

---

## **Section 6- Service Improvement Strategies and Implementation Plan**

- 6.1 [Concepts for Implementation](#)
- 6.2 [Final Service Improvement Strategies and Performance Measures](#)

# Concepts for Implementation

This section provides concepts and examples of various modes and services included in the Fulton County Transit Master Plan.

## MODE CONCEPTS & EXAMPLES

The Fulton County Transit Master Plan (TMP) evaluated a range of transit modes to provide enhanced and expanded service along major corridors. The preferred BRT/ART scenario includes the following modes:

- Bus Rapid Transit (BRT)
- Arterial Rapid Transit (ART)
- Frequent Local Bus
- Local Bus
- Microtransit
- Park and Ride Lot

This section provides descriptions and examples of modes have been implemented in settings similar to those anticipated in Fulton County, including vehicles, mode characteristics, and station concepts.

### Bus Rapid Transit (BRT)<sup>1</sup>

BRT, as proposed in the Fulton County TMP, has the following characteristics:

- Medium construction cost
- Medium capacity
- Travels in dedicated lane
- Signal coordination and priority
- Service every 10-30 mins.
- Serves major transit stations
- Can spur economic development at stations

Two types of BRT are proposed in the preferred Fulton County alternative: **BRT in GDOT managed lanes**, and **BRT on dedicated right-of-way along major arterial streets**. Like heavy rail, BRT serves a limited number of stations that are spaced farther away than typical bus service. By operating in managed and/or dedicated lanes, these vehicles can operate at the same frequency as rail to make connections to rail easier and allow riders to use the service without having to check a schedule due to vehicle frequently. BRT is often less costly than rail because the required infrastructure is less, and there is no third rail or overhead power. The permanence of these services provides the same benefits as rail tracks. The dedicated infrastructure for BRT means the alignment will not change and the service will remain in that corridor. This allows developers and employers to depend on the longevity of the service because of the infrastructure investment, therefore spurring more and typically higher quality development than local, even frequent local bus.

Figure 1: BRT Station Examples



<sup>1</sup> Figure 1: BRT Station Examples Kansas City, Minneapolis, Boston's Kenmore Square

BRT stations typically consist of a large shelter and fare vending machine. BRT stations, in managed lanes on the highway, are often inline and integrated into the highway. Inline stations require connections and pedestrian bridges to either side of the highway and nearby parking. BRT stations in dense areas with multiple route connections often have similar amenities to rail stations, but take up a smaller footprint. Major benefits for this service are its versatility and cost-effectiveness.

**Figure 2: BRT Vehicle and Station Examples<sup>2</sup>**



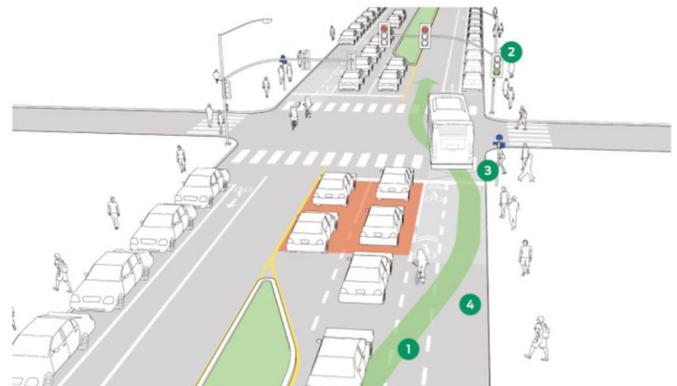
## Arterial Rapid Transit (ART)

ART uses technology to provide more reliable travel time and run more frequently than local bus. ART does not travel in its own alignment, and as proposed in the Fulton County TMP, is consistent with the characteristics of ART as defined by the current transit operator, MARTA in its Comprehensive Operations Analysis (COA):

- Low construction cost
- Low capacity
- Travels in mixed traffic
- Signal coordination and priority
- Service every 15-30 mins.
- Queue jumpers at major intersections with available right-of-way
- Serves major transit stations and local stops

