

Chapter 9 Summary of Recommendations for the Short, Mid and Long-Term

This chapter summarizes the recommendations into three distinct timeframes – or phases.

- Short Term – 2009-2015 – the main focus of this *Strategic Transit Master Plan*
- Mid Term – 2016-2025
- Long Term – 2026-2035

Short Term Recommendations (2009-2015)

General Recommendation 1

Adopt a *Service Delivery Policy*. The policy (Appendix C) provides general guidance on where to put fixed route bus service, how much service to provide, and how to evaluate service.

General Recommendation 2

Work with Metro Government, the MPO, Cumberland Region Tomorrow and other stakeholders to pursue a dedicated funding source for public transportation. Such a dedicated funding source will be important for continuing the MTA's progress in improving public transportation in Nashville/Davidson County. The new regional transit enabling legislation provides an exciting opportunity to move towards this goal.

General Recommendation 3

Implement 'green' building practices as part of all facility upgrades or renovations. Continue to move towards a hybrid bus fleet with bus replacements.

Short Term Recommendation 1: Implement BRT on Gallatin Road

Implement a BRT service for Gallatin Road. The recommended BRT service will improve service frequency in the corridor, increase speed of many trips, improve signage, and improve the image of transit. In short, BRT will make improvements in 4 out of the 5 priority categories. The increased operating cost for the recommended service is \$2.3M per year. The increase in capital cost will be \$9.4M, broken down as follows.

Table 9-1: BRT Capital Costs

BRT Capital Cost Item	Cost
5 Additional BRT Buses	\$5.1M
Cumberland River Bridge Lane	nominal
Signal Priority	\$0.5M
Real-Time Info	\$0.2M
Enhanced Stations	\$2M
Branding & Marketing	\$50,000
Contingency (20%)	\$1.6M
Total	\$9.4M

Short Term Recommendation 2: Increase Frequencies on Eleven Routes

Provide frequency improvements on eleven routes to bring them up to minimums as described in the Service Delivery Policy. Note that many of these suggested service additions are in off-peak hours which do not require additional vehicles, and which can provide an excellent boost to ridership. The total operating cost per year for these improvements is estimated at \$1,156,000 and the capital cost for new buses at \$300,000 each is \$5.1 M.

Table 9-2: Frequency Recommendations

Route No.	Route Name	Span of Service of Concern for Frequency/Headway Adjustments	Current Headways (in minutes)	Service Class Recommended Maximum Headways (in minutes)
2	Belmont	Weekday Midday	70	60
		Weekday Evening	70	60
6	Lebanon Road	Weekday Midday	90	60
		Weekday Evening	70	60
8	8th Avenue South	Saturday	60-120	60
		Sunday	60-120	60
23	Dickerson Road	Weekday Midday	35	30
28	Meridian	Weekday Midday	50	30
24X	Bellevue Express	Weekday Peak	20-45	30
33X	Hickory Hollow - Hickory Plaza Express	Weekday Peak	30-60	30
35X	Rivergate Express	Weekday Peak	10-40	30
37X	Tusculum Express	Weekday Peak	90	30
38X	Antioch Express	Weekday Peak	25-60	30
41	Golden Valley	Weekday Peak	60	30

Short Term Recommendation 3: Implement a Downtown Circulator

Institute a Downtown Circulator to provide better connections between transit facilities such as the Music City Central, the Music City Star, state office buildings, downtown businesses and residents, and tourist destinations. The Downtown Circulator will speed transit service as it will provide very frequent pickups for any passenger arriving in the downtown.

While the exact routing(s) have not yet been worked out the service can be estimated to require 4 buses to provide a very frequent level of service. Operating 17 hours a day weekdays and 8 hours a day on Saturdays and Sundays would cost around \$1.8 M for operations and \$1.3M for vehicles and specially signed bus stops.

Short Term Recommendation 4: Provide Service to a New or Unserved Area

Reserve an amount of funding for service to a new or unserved area. While the densities in most unserved areas are not sufficient to recommend fixed route services, the MTA's BusLink service (flexibly routed service) can link lower density neighborhoods with important destinations and other fixed route services. The capital cost of vehicles could be lower for such services as well. A budget of \$700,000 would allow for two buses operating 12 hours weekdays and 10 hours on Saturday. The MTA implemented a BusLink service in Madison in April of 2009. An additional amount is recommended in the near term to provide service for another (unspecified) area.

