



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



We are Here



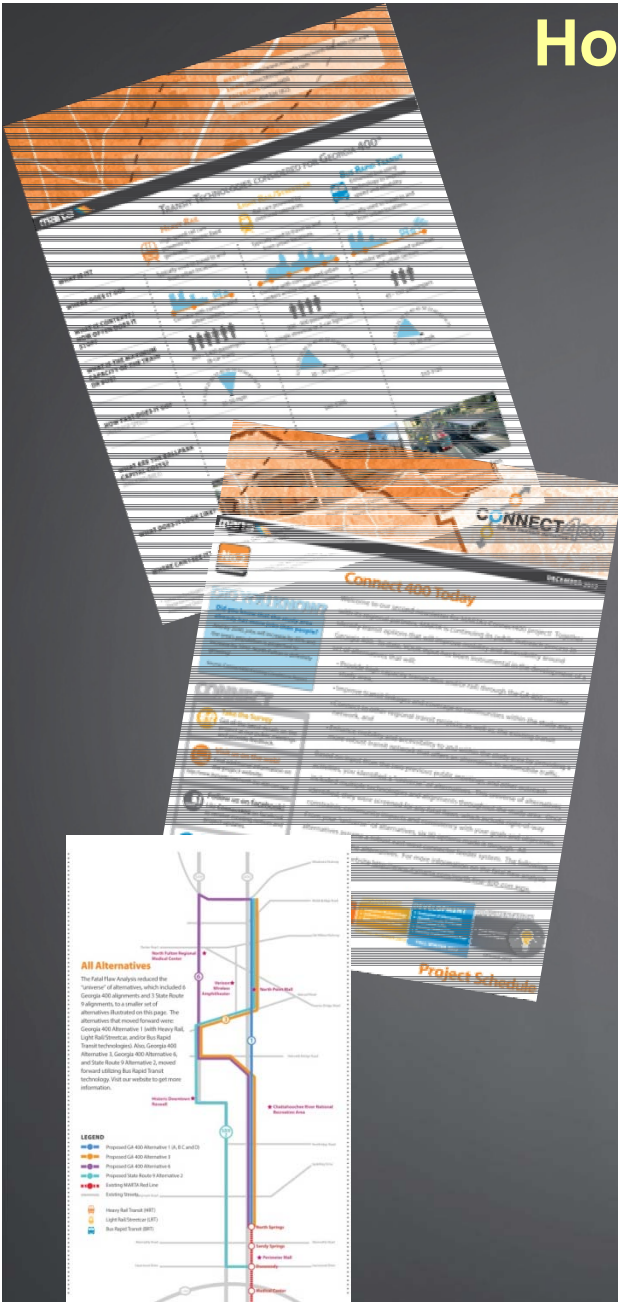
What We've Heard



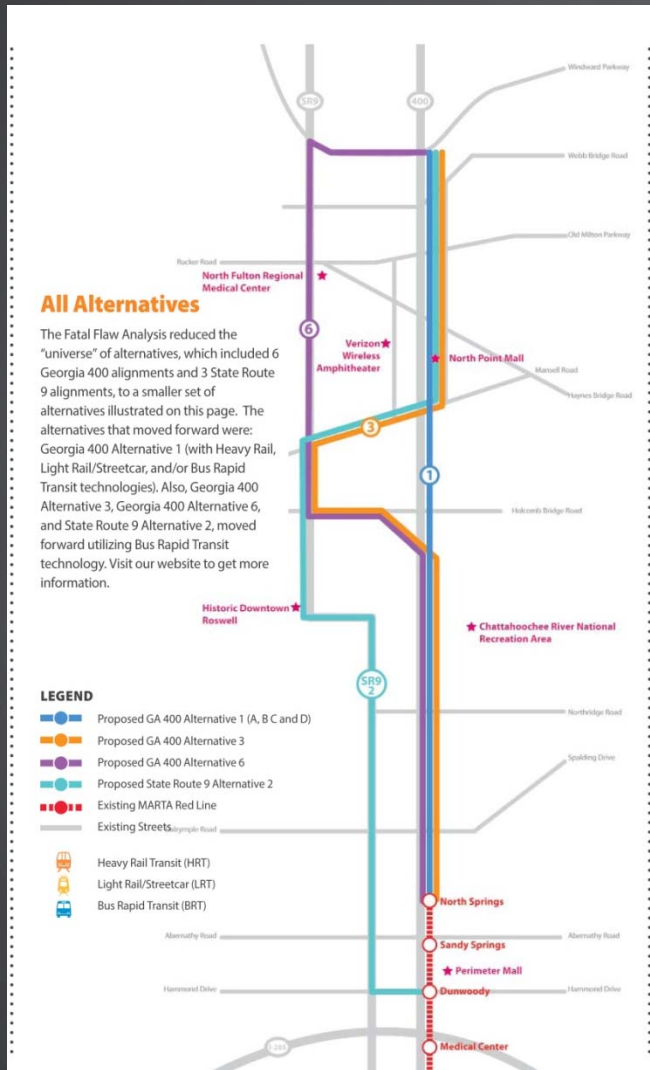
Holiday Outreach Results

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

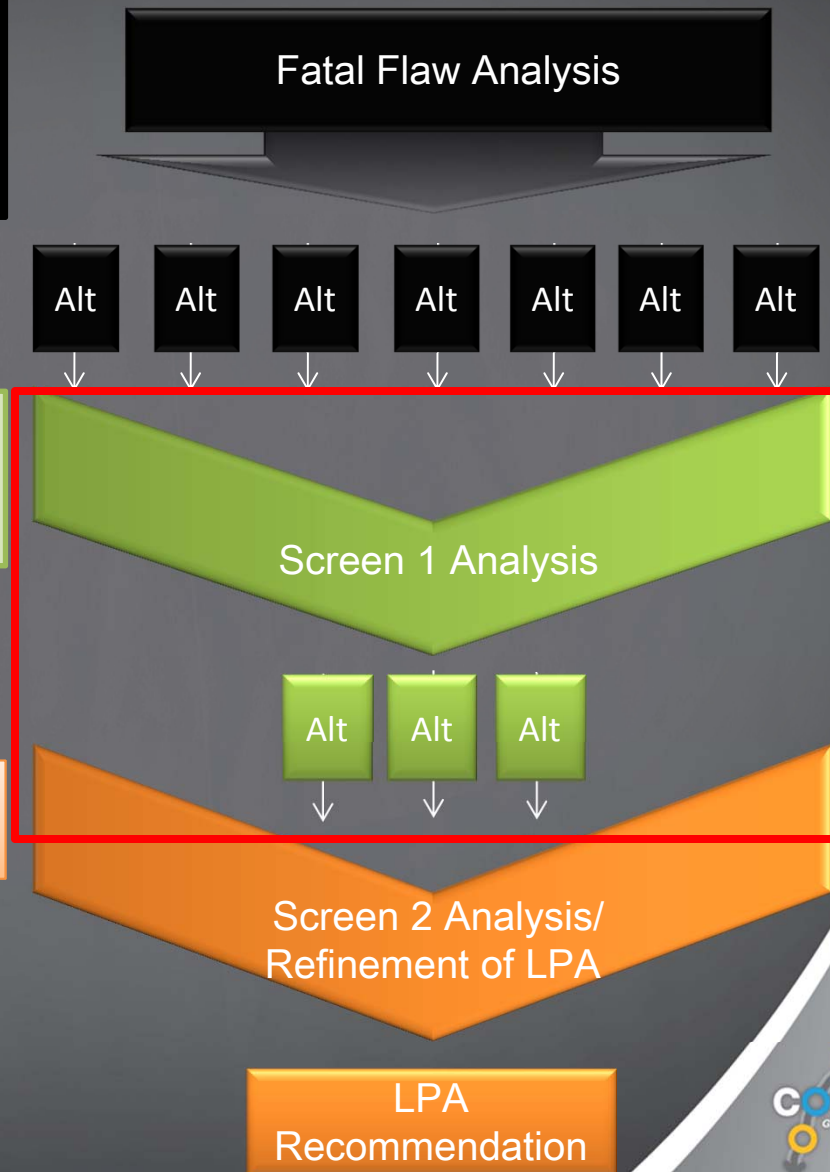
Screen 1 applies both quantitative & qualitative evaluation criteria to reduce the number of alternatives

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



Heavy Rail (HRT)



Light Rail/Streetcar (LRT/SC)



Bus Rapid Transit (BRT)

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**

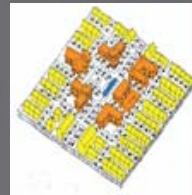
- HRT and LRT average over 42mph, and serve the corridor in 18 and 19 mins, respectively
- BRT averages 35mph and serves the corridor in 21 mins.

Station Typologies

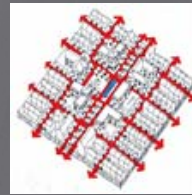
Elements of Station Area Planning



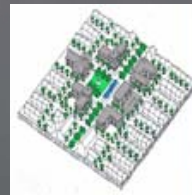
Transit Station – Designing the elements of a transit station to meet their functional requirements within the greater context



