Official
Informal Business Discussion Minutes
Tuesday, March 10, 2020 – 12:00 PM
Present: Charlotte J. Nash, Jace Brooks, Ben Ku, Marlene M. Fosque
Absent: Tommy Hunter

1. Transit Discussion
Jim Baker with Kinetics Transportation Group and Adam Dankberg of Kimley-Horn led the Board in a discussion on transit. No official action taken.
Transit Planning Process
Agenda

• Discussion of Priorities
• Mode Choice Influences
  • Demographics
  • Trip Characteristics
  • Price & Availability
  • Quality of Service
• Transit Modes
• Network Design Process
• Paying for Transit
System Goals and Priorities

**SUSTAINABILITY**
Preserve and promote social and environmental character through an integrated strategy that addresses transportation solutions

**ENVIRONMENT**
Encourage the reduction of air pollution, fuel consumption, and impacts to natural resources by providing/enhancing more sustainable modes of transportation

**ECONOMIC DEVELOPMENT**
Influence economic development patterns by providing an enhanced transportation network to better connect population, employment, and commercial centers

**CONGESTION RELIEF**
Reduce congestion and/or the demand to increase roadway capacity for automobiles by encouraging transit use

**STEWARSHIP**
Utilize available resources in an efficient manner to meet the transportation need

**EQUITY**
Increase the mobility of those with limited financial or traveling capabilities by focusing service on the mobility needs of disadvantaged communities

**PRODUCTIVITY AND EFFICIENCY**
Use constrained financial resources in the most cost-effective manner while maximizing ridership

**SYSTEM MAINTENANCE**
Continuously maintain existing capital investments to achieve a state of good repair

**SERVICE QUALITY**
Enhance the desirability and utility of the transit service for Gwinnett residents and workers

**COVERAGE AND CONNECTIVITY**
Expand the number of communities and destinations served to increase transit accessibility

**TRAVEL TIME REDUCTION**
Make the transit network more competitive and effective for its users through capital and operating investments

**RELIABILITY**
Increase the reliability of the transit network through investment in priority treatments, technologies, safety, and operations
Board Priority Themes

• Balanced Approach
• Scalable
• Coverage (Options/Modes)
• Connectivity (Options/Modes)
• Funding/Fiscal Responsibility
  (Affordable to County | Appropriate use of fiscal resources | Scalability)
• Experience
  (Service Quality and Dependability | Reliability | Safe | Affordable for Riders)
• Economic Development
  (Workforce Access to Transit | Land Use | Stability | Reduce Growth of Congestion/Quality of Life)
System Goals and Priorities

**SUSTAINABILITY**
- **ENVIRONMENT**
  - Encourage the reduction of air pollution, fuel consumption, and impacts to natural resources by providing/enhancing more sustainable modes of transportation
- **ECONOMIC DEVELOPMENT**
  - Influence economic development patterns by providing an enhanced transportation network to better connect population, employment, and commercial centers
- **CONGESTION RELIEF**
  - Reduce congestion and/or the demand to increase roadway capacity for automobiles by encouraging transit use

**STEWARDSHIP**
- **EQUITY**
  - Increase the mobility of those with limited financial or traveling capabilities by focusing service on the mobility needs of disadvantaged communities
- **PRODUCTIVITY AND EFFICIENCY**
  - Use constrained financial resources in the most cost-effective manner while maximizing ridership
- **SYSTEM MAINTENANCE**
  - Continuously maintain existing capital investments to achieve a state of good repair

**SERVICE QUALITY**
- **COVERAGE AND CONNECTIVITY**
  - Expand the number of communities and destinations served to increase transit accessibility
- **TRAVEL TIME REDUCTION**
  - Make the transit network more competitive and effective for its users through capital and operating investments
- **RELIABILITY**
  - Increase the reliability of the transit network through investment in priority treatments, technologies, safety, and operations