Short Term Recommendation 5: Increase Marketing

Provide an additional marketing budget for helping non-users to learn how to use the service. This effort has already begun with an excellent video created by Transit Now which is available on the MTA website. This effort should be expanded to include information about particular routes—for example, how to read a particular route map. It might also indicate how to get to important destinations such as the airport. Finally, this video should be marketed to MTA employer partners and through other MTA email lists. A budget of \$30,000 is recommended to expand this project. Note that BRT implementation also calls for a special marketing budget of \$50,000.

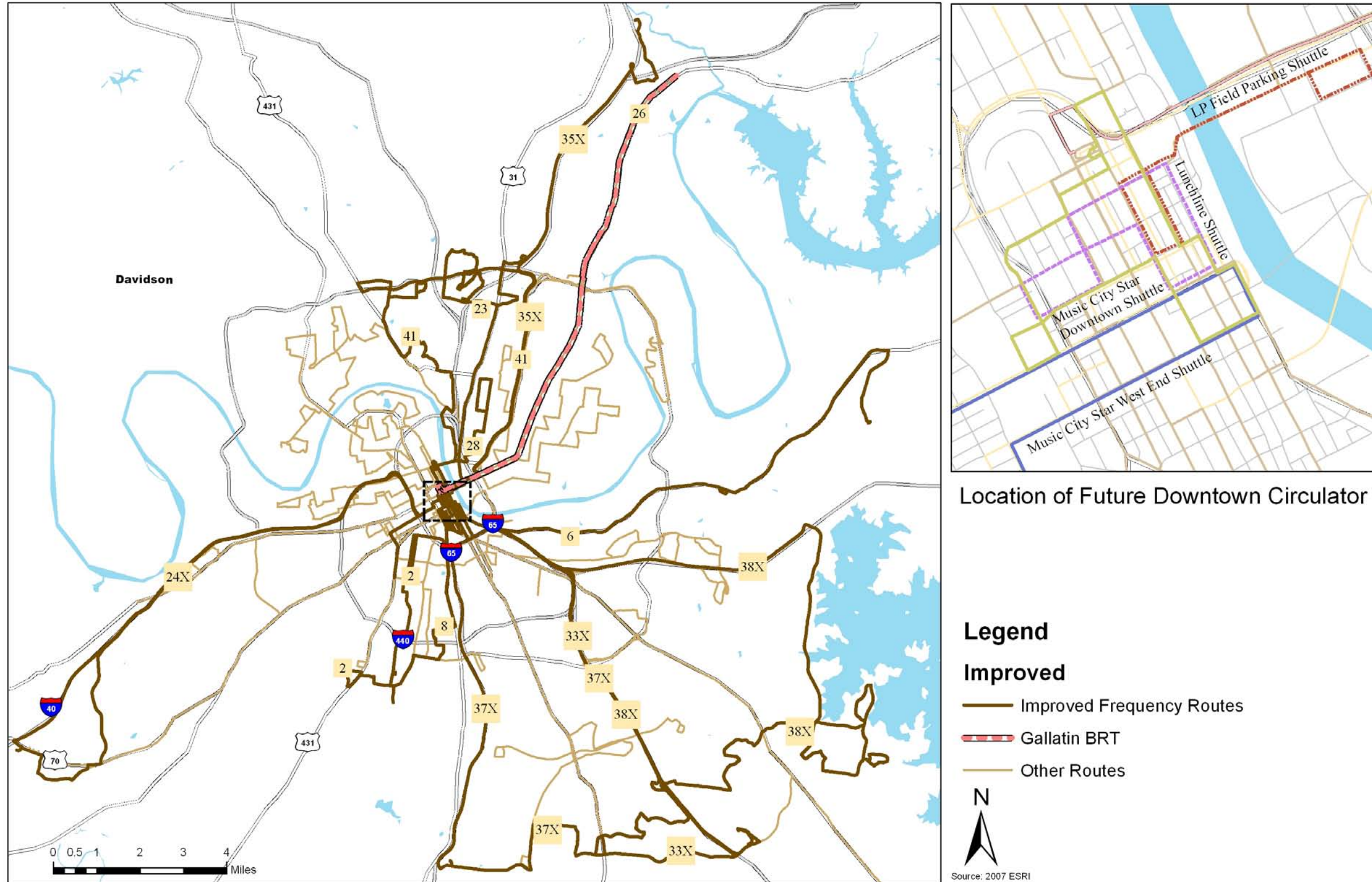
The table below summarizes the short-term recommended investments/improved services for the MTA along with the five priority areas for improvement: As can be seen, all of the priority areas are affected by the improvements.