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



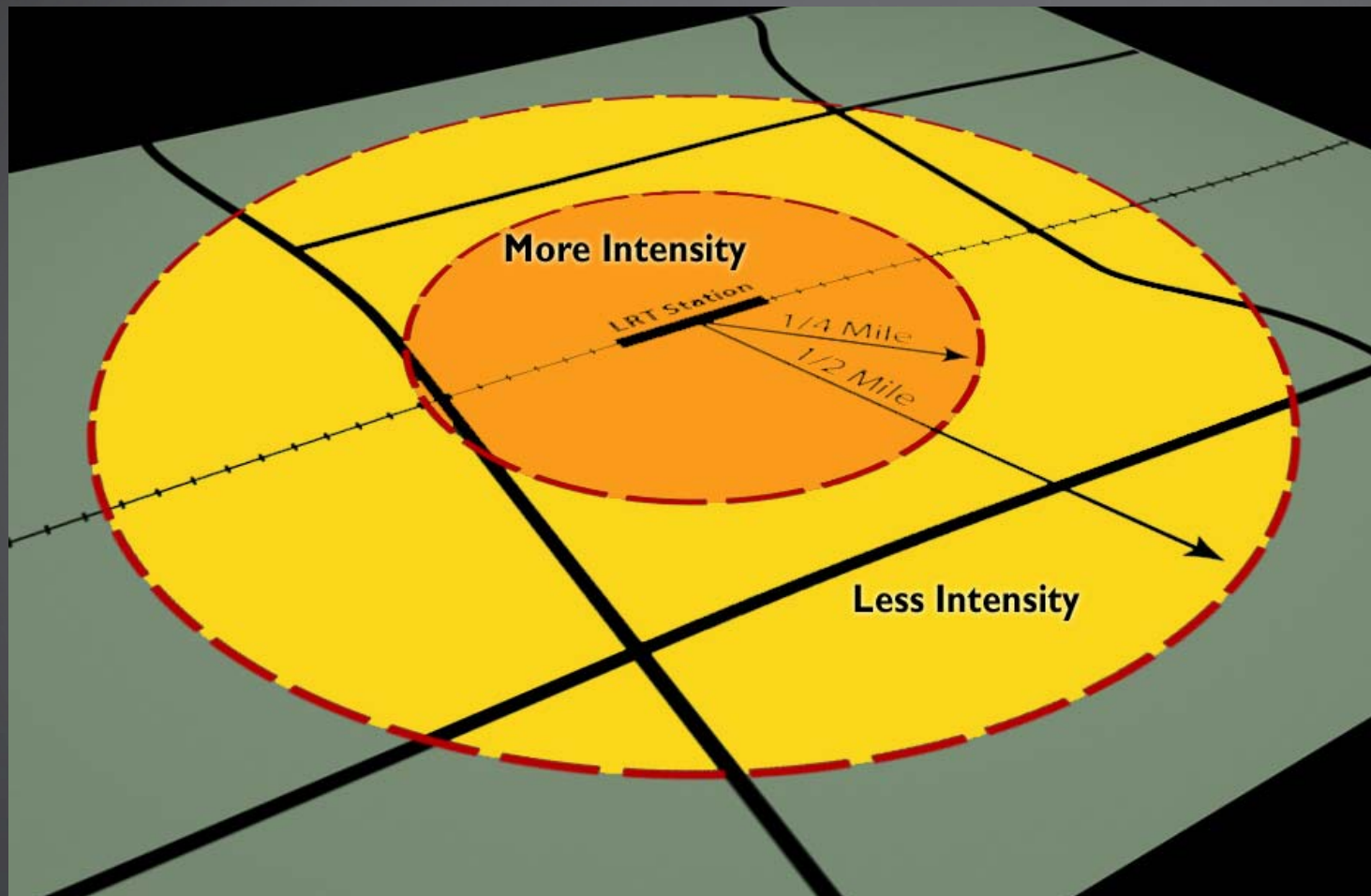
Mobility – Designing for all the ways that people get around the station area; on foot, by car, by bus, by bike, etc...



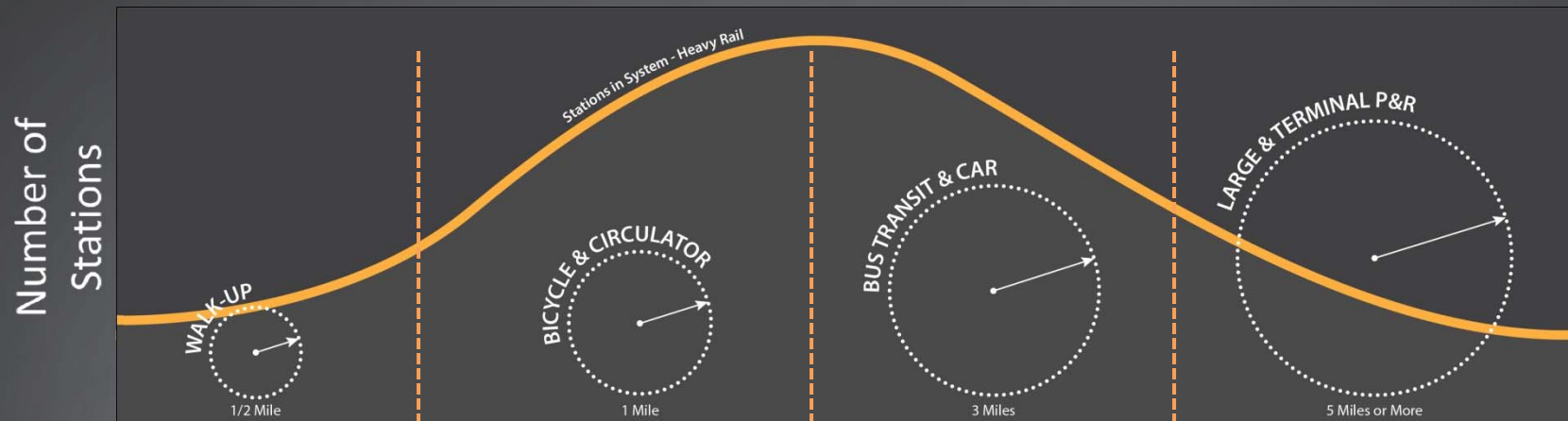
Urban Design – Making sure the elements interact with each other and make the station area a memorable place