**Balanced Approach**

**Scalable**

**Economic Development**

**Funding/Fiscal Responsibility**

**Experience**

**Coverage**

**Connectivity**
Mode Choice
Choosing a Mode

Travel Purpose

Mode Choice

- Personal Vehicle
- Transit
- Vehicle Sharing
- Active Transport
Atlanta Modal Splits
All Trips

Sources: 2015 Household Travel Survey
2015 Downtown Atlanta Commuter Survey
Peer City Modal Splits
Work Trips

Transit Mode Shares

Urban Core Counties
- King County, WA

Major Suburban Counties
- Denver County, CO
- Hennepin County, MN
- Snohomish County, WA
- Fulton & DeKalb Counties, GA
- Pierce County, WA
- Dakota County, MN
- Cobb County, GA
- Gwinnett County, GA

Source: American Community Survey 2017 5-Year
Price and Availability
Price & Availability

• What modes are options?
• Automobile cost – $9,260 annual average
  • Fuel
  • Maintenance
  • Insurance
  • Registration, licensing and taxes
  • Depreciation and financing
• Transit cost - $960 to $2,160
  • Fare
  • Employer subsidy
  • Access costs

Source: AAA “Your Driving Costs” 2019 and Gwinnett County Transit Fares
Demographics
Demographics

- Gender
- Race/Ethnicity
- Age
- Income
- Education
- Immigrant/Non-Immigrant
- Work or Mobility Limited
- Vehicle Access

### Demographics Table

<table>
<thead>
<tr>
<th>Market Niche</th>
<th>MSA Transit Index</th>
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<tbody>
<tr>
<td>Sex</td>
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</tr>
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<td>Men</td>
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<td>Women</td>
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<td>White</td>
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<td>Age of Worker</td>
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<td>17-29</td>
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<td>Immigration Status</td>
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<td>Non-immigrant</td>
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<tr>
<td>Immigrant</td>
<td>2.08</td>
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<td>Years in US</td>
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<td>&lt; 5</td>
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<td>5 - 10</td>
<td>2.25</td>
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<td>30 - 40</td>
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<td>40+</td>
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Community Characteristics

Demographics

Population and Employment
Atlanta Mode Choice Characteristics - Demographics

*Household Auto Ownership*

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<th>Category</th>
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<th>1</th>
<th>2+</th>
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<td>Atlanta Region - All Households</td>
<td>27%</td>
<td>67%</td>
<td>6%</td>
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<tr>
<td>Atlanta Region - Transit Riders</td>
<td>41%</td>
<td>32%</td>
<td>27%</td>
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<tr>
<td>Gwinnett Transit Riders</td>
<td>42%</td>
<td>40%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Sources: 2010 Atlanta Region Transit On-Board Survey and 2011 Household Travel Survey
Atlanta Mode Choice Characteristics - Demographics

Household Income

Atlanta Region - All Households
- <$20k: 38%
- $20k-$40k: 20%
- $40k-$75k: 16%
- >$75k: 26%

Atlanta Region - Transit Riders
- <$20k: 13%
- $20k-$40k: 35%
- $40k-$75k: 22%
- >$75k: 30%

Gwinnett Transit Riders
- <$20k: 18%
- $20k-$40k: 34%
- $40k-$75k: 18%
- >$75k: 2%
Trip Characteristics
Trip Characteristics

- Trip type
  - Purpose
  - Single or multiple destinations
- Travel market
  - Origin-destination
  - Trip distance
- Trip time
- Number of people to be making the trip (passengers)
Travel Purpose

- Home to work and back
- Home to the grocery store and back
- Home to school
- Home to a movie
- Work to a meeting
- Work to daycare
- Daycare to grocery store

Home-Based Work (HBW)
Home-Based Other (HBO)
Non Home-Based (NHB)
Regional Travel Purpose

Average Trip Length (mi)

- Overall Region: 13.1
- Regional Transit: 6.9
- Gwinnett Transit: 5.2

Percent Trip Type

- Overall Region:
  - HBW: 15%
  - HBO: 52%
  - NHB: 33%

- Regional Transit:
  - HBW: 44%
  - HBO: 44%
  - NHB: 12%

- Gwinnett Transit:
  - HBW: 40%
  - HBO: 48%
  - NHB: 12%

Sources: 2010 Atlanta Region Transit On-Board Survey and 2011 Household Travel Survey
Home/Work Locations

