Transit Assets and Opportunities Study

STAKEHOLDERS MEETING #4
TAMPA BAY HISTORY CENTER
MONDAY, JUNE 23, 2014
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
Emerging Development

Downtown Intermodal Center site

West River

Channel District

Encore
Visions/Ideas, Goals & Objectives

Review of Possible Alignments

Evaluation of Alternatives

Select Preferred Alternative

We Are Here

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
Segments Evaluated

URS
System Alternatives

I-275 Light Rail with Streetcar Alternative 1

Legend
- Light Rail
- Streetcar

I-275/CSX Light Rail with Streetcar Alternative 2

Legend
- Light Rail
- Streetcar

Cypress/I-275/Streetcar Light Rail Alternative 3

Legend
- Light Rail

I-275/Laurel/Streetcar Light Rail Alternative 4

Legend
- Light Rail
System Alternatives

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

Legend
- Red = Light Rail
- Green = Commuter Rail

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

Legend
- Green = Commuter Rail
- Blue = Streetcar

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

Legend
- Green = Commuter Rail
- Blue = Streetcar

I-275/Streetcar Light Rail Alternative 8

Legend
- Red = Light Rail
# Evaluation of Alternatives Results

## Phase I: Initial Screening

*Establish a technically feasible and cost effective transit system*

<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
<th>Geometric Analysis</th>
<th>Cost Range</th>
<th>Schedule</th>
<th>Engineering Constraints</th>
<th>Opportunity to provide new, unique, or enhanced transit services</th>
<th>Opportunity to provide new, unique, or enhanced transit services</th>
<th>Opportunity to provide new, unique, or enhanced transit services</th>
<th>Potential for Sociocultural Impacts</th>
<th>Potential for Natural Feature Impacts</th>
<th>Utilization of existing Assets</th>
<th>Ability to expand through extensions</th>
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<tbody>
<tr>
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<td>L-275 Light Rail with Streetcar</td>
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**URS**

**Metropolitan Planning Organization for Transportation**
# Evaluation of Alternatives Results

## Phase III: Secondary Screening

**“Support Redevelopment, Economic Development, and Create Revenue”**

<table>
<thead>
<tr>
<th>Maximize redevelopment and Infill development</th>
<th>Serve areas of future population and employment densities</th>
<th>Enhance connection to TECO Streetcar and expand its reach</th>
<th>Provide connections between major activity centers</th>
<th>Provide service to historically disadvantaged populations</th>
<th>Serve areas of existing population and employment densities</th>
<th>Enhance existing and future transit service</th>
<th>Enhance multimodal connections</th>
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<tbody>
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<td>Identified and Land designed for suitable parking with a transverse value of less than 250,000 in 2000</td>
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<td>Future population size of blocks or one-quarter mile radius</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Future employment size of blocks or one-quarter mile radius</td>
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<td>2</td>
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<tr>
<td>Number of direct connections to TECO Streetcar</td>
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<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Number of direct connections to existing TECO Streetcar lines</td>
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<td>2</td>
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<tr>
<td>Number of blocks or one-quarter mile radius adjacent to TECO Streetcar</td>
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<td>2</td>
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<td>Number of blocks or one-quarter mile radius adjacent to major activity centers</td>
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<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Number of blocks or one-quarter mile radius adjacent to historically disadvantaged populations</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Number of blocks or one-quarter mile radius adjacent to existing population and employment densities</td>
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<tr>
<td>Number of blocks or one-quarter mile radius adjacent to existing transit service</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Number of blocks or one-quarter mile radius adjacent to multimodal connections</td>
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<td>2</td>
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</tbody>
</table>

### Additional Information

- **Support Redevelopment, Economic Development, and Create Revenue**
  - Identified and Land designed for suitable parking with a transverse value of less than 250,000 in 2000
  - Future population size of blocks or one-quarter mile radius
  - Future employment size of blocks or one-quarter mile radius
  - Number of direct connections to TECO Streetcar
  - Number of direct connections to existing TECO Streetcar lines
  - Number of blocks or one-quarter mile radius adjacent to TECO Streetcar
  - Number of blocks or one-quarter mile radius adjacent to major activity centers
  - Number of blocks or one-quarter mile radius adjacent to historically disadvantaged populations
  - Number of blocks or one-quarter mile radius adjacent to existing population and employment densities
  - Number of blocks or one-quarter mile radius adjacent to existing transit service
  - Number of blocks or one-quarter mile radius adjacent to multimodal connections

- **Enhance Mobility into and Within Downtown Tampa**
  - Identified and Land designed for suitable parking with a transverse value of less than 250,000 in 2000
  - Future population size of blocks or one-quarter mile radius
  - Future employment size of blocks or one-quarter mile radius
  - Number of direct connections to TECO Streetcar
  - Number of direct connections to existing TECO Streetcar lines
  - Number of blocks or one-quarter mile radius adjacent to TECO Streetcar
  - Number of blocks or one-quarter mile radius adjacent to major activity centers
  - Number of blocks or one-quarter mile radius adjacent to historically disadvantaged populations
  - Number of blocks or one-quarter mile radius adjacent to existing population and employment densities
  - Number of blocks or one-quarter mile radius adjacent to existing transit service
  - Number of blocks or one-quarter mile radius adjacent to multimodal connections

### Note

- Some cells contain red highlights indicating areas of concern or higher priority.
- Green highlights indicate areas of strong alignment or support.
- Yellow highlights indicate areas of moderate alignment or support.