Elements of Station Area Planning

16



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

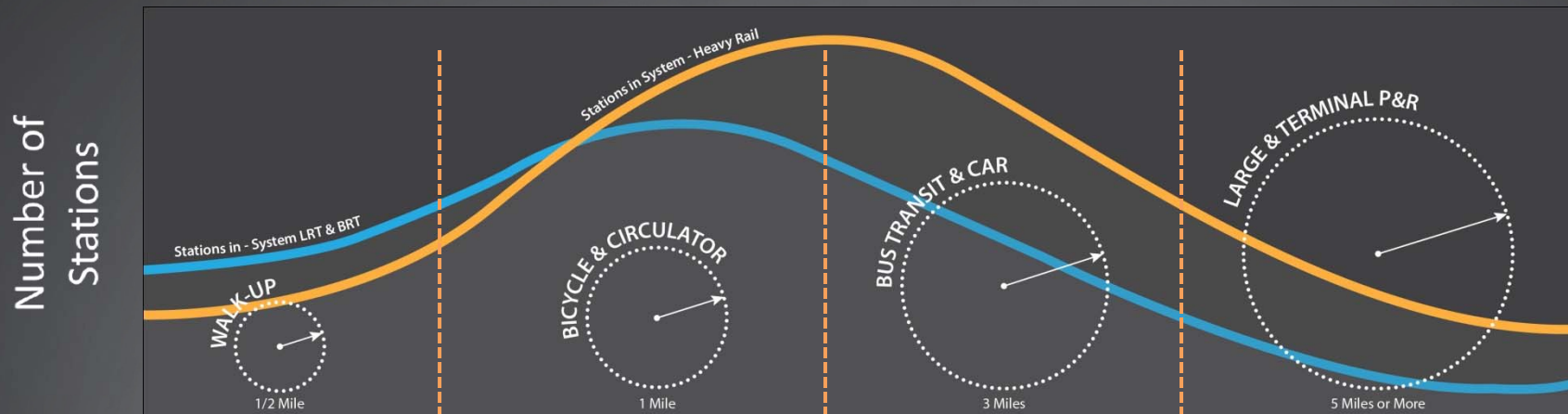
3-Mile Service Area

- 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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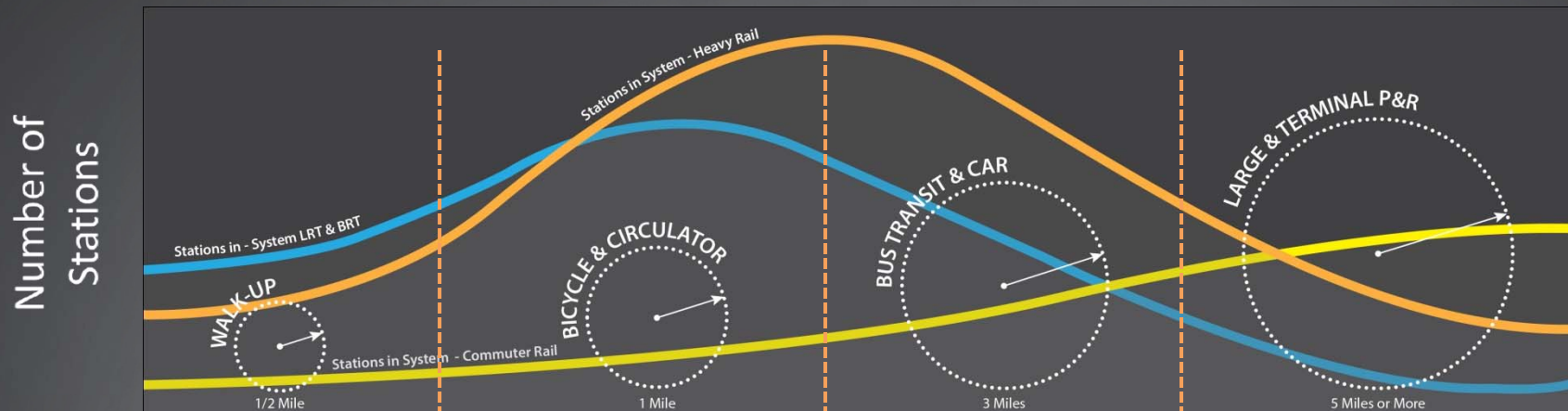
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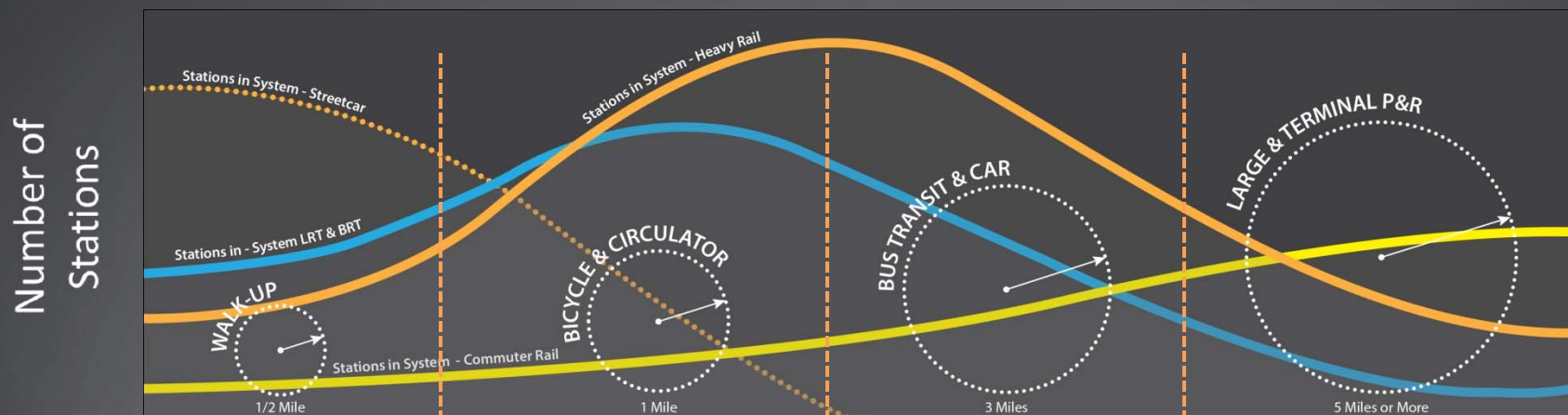
