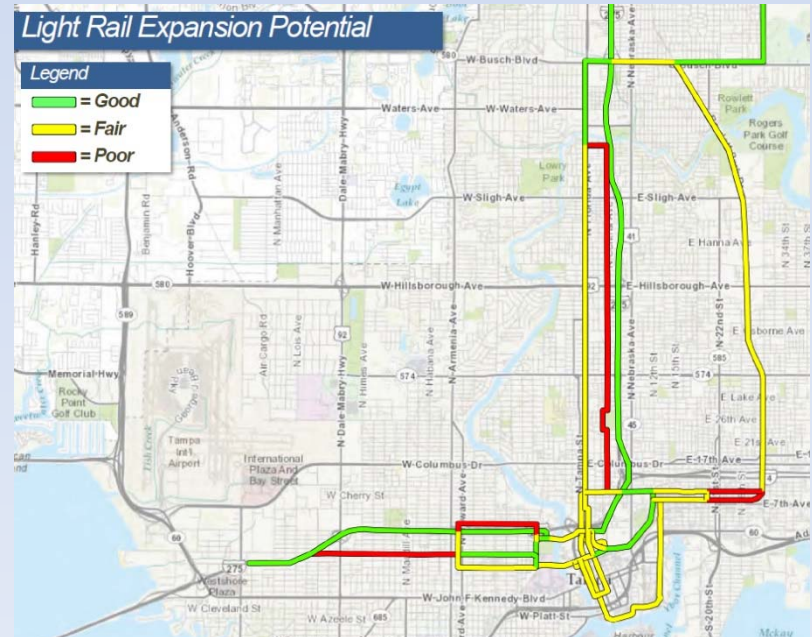
Capital Costs

- Legend**
- Green = Low
 - Yellow = Medium
 - Red = High



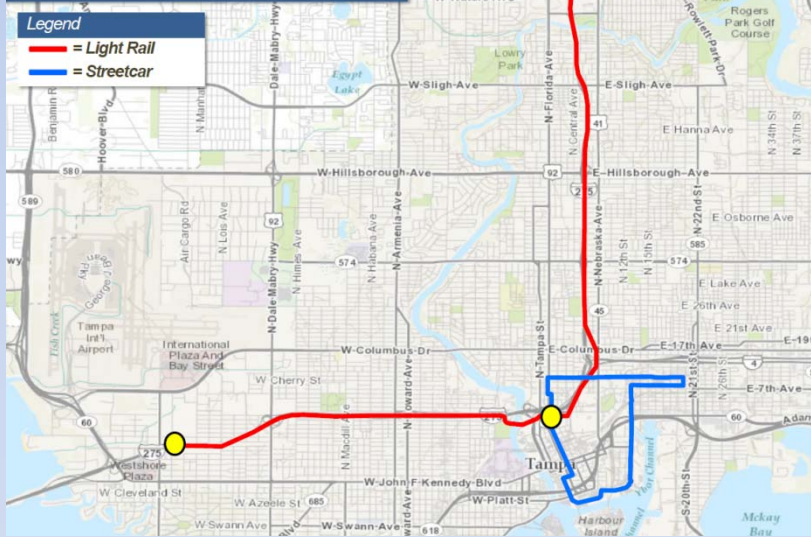
Light Rail Expansion Potential

- Legend**
- Green = Good
 - Yellow = Fair
 - Red = Poor

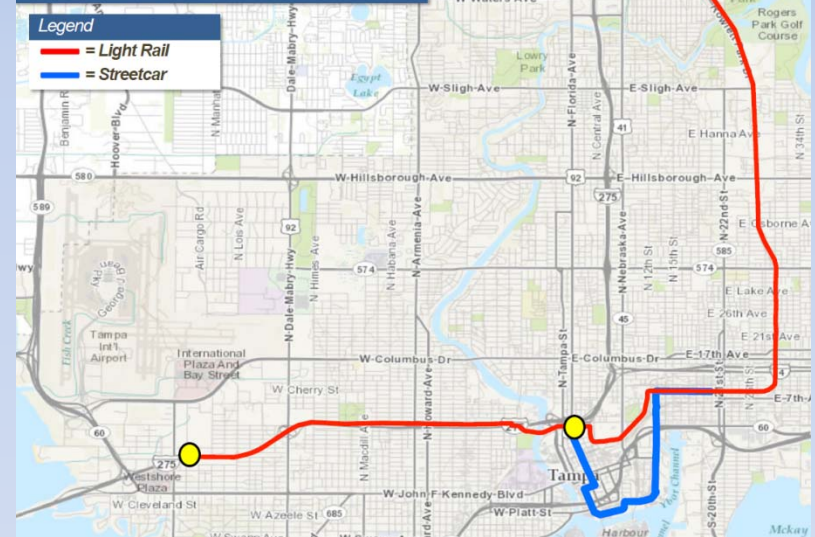


System Alternatives

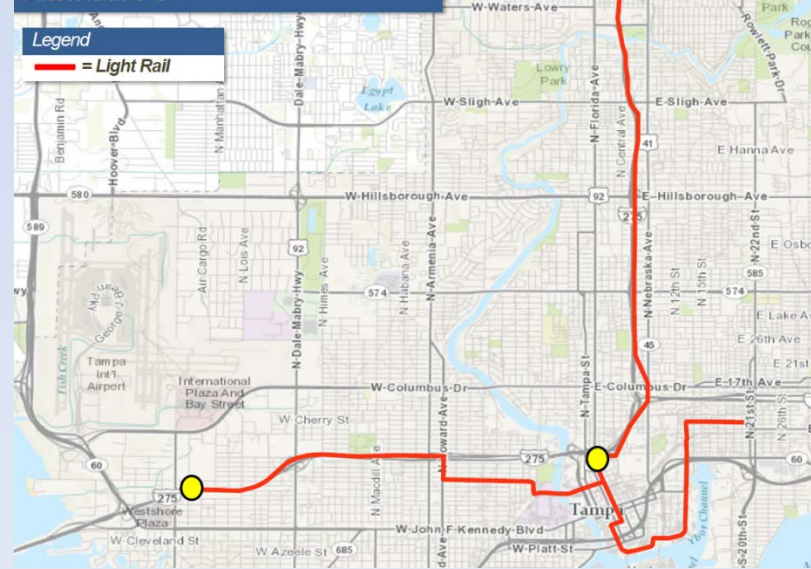
I-275 Light Rail with Streetcar Alternative 1