• 60% of Gwinnett’s work force leaves the County everyday
  • 206,000 workers

Source: U.S. Census Longitudinal Employer Household Dynamics data
General Travel Patterns
Major Corridors

Cross-County Corridors

Regional Corridors

Commuter Opportunities
Quality of Service
Quality of Service

- Travel Time
- Convenience
- Reliability
- Comfort
- Perceived Personal Safety
- Perceived "Image" of Mode

Source: TCRP Report 111, 2007
Community Values on Transit

**FREQUENCY AND SPAN**
- Provide more frequent service for a shorter time
- Provide less frequent service for a longer time

**COVERAGE**
- Provide less frequent service to more areas
- Provide more frequent service to fewer areas

**DAYS OF SERVICE**
- Provide less weekday service and more weekend service
- Provide more weekday service and less weekend service

**TRANSFERS**
- Provide more routes with less frequent service but fewer transfers
- Provide fewer routes with more frequent service but more transfers

**DIRECTNESS**
- Provide slower and less direct service with shorter walks to stops
- Provide faster, more direct service with longer walks to stops

**STOP SPACING**
- Serve many stops that make service slower but reduce walking distance
- Serve fewer stops to speed service up but increase walking distance

**SERVICE TYPE**
- Improve the local bus network
- Improve the commuter bus network

**SERVICE DISTRIBUTION**
- Provide service in areas in proportion to funding
- Provide service to areas with the most need
Travel Time and Reliability

- Product of
  - Congestion
  - Route Geometry
    - Length
    - Deviations and Turns
  - Scheduling
    - Recovery Time
  - Bus Stops
    - Number
    - Locations
  - Payment Type
User Perception of Travel Time

• People Don’t Like to Wait
  • Waiting time perceived as 2 to 4 times longer than in-vehicle time
  • Perception of waiting time influenced by stop amenities

• Transfers Cause Significant Drop in Ridership
  • Each transfer perceived as equivalent to 12 to 30 minutes of travel time in addition to transfer wait time

Source: TCRP 95, 2004
Transit Service Design

- Frequency
- Routing
- Stop Spacing and Accessibility
- Span of Service
# Frequency

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Description</th>
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<tbody>
<tr>
<td>&lt;= 5 minutes</td>
<td>Very frequent service, no need to check schedule</td>
</tr>
<tr>
<td></td>
<td>Very high density corridors/activity centers</td>
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<tr>
<td>5 to 10 minutes</td>
<td>Frequent service, no need to check schedule</td>
</tr>
<tr>
<td></td>
<td>High density corridors/activity centers</td>
</tr>
<tr>
<td>11 to 15 minutes</td>
<td>Relatively frequent service, check schedule to minimize wait</td>
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<tr>
<td></td>
<td>High density corridors with strong anchors</td>
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<tr>
<td>16 to 30 minutes</td>
<td>Always check schedules, change travel to meet the schedule</td>
</tr>
<tr>
<td></td>
<td>Moderate density corridors</td>
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<tr>
<td>31 to 59 minutes</td>
<td>Always check schedules, change travel to meet schedule</td>
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<tr>
<td></td>
<td>Low to moderate density</td>
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<tr>
<td>60 minutes</td>
<td>Meets basic travel needs, change travel to meet schedule</td>
</tr>
<tr>
<td></td>
<td>Low density</td>
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Source: *Transit Capacity and Quality of Service Manual, 3rd Edition*
Top performers are frequent …

- Frequency has triple payoff
  - Transit is always coming soon
  - Transfers are short
  - Frequency creates reliability
Routing

• Where does the transit travel?
• Direct vs Non-Direct
• Loop vs Bidirectional
Routing: Direct vs. Deviation