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Land Use Context



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



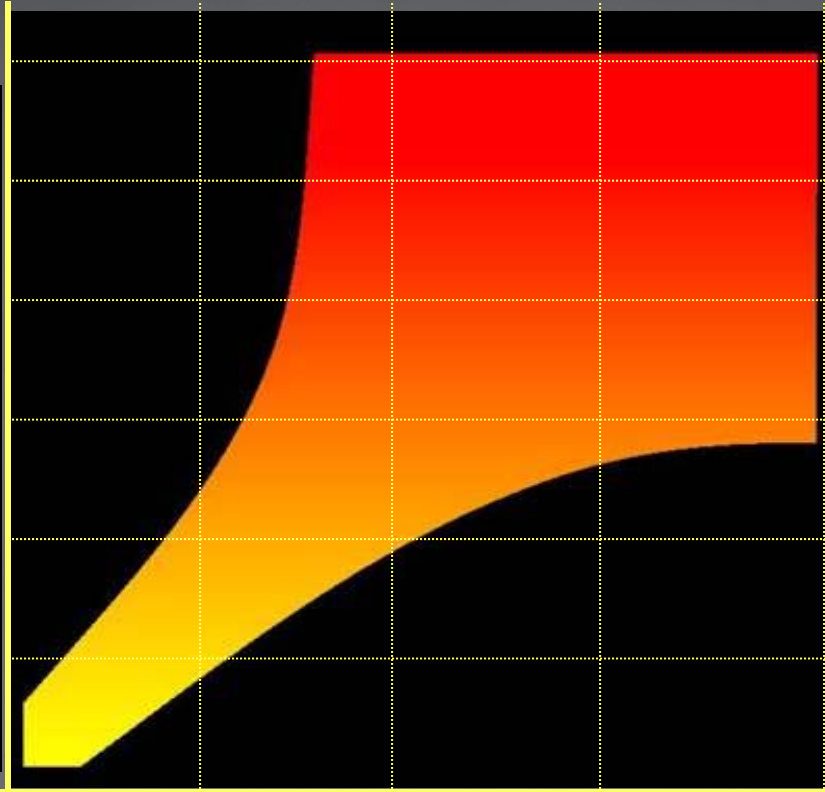
New Suburban and Greenfields

- 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

Land Use Context

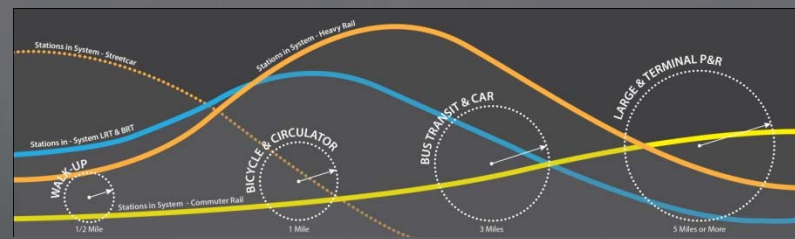


Transit's Role:
Mobility,
Placemaking, and
Development.