Table 9-3: Recommended MTA Improvements and Priority Areas

Service	Operating Cost (\$1000)	Capital Cost (\$1,000)	Increase Frequency	Faster Transit	Serve New Areas	Easier to Use	Improve Image
Gallatin BRT	\$2,305	\$9,400	X	X		X	X
Frequency improvements on 11 routes to bring to minimums	\$1,156	\$5,100	X			X	
Downtown Circulator	\$1,800	\$1,300	X	X		X	X
Service to new or unserved areas	\$700	\$250			X		
Program to show new users how to use the service	\$30					X	X
Total	\$5,991	\$16,050	X	X	X	X	X

The total of the recommended service improvements comes to around \$6M in additional operating funding and \$16 M in capital funding. These recommended improvements depend upon MTA receiving additional capital and operating funding. However, if these services could be programmed they would go far to improving MTA service and elevating the profile of transit in Nashville / Davidson County. Figure 9-1 following summarizes the short term service recommendations.

Figure 9-1: Short Term Recommendations



Mid Term Recommendations (2016-2025)

In the mid term, it is assumed that the MTA working with the Mayor's office and Metro Council, Tennessee DOT, the Nashville MPO, Cumberland Region Tomorrow and other stakeholders will be successful in finding a source of dedicated funding for regional transit services. If this is the case, it is likely that the MTA will be able to offer additional regional service. The medium term recommendations for the MTA assume that the MTA has implemented the *Service Delivery Policy* and that the Automatic Passenger Counters (APCs) have been installed successfully and are providing useful data on ridership by trip.

General Recommendation 1: Reallocate Service Using Trip by Trip Ridership Data

A general recommendation is that the service be monitored using the APC data to ensure that buses are reallocated to routes that exceed loading standards during heavy periods from routes that score lower on cost and service effectiveness. The objective would be to re-allocate service so there is no net increase in costs.

Mid Term Recommendation 1: Extend Gallatin Road BRT from the MCC to West End / Vanderbilt

This option has many benefits including providing a higher quality connection between two major employment centers, eliminating one of the larger transfers on the system (between Routes 26 Gallatin and 7 Hillsboro), and adding capacity to the portion of Route 7 Hillsboro where buses sometimes have standing-room-only due to the short distance passengers. Institution of this service may replace some of the downtown circulator service.

Mid Term Recommendation 2: Improve Night Service on Certain Routes

This recommendation is to improve frequency and simplicity of schedules for certain route pairs in the evening. Routes 4 Shelby and 20 Scott, 28 Meridan and 30 McFerrin, 2 Belmont and 7 Hillsboro, and 19 Herman and 29 Jefferson, have been combined in the evening so that one route is outbound and another inbound. Passengers may have to ride out on one route and back in part-way to reach their destination. Evening service should be restored to these routes so that the route patterns are the same as during the day.

Mid Term Recommendation 3: Institute Mini-Hubs

The mini-hub concept should be investigated further and refined using the Mobility Tracker to test alternatives. In the medium term with BRT development, it is likely that the Gallatin Road mini-hub will become attractive. Thus two mini-hubs are recommended:

- Clarksville Pike Mini-Hub
- Gallatin Road Mini-Hub

Mid Term Recommendation 4: Implement BRT Service Elements on Other Arterials

If the use of traffic signal priority and limited stops is proven on Gallatin Road, then a similar priority system should be implemented on Murfreesboro Road, Dickerson Road and Nolensville Road. Service would elements would include reduced stops, traffic signal priority, improved stops, better buses, and increased service.

Mid Term Recommendation 5: Expand Park and Ride Service

Additional park and ride capacity should be found for Route 35X Rivergate Express near the Kmart-Goodlettsville area. Also park and ride facilities should be provided for Route 41 Golden Valley near Whites Creek and Green. Park and ride service should be extended to Rutherford, Sumner and Williamson Counties. In particular, half hour service should be offered during the peak hour to Murfreesboro and Gallatin. Park and ride service to Franklin should be instituted.