Direct

Deviation
Routing: Loop vs. Bi-Directional
Stop Spacing

Local

Consolidated

385 Feet
Trade-off Between Stop Spacing and Ridership

• Bus stop reduction is often the easiest way to achieve travel time and reliability gains, but often only results in a fraction of total travel time (usually <25%)

• However, nationally:
  • Over 50% of bus riders walk less than ¼ mile to their bus stop
  • Approximately 90% of bus riders walk less than ½ mile to their bus stop

• Lack of sidewalks causes significant drop in bus access
Bus Stop Access

Current Gwinnett Transit Users
Local Service

- 51% Up to ¼ mile (0-2 blocks)
- 15% ¼-½ miles (3-4 blocks)
- 9% ½-1 miles (5-8 blocks)
- 17% 1-2 miles (9-16 blocks)
- 4% More than 2 miles (> 17 blocks)
- 1% Bicycle
- 1% Auto
- 1% Other

Source: On-Board Survey, 2015
Span of Service

• When is the service going to be more frequent?
• How late does the service run?
• Saturday and Sunday Service?
• Important for trip type
Frequency vs Coverage

- Budget limits combined with routing choices force the conversation between coverage vs. frequency
- Tradeoffs of providing frequent service only along a dense corridor vs providing more coverage service across areas of need
Frequency vs Coverage

Frequency

Coverage
Infrastructure & Capital Investments

- Amenities at stops, stations, and on-board
- Connectivity to stops and stations
Activity: Mode Choice
Transit Modes
Transit Modes

• General Travel vs. Commuter Travel Modes
• Mode Operating Environments
Common General Travel Modes

**Heavy Rail (HRT)**
- High speed/rapid acceleration rail cars
- Electrified and fully grade-separated
- Substantial stations with faregates
- Stations spaced every 1 to 5 miles

**Light Rail (LRT)**
- Operates most commonly in dedicated right-of-way
- Electrified, can be grade-separated or street level
- Lower capacity and speed than heavy rail
- Stations spaced every ½ to 1 mile

**Bus Rapid Transit (BRT)**
- Rubber tired vehicles in primarily dedicated ROW
- Priority treatments to increase speed and reliability
- Enhanced stations spaced like LRT with distinctive branding and off-board fare collection
Common General Travel Modes

**Arterial Rapid Transit (ART)**
- Rubber tired vehicles
- Runs some dedicated lanes
- Mostly queue jumper lanes and transit signal priority
- Station spacing ¼ to 1/3 mile

**Local Bus**
- Electric, hybrid, natural gas, or diesel vehicles
- Mixed flow traffic, shared-right-of-way
- Limited amenities at stops
- Stations spaced 1-2 blocks to ¼ mile

**Microtransit**
- Demand responsive bus or shuttle
- Mixed flow traffic, shared-right-of-way
- Operates in a defined geographic area without fixed routes
- Combination of door-to-door service and/or designated stops
General Travel Demand

High Demand
- HRT
- LRT

Low Demand
- BRT
- ART
- Local Bus
- Microtransit
- TNCs
Common Commuter Travel Modes

**Commuter Rail (CR) – limited**
- Electric or diesel propelled
- Carries moderate to long distance commuters
- Often runs in corridor shared with freight services
- Stations spaced at least every 2 to 5 miles

**Express Commuter Bus**
- Rubber tired coach vehicles
- Serves long-distance, commute flow
- Mostly mixed flow, benefit from managed lanes
- Limited stops, primarily route termini

**Vanpool**
- Uses vans for targeted small groups
- Serves commuters who have similar home and work locations
- Limited stops focused on route termini
Commuter Travel Demand

High Demand

Commuter Rail

Commuter Bus

Low Demand

Vanpool
Capital Costs for Transit Projects

**Heavy Rail Transit**
$250M+ per mile

**Commuter Rail Transit**
$20M-$25M per mile*
*Assumes operation on existing rail

**Light Rail Transit**
$95M-$125M per mile

**Bus Rapid Transit**
$20M-$30M per mile

**Rapid Bus (ART)**
$3M-$15M per mile

**Commuter Bus**
$10M-$150M per mile for Park-and-Ride

Note: Costs shown above reflect common ranges. Actual costs can vary significantly depending on project specifications.
# Productivity