Station Plan's Role
Concentration
Mixture of Uses
Focal Point

Transit's Role
Mobility Infrastructure

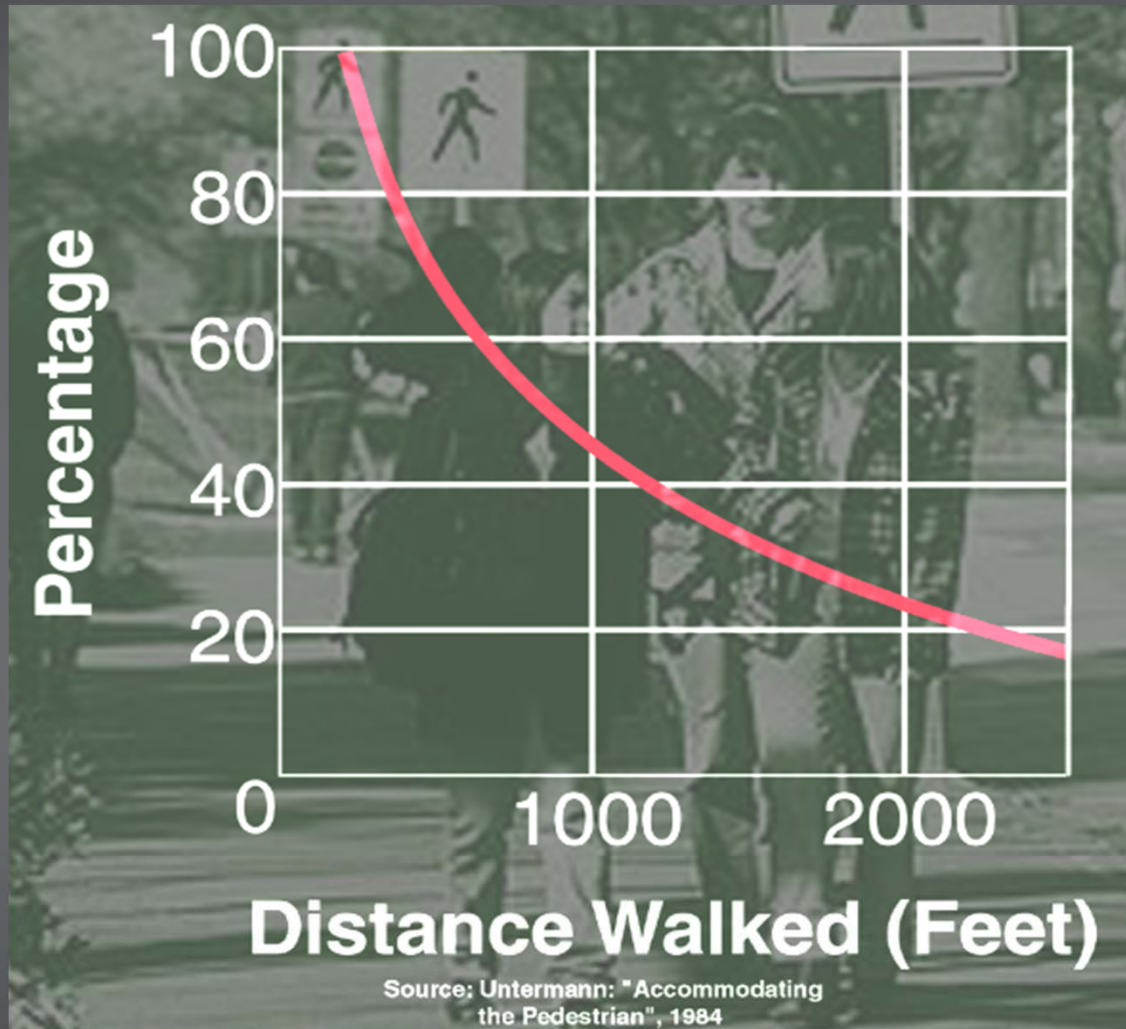
Station Plan's Role
Context
Stabilization
Redevelopment



