Stakeholders Meeting # 3
County Center
Thursday, March 27, 2014
Welcome

STUDY SPONSORS

• Hillsborough County MPO

• The Tampa Downtown Partnership
Welcome

PROJECT MANAGEMENT TEAM

- MPO Metropolitan Planning Organization for Transportation
- City of Tampa, Florida
- Downtown Partnership
- State of Florida Transportation Department
- HART www.goHART.org
- Streetcar TECO System
- URS
Agenda

• Evaluation Methodology
• Alternatives Considered
• Evaluation Results
• Break Out Session
• Next Steps
Visions/Ideas, Goals & Objectives

Review of Possible Alignments

Evaluation of Alternatives

Select Preferred Alternative

Coordinated Engagement

Stakeholders Meeting #1

Stakeholders Meeting #2

Stakeholders Meeting #3

Public Meeting

Final Report

We Are Here
Building on Previous Efforts

- HART Alternatives Analysis
- Tampa Center City Plan (InVision)
- TBARTA Master Plan
- HART Tampa Rail Project – FEIS/ROD
- Various Streetcar Studies
- Various MPO Studies
- Various City of Tampa Studies
Modes Considered

Commuter Rail:
Diesel Multiple Unit (DMU)

Light Rail Transit
Modes Considered

Streetcar:
Modern

Streetcar:
Heritage
Modes Considered

Rubber Wheeled:
City Bus

Rubber Wheeled:
Trolley
Rubber Wheeled Service

Legend: Existing Service
- In-town Trolley
- TECO Streetcar

Legend: Proposed Service
- East-West 1
- East Option
- West Option
Evaluation Matrix

- Developed Criteria based on
  - Study Goals and Objectives
  - Stakeholder input
  - Standard transit indicators
- Phased approach
  - Phase 1 – technical feasibility (quantitative)
  - Phase 2 – transit success indicators (qualitative)
Potential ROW Impacts

Legend

- Green = Low
- Yellow = Medium
- Red = High
Streetcar Expansion Potential

Legend
- Green = Good
- Yellow = Fair
- Red = Poor
Commuter Rail Expansion Potential

Legend

- **Green** = Good
- **Yellow** = Fair
- **Red** = Poor
## Phase 1 – Initial Screening

<table>
<thead>
<tr>
<th>Segment ID</th>
<th>Description</th>
<th>SC</th>
<th>LRT</th>
<th>CR</th>
<th>Geometric Analysis</th>
<th>Cost Range</th>
<th>Reduce CSX liability</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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</thead>
<tbody>
<tr>
<td>1</td>
<td>Marion from Kennedy to Cass</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>Low to High, High</td>
<td>Cost range</td>
<td>Cost Range</td>
<td>Length of the Segment that passes through a Resource Group</td>
<td>Number of Bridges Within 100 Feet</td>
<td>Number of Cemeteries Within 100 Feet</td>
<td>Number of Parks Impacted</td>
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<tr>
<td>2</td>
<td>8th East of 20th</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>Low, Medium, High</td>
<td>Cost range</td>
<td>Cost Range</td>
<td>Length of the Segment that passes through a Resource Group</td>
<td>Number of Bridges Within 100 Feet</td>
<td>Number of Cemeteries Within 100 Feet</td>
<td>Number of Parks Impacted</td>
</tr>
<tr>
<td>3</td>
<td>Cypress from North to Ashley</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>Low, Medium, High</td>
<td>Cost range</td>
<td>Cost Range</td>
<td>Length of the Segment that passes through a Resource Group</td>
<td>Number of Bridges Within 100 Feet</td>
<td>Number of Cemeteries Within 100 Feet</td>
<td>Number of Parks Impacted</td>
</tr>
</tbody>
</table>
## Phase II: 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>
</tr>
</thead>
<tbody>
<tr>
<td>Future Population [2Q10] within one-quarter mile</td>
<td>Number of direct connections to existing TECO Streetcar Stations</td>
<td>Number of connections to existing TECO Streetcar Stations</td>
<td>Number of Major Activity Centers served by each facility within one-quarter mile of each alignment</td>
<td>Provides Service to Racial Minority Group</td>
<td>Provides Service to Ethnic Minority Group</td>
<td>Enhance existing and future transit service</td>
<td>Enhance multimodal connections</td>
</tr>
<tr>
<td>Future Employment [2010] within one-quarter mile</td>
<td>Provides Service to Low Income Group</td>
<td>Existing Residential Units Within One-Quarter Mile</td>
<td>Provide Service to Historically Disadvantaged Populations</td>
<td>Provides Service to Low Income Group</td>
<td>Existing Commercial Use Within One-Quarter Mile</td>
<td>Enhance multimodal connections</td>
<td>Enhance multimodal connections</td>
</tr>
<tr>
<td>Number of Units</td>
<td>Total Square Feet</td>
<td>2010 Population Within 1/4 mile of a Segment</td>
<td>Number of Connections to Existing TECO Streetcar Stations</td>
<td>Number of Connections to Existing TECO Streetcar Stations</td>
<td>Number of Connections to Existing Employment Centers</td>
<td>Number of Connections to Existing Employment Centers</td>
<td>Number of Connections to Existing Employment Centers</td>
</tr>
<tr>
<td>Number of Quadrants</td>
<td>Number of Activity Centers</td>
<td>Number of Units</td>
<td>Total Square Feet</td>
<td>2010 Population Within 1/4 mile of a Segment</td>
<td>Number of Connections to Existing Employment Centers</td>
<td>Number of Connections to Existing Employment Centers</td>
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<td>Number of Connections</td>
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### "Enhance Mobility Into and Within Downtown Tampa"