Mid Term Recommendation 6: Institute Service in Unserved Neighborhoods

A number of improvements are recommended to provide service to unserved neighborhoods, particularly those of greater than 5000 persons per square mile. Two such areas are to the east of Gallatin Pike and just north of the new Madison Bus Link area. These areas can be served by increasing and expanding the Madison Bus Link service northward to Anderson Lane.

Another denser area falling outside the ½ mile buffer is an area between Routes 3 West End and 7 Hillsboro, part of the Hillsboro-West End area. This area would be a candidate for a neighborhood route or flexible route connecting to the Mall at Green Hills.

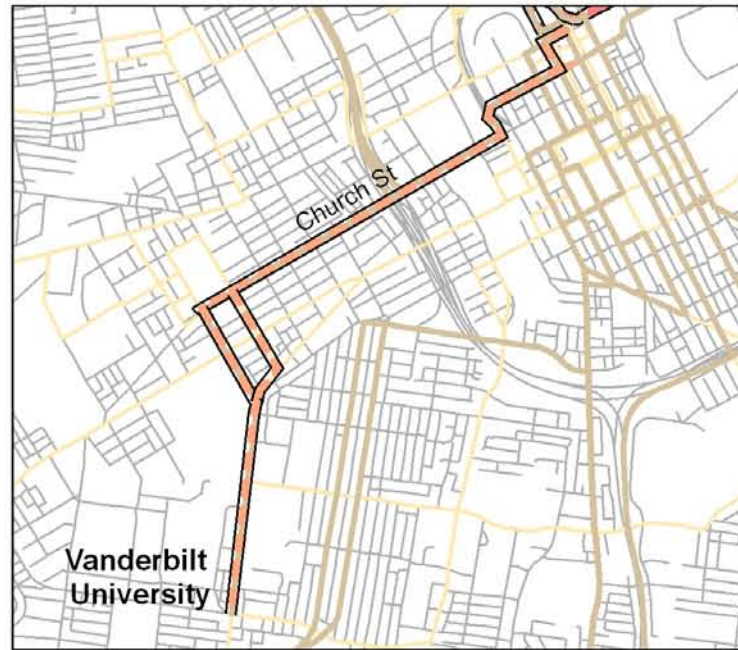
A larger area of density greater than 5000 persons per square mile is south of I-440 between MTA Route 12 and I-24. To service this area, two connector routes are suggested for the Glencliff and Woodbine communities. Alternatively, a flexibly routed service could be instituted in the area.

Mid Term Recommendation 7: Improved System Map and Increased Marketing

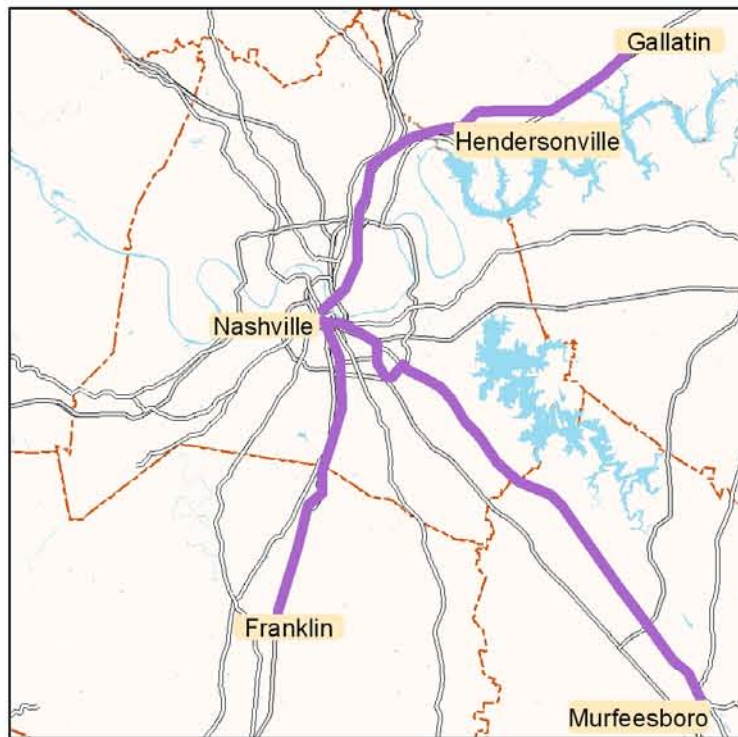
The system map should be improved to clarify the paths of bus routes in the downtown. Targeted marketing campaigns should be instituted for each new or improved service.