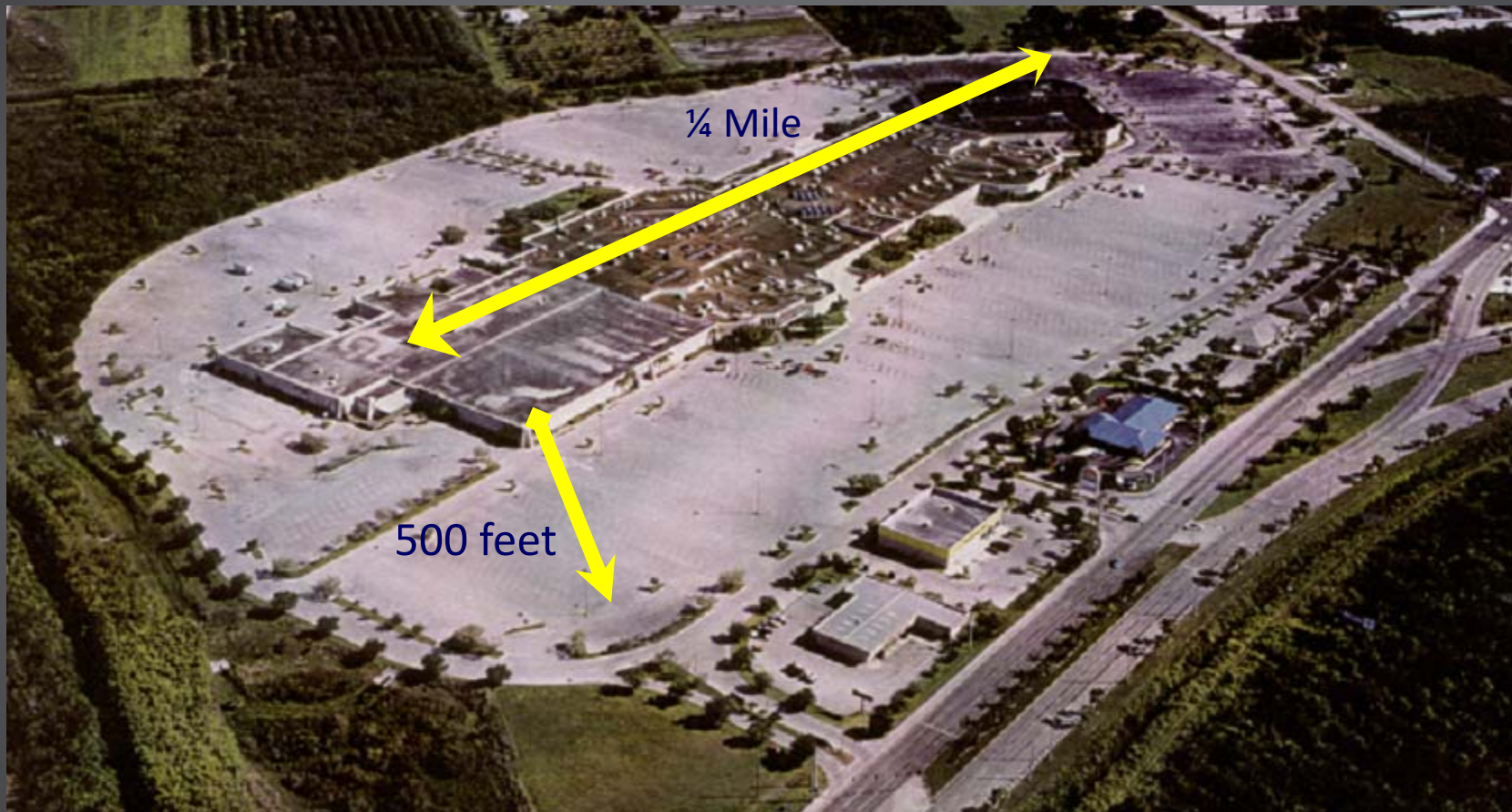
Transit Service Area



The Pedestrian-Key to TOD Success



Learning from the Mall



Station Function & Service Area



A Journey to Transit



A Journey to Transit



A Journey to Transit



A Journey to Transit



Characteristics of Transit-Friendly Communities



Accessible

Comfortable

Connected

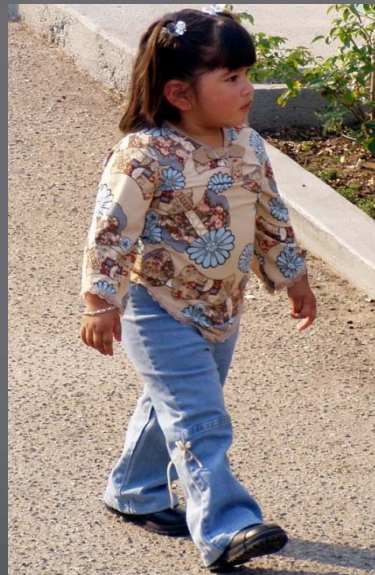
Convenient

Engaging

Vibrant

Characteristics of Transit-Friendly Communities

Accessible



Characteristics of Transit-Friendly Communities

Comfortable



Characteristics of Transit-Friendly Communities

Convenient



Characteristics of Transit-Friendly Communities

Connected



Characteristics of Transit-Friendly Communities

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Characteristics of Transit-Friendly Communities