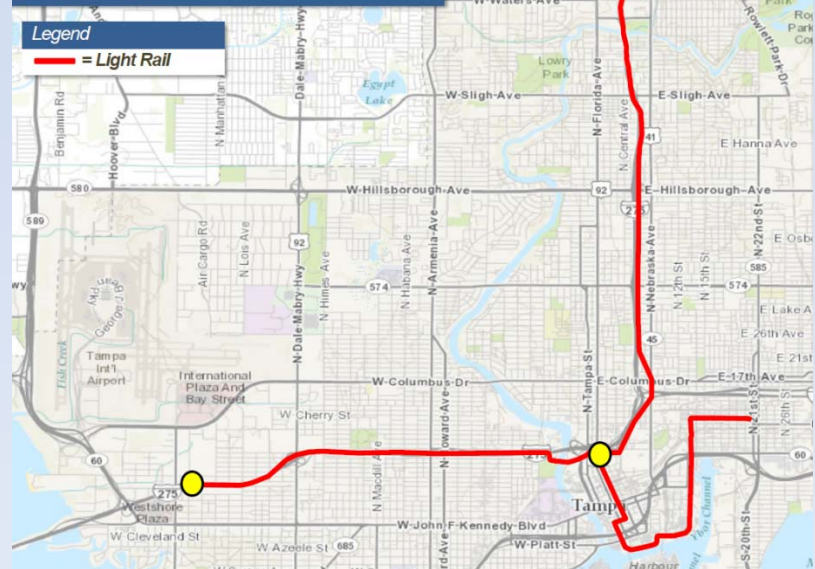
I-275/CSX Light Rail with Streetcar Alternative 2



Cypress/I-275/Streetcar Light Rail Alternative 3

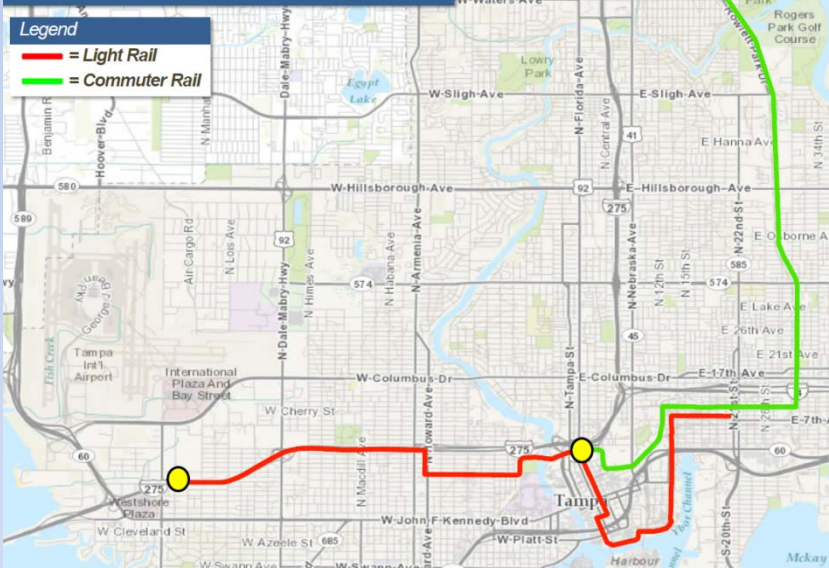


I-275/Laurel/Streetcar Light Rail Alternative 4

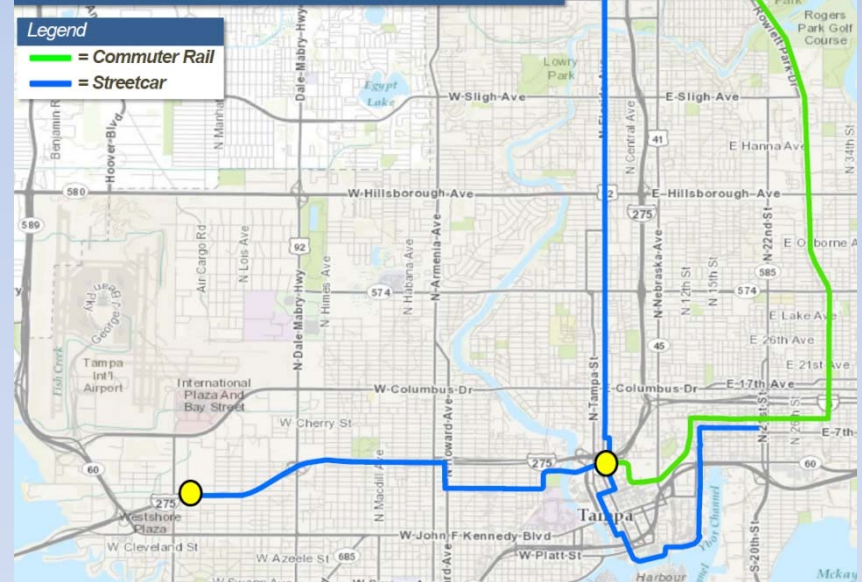


System Alternatives

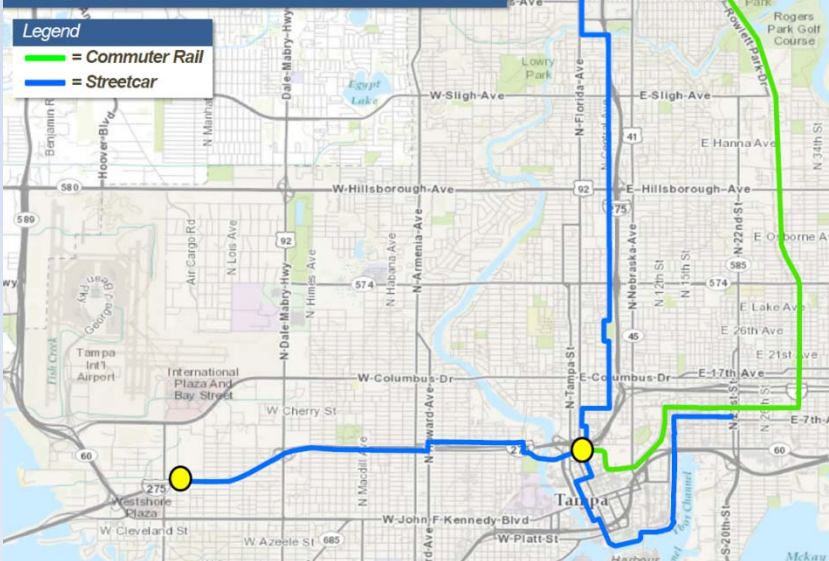
Cypress/I-275 Light Rail – CSX DMU Alternative 5