ART leverages technology, and larger vehicles if there is enough demand, to improve travel time reliability and capacity for bus routes. By equipping buses and traffic signals with transponders, through transit signal priority (TSP) vehicles can save time and stop less frequently at red lights. This, combined with serving fewer, and farther-between stops, allows the bus to improve travel time. ART is a good option for corridors with high demand but contain barriers that restrict dedicated right-of-way like BRT. Using technology, and queue-jumpers at intersections, these vehicles can improve

**Figure 3: Queue Jumper Example**



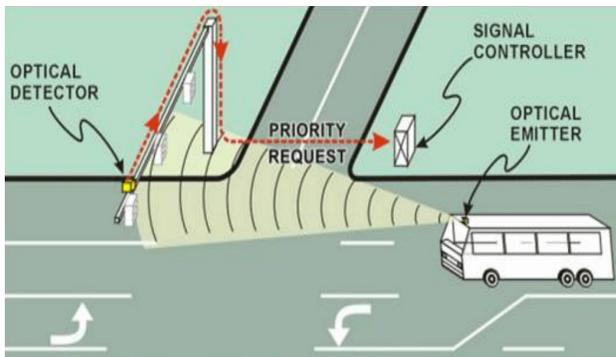
<sup>2</sup> Figure 2 BRT vehicle examples: Cleveland, France, IndyStar article, Metro Transit, Nelson Nygaard

overall corridor travel time and reliability. Queue-jumpers allow buses to pass queues of vehicles waiting at signalized intersections, therefore adding to the time savings. In a study done in Los Angeles, TSP improved travel time savings by 25%, and increased overall transit speeds by 29%.<sup>3</sup>

Consistent with the MARTA COA, this service would be focused on mixed-use corridors and have frequent service that riders could use without having to consult a schedule. MARTA’s vision for this mode in its service area will provide a frequent, rapid alternative outside of the rail and BRT corridors in the system and potentially implement various rapid service characteristics, such as level platform boarding, off-board fare collection, and/or all-door boarding to improve travel time of the service. It is envisioned that ART would be operated with similar buses to local bus service, but branded differently for patrons to recognize this service as faster, more frequent service, with fewer stops.

Conveying the distinctions between ART and local bus routes will be important to educate potential riders and existing riders on how to integrate this service into trips they already take. It will be critical to partner with the transit provider for outreach and education on how ART schedules and rapid characteristics will affect using the service.

**Figure 4: ART Station, Vehicle and Signal Priority Examples<sup>4</sup>**



<sup>3</sup>

<https://www.itsbenefits.its.dot.gov/its/benecost.nsf/ID/111FCD5A4E264420852573E200623854?OpenDocument&Query=BOTM>

<sup>4</sup> ART Station Examples: Santa Clara, rendering

## Frequent and Local Bus

MARTA currently operates both frequent and local bus service. Bus stop amenities range from a single pole-mounted sign to full shelters with lighting, benches, and trash receptacles. The key difference between local and frequent bus service is the frequency. Frequent service comes at least every 15 minutes (often more frequently during peak hours). Both frequent and local bus service should connect into rapid transit stations within the system. Amenities and vehicles for these services are expected to remain similar to MARTA bus services today, recognizing the routes and bus stop facilities should be refreshed and improved from time to time.

Bus service is important because it connects areas with lower densities into the rapid transit corridors. It is envisioned that as the BRT and ART routes are implemented, MARTA local and frequent service along and connecting to those corridors will be realigned to best connect people and areas into the new rapid transit corridors.

## Microtransit

As described in the *Transit Investment Scenarios* section, microtransit service is a cost-effective way to serve low density areas and connect these areas into higher capacity rapid transit services. Microtransit can be delivered in a few ways, and is defined differently at transit agencies across the county. Service models include variations of the following:<sup>5</sup>

- A designated area with on demand, curb-to-curb service from anywhere in the designated area to a transfer center to access the rest of the transit system;
- A flex route with a few scheduled stops, and the ability to deviate to pick up passengers on demand;
- A local circulator that changes routes each time to provide access to a wider area with a limited number of vehicles.