<table>
<thead>
<tr>
<th>“Enhance Mobility Into and Within Downtown Tampa”</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Underutilized Land: Land designated for use as parking with a structure value less than $250,000 or a lot value that exceeds the building value by 2.5 or more.</td>
<td>Infill Development Opportunity: Vacant Land</td>
<td>Future Population [2010] within one-quarter mile</td>
<td>Future Employment [2010] within one-quarter mile</td>
<td>Number of direct connections to existing TECO Streetcar Stations</td>
<td>Number of connections to existing TECO Streetcar Stations</td>
<td>Number of Major Activity Centers served by each facility within one-quarter mile of each alignment</td>
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</tr>
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<td>Number of Units</td>
<td>Total Square Feet</td>
<td>2010 Population Within 1/4 mile of a Segment</td>
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**URS**
Practice Question
Which college football team will win the National Championship next year?

A. University of South Florida
B. LSU
C. University of Florida
D. University of Alabama
E. University of Miami
F. Florida State University
G. Other

[Bar chart showing percentages: University of South Florida 15%, LSU 10%, University of Florida 10%, University of Alabama 10%, University of Miami 5%, Florida State University 0%, Other 50%]
Question #1
The methodology to the evaluation is reasonable.

A. Strongly agree
B. Agree
C. Neutral
D. Disagree
E. Strongly disagree
Question #2
The segments considered are reasonable for further study.

A. Strongly agree (35%)
B. Agree (35%)
C. Neutral
D. Disagree
E. Strongly disagree (30%)
Question 3
The modes considered are reasonable for further study.

A. Strongly agree
B. Agree
C. Neutral
D. Disagree
E. Strongly disagree
Alternatives Evaluated

- FEIS/ROD, HART AA and existing TECO Streetcar as starting point
- Analyzed by link
- Considered:
  - Previous studies
  - Stakeholder input
  - Scenarios – no use of CSX, CSX operating agreement, CSX purchase, use of highway ROW
I-275 Light Rail with Streetcar Alternative 1

Legend

- Red = Light Rail
- Blue = Streetcar
I-275/CSX Light Rail with Streetcar Alternative 2

Legend
- Red = Light Rail
- Blue = Streetcar
I-275/CSX Light Rail with Streetcar Alternative 2

Legend
- **Red** = Light Rail
- **Blue** = Streetcar
Cypress/I-275/Streetcar Light Rail Alternative 3