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**URS**

**MPO**

**Transportation**
## Evaluation of Alternatives Results

<table>
<thead>
<tr>
<th>Alt</th>
<th>Technical Ranking</th>
<th>Systems Cost</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Capital Costs</td>
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<tr>
<td>1</td>
<td>33</td>
<td>$1.5 - $2.0 B</td>
</tr>
<tr>
<td>2</td>
<td>33</td>
<td>$1.0 - $1.3 B</td>
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<td>40</td>
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<td>38</td>
<td>$1.5 - $2.0 B</td>
</tr>
<tr>
<td>5</td>
<td>42</td>
<td>$800 M - $1.0 B</td>
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<tr>
<td>6</td>
<td>47</td>
<td>$1.0 - $1.3 B</td>
</tr>
<tr>
<td>7</td>
<td>43</td>
<td>$1.0 - $1.3 B</td>
</tr>
<tr>
<td>8</td>
<td>44</td>
<td>$1.6 - $2.0 B</td>
</tr>
</tbody>
</table>
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

Options Going West:
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)
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

Options Going North

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.

<table>
<thead>
<tr>
<th>Segment</th>
<th>Total Length</th>
<th>Length Needed</th>
<th>Acquisition Cost*</th>
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</thead>
<tbody>
<tr>
<td>Brooksville Subdivision</td>
<td>61.2 miles</td>
<td>3.2 miles</td>
<td>$8M - $16M</td>
</tr>
<tr>
<td>Clearwater Subdivision</td>
<td>60.3 miles</td>
<td>5.4 miles</td>
<td>$13M – $27M</td>
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<tr>
<td>Port Tampa Spur</td>
<td>12.7 miles</td>
<td>0.0 miles</td>
<td>-</td>
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</table>

* Based on Sunrail costs
<table>
<thead>
<tr>
<th></th>
<th>Annual Operating Costs</th>
<th>Capital Cost</th>
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</thead>
<tbody>
<tr>
<td>Phase I (In-Town Trolley)</td>
<td>$1,256,029</td>
<td>$1,600,000</td>
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<tr>
<td>Phase II (East West Option 1)</td>
<td>$798,054</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>Phase III (West UT Option)</td>
<td>$798,054</td>
<td>$1,200,000</td>
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<tr>
<td></td>
<td>$2,852,138</td>
<td>$4,000,000</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>Key Decision</th>
<th>Who Decides</th>
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<tbody>
<tr>
<td>Include corridor(s) in <strong>2040 Long Range Transportation Plan:</strong></td>
<td>MPO</td>
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<tr>
<td>• <em>Identifies:</em></td>
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</tr>
<tr>
<td>- Mode</td>
<td></td>
</tr>
<tr>
<td>- Termini</td>
<td></td>
</tr>
<tr>
<td>- Costs</td>
<td></td>
</tr>
<tr>
<td>- Potential funding</td>
<td></td>
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<tr>
<td>• <em>Signals intent to develop a project</em></td>
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<tr>
<td>• <em>Officially communicates project priorities to Tallahassee &amp; DC</em></td>
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## Next Steps

<table>
<thead>
<tr>
<th>Key Decision</th>
<th>Who Decides</th>
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<tbody>
<tr>
<td><strong>Enter Project Development Phase:</strong></td>
<td>HART or other implementing agency</td>
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<tr>
<td>- Alternatives Analysis</td>
<td>With FTA concurrence</td>
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<tr>
<td>- Environmental review</td>
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<td>- Stakeholder participation</td>
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<tr>
<td>Select preferred alternative</td>
<td>HART or other implementing agency</td>
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<tr>
<td>Pursue new funding source</td>
<td>BOCC → Voter referendum</td>
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<tr>
<td>Adopt project into Cost Affordable Plan</td>
<td>MPO</td>
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<tr>
<td>Rate &amp; approve project to enter <strong>Engineering &amp; Design Phase</strong></td>
<td>FTA</td>
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<tr>
<td>Secure funding commitment</td>
<td>HART or other implementing agency</td>
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<td>- Local, state &amp; private</td>
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<tr>
<td>- Sufficient to build &amp; operate system</td>
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<tr>
<td>Rate project &amp; approve <strong>Full Funding Grant Agreement</strong></td>
<td>FTA</td>
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<tr>
<td>- Construction phase</td>
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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 ≥ $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

- Complete environmental review process including developing and reviewing alternatives, selecting locally preferred alternative (LPA), and adopting it into the fiscally constrained long range transportation plan
- Gain commitments of all non-New Starts funding
- Complete sufficient engineering and design

Full Funding Grant Agreement
- Construction

Small Starts Process

- Complete environmental review process including developing and reviewing alternatives, selecting locally preferred alternative (LPA), and adopting it into fiscally constrained long range transportation plan
- Gain commitments of all non-Small Starts funding
- Complete sufficient engineering and design

Expedited Grant Agreement
- Construction

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

<table>
<thead>
<tr>
<th>Funding</th>
<th>Project Development</th>
<th>Design</th>
<th>ROW</th>
<th>Construction</th>
<th>Total</th>
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<td>New Starts</td>
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<td>2-3 yrs</td>
<td>2 yrs</td>
<td>2-3 yrs</td>
<td>8-11 yrs</td>
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<tr>
<td>No New Starts (Local)</td>
<td>1-2 yr</td>
<td>1-2 yrs</td>
<td>2 yrs</td>
<td>1-2 yrs</td>
<td>5-8 yrs</td>
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SWOT
(Strengths, Weakness, Opportunities and Threats)
SWOT
(Strengths, Weakness, Opportunities and Threats)