**Figure 6: Microtransit Vehicle Examples<sup>5</sup>**

**Figure 5: MARTA Bus**



Microtransit provides service from designated stops as well as requested stops into a major transfer station that connects into a rapid transit mode, such as rail or BRT. Vehicles for microtransit are often smaller than typical local bus service vehicles and can carry approximately eight to twenty riders at once.

## CORRIDORS AND ROUTING CONCEPTS

Implementing BRT and ART services into the existing transit system will allow some flexibility in how the routes are delivered when compared to rail services. Once funding is in place and detailed service plans are developed there will be opportunities to adjust services in a way that will reduce the need for riders to transfer and/or provide more direct, effective service.

The key difference between BRT and rail transit is the ability for the vehicle to leave its alignment. This allows opportunities for vehicles to provide dual service- such as local service at one end of a route, and then BRT through the corridor with dedicated right-of way. Based on surveys and origin-destination data of riders once they begin to use the service, potential routing alignments that could take advantage of the dedicated right-of-way infrastructure in place include, but are not limited to, the following examples:

<sup>5</sup> Microtransit example vehicles: Bridj, Cobb County flex

- **Service Example 1: Microtransit to Midtown/Downtown Express**

In this example, a microtransit vehicle with capacity for eight to twenty, could circulate in a low-density area or neighborhood off Holcomb Bridge picking up riders at their requested origin. Once full, the bus can enter a dedicated lane along Holcomb Bridge, then turn onto the managed lanes along GA400, and travel directly into Midtown or Downtown Atlanta for a one-seat ride from North Fulton into Atlanta with no transfers. Similar service is possible in South Fulton, where a microtransit vehicle could circulate an area with requested pickups, and then enter the dedicated lanes along South Fulton Parkway directly to MARTA's College Park Station. In this way, a rider would only have to transfer into the rail system, instead of transferring from microtransit to BRT, and then from BRT to rail.

- **Service Example 2: Holcomb Bridge to Perimeter Center**

It was clear in the North Fulton public meetings that there is a desire for direct connectivity into Perimeter Center, particularly from destinations along Holcomb Bridge Road. Instead of having routes only north-south along GA400 and east-west along Holcomb Bridge Road, there could be multiple alignments that provide direct service. For example, one route could provide east-west service along Holcomb Bridge only, and another route could provide service from the Fulton/Gwinnett County border on Holcomb Bridge Road along the dedicated bus lanes, and then directly enter the managed lanes for a direct trip from Roswell into Perimeter Center without transferring. Similarly, ART buses proposed along Old Milton Parkway could travel along that alignment and then turn into the managed lanes providing a one-seat ride from Johns Creek to Perimeter Center. These are examples of how to leverage the ART and BRT infrastructure to reduce transfers and improve transit convenience.

- **Service Example 3: Fulton Industrial Boulevard to MARTA's College Park Station**

In South Fulton, routes are proposed along Fulton Industrial Boulevard as well as Camp Creek Parkway. Along both corridors, technology will be in place for TSP and ART services. Therefore, a bus could provide continuous service from Fulton Industrial Boulevard at I-20 all the way to MARTA's College Park Station or Hartsfield-Jackson Atlanta International Airport leveraging the technology. This is one example of how to use the ART and TSP technology in place to maximize its use and benefit to riders.

This is not an exhaustive list, but examples of how dedicated bus lanes and TSP technology can be used to maximize the flexibility and convenience of BRT and ART services in Fulton County.

## Future Potential Modes and Services

Both heavy and light rail were highly considered mode types as part of the FCT master plan. However, these modes were not included in the preferred BRT/ART scenario. Below is a summary for each mode type if the funds become available to upgrade to heavy rail or light rail in the future.