Figure 9-2 following shows both the short and medium term service recommendations.

Figure 9-2: Short and Mid Term Recommendations



BRT Extension to Vanderbilt/ Western Avenue



Expand Regional Commuter Service



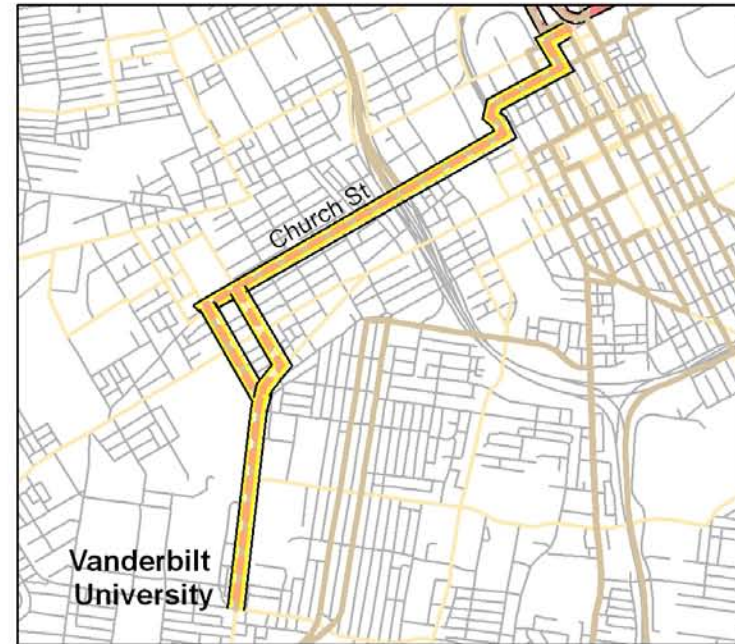
Long Term Recommendations (2026-2035)

In the longer term, it is assumed that the MTA will play a larger regional role in improving inter-regional connecting service in accordance with regional alternative analysis studies. Given the expected population and employment changes within Davidson County, the following types of improvements can be contemplated:

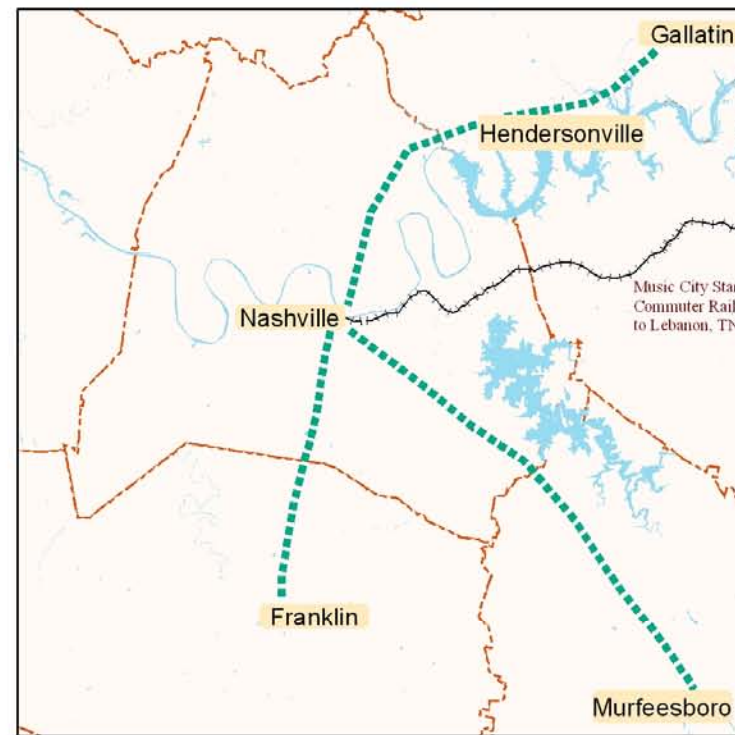
- Extend Route 23 Dickerson Road to reach emerging employment areas north of the current service area.
- Extend Route 6 Lebanon Road southward to reach new developing communities and employment areas, including Summit Medical Center.
- Further improve transit capacity between downtown Nashville and the West End with dedicated bus lanes, queue jump lanes or streetcar service.
- Provide high capacity service (BRT, light rail or commuter rail) to Rutherford, Sumner and Williamson Counties. If BRT service, improve existing right-of-way for buses with exclusive lanes or queue jump lanes.
- Provide additional service to the developing neighborhoods currently served by Route 37X Tusculum/McMurray Express and Route 38X Antioch Express. These neighborhoods are expected to reach densities that would justify more than peak hour service. The express bus services could be expanded throughout the day and into the early evening or alternatively, the service could be used to connect with the regional high capacity service.
- Institute an additional mini-hub at 100 Oaks to improve connections.

