TASK 20

NATIONAL COMMUTER RAIL COMPARISON TECHNICAL MEMO

PREPARED BY: QUANDEL CONSULTANTS, LLC

MARCH 16, 2017

TheRide MDOT Michigan Department of Transportation

SMITHGROUP JJR AECOM . BERGMANN ASSOCIATES . QUANDEL CONSULTANTS

NORTH SOUTH COMMUTER RAIL

North-South Commuter Rail
Feasibility Study

Task 20: National Commuter Rail Comparison Technical Memo

Table of Contents

1. INTRODUCTION AND SCOPE OF WORK 3
   - 1.1 Introduction 3
   - 1.2 Scope of Work 4
2. NATIONAL TRANSIT DATABASE 5
   - 2.1 History and Compliance 5
   - 2.2 Reporting Requirements 5
   - 2.3 Adjustments to North-South Commuter Rail Statistics 7
3. COMMUTER RAIL SYSTEMS SELECTED FOR COMPARISON 9
   - 3.1 Selection Criteria 9
   - 3.2 Peer Group System Characteristics 10
   - 3.3 Variables Reported 10
   - 3.4 Comparison Metrics 11
4. ANALYSIS 122
   - 4.1 Performance Metrics Comparison 122
   - 4.2 Analysis of Specific Cost Elements 122
5. CONCLUSIONS 133

APPENDICES

1. INTRODUCTION AND SCOPE OF WORK

1.1 Introduction

The North-South Commuter Rail Project, (WALLY), is a proposed 27-mile long commuter rail operation on existing tracks that would provide service between Ann Arbor and Howell, with intermediate stops along the way. It has been embraced by a number of public and private organizations in Washtenaw and Livingston counties as a way to expand commuting options in a rapidly growing part of southeast Michigan along the US 23 corridor. The Ann Arbor Area Transportation Authority (AAATA) has taken on the role as the "designated authority" for studying and developing the concept.

This report is one of the deliverables in a feasibility study which will determine in detail the costs of the project and the estimated number of future riders. The feasibility study will also define the organization needed to build and operate the service, and the prospects for establishing a funding source for the service. It will help drive the community's decision about moving forward with the project.

Quandel Consultants has developed estimates of the annual operating costs for various commuter rail system alternatives operating in the railroad corridor between Ann Arbor and Howell. Two of the more promising alternatives based on ridership estimates include Option 1: Full Service and Option 5B: Shuttle Service. Detailed service plans for each option are presented in Task 8 memo. Detailed operating costs are presented in Task 11 memo. The key parameters of each option are as follows:

System Parameters		
	Option 1: Full Service	**Option 5B: Shuttle Service (two train sets)**
Service Limits	Downtown Ann Arbor-Howell	Downtown Ann Arbor-Whitmore Lake
Equipment/Speed	Locomotive-Coach-Coach-Cab, 60 mph maximum	Locomotive-Coach-Coach-Cab, 60 mph maximum
Stations	(6) Howell, Genoa Township, Hamburg, Whitmore Lake, Barton Drive and Downtown Ann Arbor	(3) Whitmore Lake, Barton Drive and Downtown Ann Arbor
Revenue Service Operation	Four train sets to Ann Arbor in the AM; four trains sets return to Howell in the PM	Two train sets, making four peak direction trips and two reverse trips to Ann Arbor in the AM and four peak direction trips and two reverse direction trips to Whitmore Lake in the PM
Weekday/Weekend	Weekday operation only	Weekday operation only
Connecting Bus Service	Dedicated bus service at Barton Drive	Dedicated bus service at Barton Drive
Layover Facility	Full facility in Ann Arbor	Layover track/minimal facility in Ann Arbor
Maintenance Strategy	Overnight/maintenance facility in Howell area	Overnight/layover track/minimal facility in Whitmore Lake, Periodic offsite maintenance at Owosso or another existing facility
Freight Operations	CSX coordination required at the Annpere Interlocking, New freight interchange at Ellsworth Rd	New freight interchange at Ellsworth Rd
Grade Crossing Warning Systems	Gates at all public crossings	Gates at all public crossings
Signal System	Positive Train Control	Positive Train Control
Annual Operating Cost	$11.1 million*	$5.6 million*
* Adjusted to eliminate rolling stock leasing costs and connecting bus service costs in accord with NTD guidance.		
All costs are in 2015 dollars.		