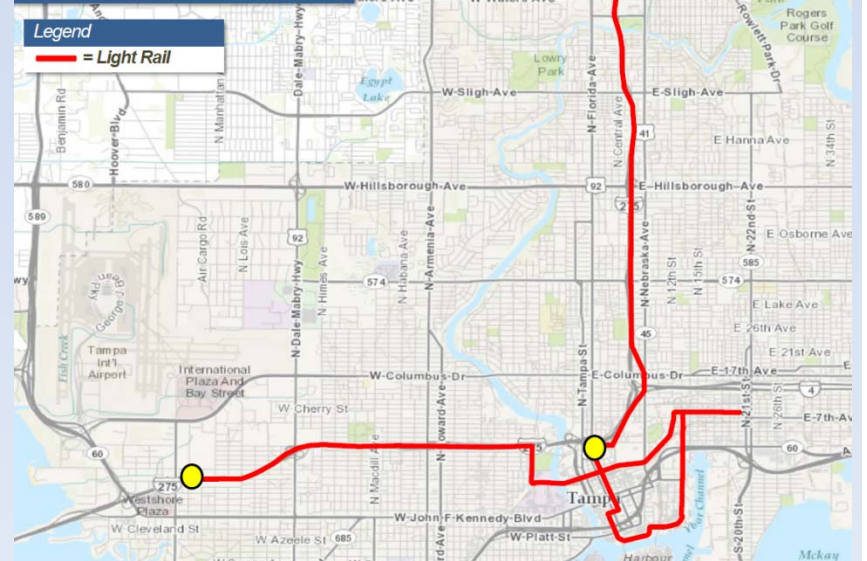
Cypress/I-275/Florida Streetcar – CSX DMU Alternative 6



Main/I-275/Central Streetcar – CSX DMU Alternative 7



I-275/Streetcar Light Rail Alternative 8



Evaluation of Alternatives Results

		Phase I: Initial Screening															
		"Establish a technically feasible and cost effective transit system"											"Maximize System Flexibility and Utilization of Assets"				
		Geometric Analysis		Cost Range		Reduce CSX Liability	Potential for Sociocultural Impacts					Potential for Natural Feature Impacts		Utilization of existing assets		Ability to expand through extensions	
		Engineering constraints	Potentially significant impacts to ROW.	Order of magnitude capital cost range	Operations and maintenance annual cost range	Opportunity to avoid, minimize, or mitigate required liability/insurance provisions.	Potential to Have a Negative Effect on a Historic District or Resource Group	Potential to Have a Negative Effect on a Historic Structure	Potential to Have a Negative Effect on a Historic Bridge	Potential to Have a Negative Effect on a Historic Cemetery	Potential to Have a Negative Effect on a Park	Potential to Have a Negative Effect on a Wetland	Potential to Have a Negative Effect on a Floodplain	Percent of the alignment that utilizes dedicated transit envelope (Marion St. or I-275)	Percent of the alignment that utilizes an existing CSX corridor	Percent of the alignment that utilizes existing streetcar corridor	Does the alignment either enhance, limit, or have no effect the development of other rail alternatives.
System	Description	Low, Medium, High, None	Low, Medium, High	Cost range	Cost Range	Avoid, Minimize, Mitigate, or None	Length of the Segment that passes through a Resource Group	Number of Structures Within 500 Feet	Number of Bridges Within 500 Feet	Number of Cemeteries Within 500 feet	Number of Parks Impacted	Length of Segment in Wetland	Length of Segment in Floodplain	Percent of the alignment that utilizes dedicated transit envelope	Percent of the alignment that utilizes an existing CSX corridor	Percent of the alignment that utilizes existing streetcar corridor	Enhance, Limit, No Effect
1	I-275 Light Rail with Streetcar	2	2	2	(NOT USED FOR SEGMENT ANALYSIS)	(NOT USED FOR SEGMENT ANALYSIS)	2	2	2	1	3	2	1	3	2	3	(NOT USED FOR SEGMENT ANALYSIS)
2	I-275/CSX Light Rail with Streetcar	2	2	2			2	2	2	3	2	1	2	3	2	3	
3	Cypress/I-275/Streetcar Light Rail	1	1	1			2	2	2	1	2	3	2	2	1	2	
3 Alt B	I-275/Laurel/Streetcar Light Rail	1	1	1			1	2	2	1	2	2	1	2	3	2	
4	Cypress/I-275 Light Rail-CSX DMU	2	2	2			2	2	2	1	2	1	2	2	1	2	
5	Cypress/I-275/Florida Streetcar - CSX DMU	3	3	3			2	2	2	1	2	2	3	2	3	2	
5 Alt B	Main/I-275/Central Streetcar - CSX DMU	3	3	3			3	3	3	1	2	2	3	2	3	2	
6	I-275/Streetcar Light Rail	2	2	2			1	2	2	1	2	3	2	2	3	2	

Evaluation of Alternatives Results

Phase II: Secondary Screening																			
"Support Redevelopment, Economic Development, and Create Revenue"				"Enhance Mobility Into and Within Downtown Tampa"															
Maximize redevelopment and infill development		Serve areas of future population and employment densities		Enhance connection to TECO Streetcar and expand its reach		Provide connections between major activity centers		Provide Service to Historically Disadvantaged Populations			Serve areas of existing population and employment densities				Enhance existing and future transit service			Enhance multimodal connections	
Underutilized land: Land designated for use as parking with a structure value less than 250,000 in value or a lot value that exceeds the building value	Infill Development Opportunity - Vacant Land	Future Population (2040) within one-quarter mile	Future Employment (2040) within one-quarter mile	Number of direct connections to existing TECO Streetcar Stations	Number of connections to existing TECO Streetcar stations within 3 blocks or one-quarter mile	Number of quadrants? to which the service has direct connection	Number of Major Activity Centers served by each facility within one-quarter mile of each alignment	Provides Service to Racial Minority Group	Provides Service to Ethnic Minority Group	Provides Service to Low Income Group	Existing Residential Units Within One-Quarter Mile	Existing Commercial Use Within One-Quarter Mile	Serves Existing Population Centers	Serves Existing Employment Centers	Does the alignment connect to the Marion Transit Center (Downtown Intermodal Site)	Does the alignment connect to the HART Metrolink	Bus Stops that fall within one-quarter mile of the alignments	Major Pedestrian and Bike facilities that intersect alignment	Major Pedestrian and Bike facilities are within one-quarter mile of alignment
2F Within 1/4 mile of Alignment	2F Within 1/4 mile of Alignment	Population by Affected TAZ	Population by Affected TAZ	Number of connections	Number of connections	Number of Quadrants	Number of Activity Centers	Length of Alternative Within 1/4 Block Group	Length of Alternative Within 1/2 Block Group	Length of Alternative Within 1/4 Block Group	Number of Units	Total Square Feet	2010 Population Within 1/4 mile of Segment	2010 Employment Within 1/4 mile of Segment	Y or N	Y or N	Number of Stops	Number of Connections	Number of Connections
2	2	2	2	1	1	1	3	2	2	2	2	2	2	2	1	1	2	2	2
3	2	2	2	1	1	3	2	2	3	2	2	3	2	2	1	1	2	2	2
2	2	2	2	1	1	2	2	2	2	2	2	2	3	1	1	2	2	3	
2	2	2	2	1	1	3	3	2	2	3	3	2	2	1	1	1	2	3	2
3	2	1	1	1	1	3	2	2	3	2	3	3	2	1	1	1	2	2	2
2	1	2	2	1	1	2	1	1	1	1	2	2	1	2	1	1	1	2	1
1	1	3	3	1	1	1	1	1	1	1	2	2	1	2	1	1	1	1	1
2	2	1	1	1	1	2	1	2	2	2	2	2	2	1	1	1	2	2	2