Figure 9-3 following shows the short, mid and long term recommendations for service improvements for the MTA.

Figure 9-3: Short, Mid and Long Term Recommendations



High Capacity Improvements (Light Rail or BRT Queue Jumps/Reserved Lanes)



High Capacity Regional Connections



Summary

The Strategic Master Plan recommendations in the short, mid and long term for MTA service focus on bringing service to minimum standards and improving the speed, image and simplicity of service. Additional service is recommended for unserved areas, particularly those that exceed 5000 persons per square mile. The implementation of Bus Rapid Transit (BRT) in stages is a key component of the recommendations in each time-frame, starting with a Gallatin Road BRT in the short-term. In the medium term the Gallatin BRT is expanded to Vanderbilt and the West End and BRT elements are added to additional high ridership routes. Another key recommendation is to institute a downtown circulator to serve the variety of worker and tourist needs. Other recommendations recognize the need to provide better service to commuters in Davidson County and high quality connecting service to other communities outside Davidson County. Table 9-3 summarizes the recommendations for each time period.

Table 9-4 Summary Table of Projects for Nashville MTA

Short Term Actions (2009-2015)
Adopt a Service Delivery Policy
Pursue a dedicated funding source for public transportation
Implement 'green' building practices and continue to acquire hybrid buses
Implement BRT on Gallatin Road
Increase frequencies on eleven routes to bring them up to minimum standards
Implement a downtown circulator
Provide service to a new or unserved neighborhood
Provide a budget for increased marketing to help non-users learn how to use the MTA service. Provide a targeted marketing campaign for the Gallatin BRT.
Mid Term Actions (2016-2025)
Reallocate service using trip by trip ridership data from the Automatic Passenger Counters
Extend the Gallatin Road BRT from Music City Central to West End/Vanderbilt
Improve night service on routes currently paired routes: (Routes 4 Shelby and 20 Scott, 28 Meridan and 30 McFerrin, 2 Belmont and 7 Hillsboro, and 19 Herman and 29 Jefferson)
Institute mini-hubs on Clarksville Pike and Gallatin Road to serve multiple routes
Implement BRT service elements such as fewer and nicer stops, traffic signal priority, better buses and increased service on Murfreesboro Road, Dickerson Road and Nolensville Road.
Expand park and ride capacity for Route 35X Rivergate Express near Kmart-Goodlettsville. Add park and ride capacity to Route 41 Golden Valley. Provide and improve park and ride service to Rutherford, Sumner, Williamson and Davidson Counties.
Expand the Madison Bus Link northward to Anderson Lane. Add fixed or flexible service from the Hillsboro-West End area to connect to the Mall at Green Hills. Add fixed or flexible service from the Glenciff and Woodbine neighborhoods to the 100 Oaks facility.
Revise downtown system map to clarify routes in the downtown. Provide a targeted marketing campaign for new and improved services.
Long Term Actions (2026-2035)
Extend Route 23, Dickerson, to reach employment areas north of the current service area.
Extend Route 6 Lebanon Road to developing communities and Summit Medical Center
Further improve transit capacity between downtown Nashville and the West End with dedicated or queue jump lanes or streetcar service
Provide high capacity service (BRT with queue jumps, light rail or commuter rail) to Rutherford, Sumner and Williamson Counties).
Provide Frequent service to developing neighborhoods served by Route 37X Tusculum/McMurray Express and route 38X Antioch Express.
Institute a mini-hub at 100 Oaks Road.