1.2 Scope of Work

Quandel Consultants is serving as sub-consultant to SmithGroupJJR, the project prime consultant to implement the following work scope as defined in the contract documents:

Task 20-National Commuter Rail Comparison

Obtain and analyze financial and operating data from peer group commuter rail operations including conventional commuter rail systems: Music City Star, SunRail and Northstar, and DMU systems: NCTD and Capital Metro. Integrate data into a summary matrix and develop recommendations for consideration in the North-South system.

Deliverable(s):
1. *Submit draft national commuter rail comparison memo.*
2. *Review meeting, refine and submit final national commuter rail comparison memo.*

2. NATIONAL TRANSIT DATABASE

2.1 History and Compliance

In 1974, Congress established the National Transit Database (NTD) Program to collect information and statistics on transit agencies in the United States. The NTD system is based on the Uniform Financial Accounting and Reporting Elements (FARE), a project initiated by the transit industry. As the need for transit assistance grew, Congress continued to develop the NTD program and increased federal funding.[i]

Transit Agencies are required to report to the NTD if they receive or benefit from Section 5307 or Section 5311 formula grants. Section 5307, the Urbanized Area Formula Program (UAFP) provides capital, operating, and planning assistance for public transportation operated in urbanized areas (UZAs). The Federal Transit Administration (FTA) initiated this program under the Surface Transportation Assistance Act of 1982. Since 1984, Section 5307 has been the primary transit assistance program of the FTA. Section 5311, Formula Grants for Rural Areas, provides capital, planning, and operating assistance to states to support public transportation in rural areas. The reporting requirements for 5307 grantees are significantly more robust than those for 5311 grantees, as the urban recipients typically have greater resources.

The FTA submits annual NTD reports that summarize transit service and safety data to Congress for its review and use. The legislative requirement for the NTD is codified in Title 49 U.S.C. §5335(a).[ii]

2.2 Reporting Requirements

The FTA has defined a strict system of accounting and reporting standards known as the Uniform System of Accounts (USOA). Transit agencies follow these guidelines in their annual reporting, which enable accurate analyses and comparisons among different systems.

The NTD separates expenses into two major categories: operating and capital. Operating expenses are expenses that a transit agency incurs during day-to-day operations. Agencies report total operating expenses to show the true cost of transit service. Usually, operating expenses have a useful life of less than one year and a unit cost of less than $5,000. Capital expenses are the costs that a transit agency incurs when it purchases equipment or other assets. The NTD generally defines capital as an asset having a useful life of more than one year and a unit cost of at least $5,000.[iii]

Transit agencies must report costs associated with transit service, including direct and indirect expenses. Direct costs are expenses that agencies incur for a specific mode or service. Examples include:

- Labor expenses for personnel who work on one mode of transportation
- Tire and tube expenses for directly-operated motor bus vehicles
- Schedule printing costs for services operated under a purchased transportation contract

- Diesel or gasoline expenses if tracked by vehicle and the vehicles are operated on only one mode of service

Indirect costs may include such items as:

- Salary expenses for the general manager who is responsible for the provision of transit services
- Expenses for printing tickets, passes, and smart cards that can be used to ride bus or rail transit
- Outside audit services
- Building maintenance expenses for an administrative building

Transit agencies providing multiple modes of service must report direct costs by mode and allocate indirect/shared costs to each mode. The FTA allows multiple strategies for allocating the indirect costs that are shared among multiple modes. Common allocation variables include:

- Revenue hours and miles
- Vehicles operated in annual maximum service (VOMS)
- Number of employees
- Direct expenses
- Ridership (unlinked passenger trips)[iv]

Transit agencies are required to report both operating and capital expenses they incur to provide transit service. When an agency contracts with a seller to provide service, the agency may also incur capital leasing costs. Capital leasing costs are the expenses that the seller charges the buyer for the use of its capital. For example, if the seller uses its vehicles to provide service, it typically charges the buyer to cover depreciation. The buyer reports this as a capital leasing cost. Agencies that incur capital leasing costs must report this data, even if these costs are not itemized on invoices.[v]

Operating Expense is comprised of four basic functions:

- Vehicle Operations
- Vehicle Maintenance
- Non-Vehicle Maintenance
- General Administration[vi]

It is important to note that the operating expense reported by transit agencies does not include depreciation and lease costs for vehicles and facilities. Such expenses are reported as capital expenses or reconciling items along with interest expenses. The FTA clarifies this accounting principal in its discussion of Purchased Transportation Services, noting that, “Transit agencies must report depreciation and lease costs as reconciling items.[vii]

Contractors providing transportation services to a transit Agency may use their own revenue vehicles or maintenance facility as part of the contract. The Agency must report this service as Purchased Transportation. If the purchased transportation provider charges total costs, either in absolute dollars and unit charges (e.g., per mile or per trip), the agency must separate operating costs from any lease and depreciation expenses. [viii]

Transit Agencies are required to report vehicle revenue hours (VRH) and vehicle revenue miles (VRM). These values take into account the hours and miles that vehicles travel while in revenue service. Under NTD rules, Revenue hours for conventional scheduled services include both running time plus layover/recovery time.[ix]

Running time is the time it takes a transit vehicle to travel from the beginning to the end of a transit route. A transit agency's passenger timetable typically shows the running times for trips it operates.

Usually, agencies schedule layover/recovery time at the end of each trip. Layover time typically ranges from 10 to 20 percent of the running time. Transit agencies use this time to provide the operator a break or to give the operator an opportunity to get service back on schedule if it was running late. [x]

The FTA considers vehicles employed in a commuter rail system to include both locomotives (RL) and passenger coaches (RP). Transit agencies are required to report Vehicle Revenue Miles (VRM) and Vehicle Revenue Hours (VRH) as well as Train Revenue Miles. VRM and VRH exclude the miles and hours related to:

- Deadhead time
- Operator training
- Maintenance testing[xi]

2.3 Adjustments to North-South Commuter Rail Statistics

Transit Agencies report their operating expenses to the NTD on Form F-30. Operating expenses as reported to the NTD may not agree precisely with operating budgets as reported by the agencies to their governing entities due to the differences in definitions of the reported elements. Similarly, it is necessary to make adjustments to several of the previously reported statistics and operating costs of the proposed North-South system to comply with the NTD definitions. The adjustments are as follows:

- Operating Cost adjustment for Locomotive and Coach Lease Expense. The annual operating costs reported in Task Memo 11 include costs for leasing locomotives and coaches. Leasing the rolling stock enables a start-up operation to proceed without incurring the potentially large capital expense of procuring new equipment. In accord with the FTA procedures, the previously reported annual operating cost for Option 1: Full Service of $13,151, 486 is reduced by $502,000 to eliminate the lease expense of 5 locomotives and $746,000 to eliminate the expense of leasing 5 cab cars and 11 coaches. Similarly, the annual operating cost of Option 5B: Shuttle Service of $7,026,001 is reduced by$301,500 to eliminate the lease expense of 3 locomotives and $286,500 to eliminate the expense of leasing 3 cab cars and 3 coaches.
- Allocation of costs by mode. The annual operating cost reported in Task 11 is also reduced to eliminate the cost of providing connecting bus service. This action reduces the reported annual operating cost by $803,000 for each option.