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Passenger trips/service hour</th>
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<tbody>
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<td>Urban subway</td>
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<td>Urban light rail</td>
<td>&gt;100</td>
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<tr>
<td>Urban frequent bus</td>
<td>40-100</td>
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<tr>
<td>Ridership-justified suburban bus</td>
<td>15-40</td>
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<tr>
<td>Coverage-justified suburban bus</td>
<td>10-15</td>
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<tr>
<td>General Public Dial-a-Ride</td>
<td>0-3</td>
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<tr>
<td>Microtransit Pilots to Date</td>
<td>0-3</td>
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<td>TNCs</td>
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<tr>
<td>ADA Paratransit</td>
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Mode Operating Environment

- Grade Separated
- Exclusive
- Semi-Exclusive
- Mixed-Traffic

High Speed and Reliability
Low

Source: TRB Transit Capacity and Quality of Service Manual, 3rd Edition
Grade Separated

- No potential conflict points with any traffic
- Allows for highest speed and most reliability
- HRT, LRT, and BRT

Grade Separated

- High Speed and Reliability
- Mixed-Traffic Low

Exclusive

Semi-Exclusive
Exclusive

- Exclusive transit right-of-way where there is some interaction with other traffic
- On-street transit lanes, Commuter Rail right-of-way grade crossings
- LRT, BRT, Commuter Rail

Grade Separated  Exclusive  Semi-Exclusive  Mixed-Traffic

High  Speed and Reliability  Low
Semi-Exclusive

- Partially dedicated transit right-of-way that allows some other vehicles to use depending on location and time
- Peak hour bus lanes, managed lanes
- BRT, Streetcar, Rapid Bus, Commuter Bus

Grade

Separate

Exclusive

Semi-Exclusive

Mixed-Traffic

Speed and Reliability

High

Low

Gwinnett
Mixed Traffic

- Transit operates in regular travel lanes with normal traffic
- Streetcar, Local Bus, Rapid Bus, Commuter Bus
Network Design Process
Building the Transit Network

Matching Transit Services to Travel Markets

- Use guiding principles
- Let the market determine appropriate service type
- Create realistic recommendations
- Consider equity implications
- Be mindful of the importance of transit facilities

Service Layers Form a Network

The network is based on a layering of service types to provide additional transit access to less populated areas while providing faster and more direct connections between activity centers.

![Diagram showing layers of mobility and accessibility with options such as Regional Express, High Frequency, Local Service, Community/Circulator, and New Mobility Options.](image-url)
Building the Transit Network:
Daily Trips per Mile

South I-85 Corridor
2015: 7,286
2040: 10,178

North I-85/I-985 Corridor
2015: 3,850
2040: 6,243

Connection to Hall County
2015: 1,194
2040: 2,075

A B C
Building the Transit Network: Alignment Considerations
Building the Transit Network: Satellite Boulevard Alignments

Traffic Constraints
- Congestion on Buford Hwy between Button Gwinnett Rd and Beaver Ruin Rd and on Brook Hollow Pkwy between Jimmy Carter Blvd and Indian Trail Lilburn Rd

Major Right-of-Way Constraints
- Button Gwinnett: 50’, 2 undivided lanes
- Jimmy Carter: 100’, 6 lanes with two way left turn lane
- Beaver Ruin: 85’, 5 lanes with two way left turn lane
Alignment Considerations

• Beaver Ruin
  • Low-density residential
  • ROW on Beaver Ruin Road ranges from 85 to 150 feet for 4 lanes; least ROW-constrained among Satellite options

• Jimmy Carter
  • Mixed-use employment area; low-density office
  • ROW on Jimmy Carter Blvd ranges from 100 to 150 feet for 6 lanes