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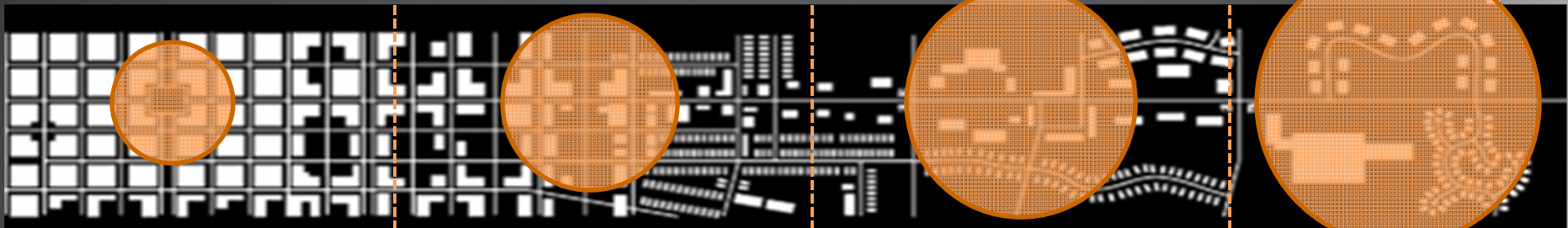
TOD???



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

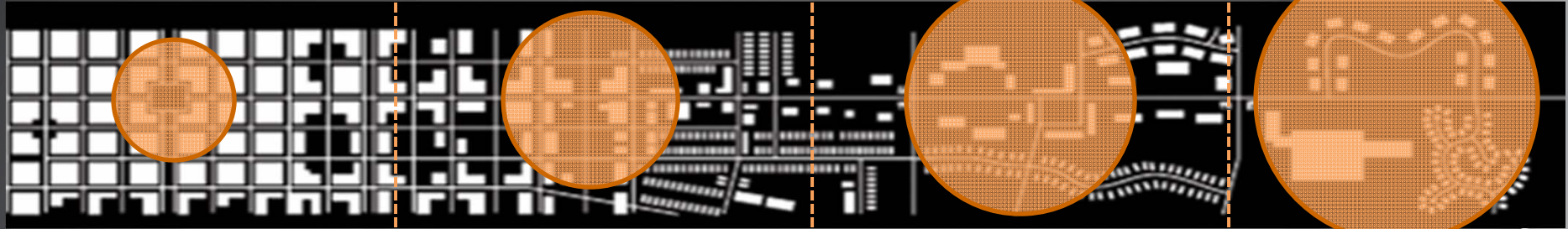
Community Stations (3 Mile Service Area)

- 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



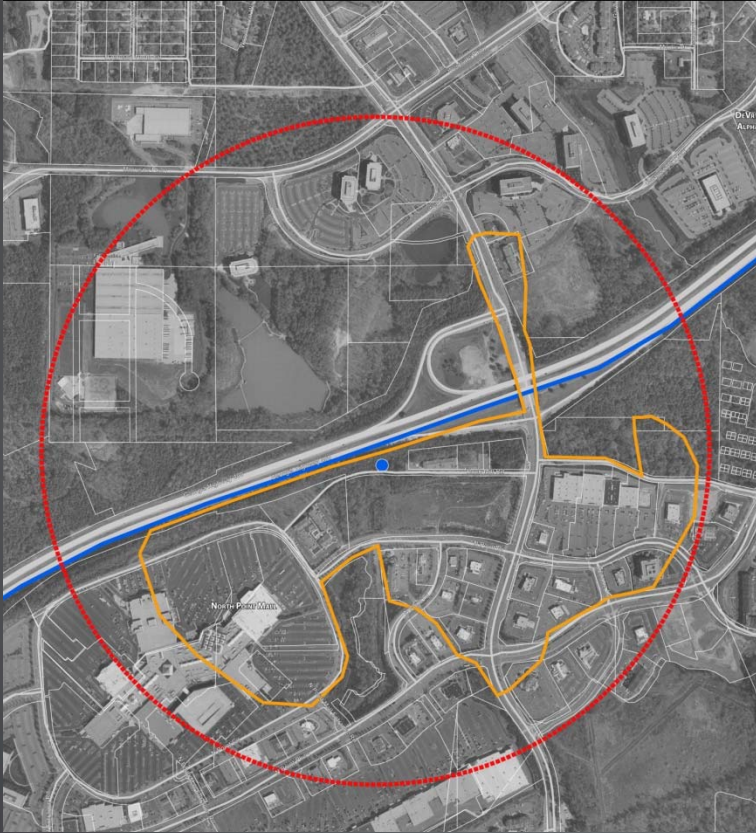
Bus Rapid
Transit



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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