The resultant annual operating costs as would be reported in the National Transportation Database are:

- Option 1: Full Service: $11,100,488
- Option 5B: Shuttle Service: $5,635,001

It is important to note that the service provider will incur the full operating cost as reported in the Detailed Long Term Operating Costs Technical Memo. However, in order to put all transit agencies on an equal footing for comparative purposes, agencies which lease their rolling stock are required to strip out their leasing costs, while agencies which own their rolling stock are required to strip out their depreciation costs.

3. COMMUTER RAIL SYSTEMS SELECTED FOR COMPARISON

3.1 Selection Criteria

The National Transit Database identifies 28 commuter rail systems in the United States. Commuter Rail (CR) is defined in the NTD Glossary as a transit mode that is an electric or diesel propelled railway for urban passenger train service consisting of local short distance travel operating between a central city and adjacent suburbs. Service must be operated on a regular basis by or under contract with a transit operator for the purpose of transporting passengers within urbanized areas (UZAs), or between urbanized areas and outlying areas. Such rail service, using either locomotive hauled or self-propelled railroad passenger cars, is generally characterized by multiple trip tickets, specific station to station fares, railroad employment practices and usually includes only one or two stations in the central business district. Heavy rail (HR) rapid transit, Light rail (LR) streetcar transit service and (most) intercity rail service are specifically excluded.

In addition, the NTB identifies 17 hybrid rail systems, some of which have commuter rail characteristics.

Hybrid Rail (HR) is defined as systems primarily operating routes on the national system of railroads, but not operating with the characteristics of commuter rail. This service typically operates light rail-type vehicles as diesel multiple unit trains (DMU's). These trains do not meet Federal Railroad Administration standards, and so must operate with temporal separation from freight rail traffic.

See: https://www.transit.dot.gov/ntd/national-transit-database-ntd-glossary

Commuter rail systems in the United States generally fall in two categories, those that have been in operation for roughly a century in our major cities and those that are more recent startups. The historic systems tend to have well established fleets, significant operations, extensive ridership and relatively high fare box recovery, where the annual fare revenues approach or exceed 50% of the operating cost. There is little value in seeking to compare a new start-up service, such as the North-South Commuter Rail System to such entities. However, over the last two decades, multiple new commuter systems have been started. Four systems, including:

- Nashville: Music City Star
- Minneapolis: Northstar
- Orlando: SunRail
- Oceanside: Coaster

offer characteristics and parameters similar to those of the proposed Ann Arbor system and may be suitable for comparison. Similarly, new hybrid rail systems can be employed as comparable systems. We have selected:

- Denton: A-Train
- Austin: Red Line

as these systems have comparable fleet size, route miles, ridership, operating costs and revenues.

3.2 Peer Group System Characteristics

The characteristics of the two North-South options and the selected peer group systems are presented in the following table:

System Characteristics								
	System							
Characteristic	North-South Option 1	North-South Option 5B	Music City Star	Northstar	SunRail (2015)**	Coaster	Red Line	A-Train
Route Miles	28.4	11.97	32	40	32.7	41	32	21
Stations	6	3	6	7	12	8	9	5
Passenger Cars per Train	3	2	3				1	2
Weekday One-Way Revenue Trips	8	12	14	12	36	68-78	40-56	60-62
Operating Days per Year	262	262	262	358	262	365	312	312
Vehicles Avail for Max Service	21	9	15	24	30	35	6	11
Vehicles Operated in Max Service	16	6	7	20	30	24	4	8
Annual Train Revenue Miles	59,526	37,634	84,200	145,868	279,449	276,960	279,757	313,062
Annual Train Revenue Hours	2,035	1,638	2,904	4,429	8,796	7,012	11,613	12,215
Annual Vehicle Revenue Miles	238,106	112,901	199,870	528,744	636,033	1,394,955	279,757	624,330
Annual Vehicle Revenue Hours	8,139	4,913	6,578	16,077	20,648	35,318	11,613	24,450
Annual Passenger Revenue	$1,456,279	$810,856	$691,698	$2,349,875	$2,116,764	$7,627,368	$3,136,133	$831,112
Annual Passenger Miles	6,047,424	3,676,908	3,776,278	18,259,201		47,124,736	12,006,789	8,339,421
Annual Unlinked Trips	482,080	439,112	243,133	721,214		1,673,816	763,551	568,338
Total Operating Expense*	$11,100,488	$5,635,001	$4,332,322	$15,238,880	$33,667,907	$19,308,163	$15,810,047	$12,402,812
*North-South Operating Costs are adjusted to eliminate the the costs of operating connecting bus service and the cost of leasing locomotives and coaches								
**Sunrail started service in mid year 2014; complete data is not available								