### Vehicle and Service

### Facilities

Heavy Rail  
(HRT)



- High construction cost \$250-300M/mile
- High capacity
- Powered by third rail
- High ROW requirement
- Dedicated tracks
- Service every 5-20 mins
- Can spur economic development at stations



- Large footprint, roughly 4 – 5 acres
- Covered parking decks
- Multiple faregates
- High capital construction and maintenance costs
- Passenger notification systems, cameras, on site security
- Dedicated right of way, segregation from other vehicles modes
- Rideshare and taxi bays
- Access control

Light Rail  
Transit  
(LRT)



- Medium-high construction cost \$150-250M/mile
- Medium-high capacity
- Powered by third rail
- Medium ROW requirement
- Dedicated tracks
- Service every 5-20 mins.
- Can spur economic development at stations



- In street location, smaller footprint
- Typically no adjacent parking, except for end of the line stations
- Passenger notification systems
- Moderate security systems
- No access control, honor fare system

# Final Service Improvement Strategies and Performance Measures

This section describes next steps for the selected scenario, implementation strategies, and performance measures for tracking future progress. The next steps to expanding transit in Fulton County includes conducting a more detailed level of analysis, and planning and designing for each specific corridor in the project. These steps encourage detailed financial planning, opportunities for value engineering, and improved reliability in costs for successful project funding.

## Final Recommended Service Improvement Strategies

The Fulton County TMP project team worked with Fulton County, 14 partner cities and the Atlanta Regional Commission (ARC) to narrow down project alternatives from the Market-Based Scenario to four affordable options, as described in the [Transit Investment Scenarios Section](#).

Based on individual conversations with elected officials, online and in-person input, and direction from the Fulton County Board of Commissioners and Mayors, the Bus Rapid Transit/Arterial Rapid Transit (BRT/ART) scenario was preferred. This scenario is geographically balanced in both North and South Fulton County, will complement and feed into the existing MARTA heavy rail system, connect major employment centers and increase access and mobility options for all citizens.

This scenario was selected for its cost efficiency and ability to provide expanded rapid transit services to a wider area of Fulton County than is currently served. Implementing ART and BRT routes will provide travel time reliability, travel time savings and help build the rapid core network and improve access as well as catalyze economic investment and development in station areas. This section describes the selected scenario, as well as a plan for working with the transit providers to prepare for successful rollout and implementation.

**Figure 1: BRT/ART Preferred Scenario**

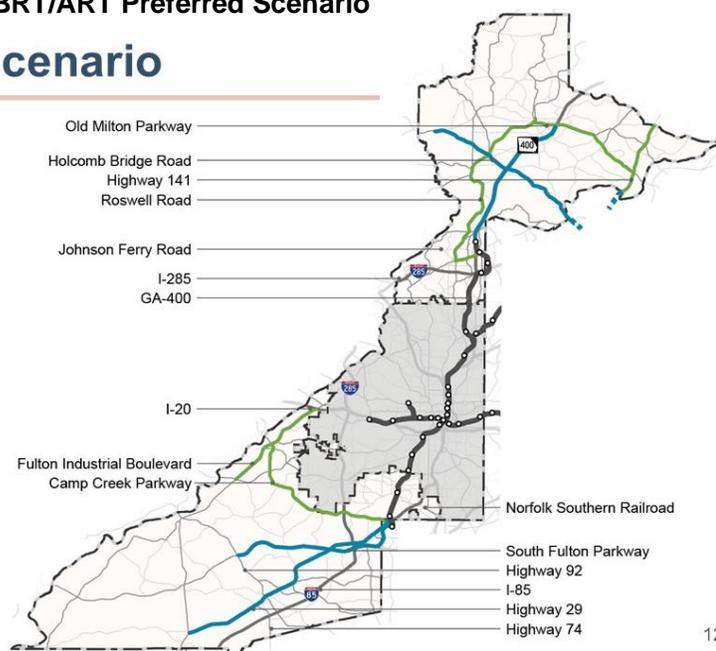
## BRT/ART Preferred Scenario

### Bus Rapid Transit

GA 400 to Old Milton  
Holcomb Bridge Road  
Highway 29  
South Fulton Parkway to Highway 92

### Arterial Rapid Transit

Roswell Road  
Old Milton Parkway  
Highway 141  
Fulton Industrial Boulevard  
Camp Creek Parkway



This preferred scenario includes projects listed in the following tables.