Evaluation of Alternatives Results

Alt	Technical Ranking		Systems Cost			
	Total Score		Capital Costs		O&M Costs	
1	33		\$1.5 - \$2.0 B		\$28.6 - \$34.4 M	
2	33		\$1.0 - \$1.3 B		\$25.6 - \$30.7 M	
3	40		\$1.5 - \$2.0 B		\$31.7 - \$38.0 M	
4	38		\$1.5 - \$2.0 B		\$31.7 - \$38.0 M	
5	42		\$800 M - \$1.0 B		\$16.1 - \$19.3 M	
6	47		\$1.0 - \$1.3 B		\$14.1 - \$16.9 M	
7	43		\$1.0 - \$1.3 B		\$14.1 - \$16.9 M	
8	44		\$1.6 - \$2.0 B		\$34.7 - \$41.7 M	

LRT Capital Costs = \$404m to \$525m
 LRT Annual O&M = \$8.4m
 Modern Streetcar Capital Costs = \$320m to \$420m
 Modern Streetcar Annual O&M = \$5.7m
 Laurel Street Bridge = \$20m to \$25m

DRAFT



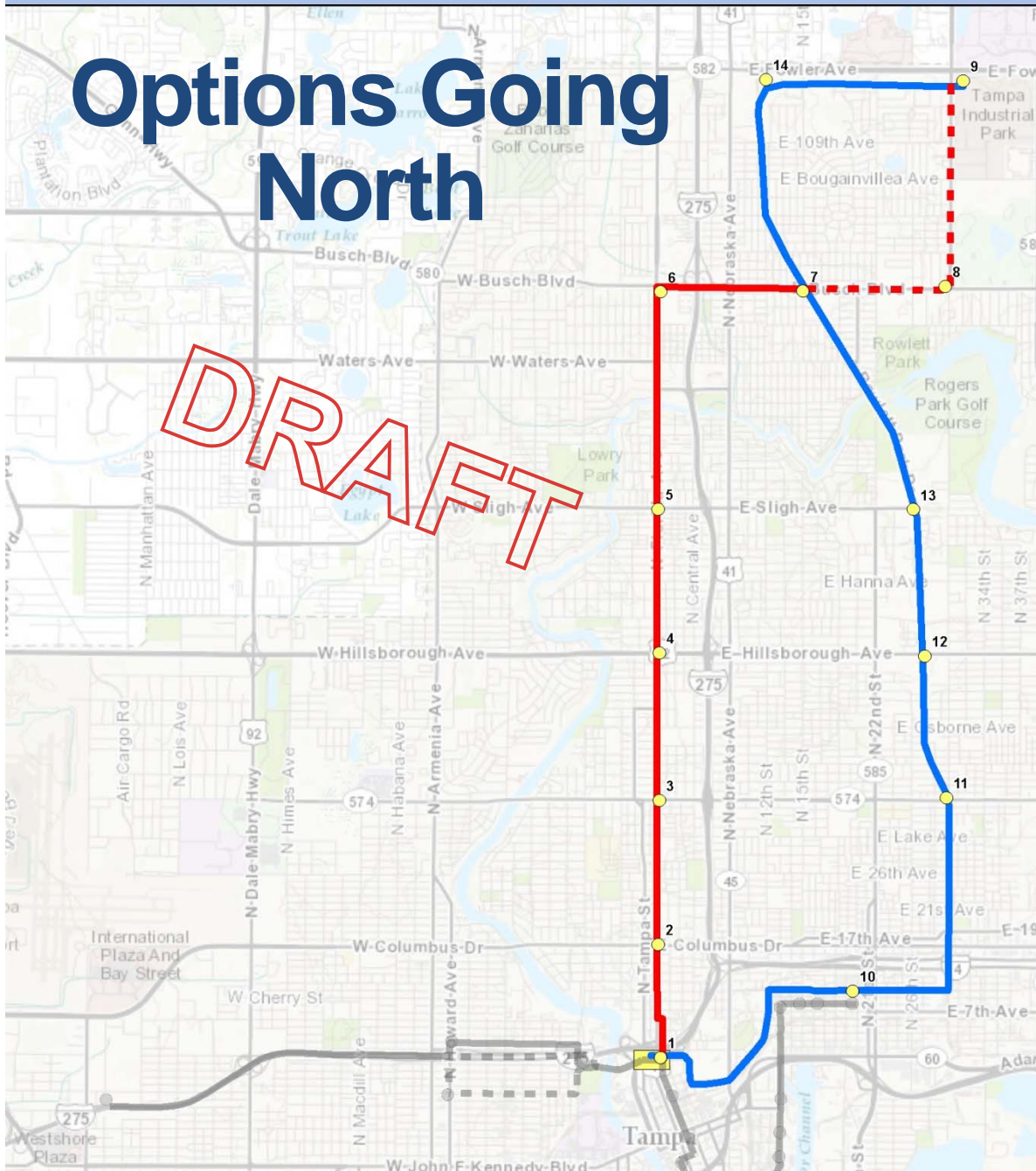
One-seat ride from Convention Center & Cruise Terminal to Westshore Multimodal Center & Airport People Mover Ext.

Peak Headways = 15 min (5 hours)
 Off-Peak Headways = 30 min
 Hours of operation = 18.5 hours (weekdays)
 14 hours (Sat/Sun)

Options Going West

Options Going North

DRAFT



DMU Capital Costs
= \$175m to \$228m
DMU Annual O&M
= \$5.4m
Modern Streetcar Capital Costs
= \$280 to \$360m
Modern Streetcar Annual O&M
= \$4.0m

Passenger service on existing rail (DMU) is potentially 1/2 to 1/3 the cost of previous LRT proposal, downtown to USF

Peak Headways =
15 min (5 hours)
Off-Peak Headways =
30 min
Hours of operation =
18.5 hours (weekdays)
14 hours (Sat/Sun)

Freight Rail Assumptions

* Based on Sunrail costs

In the case of Sunrail in Orlando, the rail corridors were acquired by the State of Florida.