3.3 Variables Reported

As noted in sections 2.1 and 2.2 above, transit agencies are required to report a host of data to the FTA's National Transit Database. We have selected a subset of the data in order to generate metrics that can be used to evaluate the efficiency of the proposed North-South system in comparison to similar systems in operation in the United States.

Transit agencies report operating statistics and financial data annually to the NTD. The NTD assembles the data in a variety of prepackaged reports and tables that may be downloaded by the public and other agencies for further analysis. The data is available at this website: https://www.transit.dot.gov/ntd

Our analysis is based on FY2014 reporting, the last year for which individual transit agency summary data is available. The NTB publishes this data in an easily readable format, roughly one year later than

the data is available in excel tables. The summary data for the comparable systems that we have used in this analysis is provided in Appendix I. It should be noted that the 2014 summary data the SunRail System reflects operations over a roughly seven month period, as the system started operation in May 2014. As this data does not represent a steady state operation and includes some one time startup costs, we have employed 2015 data for the SunRail system, which we collected from the primary excel data files.

The primary annual variables that we have used in our analysis include:

- Train Revenue Miles
- Train Revenue Hours
- Vehicle Revenue Miles
- Vehicle Revenue Hours
- Passenger Miles
- Operating Expense
- Unlinked Passenger Trips

3.4 Comparison Metrics

The data enables the NTD to generate metrics which are commonly used to assess the performance of the transit system. We have used the following:

- Operating Expense per Train Revenue Mile
- Operating Expense per Train revenue Hour
- Operating Expense per Vehicle Revenue Mile
- Operating Expense per Vehicle Revenue Hour
- Operating Expense per Passenger Mile
- Unlinked Passenger Trips per Vehicle Revenue Mile

NTD differentiates between service efficiency and service effectiveness. Service efficiency is measured by Operating Expense per Vehicle Revenue Mile and Operating Expense per Vehicle Revenue Hour. Service effectiveness is measured by Operating Expense per Passenger Mile, Operating Expense per Unlinked Passenger Trip, Unlinked Trips per Vehicle Revenue Mile and Unlinked Trips per Vehicle Revenue Hour.

The financial performance of Commuter Rail systems has historically been measured on the basis of operating cost per train revenue mile. However, it should be noted that this metric contains a built in inaccuracy, as train length varies greatly among different systems. Well established commuter rail systems, in particular, tend to have robust ridership and are compelled to operate longer trains in order to provide the capacity necessary to serve the ridership demand. In recent years, the FTA has placed greater emphasis on a similar metric, operating cost per vehicle revenue mile, which tends to eliminate the distortion caused by varying train length. However, our candidate comparative systems tend to be relatively new with comparatively light ridership, so train lengths are fairly comparable.