• Button Gwinnett
  • Mostly industrial areas; best connection to OFS Fitel site
  • Most ROW-constrained among Satellite options; 2-lane road would require widening
## Alignment Comparisons

<table>
<thead>
<tr>
<th>Alignment</th>
<th>Peachtree Industrial Blvd</th>
<th>Satellite via Button Gwinnett</th>
<th>Satellite via Jimmy Carter</th>
<th>Satellite via Beaver Ruin</th>
<th>Steve Reynolds</th>
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<tbody>
<tr>
<td>Corridor Length (miles)</td>
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<td>16.1</td>
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<td>17.0</td>
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<tr>
<td>Existing Transit Use</td>
<td>1,147 Daily Boardings</td>
<td>2,101 Daily Boardings</td>
<td>2,301 Daily Boardings</td>
<td>2,232 Daily Boardings</td>
<td>1,708 Daily Boardings</td>
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<td>Population Served</td>
<td>20,196</td>
<td>18,697</td>
<td>18,145</td>
<td>17,747</td>
<td>18,620</td>
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<td>Jobs Served</td>
<td>24,577</td>
<td>29,411</td>
<td>27,024</td>
<td>24,354</td>
<td>22,939</td>
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Paying for Transit
Paying for Transit

• Capital Costs

• Operations and Maintenance (O&M) Costs
  • Daily operations of service
  • Labor Costs (70-75%)
    • Drivers and support staff
  • Non-Labor Costs (25-30%)
    • Fuel, vehicle parts, insurance

• State of Good Repair Costs
  • “System components are properly maintained or replaced”
  • Need to program funds for transit infrastructure repair and replacement
Capital Costs

• Cost associated with physical assets of transit
• Stations
• Guideways
• Vehicles
Infrastructure

- Direct Access Ramps
- Major Transfer Point Facilities
- Bus Stop Improvements

Image Sources (from bottom left): HRT Transit Center, Building Design & Construction. Nashville Bus Stop, Nashville MTA.
Capital Funding Sources

- FTA New Starts Federal Grant Program
  - Projects greater than $300M
  - Competitive program with limited funds
  - Time needed to secure funds can take several years
- FTA Small Starts Federal Grant Program
  - For smaller projects (e.g., $300 million or less) with smaller federal share (< $100 million)
  - Less restrictive criteria and requires less time to secure funding
- Federal funding covers 30% to 80% of project cost
- Local and/or state matching funds cover the rest of the cost
**FTA CIG PROGRAM FUNDING – MODAL BREAKDOWN**

- Average federal funding levels across all modes are at **37.53%** for new transit projects
- Total of 13 FFGAs and additional 8 projects with anticipated agreements (21 total projects)

<table>
<thead>
<tr>
<th>Mode</th>
<th>CIG Fed. Share</th>
<th>Total Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus Rapid Transit</td>
<td>57%</td>
<td>12</td>
</tr>
<tr>
<td>Streetcar</td>
<td>35%</td>
<td>3</td>
</tr>
<tr>
<td>Commuter Rail</td>
<td>34%</td>
<td>2</td>
</tr>
<tr>
<td>Light Rail</td>
<td>36%</td>
<td>3</td>
</tr>
<tr>
<td>Heavy Rail</td>
<td>39%</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: ATL Transit Operators Working Group August 16, 2019
O&M Costs

- Costs associated with daily operations and maintenance
- Costs included in running service with capital assets
  - Labor Costs
    - Driver pay and benefits
    - Support staff pay and benefits
  - Non-Labor Costs
    - Fuel costs
    - Vehicle parts and supplies
    - Insurance

Labor costs (wages & fringes) typically account for 70-75% of all costs
O&M Costs in Gwinnett County

- Gwinnett’s cost to add one hour of revenue service:
  - Express Bus – $150
  - Local Bus – $90
  - Demand Response – $90

Current Approximate Annual O&M Cost: $18 Million

Source: 2017 National Transit Database
Funding Sources for O&M Costs

Gwinnett Transit Farebox Revenues Cover:
- 22% of commuter bus costs
- 16% of local bus costs
- 3% of demand response costs