**Table 1: North Fulton County Transit Project List\***

Project Corridor/Name	Termini	Mode	Capital Cost**	Annual Operating Cost
GA400	Holcomb Bridge Road to Old Milton Parkway	BRT	\$278,000,000	\$4.2 million
Holcomb Bridge Road	Bowen Road to SR 141	BRT	\$119,000,000 *Fulton cost only	\$5.7 million *Fulton cost only
Highway 141/ Medlock Bridge Road	McGinnis Ferry Road to Doraville MARTA Station	ART	\$38,000,000 *Fulton cost only	\$4.7 million *Fulton cost only
Old Milton Parkway	Roswell Road to SR 141	ART	\$20,000,000	\$2.6 million
Roswell Road	Sandy Springs MARTA Station to Old Milton Parkway	ART	\$38,000,000	\$4.6 million
Abernathy/ Johnson Ferry Road	Sandy Springs MARTA Station into Cobb County	Local Bus	-	\$0.9 million
3 Microtransit areas	Sandy Springs City Center, North Sandy Springs, Roswell Road	Microtransit	-	\$3.3 million

**Table 2: South Fulton County Transit Project List\***

Project Corridor/Name	Termini	Mode	Capital Cost**	Annual Operating Cost
Highway 29/ Roosevelt Highway	College Park MARTA Station to Palmetto	BRT	\$205,000,000	\$9.3 million
South Fulton Parkway	College Park MARTA Station to SR 92	BRT	\$143,000,000	\$5.8 million
Fulton Industrial Boulevard	I-20 to SR 154	ART	\$19,000,000	\$3.5 million
Camp Creek Parkway	College Park MARTA Station to Fulton Industrial Boulevard	ART	\$28,000,000	\$3.7 million
5 microtransit areas	Fairburn, College Park, Flat Shoals Road / Buffington Road	Microtransit	-	\$3.3 million
South Side Park and Ride Facility	Located at SR 74 and I-85, this lot would serve <i>Xpress</i> buses in the area and expand direct access into downtown from Fairburn.	Park and Ride Lot	\$800,000	

\*Costs are in 2017 dollars and do not include inflation, cost escalation, or contingencies. These items are accounted for in the detailed model as documented in the Financial Model Chapter.

\*\*Capital costs do not account for the cost of vehicles, which is included in the full model documentation and can be found in the Financial Model Chapter.

North and South Fulton each have two key corridors identified for implementation of rapid transit services with BRT. Each of these corridors faces different challenges with the implementation of BRT, but would benefit from the added rapid transit component as a multimodal corridor.

- GA 400 (North Fulton) – this corridor has been studied previously for potential transit expansion with multiple modes considered. By implementing BRT, and partnering with GDOT as it implements managed lanes, Fulton County, GDOT, and the transit provider can take advantage of significant cost savings in planning, design, and construction cost efficiencies. Failure to incorporate North Fulton transit enhancements into GDOTs current GA400 improvements, could result in an inability to provide transit along GA400 in the future.
- Holcomb Bridge Road (North Fulton) – this corridor is the most constricted with ROW and will require public outreach and an open planning process to implement a bus lane in addition to existing travel lanes. This corridor is an essential east-west connection in North Fulton and will provide local connectivity and a connection into the BRT system along GA 400.

- South Fulton Parkway (South Fulton) – is a corridor critical to the future economic growth of South Fulton. South Fulton Parkway has available right-of-way for BRT and potential for future light rail.
- Highway 29/Roosevelt Highway (South Fulton) – connects the downtown areas of Palmetto and Fairburn into the existing MARTA rail station. This corridor has seen growth in ridership and improved frequency in recent years and would support the additional capacity and frequency that would come with BRT. Right-of-way is limited and may be restricted by the CSX railroad.

The proposed ART corridors provide critical connection into the BRT corridors and existing MARTA heavy rail transit in the County. Through coordination with the current transit provider, as these BRT and ART corridors are implemented, local bus service provided would be structured to connect major corridors to provide the best overall mobility for those making local trips in North and/or South Fulton County and those traveling throughout the County and region.