4. ANALYSIS

4.1 Performance Metrics Comparison

Most of the North-South performance metrics are less favorable than those of the selected comparable systems. However, the service effectiveness as measured by Unlinked Trips per Vehicle Revenue Mile of both North South Options is relatively strong. The comparative results are shown in the following summary table:

Performance Metrics Comparison Table									
	System								
Performance Metric	North-South Option 1	North-South Option 5B	Music City Star	Northstar	SunRail (2015)**	Coaster	Red Line	A-Train	Average Value
OpEx per Train Revenue Mile	$186.48	$149.73	$51.45	$104.47	$120.48	$69.71	$56.51	$39.62	$73.71
OpEx per Train Revenue Hour	$5,455.14	$3,441.22	$1,491.85	$3,440.70	$3,827.64	$2,753.59	$1,361.41	$1,015.38	$2,315.09
OpEx per Vehicle Revenue Mile	$46.62	$49.91	$21.68	$28.82	$52.93	$13.84	$56.51	$19.87	$32.28
OpEx per Vehicle Revenue Hour	$1,363.79	$1,147.07	$658.61	$947.87	$1,630.57	$546.69	$1,361.41	$507.27	$942.07
OpEx per Passenger Mile	$1.84	$1.53	$1.15	$0.83		$0.41	$1.32	$1.49	$1.04
Unlinked Trips per Veh-Rev-Mi	2.02	3.89	1.22	1.36		1.20	2.73	0.91	1.48
*North-South Operating Costs are adjusted to eliminate the the costs of operating connecting bus service and the cost of leasing locomotives and coaches									
**SunRail started service in mid year 2014; Limited 2015 data is available.									

A more detailed analysis is presented in Appendix II.

4.2 Analysis of Specific Cost Elements

While, the proposed North-South Commuter System is shown to be more expensive to operate than its peer systems by the conventional metrics explored above. A more detailed comparison of the operating cost elements of North-South and its peer systems revels several elements that contribute significantly to the differences.

- General Administrative Cost and (Casualty and Liability Costs). The operating costs for the North-South system alternatives were developed, considering the system to be a new entity, rather than an arm of an existing transit agency. The planning team consulted with the insurance industry to get an accurate estimate of casualty and liability costs, and specifically liability insurance. We have estimated that the casualty and liability costs will be $1.3 million for Option 1 and $1.25 million for Option 5B. These values comprise a relatively large component of the total general administrative cost, specifically 43% in the case of Option 1 and almost 70% in the case of Option 5B. In contrast, the peer systems report rather widely varying casualty and liability costs, ranging from a low of $25,000 for Austin Capital Metro to a high of $1.56 million for CFRA SunRail. It appears that the specific allocation methodology chosen by the agency to

allocate and report general administrative expenses among multiple modes has a significant effect on the value reported.

- Non-Vehicle Maintenance Costs. The non-vehicle maintenance costs include cost to maintain the track, bridge, signal, and grade crossing warning system infrastructure. The magnitude of the cost is influenced by the condition and age of the infrastructure. Costs can be compared across agencies on a route- mile basis. Our computations yield values of $127,000 and $171,000 per track mile for Options 1 and 5B, respectively. It is anticipated that the North-South Commuter System will be the primary user of the track and signal infrastructure between Ann Arbor (State St) and Howell. A nominal two freight trains per day are expected to operate on the system. Therefore, great majority of the maintenance costs have been assigned to the passenger service. The analysis reveals that commuter rail operators report a wide range of non-vehicle maintenance costs, ranging from a low of $15,000 per route-mile to a high of $289,000. Greater detail on the actual costs incurred and their allocation are required to understand this variation.

5. CONCLUSIONS

By all common metrics, the North-South Commuter Rail System will be relatively expensive to operate as compared to its peers. However, based on the predicted ridership, the system could provide a high level of service effectiveness as measured by unlinked trips per vehicle revenue mile. This is particularly true of Option 5B: Shuttle Service (two train sets), which yields a value of 3.89, which is almost twice that of the peer group average.