Source: 2017 National Transit Database
Title VI Requirements

- Implementation of the Civil Rights Act
- Required for federal funding recipients
- Reporting required every three years plus with any service change, fare change, or parking charge
- New service must be equitable
  - Must provide equivalent service investment in minority and low-income areas
  - Minority and low-income areas defined relative to service area
State of Good Repair

• A transit system is in a State of Good Repair when:
  • “system components are properly maintained or replaced.”
• Need to program funds for transit infrastructure repair and replacement
• Typical Bus Replacement Requirements
  • Buses = 12 years
  • Paratransit/Small Buses = 4-6 years
  • Rail Vehicles = 25 years
Comparison – OCTA

Source: OCTA
OCTA Community Vision

• Faster and More Frequent Service
  • 15-Minute Network
• Longer Hours of Operation
• High-Capacity Transit on Busy Corridors
• Easier Connections to Transit (Walking/Biking)
• Real-Time Information and Amenities
OCTA Flex Bus

• Two Zones
• After first year, averaging 2.4 riders per revenue hour
• About a third of trips involve transfers with regional rail

Source: OCTA
Comparison – MVTA

- Serves Dakota County, south of Minneapolis/St. Paul
Comparison – MVTA

- One BRT, connecting to Metro Transit LRT
- 14 Local Routes
- 17 Express Routes
- 5 Transit Centers/P&Rs
- 5 Additional P&Rs
Summary of Key Concepts

• Start with understanding trip needs and mode choice
• Find the right balance between trade-offs
• An efficient service provides value for users and maximizes use of operating funds
• Labor is the primary driver of operating cost
Questions/Discussion
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>04/07/2020</td>
<td>Board of Commissioners adopts revised Transit Plan</td>
</tr>
<tr>
<td>07/21/2020</td>
<td>Board of Commissioners requests approval by the ATL of any changed projects in the Regional Transit Plan</td>
</tr>
<tr>
<td>07/21/2020</td>
<td>MARTA Board approves Contract for Transit Services</td>
</tr>
<tr>
<td>07/21/2020</td>
<td>Board of Commissioners meets and votes to Call Transit Referendum</td>
</tr>
<tr>
<td>07/21/2020</td>
<td>Board of Registrations and Elections meets and votes to approve the Resolution, Call, and Notice of Election</td>
</tr>
<tr>
<td>07/29/2020</td>
<td>1st publication of Call in Gwinnett Daily Post (Wednesday)</td>
</tr>
<tr>
<td>08/02/2020</td>
<td>2nd publication of Call in Gwinnett Daily Post (Sunday)</td>
</tr>
<tr>
<td>09/30/2020</td>
<td>1st publication of Notice of Election</td>
</tr>
<tr>
<td>10/07/2020</td>
<td>2nd publication of Notice of Election</td>
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<tr>
<td>10/14/2020</td>
<td>3rd publication of Notice of Election</td>
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<tr>
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<td>4th publication of Notice of Election</td>
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<tr>
<td>10/28/2020</td>
<td>5th publication of Notice of Election</td>
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<tr>
<td>11/01/2020</td>
<td>6th publication of Notice of Election (Sunday of week of election)</td>
</tr>
<tr>
<td>11/03/2020</td>
<td>Date of Referendum</td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>04/07/2020</td>
<td>Board of Commissioners adopts revised Transit Plan and Resolution that the Region has not proposed a TSPLOST</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>05/19/2020</td>
<td>Notice to the Cities of Meeting with Board of Commissioners</td>
</tr>
<tr>
<td>05/29/2020</td>
<td>Meeting between Board of Commissioners and Cities</td>
</tr>
<tr>
<td></td>
<td>County Notice to the ATL of Intent to Call Referendum, List of Projects, Etc.</td>
</tr>
<tr>
<td>07/21/2020</td>
<td>Board of Commissioners meets and votes for Resolution Calling for Implementation of Tax with List of Projects, Operator, etc.</td>
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