West-Central Florida Rail System (2014)

Legend

Section of Subdivision Used By TAOS Alternative

Rail Subdivision

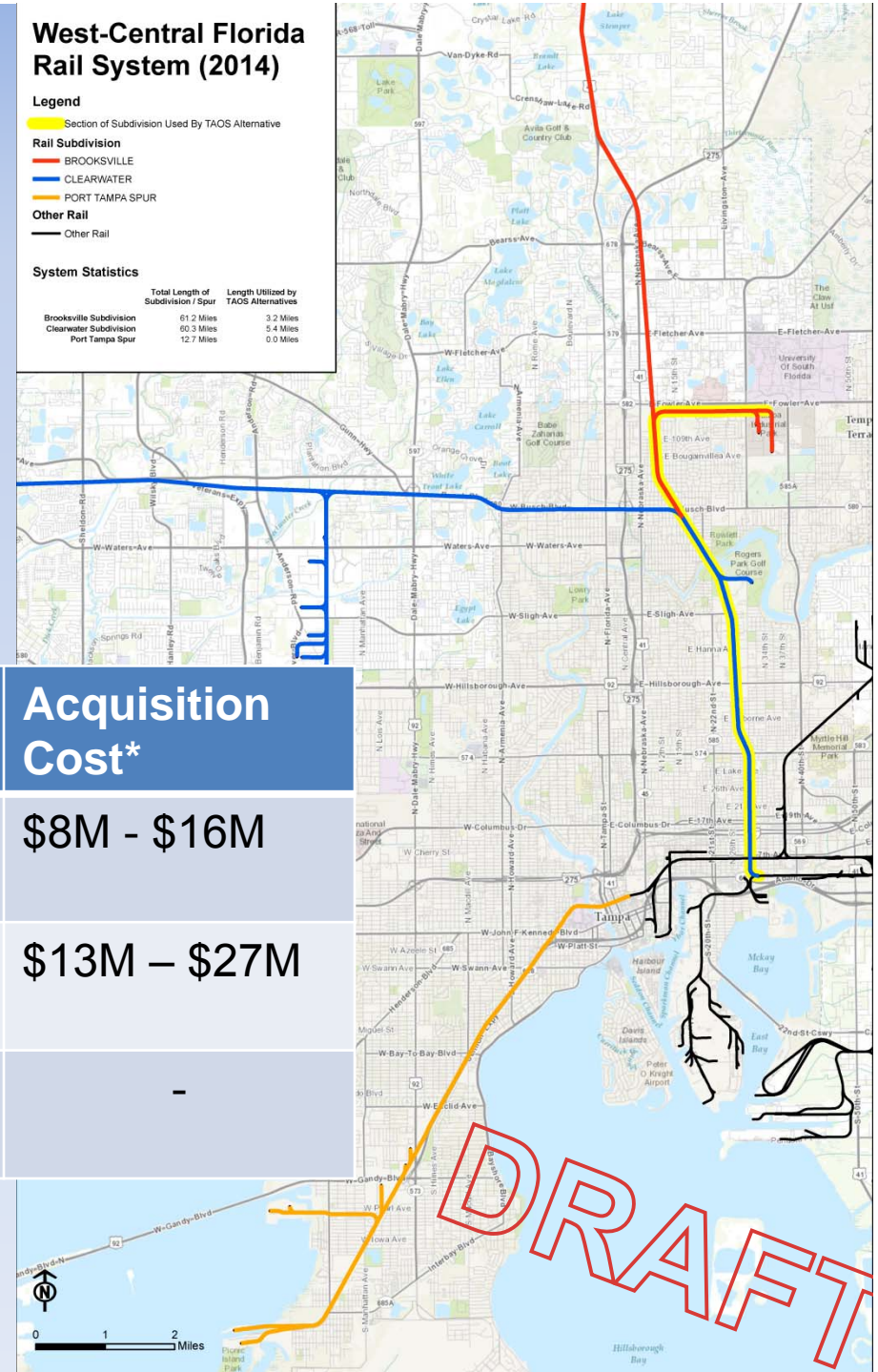
- BROOKSVILLE
- CLEARWATER
- PORT TAMPA SPUR

Other Rail

- Other Rail

System Statistics

	Total Length of Subdivision / Spur	Length Utilized by TAOS Alternatives
Brooksville Subdivision	61.2 Miles	3.2 Miles
Clearwater Subdivision	60.3 Miles	5.4 Miles
Port Tampa Spur	12.7 Miles	0.0 Miles



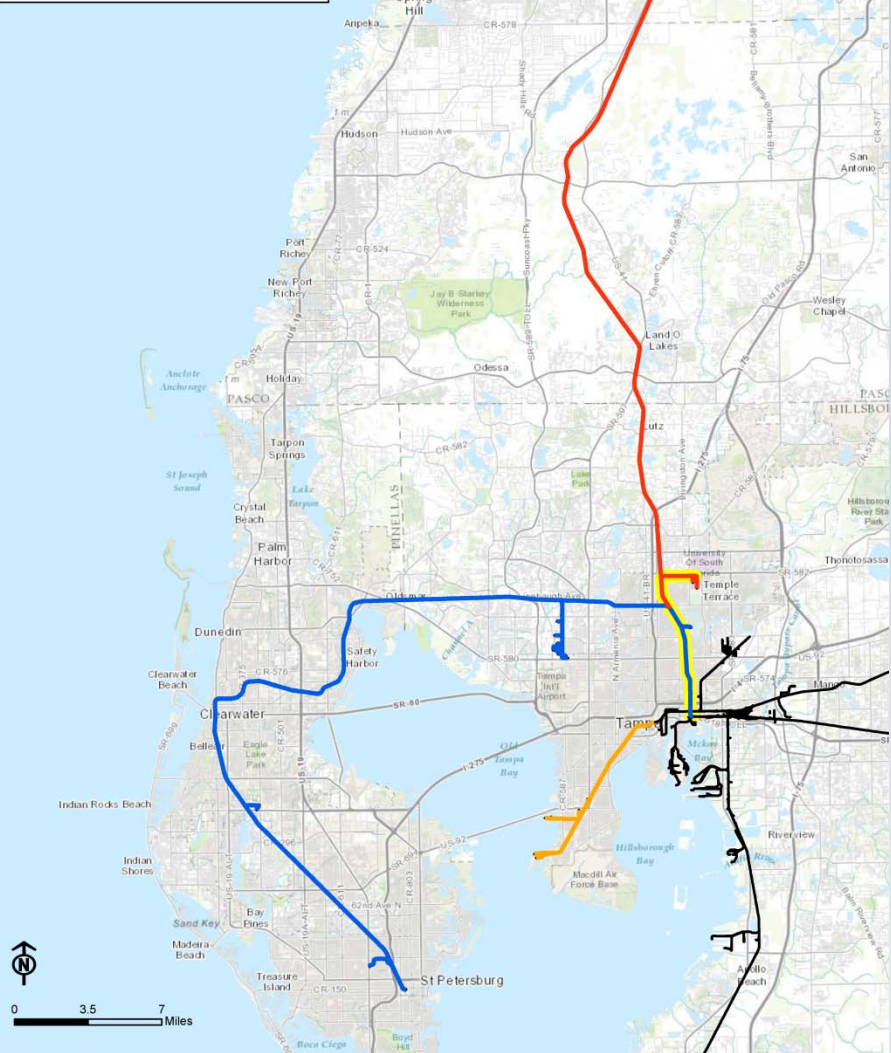
Segment	Total Length	Length Needed	Acquisition Cost*
Brooksville Subdivision	61.2 miles	3.2 miles	\$8M - \$16M
Clearwater Subdivision	60.3 miles	5.4 miles	\$13M - \$27M
Port Tampa Spur	12.7 miles	0.0 miles	-