## Partnering to Prepare for New Modes

The BRT/ART scenario will not only expand service coverage and frequency throughout Fulton County, but it will bring two new modes of service that are more appropriate for North and South Fulton development densities and would benefit current and potential new transit riders. Working together, cities and the transit provider can pursue joint efforts to educate residents, employees, and visitors in Fulton County on how to use the new services and take advantage of the service reliability provided by both modes and travel time savings of BRT.

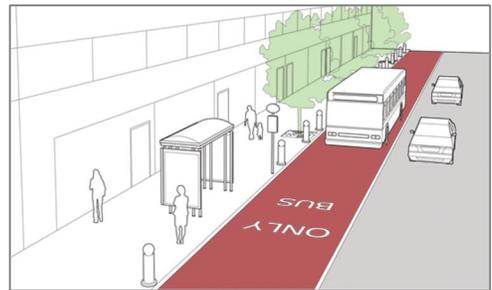
### Bus Rapid Transit/Arterial Rapid Transit Education

In Fulton County, it will be important to educate multiple transit markets, including those who currently use bus and rail, currently use rail only, and non-riders in areas where there will be new services.

As planning and implementation steps are undertaken for each corridor, it will be important to actively engage those who live, work, and visit the corridor by participating in public events, visiting local businesses, setting up at planned station locations, and engaging the public online. This will be done most effectively through partnerships and coordination between Fulton County, affected cities, and the transit service provider.

MARTA has been working towards implementing ART on major corridors to improve mobility. Education on the differences between ART corridors and local bus routes will be important because ART is not a standard transit mode –

**Figure 2: BRT Curbside Design Examples**



Pictured: NACTO Design guides, and NACTO examples of existing BRT curbside.

it is implemented differently at various agencies with certain characteristics and branding. As proposed in the Fulton County TMP, this service would provide more reliable and direct service along major corridors and be designated. Participation in community events along the corridor demonstrating how prioritized signals promotes reliability and how to pay a fare when boarding a bus will make ART, as well as local buses more accessible.

## Legislative Needs

For the preferred scenario to move toward implementation with the identified funding mechanism of an additional sales tax, the State Legislature must amend current local funding statutes.

If legislation is passed in the 2018 General Assembly allowing sales tax for a duration of at least 30-40 years, a public referendum for transit funding in Fulton County could be held as early as November 2018. Due to the current 3/4-cent T-SPLOST, the County could collect 1/4-cent for transit improvements as early as the spring of 2019. Any amount exceeding a 1/4-cent could be considered beginning in April 2022, upon expiration of the current 3/4-cent T-SPLOST to remain in compliance with the sales tax limit for Fulton County of 1-cent.

If transit funding is approved by voters in 2018, the transit operator could begin delivering projects as soon as 2020. To support, sustain, and grow transit ridership, transit operators, Fulton County, and local cities will need to coordinate and enact connecting services as part of a regional transit system efficiently.

In addition to a potential sales tax to fund the selected scenario County and State leaders desire a greater understanding of how the current 1-cent collected by MARTA can be used to help build and/or implement this plan. State funding may also be possible as a product of recent and ongoing discussions concerning state funding of transit in Georgia.

Actions are needed by officials at the state and local level as well as the public for transit funding to come to fruition either through the studied sales tax mechanism or a different structured funding sources. Key steps and supporting strategies by various parties are outlined in the following table.

**Figure 3: BRT Median Design Examples**



Pictured: NACTO Design guides, and NACTO examples of existing median BRT lanes.

**Table 3: Next Steps**

City/County officials	State legislators	Public
<ul style="list-style-type: none"> <li>• Recommend and support unified Fulton Transit Plan</li> <li>• Coordinate with delegation for integration of funding into state law</li> <li>• Coordinate with the House Commission on Transit Governance and Funding</li> <li>• Coordinate with transit provider on all planning efforts so that County and service provider plans are complementary.</li> </ul>	<ul style="list-style-type: none"> <li>• Enable transit tax for Fulton County</li> <li>• Allow 40-year or longer term for transit tax</li> <li>• Integrate Fulton transit tax into new Atlanta regional transit finance and governance bill</li> </ul>	<ul style="list-style-type: none"> <li>• Vote on transit tax referendum</li> <li>• Engage and learn about new types of services</li> <li>• Provide continuous input for needs</li> </ul>

Overall, parties need to continue to engage, partner, and pursue funding options to be able to support expanded transit in Fulton County and the region. Continuous collaboration as the region continues to grow can yield benefits across the region and ensure that various planning efforts aligned to expedite implementation.