As noted early in this study, we have evaluated a stand-alone commuter rail system operating independently of any existing transit agency. The possibility exists that the system can be made to operate more efficiently in combination with another commuter route, such as the East-West line between Ann Arbor and Detroit. Such a combination would allow some efficiencies of scale and wider allocation of the relatively inelastic overhead costs. Similarly, operating the service under an existing multi-modal transit agency can achieve similar effects.

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[i] National Transit Database Policy Manual 2014 Reporting Year, page 1.

[ii] Ibid., page 2.
[iii] Ibid., page 28.
[iv] Ibid., page 28.
[v] Ibid., page 46.
[vi] Ibid., page 47.
[vii] Ibid., page 51.
[viii] Ibid., page 51.
[ix] Ibid., page 64.
[x] Ibid., page 64.
[xi] Ibid., page 66.

APPENDIX I: PEER GROUP 2014 AGENCY PROFILES

Prepared by Quandel Consultants, LLC for SmithGroupJJR, Inc.
February 2, 2017

http://www.rtarelaxandride.com/
130 Nestor Street
Nashville, TN 37210

Regional Transportation Authority (RTA)

2014 Annual Agency Profile

Chief Executive Officer: Mr. Stephen Bland
615-862-6262

General Information

Urbanized Area Statistics - 2010 Census

Nashville-Davidson, TN
563 **Square Miles**
969,587 **Population**
44 **Pop. Rank out of 498 UZAs**

Other UZAs Served

241 Murfreesboro, TN; 0 Tennessee Non-UZA; 208 Clarksville, TN-KY

Service Consumption

13,838,105 **Annual Passenger Miles (PMT)**
619,589 **Annual Unlinked Trips (UPT)**
2,443 **Average Weekday Unlinked Trips**
0 **Average Saturday Unlinked Trips**
0 **Average Sunday Unlinked Trips**

Database Information

NTDID: 40159
Reporter Type: Full Reporter

Service Area Statistics

750 **Square Miles**
1,583,115 **Population**

Service Supplied

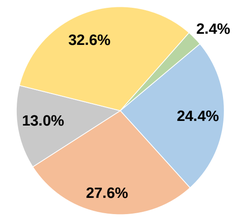
1,445,779 **Annual Vehicle Revenue Miles (VRM)**
36,110 **Annual Vehicle Revenue Hours (VRH)**
77 **Vehicles Operated in Maximum Service (VOMS)**
102 **Vehicles Available for Maximum Service (VAMS)**

Financial Information

Sources of Operating Funds Expended

Fare Revenues	$2,249,416	24.4%
Local Funds	$2,547,239	27.6%
State Funds	$1,196,560	13.0%
Federal Assistance	$3,005,576	32.6%
Other Funds	$219,646	2.4%
Total Operating Funds Expended	**$9,218,437**	100.0%

Operating Funding Sources



Sources of Capital Funds Expended

Fare Revenues	$0	0.0%
Local Funds	$137,909	11.1%
State Funds	$110,194	8.9%
Federal Assistance	$992,406	80.0%
Other Funds	$0	0.0%
Total Capital Funds Expended	**$1,240,509**	100.0%

Capital Funding Sources

Summary of Operating Expenses (OE)

Salary, Wages, Benefits	$1,186,527	16.7%
Materials and Supplies	$830,742	11.7%
Purchased Transportation	$4,429,246	62.3%
Other Operating Expenses	$659,614	9.3%
Total Operating Expenses	**$7,106,129**	100.0%
Reconciling OE Cash Expenditures	$841,238	
Purchased Transportation (Reported Separately)	$1,271,070 *	

Modal Characteristics

Modal Overview

Mode	Vehicles Operated in Maximum Service: Directly Operated	Vehicles Operated in Maximum Service: Purchased Transportation	Uses of Capital Funds: Revenue Vehicles	Uses of Capital Funds: Systems and Guideways	Uses of Capital Funds: Facilities and Stations	Uses of Capital Funds: Other	Uses of Capital Funds: Total
Commuter Bus	-	16 ˜	$0	$0	$138,575	$0	$138,575
Commuter Rail	-	7	$0	$1,101,934	$0	$0	$1,101,934
Vanpool	-	54	$0	$0	$0	$0	$0
Total	**-**	**77**	**$0**	**$1,101,934**	**$138,575**	**$0**	**$1,240,509**