West-Central Florida Rail System (2014)

- Legend**
- Section of Subdivision Used By TAOS Alternative
- Rail Subdivision**
- BROOKSVILLE
 - CLEARWATER
 - PORT TAMPA SPUR
- Other Rail**
- Other Rail

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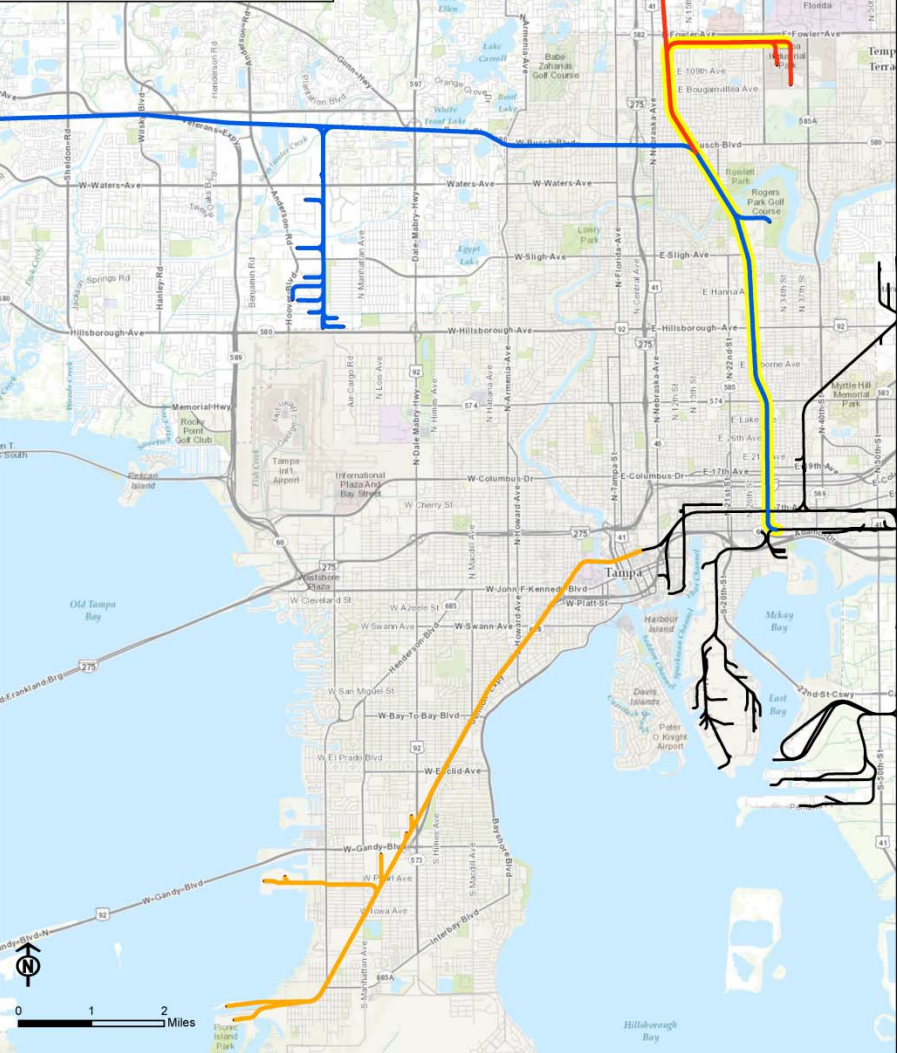


West-Central Florida Rail System (2014)

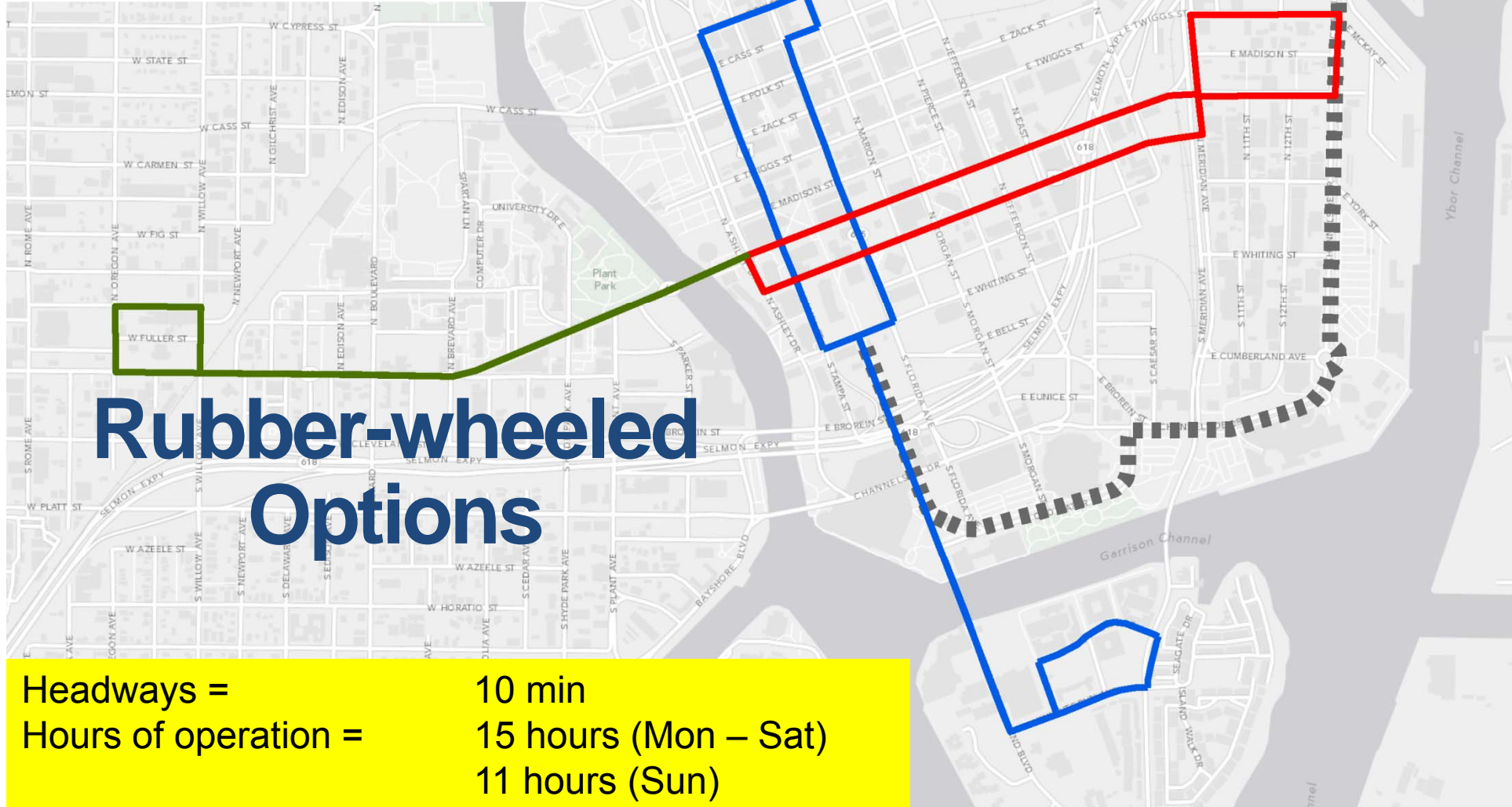
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Annual Operating Costs	
Phase I (In-Town Trolley)	\$1,256,029
Phase II (East West Option 1)	\$798,054
Phase III (West UT Option)	\$798,054
	\$2,852,138
Capital Cost	
Phase I (In-Town Trolley)	\$1,600,000
Phase II (East West Option 1)	\$1,200,000
Phase III (West UT Option)	\$1,200,000
	\$4,000,000