## Transit-Supportive Strategies

Together, multimodal transit systems provide connectivity across a region. Rapid transit modes with high capacity efficiently connect areas of dense residential and core employment centers, where as local and frequent bus services connect rural and suburban areas into the core of the region and transit network. Each mode serves a different purpose to expand overall access and create a cohesive system appropriately sized in different areas.

To support ridership and enhance activity centers, local cities can implement a range of projects, programs, and policies that best support transit usage, growth, and economic development around transit access points. Examples of strategies are included, but not limited, those listed in the following table.

**Table 4: Transit-Supportive Strategies Examples**

Description	Impact on Transit and Economic Development	How Cities Can Affect Change
Develop/improve pedestrian and cyclist networks around transit stations	Pedestrian facilities make access to transit stations safe and physically accessible to all. Direct pedestrian connectivity can allow more residents and area visitors to connect directly into transit stations, and can therefore positively impact ridership. Pedestrian connections can support growing development and vibrancy with more people visiting areas on foot.	<ul style="list-style-type: none"> <li>• Prioritize pedestrian and cyclist infrastructure in areas within half mile of stations (existing and planned)</li> <li>• Pursue private funding and sponsorship for stations and pedestrian/cyclist infrastructure</li> </ul>
Consider additional density and diversity for transit area	More compact, walkable development supports and justifies rapid, high-capacity transit	<ul style="list-style-type: none"> <li>• Focus mixed use development to areas around walking distance to rapid transit stations.</li> <li>• Create development requirements for housing at multiple income levels.</li> <li>• Create land use plans that focus mixed use development and commercial/retail near existing/planned transit stations.</li> </ul>
Influence transit usage with regulations that favor riders/transit oriented development	Influencing transportation mode choice to increase attractiveness of transit by making it more differentiated and/or costly to use less efficient modes, such as personal vehicles. Cities can implement these targeted regulations specifically in areas near transit and not throughout the entire municipality.	<ul style="list-style-type: none"> <li>• Impose fees for using land near transit stations for for-profit parking lots/structures.</li> <li>• Reduce/eliminate parking requirements for businesses and developments</li> </ul>

Every city is different, and there is no one-size-fits all for planning land use and development around transit stations. It is based on the desired community character. The quality, quantity, and compactness of development focused in activity centers and nodes inform, and provide demand for, different modes of transit. Transit mode and activity center size/density go hand in hand when cities are planning and envisioning their desired activity center size.

## Performance Measures to Track Success

Successful transit requires not only consistent service, delivery, operations, maintenance, and oversight, but also requires coordination with local jurisdictions to support development in a pattern that transit can serve in a cost-efficient manner. Performance measures are critical to assess operations and service delivery, but also to understand the direct and indirect impact to areas served by transit, and particularly rapid transit stations.

Having performance measures and a plan for tracking them will provide the following benefits to the transit provider and served cities/counties:

1. Transit provider(s) will have the ability to track service delivery statistics and identify areas where operations are delivered as planned, and the source of various operational issues. Regular review of performance will allow agencies to address issues faster before they have greater impacts and ramifications.
2. Transit provider(s) and served communities can demonstrate local impacts as evidence of growth and successful implementation when applying for state, federal, and other funding programs for future funding opportunities to continue local investments.
3. Served communities can demonstrate the positive impacts of rapid transit to potential area investors and draw in developers to the area.
4. Transit provider(s) and served communities can use the findings to inform future decisions of transit investment in other growing areas to support local land use plans and shape communities in the desired form.

