Project Steering Committee Meeting #4
February 26, 2013
Today’s Meeting Purpose

• Project Status Update

• Screen 1 Findings

• Preliminary Operations Plans
  – Station Locations
  – Typical Sections

• Station Typologies

• Small Group Session
Where We Are
Connect 400 Alternatives Analysis Schedule

- **Discovery**
  - Goals and Objectives
  - Purpose and Need
  - Existing Conditions

- **Discussion**
  - Evaluation Methodology
  - Definition of Alternatives
  - Refine Ridership Model

- **Development**
  - Evaluation of Alternatives
  - Identify Locally Preferred Alternative
  - Develop Financial Plan
  - Develop Implementation Plan

- **Documentation**
  - Final Alternatives Analysis Report

**Schedule**
- 2011 Winter
- 2012 Spring
- 2012 Summer-Winter
- 2013 Spring

We are Here
What We’ve Heard
In General:

- Respondents were asked to review Newsletter Number 2 and a PowerPoint prior to taking the survey.
- The survey was open between December 12, 2012 till January 17, 2013.
- **136** people began the survey.
- 119 people completed the survey (87.5%).
Holiday Outreach Results

Key Observations:

- 82% of respondents chose **GA 400 Alternative 1A** as the “most appropriate”.
- GA Alternative 3 scored the lowest of all alternatives.
- **Heavy Rail** was the preferred mode choice.
- Concern about the need for true **Transit Oriented Development** and the quality of the last mile.
Screening Process & Screen 1 Findings
Technical Screening Process

**Fatal Flaw Analysis** considers at a high level:
- Purpose & Need
- Constructability & right-of-way impacts
- Generalized Technology Assessment

*Defined alternatives (combinations of alignment & transit technology) for Screen 1*

**Screen 1** applies both quantitative & qualitative evaluation criteria to reduce the number of alternatives

*Smaller set of alternatives advance into Screen 2*

**Screen 2** involves a more in-depth analysis using additional performance measures

*Screen 2 identifies the LPA*

**MARTA Board to Adopt LPA**
Overview of Fatal Flaw Analysis

**Step 1: Technology Assessment**
- Independent review of 6 modes
- Most appropriate - Bus Rapid Transit (BRT); Light Rail/Streetcar (LRT/SC); Heavy Rail (HRT)

**Step 2: Universe of Alternatives**
- 3 modes + 9 alignments along GA 400 & SR 9

**Step 3: Fatal Flaw Analysis**
- Reduce ‘universe’ to a smaller set for Screen 1
- High-level based on purpose/need & constructability
Screen 1 Findings

- **Methodology/Assumptions**
  - Qualitative and quantitative analysis
  - Performance Measures based on Purpose & Need Goals and Objectives
  - Station-related measures normalized for number of stations

- **Results**
  - GA 400-1 (all modes) and GA 400-3 alternatives scored highest
    - Fewer potential community and environmental impacts
    - More population and employment access per-station

- **Holiday Outreach input**
  - GA 400-3 screened out due to concerns regarding potential length and time of transit trips, as well as impacts along arterials (Mansell Road and SR 140)
Preliminary Operations Plans
Preliminary Operating Plans

- **Assumptions**
  - Speeds based on industry standards and include dwell time
  - LRT and BRT have identical stations, in terms of parking
  - Parking access “major” or “minor” for modeling, but specific design and number of spaces are to be determined

- **East-West Connections**
  - Connections based on feedback from public and committees
  - Majority of headways are 15/30 peak/off-peak
  - Includes nine new potential routes serving proposed stations
  - Existing MARTA and GRTA bus routes may be modified

- **Service**
  - HRT and LRT average over 42mph, and serve the corridor in 18 and 19 mins, respectively
  - BRT averages 35mph and serves the corridor in 21 mins.
Station Typologies
Elements of Station Area Planning

Transit Station – Designing the elements of a transit station to meet their functional requirements within the greater context

Land Use – Determining and planning for the proper intensity and mix of uses surrounding the transit station

Mobility – Designing for all the ways that people get around the station area; on foot, by car, by bus, by bike, etc…

Urban Design – Making sure the elements interact with each other and make the station area a memorable place
Elements of Station Area Planning

![Diagram showing areas of More Intensity and Less Intensity around an LRT station within 1/4 mile and 1/2 mile distances.](image)
Station Function & Service Area

½ - Mile Service Area
- Only serve a localized area immediately around the station
- Stations can be grouped to provide better service area overlay in the densest of areas
- Locate near minor thoroughfare

