

# Table of Contents

- Executive Summary..... i
  - Current Conditions and Trends ..... i
  - The Strategic Transit Master Plan Process ..... iv
  - The Need for Transit Improvements..... iv
  - Five Priority Areas for Transit Investment ..... v
  - Application of the Service Delivery Policy ..... v
  - Opportunities for Transit Investment in the Short Term (2009-2015) ..... vi
  - Opportunities for Transit Investment in the Mid Term (2016-2025) ..... vii
  - Opportunities for Transit Investment in the Long Term (2026-2035) ..... viii
  - Conclusions ..... x
- Chapter 1 Introduction ..... 1-1
  - Purpose of the Report ..... 1-1
  - About the MTA ..... 1-1
  - Project Approach and Report Organization ..... 1-1
- Chapter 2 The Past, Current and Future Condition for Transit in Nashville/Davidson County ..... 2-1
  - Population ..... 2-1
  - Employment ..... 2-6
  - Future Forecasts ..... 2-8
- Chapter 3 Transit Trends..... 3-1
  - Transit Ridership and Performance Trends..... 3-1
  - Transit Expenditure and Revenue Trends..... 3-4
  - Summary ..... 3-6
- Chapter 4 Comparison of Nashville MTA with Peers..... 4-1
  - Selection of Peers ..... 4-1
  - Peer Performance Comparison ..... 4-3
  - Peer Funding Comparison ..... 4-11
  - Summary of Findings ..... 4-12
- Chapter 5 Service Delivery Policy and Implications ..... 5-1
  - Temporal Availability ..... 5-1
  - Geographic Availability ..... 5-4
  - Cost Effectiveness and Service Effectiveness Standards ..... 5-10
  - Summary ..... 5-13

Chapter 6 Regional and MTA Goals and Priorities.....	6-1
Regional Transportation Goals from the Long Range Transportation Plan and Corridor Studies .....	6-1
Other Regional Goals and Priorities.....	6-5
The MTA's Mission.....	6-6
MTA Priorities and Connections to the Regional Long Range Vision.....	6-7
Summary.....	6-8
Chapter 7 Detailed Recommendations for BRT .....	7-1
Background of Route 26 Gallatin Road .....	7-2
Potential Application of Specific BRT Elements to Proposed Gallatin BRT Service.....	7-5
Summary of Recommendations for Gallatin BRT.....	7-12
Potential Extension of BRT from MCC to Vanderbilt .....	7-13
Addendum 6-A: Alternative Service Patterns .....	7-15
Chapter 8 Opportunities for Improving MTA Service and Image .....	8-1
Bring Service Frequency to Meet Service Policy Minimums .....	8-1
Improve Speed of Transit .....	8-3
Serve New or Unserved Areas.....	8-8
Make Service Easier to Use .....	8-10
Improve the Image of Transit .....	8-10
Environmental Opportunities .....	8-11
Summary of Opportunities.....	8-12
Chapter 9 Summary of Recommendations for the Short, Medium and Long-Term.....	9-1
Short Term Recommendations (2009-2015) .....	9-1
Medium Term Recommendations (2016-2025) .....	9-5
Long Term Recommendations (2026-2035).....	9-8
Summary.....	9-10
 Appendix A: MTA Service Analyzer	
Appendix B: Public Input on MTA Priorities	
Appendix C: MTA Service Delivery Policy	

## Figures

Figure E-1: Persons per Square Mile in 2007 (based on Census Block Groups) .....	ii
Figure E-2: Passengers per Hour Comparison .....	iii
Figure E-3: Service Hours per Person Living in the Service Area.....	iii
Figure E-4: Short, Mid and Long Term Recommendations.....	ix
Figure 2-1: Population Density in Nashville/Davidson County (by Block Group – 2007) .....	2-2
Figure 2-2: Median Household Income by Block Group – 2007.....	2-3
Figure 2-3: Percent Households without Automobiles - 2007 .....	2-4
Figure 2-4: Number of Persons over 65 Years Old Per Acre .....	2-5
Figure 2-5: Employment in Nashville/Davidson County .....	2-7
Figure 2-6: 2007 Population Density in Persons per Square Mile.....	2-8
Figure 2-7: 2035 Projected Population Density in Persons per Square Mile.....	2-8
Figure 2-8: 2006 Employment Density in Employees per Square Mile .....	2-9
Figure 2-9: 2035 Projected Employment Density in Employees per Square Mile .....	2-9
Figure 3-1: Total Ridership Trends (Source: MTA) .....	3-2
Figure 3-2: Access Ride Ridership Trends (Source: MTA) .....	3-2
Figure 3-3: Bus Service Riders per Revenue Hour (Source: MTA).....	3-3
Figure 3-4: Bus Service Riders per Revenue Hour by Route Type (Source: MTA) .....	3-3
Figure 3-5: Sources of MTA Revenues (Source: MTA).....	3-4
Figure 3-6: Support for MTA Operating Expenses by Source for FY 2009 .....	3-5
Figure 4-1: Population Density Comparison (persons/square mile).....	4-6
Figure 4-2: Passengers per Vehicle Hour .....	4-7
Figure 4-3: Cost per Vehicle Hour.....	4-7
Figure 4-4: Cost per Passenger .....	4-8
Figure 4-5: Fare Recovery Ratio .....	4-8
Figure 4-6: Net Cost per Passenger .....	4-9
Figure 4-7: Service Hours per Capita.....	4-9
Figure 4-8: Passenger Trips per Capita .....	4-10
Figure 4-9: Funding per Capita by Source .....	4-12
Figure 5-1: Nashville MTA ½ Mile Route Buffers and 2007 Population Density (by Census Block Group) .....	5-5