Headways =	10 min
Hours of operation =	15 hours (Mon – Sat)
	11 hours (Sun)

Potential Regional Connections

Transit Assets and Opportunities Study

Building on Current Assets

Local System Utilizes

Existing Streetcar Corridor,
Existing CSX Rail Corridors,
Airport People-Mover Extension,
I-275 Right-of-Way, and
The Marion Street Transitway

Future Connections Utilize

Howard Frankland Bridge,
I-4 Right-of-Way, and
Existing CSX Rail Corridors





You spoke. We listened. Tell Us More!

A Planning Commission – Metropolitan Planning Organization for Transportation Partnership in Coordination with the Transportation for Economic Development Initiative

Part 2: How will we get here?

Imagine2040.org July 10th through Labor Day



Next Steps

Key Decision	Who Decides
<p>Include corridor(s) in 2040 Long Range Transportation Plan:</p> <ul style="list-style-type: none">• <i>Identifies:</i><ul style="list-style-type: none">▪ <i>Mode</i>▪ <i>Termini</i>▪ <i>Costs</i>▪ <i>Potential funding</i>• <i>Signals intent to develop a project</i>• <i>Officially communicates project priorities to Tallahassee & DC</i>	MPO

Next Steps

Key Decision	Who Decides
Enter Project Development Phase: <ul style="list-style-type: none"> <i>Alternatives Analysis</i> <i>Environmental review</i> <i>Stakeholder participation</i> 	HART or other implementing agency <ul style="list-style-type: none"> <i>With FTA concurrence</i>
Select preferred alternative	HART or other implementing agency
Pursue new funding source	BOCC → Voter referendum
Adopt project into Cost Affordable Plan	MPO
Rate & approve project to enter Engineering & Design Phase	FTA
Secure funding commitment <ul style="list-style-type: none"> <i>Local, state & private</i> <i>Sufficient to build & operate system</i> 	HART or other implementing agency
Rate project & approve Full Funding Grant Agreement <ul style="list-style-type: none"> <i>Construction phase</i> 	FTA

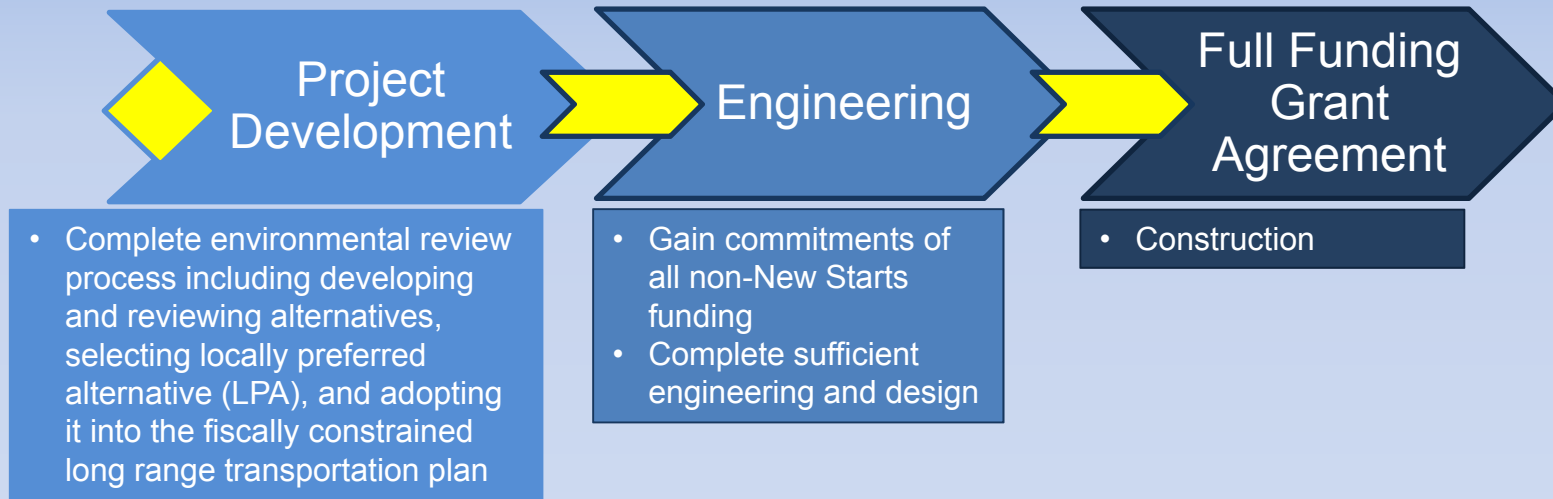
Federal Funding

- Funds light rail, commuter rail, streetcar, and BRT projects
- Roughly \$2 billion appropriated each year
- Annual Report to Congress includes ratings for each project and Administration's funding recommendations
- Highly competitive, demand for funds exceeds supply – 29 projects in current pipeline