To track the success of service delivery, ridership, and local impact and cooperation, continuous performance monitoring is critical. Tracking key measures will help transit service providers and the jurisdictions they serve to identify new opportunities as they emerge and help to identify any issues early before they cause issues for existing and potential riders. For a performance management system to be successful, the transit provider and cities/counties served need to work together to collect, share, analyze, and publish findings.

1. Data Collection - various performance measures needs to occur prior to service startup to establish a baseline condition for measurement. Transit provider(s) and communities served need to identify who is responsible for collecting data for each agreed-upon performance measures.
2. Data Sharing - agreements need to be in place between agencies so that no two entities are spending resources collecting the same data. Expectations should be clear from the start about who, and how often data will be collected and shared.
3. Data Analysis - will be done at predetermined intervals to identify any short-term significant changes, and track long-term impacts on an annual basis.
4. Data Publishing - is critical to build local support for success of transit and area growth. Publishing the data can demonstrate success to users, non-users, and inform future investments in areas surrounding rapid transit stations.

**Table 5: Potential Key Performance Measures**

Key Performance Measure	Importance and How to use the Data
Ridership per route	<p>Tracking ridership is important to make sure that the appropriate mode is serving the corridor. Significant ridership changes over short periods of time may indicate a need for one or more of the following:</p> <ul style="list-style-type: none"> <li>• Higher/lower frequency</li> <li>• Higher/lower capacity</li> <li>• Potential mode change/upgrade</li> </ul>
Ridership by stop/station	<p>Ridership at individual stops is important to evaluate the demand from stops, and identify stops that are eligible for amenity changes, and whether a stop demands additional service.</p> <ul style="list-style-type: none"> <li>• Shelter/amenity upgrades</li> <li>• Potential for serving multiple routes, if there is an appropriate route nearby</li> </ul>
Performance	<p>On-time performance is critical for national reporting requirements, and can indicate issues with operations and/or schedules.</p> <ul style="list-style-type: none"> <li>• High on-time performance can support any marketing for transit and building the brand. It indicates operations and scheduled time points are in line.</li> <li>• Low on-time performance can indicate issues with the schedule, potential operational issues, and demands attention.</li> </ul>
Travel Time Source Reliability	<p>Reliability is one variable travelers use when deciding whether or not to use transit. Demonstrating that the travel time of transit is consistent can make it easier for travelers to plan trips and depend on transit because they know what to expect.</p> <ul style="list-style-type: none"> <li>• High reliability means travel time is consistent at particular times of the day and indicates smooth operations and accurate scheduling.</li> <li>• Low reliability means may indicate unusual traffic conditions along streets for local, frequent, and ART bus services or an operations issue if it persists.</li> </ul>

Key Performance Measure	Importance and How to use the Data
<p>Dwelling Units and Jobs within 0.5 miles of stations</p>	<p>Tracking dwelling units and jobs within a set radius of a station can track growth in the area. While rapid transit may not be the only factor in these changes, these numbers can be compared to citywide/countywide numbers to show impacts when access to rapid transit. Potential results from this assessment may indicate:</p> <ul style="list-style-type: none"> <li>• Job/population growth in the area within walking distance of rapid transit that is significantly different from other areas can indicate the desire for access and potential future development/expansion in other areas.</li> <li>• Area growth may also indicate the need to assess area need for upgraded capacity/mode if the demand exists.</li> </ul>
<p>Pedestrian Access</p> <p>(% of roadway mileage within ½ mile of station with sidewalks)</p>	<p>Areas surrounding rapid transit stations tend to have more pedestrians in the area, both accessing the transit station and surrounding development. For cities/counties it is important to track this infrastructure and continue to include it in local public works programs.</p> <ul style="list-style-type: none"> <li>• Tracking sidewalk access, and quality can help prioritize funding decisions for new/upgraded sidewalks in these areas with higher pedestrian demand.</li> </ul>

## Summary

Coordination in collecting, analyzing, and sharing performance measures between transit providers and cities/counties served demonstrates strong partnerships. Using performance measures to track delivery and to share key milestones with stakeholders and the public can strengthen the transit service's brand and effectiveness and maintain funding for continued system support.