Legend

= Light Rail
I-275/Laurel/Streetcar Light Rail Alternative 4

Legend
= Light Rail
I-275/Laurel/Streetcar Light Rail
Alternative 4

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

Legend
- Light Rail
- Commuter Rail
Cypress/I-275/Florida Streetcar – CSX DMU Alternative 6

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

Legend

- **Commuter Rail**
- **Streetcar**
Evaluation Results
# Evaluation of Alternatives Results

## Phase I: Initial Screening

<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
<th>Geometric Analysis</th>
<th>Reduce CSX Liability</th>
<th>Potential for Sociocultural Impacts</th>
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<tbody>
<tr>
<td>1</td>
<td>275 Light Rail with Streetcar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>275/Csx Light Rail with Streetcar</td>
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<tr>
<td>3</td>
<td>Proposed 275/275 Streetcar Light Rail</td>
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<tr>
<td>4</td>
<td>275/Local/Streetcar Light Rail</td>
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</tr>
<tr>
<td>5</td>
<td>Proposed 275 Light Rail-Csx DMU</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>6</td>
<td>Proposed 275/275DMU Light Rail-Csx DMU</td>
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</tr>
<tr>
<td>7</td>
<td>MainLine 275/Central Streetcar - Csx DMU</td>
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<td></td>
</tr>
<tr>
<td>8</td>
<td>275/Streetcar Light Rail</td>
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</tbody>
</table>

*Note: The table above shows the evaluation of alternatives for initial screening with metrics such as geometric analysis, reduce CSX liability, potential for sociocultural and natural resource impacts, utilization of existing assets, and ability to expand through extensions.*
## Evaluation of Alternatives Results

<table>
<thead>
<tr>
<th><strong>Support Redevelopment, Economic Development, and Create Revenue</strong></th>
<th><strong>Phase II: Secondary Screening</strong></th>
<th><strong>Enhance Mobility Into and Within Downtown Tampa</strong></th>
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<tbody>
<tr>
<td>Maximize redevelopment and infill development</td>
<td>Enhance connection to TECO Streetcar and expand its reach</td>
<td>Provide service to historically disadvantaged populations</td>
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<tr>
<td>Some areas of future population and employment densities</td>
<td>Provide connections between major activity centers</td>
<td>Serve areas of existing population and employment densities</td>
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<td>Enhance existing and future transit service</td>
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### Land designated for use with a build-out value $<250,000 or a lot size that exceeds the build-out value by 2x or more |

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<tbody>
<tr>
<td>Infill Development Opportunity - Vacant Land</td>
<td>Infill Development Opportunity - Vacant Land</td>
</tr>
<tr>
<td>Future Population (2040) within one-quarter mile</td>
<td>Future Employment (2040) within one-quarter mile</td>
</tr>
</tbody>
</table>

### Number of direct connections to existing TECO Streetcar stations within 3 blocks of one-quarter mile

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<thead>
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<th>Number of direct connections to existing TECO Streetcar stations within 3 blocks of one-quarter mile</th>
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</thead>
<tbody>
<tr>
<td>Number of Purple Line Stations</td>
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</tbody>
</table>

### Number of Purple Line Stations within one-quarter mile

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Population by Affected HD</td>
<td>Population by Affected HD</td>
</tr>
<tr>
<td>Population by Affected HD</td>
<td>Population by Affected HD</td>
</tr>
<tr>
<td>Number of Connections</td>
<td>Number of Connections</td>
</tr>
<tr>
<td>Number of Connections Served</td>
<td>Number of Connections Served</td>
</tr>
<tr>
<td>Number of Activity Centers</td>
<td>Number of Activity Centers</td>
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</tbody>
</table>

### Number of Activity Centers

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Number of Activity Centers Served</td>
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</tr>
</tbody>
</table>

### Length of Alternative Route in Black Group

<table>
<thead>
<tr>
<th>Length of Alternative Route in Black Group</th>
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</thead>
<tbody>
<tr>
<td>Length of Alternative Route in Black Group</td>
<td>Length of Alternative Route in Black Group</td>
</tr>
<tr>
<td>Number of Surveys</td>
<td>Number of Surveys</td>
</tr>
<tr>
<td>Total Diameter</td>
<td>Total Diameter</td>
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### Number of Surveys