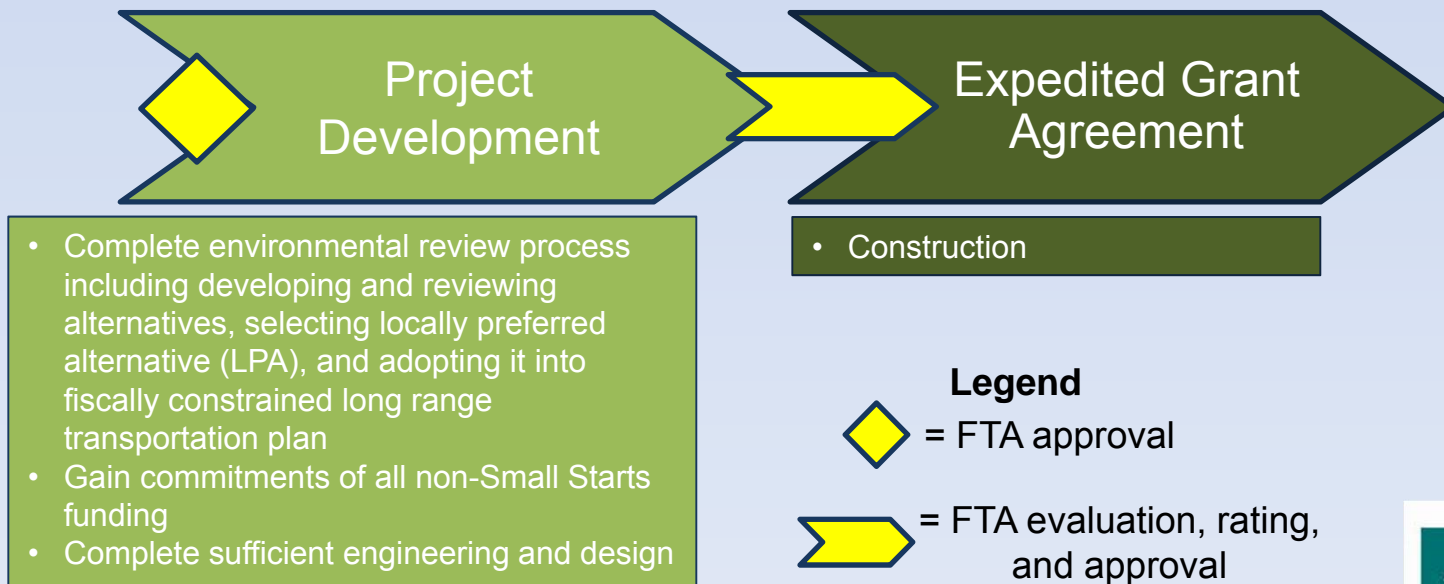
MAP-21 Eligible Projects



- New Starts
 - Total Cost \geq \$250M and/or New Starts funding sought is $>$ \$75M
 - New fixed guideway system (light rail, commuter rail etc.)
 - Extension to existing system
 - Fixed guideway BRT system
- Small Starts
 - Total cost $<$ \$250 million and Small Starts share $<$ \$75 million
 - New fixed guideway systems (light rail, commuter rail etc.)
 - Extension to existing system
 - Fixed guideway BRT system
 - Corridor-based BRT system

New Starts Process



Small Starts Process



- Legend**
-  = FTA approval
 -  = FTA evaluation, rating, and approval

New Starts & Small Starts Criteria

Individual Criteria Ratings

Mobility Improvements
(16.66%)

Environmental Benefits
(16.66%)

Congestion Relief
(16.66%)

Economic Development
(16.66%)

Cost-Effectiveness
(16.66%)

Land Use
(16.66%)

Current Condition
(25%)

Commitment of Funds
(25%)

Reliability/Capacity
(50%)

Summary Ratings

Project Justification
(50% of overall rating)

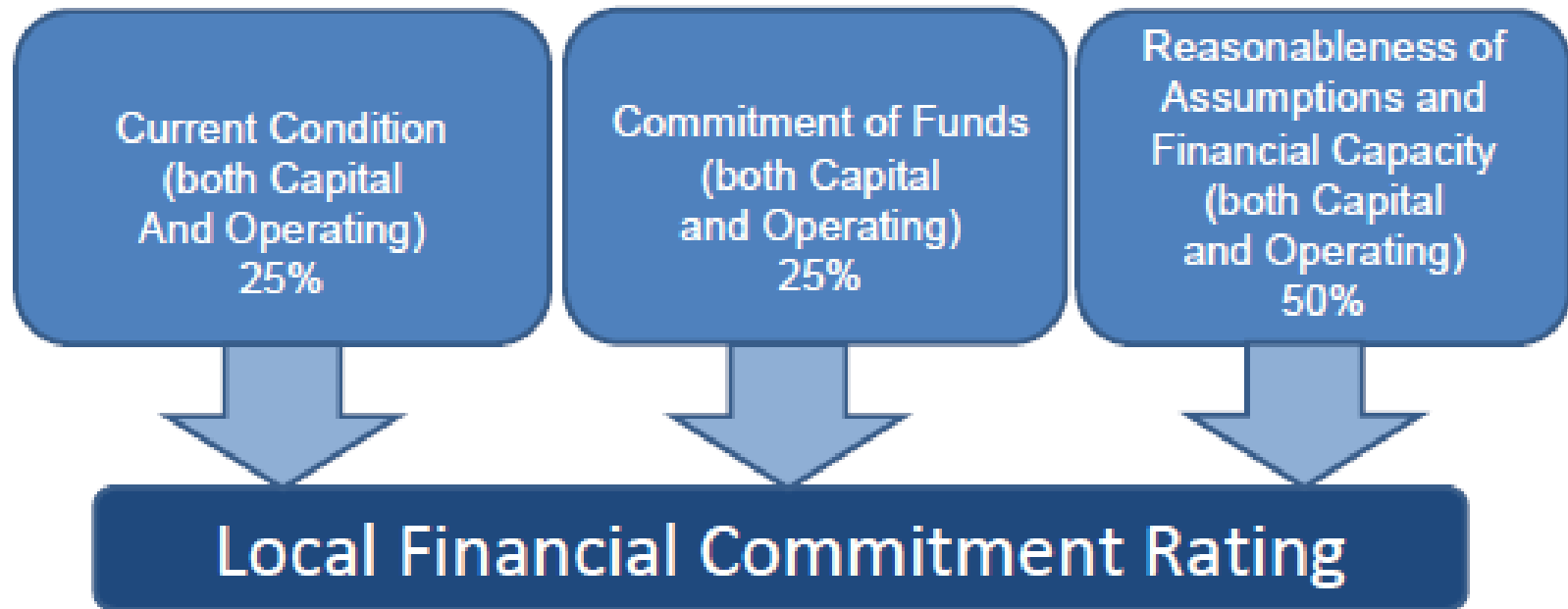
Local Financial Commitment
(50% of overall rating)

Overall Rating

- 5 point scale (Low to High)
- “Medium” Rating Required for Consideration

Overall Project Rating

Local Financial Commitment



To encourage overmatch, projects proposing less than 50% Section 5309 share will have their local financing commitment rating raised one level

Receipt of Funding

- FTA's decision to recommend funding project in President's Budget
 - “readiness” of the project for capital funding
 - project's overall rating
 - geographic equity
 - amount of available funds versus the number and size of the projects in the pipeline
- To receive construction grant agreement a project must:
 - Complete the Planning, Project Development, and Environmental Review Processes
 - Meet Project Readiness Requirements (technical capacity, firm and final cost estimate, all funding committed)
 - Receive a “Medium” or higher overall rating
 - Meet all other Federal Requirements

Timeline

Funding	Project Development	Design	ROW	Construction	Total
New Starts	2-3 yrs	2-3 yrs	2 yrs	2-3 yrs	8-11 yrs
No New Starts (Local)	1-2 yr	1-2 yrs	2 yrs	1-2 yrs	5-8 yrs

SWOT

(Strengths, Weakness, Opportunities and Threats)

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