1 - Mile Service Area
- Most common transit stations
- Reliant on bus connections to the station
- Some customers will arrive by car - need for adequate parking and Kiss & Ride areas.
- Locate near thoroughfare

3-Mile Service Area
- Access by a more limited feeder bus network and a larger number of private vehicles
- Provide adequate facilities for all modes of travel
- Locate near major thoroughfare

5 - Mile Service Area
- Typically the station's toward the end of the line.
- Access primarily by private vehicles
- Access to major thoroughfare or freeways.
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Number of Stations

- Stations in System: LRT & BRT
- Stations in System: Commuter Rail
- Stations in System: Heavy Rail

1/2 Mile
- Stations in System: Walk-Up

1 Mile
- Stations in System: Bicycle & Circulator

3 Miles
- Stations in System: Bus Transit & Car

5 Miles or More
- Stations in System: Large & Terminal P&R
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Land Use Context

High Intensity Urban Core
- Downtown cores - most accessible place in the region
- Well-established and connected street pattern
- Densities supportive of transit
- Transit ranges from small local stations to large multi-modal stations
- Strong TOD development market

Established Urban Neighborhoods & Historic Communities
- Includes old streetcar suburbs and historic towns
- All have individual character built-up over time
- All feature a connected block system and transit-supportive densities
- TOD development market varies, may need assistance.

Industrial Communities
- Important Centers of Employment
- Many have individual character built-up over time
- Generally well connected street network
- Often there are physical barriers to TOD Development
- TOD development market varies, and may need assistance.

Established Suburban Neighborhoods
- Most common built form
- These areas are well developed, but lack orientation to the public realm
- Access usually comes from a fewer large roads
- Densities tend to be below transit-supportive levels.
- Few centers of activity
- TOD development market varies, may need assistance.

New Suburban and Greenfields
- Outermost edge of the transit region
- Areas are quickly developing
- Connections are limited; but opportunities abound
- Densities are well below transit-supportive levels
- Stations located here will attract riders from a larger area
- No existing centers of activity
- TOD development varies.
Role of Transit & Land Use in the Regional Context

Transit’s Role:
Mobility, Placemaking, and Development.

Station Plan’s Role:
Concentration
Mixture of Uses
Focal Point

Transit’s Role:
Mobility Infrastructure

Station Plan’s Role:
Context
Stabilization
Redevelopment

Transit Service Area
The Pedestrian-Key to TOD Success

Source: Untermann: "Accommodating the Pedestrian", 1984
Learning from the Mall

¼ Mile

500 feet
Station Function & Service Area
A Journey to Transit
A Journey to Transit
Characteristics of Transit-Friendly Communities

Accessible
Comfortable
Connected
Convenient
Engaging
Vibrant
Characteristics of Transit-Friendly Communities

Accessible
Characteristics of Transit-Friendly Communities

Comfortable
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Characteristics of Transit-Friendly Communities

Engaging
Characteristics of Transit-Friendly Communities

Vibrant
TOD???
Table Sessions
### Station Typologies

**Urban Stations**
(1/2 Mile Service Area)
- Only serve a localized area immediately around the station
- Stations can be grouped to provide better service area overlay in the densest of areas
- Locate near minor thoroughfare

**Neighborhood Stations**
(1 Mile Service Area)
- Most common transit stations
- Reliant on bus connections to the station
- Some customers will arrive by car - need for adequate parking and Kiss & Ride areas.
- Locate near thoroughfare

**Community Stations**
(3 Mile Service Area)
- Access by a more limited feeder bus network and a larger number of private vehicles
- Provide adequate facilities for all modes of travel
- Locate near major thoroughfare

**Regional Stations**
(5 Mile Service Area)
- Typically the station's toward the end of the line.
- Access primarily by private vehicles
- Access to major thoroughfare or freeways.
Station Typologies

- **Urban Stations** (1/2 Mile Service Area)
- **Neighborhood Stations** (1 Mile Service Area)
- **Community Stations** (3 Mile Service Area)
- **Regional Stations** (5 Mile Service Area)

- **Light Rail Transit**
- **Bus Rapid Transit**
- **Heavy Rail Transit**
Small Group Exercise

- Confirm Screen 1 Alternatives - add/delete/refine
- Identify Potential Station Typologies
- Identify Station Area Opportunities and Constraints, including development potential.
Moving Forward
Next Steps

• Screen 2 Analysis
• Travel Demand Modeling
• Public Outreach – March 14, 2013
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