<table>
<thead>
<tr>
<th>Number of Surveys</th>
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<tr>
<td>Number of Surveys</td>
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### Total Diameter

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### Other Data

<table>
<thead>
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### Additional Data

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*Source: Metropolitan Planning Organization for Transportation (MPO)*
## Evaluation of Alternatives Results

<table>
<thead>
<tr>
<th>Alt</th>
<th>Technical Ranking</th>
<th>Systems Cost</th>
<th></th>
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<tbody>
<tr>
<td></td>
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<td>Total Score</td>
<td>Capital Costs</td>
<td>O&amp;M Costs</td>
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<tr>
<td>1</td>
<td>33</td>
<td>$1.5 - $2.0 B</td>
<td>$28.6 - $34.4 M</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>33</td>
<td>$1.0 - $1.3 B</td>
<td>$25.6 - $30.7 M</td>
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<tr>
<td>3</td>
<td>40</td>
<td>$1.5 - $2.0 B</td>
<td>$31.7 - $38.0 M</td>
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<tr>
<td>4</td>
<td>38</td>
<td>$1.5 - $2.0 B</td>
<td>$31.7 - $38.0 M</td>
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<tr>
<td>5</td>
<td>42</td>
<td>$800 M - $1.0 B</td>
<td>$16.1 - $19.3 M</td>
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<td>6</td>
<td>47</td>
<td>$1.0 - $1.3 B</td>
<td>$14.1 - $16.9 M</td>
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<td>7</td>
<td>43</td>
<td>$1.0 - $1.3 B</td>
<td>$14.1 - $16.9 M</td>
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<td>8</td>
<td>44</td>
<td>$1.6 - $2.0 B</td>
<td>$34.7 - $41.7 M</td>
<td></td>
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</tbody>
</table>
Break Out Session

4 Discussion Topics

12-15 minutes each
Break Out Session
Discussion #1

How would your group rank the top 3 proposed alternatives? Why?
How would your group “hybridize” any of the proposed alternatives?
Break Out Session Discussion #3

What are the 3 most important factors in the Phase 2 – Secondary Screening? Are there any other?
Based on your group’s ranking of the rail alternatives would you suggest any changes to the rubber wheeled circulator?
Question #4
Which alternative should be moved forward?

A. Alternative 1
B. Alternative 2
C. Alternative 3
D. Alternative 4
E. Alternative 5
F. Alternative 6
G. Alternative 7
H. Alternative 8
Question #5
Pick 3 modes that should be moved forward for further study.

A. Commuter Rail DMU
B. Light Rail Transit
C. Modern Streetcar
D. Heritage Streetcar
E. Rubber Wheeled Bus
F. Rubber Wheeled Trolley
Question #6
Rank the days of the week you would use the system.

A. Monday – Thursday
B. Friday
C. Saturday
D. Sunday

31% 29% 25% 15%
Question 7
Rank the times of day you would use the system.

A. AM Peak (6am-9am)
B. Midday (9am – 3pm)
C. PM Peak (3pm – 6pm)
D. Early evening (6pm – 10 pm)
E. Late Night (After 10 pm)
Question #8
From these trip types, rank your top 5 trips that you would use the system for.

A. Commute (work and home trips)
B. Access Other Transportation (i.e. Airport / Bus / Rail)
C. Attend a Meeting
D. Run an Errand (Post Office / Bank)
E. Access a Service (i.e. County and City Services / Courts)
F. Access a Public a Space (i.e. Riverwalk/Art Museum/Park)
G. Attend a Special Event (i.e. Hockey Game/Festival/Concert)
H. Shopping (i.e. Groceries/Clothing/Other goods)
I. Entertainment (i.e. Dining Out/Go To Bar/Theater)
Next Steps

• Consider input from today
• Public Meetings
• Continued coordination with City, HART and other agencies
• Determine Preferred Alternative(s)
• Present Projects to the MPO and HART for inclusion in the LRTP and TDP
• Finalize Report