Figure 5-2: Nashville Employers and ¼ Mile Buffers for MTA Service.....	5-6
Figure 5-3: Nashville Points of Interest and ¼ Mile Buffers for MTA Service.....	5-7
Figure 5-4: Cost and Service Effectiveness of the Most Frequent Routes.....	5-10
Figure 5-5: Cost and Service Effectiveness of the Frequent Routes .....	5-11
Figure 5-6: Cost and Service Effectiveness of the Commuter Routes (Passengers per Hour).....	5-12
Figure 5-7: Cost and Service Effectiveness of the Commuter Routes (Passengers per Trip) .....	5-12
Figure 6-1: Schematic of Higher Capacity Corridors for the Nashville Region.....	6-4
Figure 7-1: Typical Section of Outer Portion of Gallatin Pike with Route 26 Gallatin Road Buses.....	7-3
Figure 7-2 and Figure 7 3: Two Views of Bus Stop at Rivergate Mall.....	7-3
Figure 7-4: Bus Stop in Section with Diagonal Parking.....	7-4
Figure 7-5: Boarding at Music City Central Station .....	7-4
Figure 7-6: Future Nashville BRT Vehicle.....	7-5
Figure 7-7: Illustration of a Queue Jump Lane.....	7-6
Figure 7-8: Main Street Bridge over Cumberland River.....	7-7
Figure 7-9: Next Bus Sign at a Station.....	7-9
Figure 7-10: Mobile Unit with Bus Arrival Data.....	7-9
Figure 7-11: Smart Card Reader Installed at Rear Door of Bus.....	7-10
Figure 7-12: Kansas City MAX Station, with Marker and Shelter .....	7-11
Figure 7-13: Alternative Service Patterns for Gallatin Road BRT .....	7-12
Figure 8-1: MTA Routes Recommended for Headway Improvements to Meet Standards .....	8-2
Figure 8-2: Existing Downtown Shuttles .....	8-5
Figure 8-3: One Concept for a Downtown Circulator .....	8-5
Figure 8-4: Schematic of the Mini-Hub Concept .....	8-7
Figure 8-5: Glenclyff and Woodbine Routes .....	8-9
Figure 9-1: Short Term Recommendations.....	9-4
Figure 9-2: Short and Mid Term Recommendations .....	9-7
Figure 9-3: Short, Mid and Long Term Recommendations .....	9-9

## Tables

Table E-1: Recommended Short-Term MTA Improvements and Priority Areas .....	vii
Table 2-1: Population of Nashville/Davidson County .....	2-1
Table 2-2: MTA Coverage of Population and Households in Nashville/Davidson County .....	2-6
Table 2-3: MTA Coverage of Employers/Employees in Nashville/Davidson County.....	2-6
Table 3 1: MTA Ridership Trends (Source: MTA) .....	3-1
Table 3-2: MTA Expenses by Fiscal Year (Source: MTA).....	3-4
Table 3-3: Sources of MTA Revenues (Data from MTA) .....	3-5
Table 4-1: Characteristics of Nashville and Selected Peer Agencies (from NTD 2006).....	4-2
Table 4-2: Nashville Rank for Performance Measures (from 2006 NTD).....	4-4
Table 4-3: Service Performance Measures for Nashville and Peer Agencies (from NTD 2006).....	4-5
Table 4-4: Funding for Operations by Source for Nashville and Peer Agencies on a Per Capita Basis.....	4-11
Table 5-1: Proposed Span of Service and Service Frequency by Service Class.....	5-2
Table 5-2: Routes Needing Frequency Improvements to Meet Standards .....	5-3
Table 5-3: MTA Park and Ride Lot Utilization .....	5-8
Table 5-4: Service and Cost Effectiveness for Top and Bottom MTA Routes.....	5-13
Table 7-1: BRT Elements.....	7-1
Table 7-2: BRT Cost Summary .....	7-13
Table 8-1: Routes Recommended for Frequency Improvements to Meet Minimum Frequency Standards.....	8-1
Table 8-2: Cost to Bring Service up to Frequency Standards Listed By Service Type .....	8-3
Table 8-3: Costs to Bring Service up to Frequency Standards Listed By Service Time.....	8-3
Table 8-4: Mini-Hubs Concept and Routes Served.....	8-7
Table 9-1: BRT Capital Costs .....	9-1
Table 9-2: Frequency Recommendations .....	9-2
Table 9-3: Recommended MTA Improvements and Priority Areas .....	9-3