Operation Characteristics

Mode	Operating Expenses	Fare Revenues	Uses of Capital Funds	Annual Passenger Miles	Annual Unlinked Trips	Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours	Fixed Guideway Directional Route Miles	Vehicles Available for Maximum Service	Vehicles Operated in Maximum Service	Percent Spare Vehicles	Average Fleet Age in Years[1]
Commuter Bus	$1,908,343 ˜	$935,880 ˜	$138,575	5,240,653	197,963	278,273	9,498	0.0	17	16 ˜	5.9%	
Commuter Rail	$4,332,322	$691,698	$1,101,934	3,776,278	243,133	199,870	6,578	62.8	15	7	53.3%	29.0
Vanpool	$865,464	$621,838	$0	4,821,174	178,493	967,636	20,034	0.0	70	54	22.9%	4.5
Total	**$7,106,129**	**$2,249,416**	**$1,240,509**	**13,838,105**	**619,589**	**1,445,779**	**36,110**	**62.8**	**102**	**77**	**24.5%**	

Performance Measures

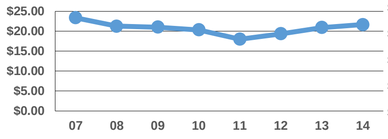
Service Efficiency

Mode	Operating Expenses per Vehicle Revenue Mile	Operating Expenses per Vehicle Revenue Hour
Commuter Bus	$6.86	$200.92
Commuter Rail	$21.68	$658.61
Vanpool	$0.89	$43.20
Total	**$4.92**	**$196.79**

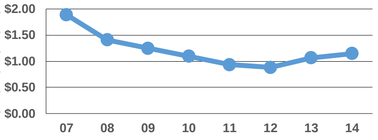
Service Effectiveness

Mode	Operating Expenses per Passenger Mile	Operating Expenses per Unlinked Passenger Trip	Unlinked Trips per Vehicle Revenue Mile	Unlinked Trips per Vehicle Revenue Hour
Commuter Bus	$0.36	$9.64	0.7	20.8
Commuter Rail	$1.15	$17.82	1.2	37.0
Vanpool	$0.18	$4.85	0.2	8.9
Total	**$0.51**	**$11.47**	**0.4**	**17.2**

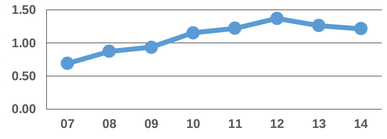
Operating Expense per Vehicle Revenue Mile: Commuter Rail



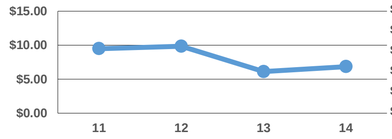
Operating Expense per Passenger Mile: Commuter Rail



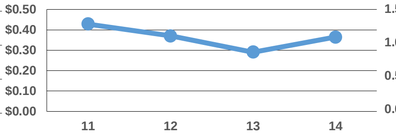
Unlinked Passenger Trip per Vehicle Revenue Mile: Commuter Rail



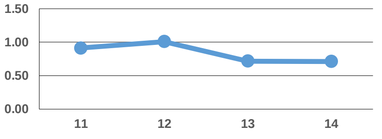
Operating Expense per Vehicle Revenue Mile: Commuter Bus



Operating Expense per Passenger Mile: Commuter Bus



Unlinked Passenger Trip per Vehicle Revenue Mile: Commuter Bus



Notes:

[1]Demand Response - Taxi (DT) and non-dedicated fleets do not report fleet age data.
˜Excludes data for purchased transportation filed separately.
*This agency has a purchased transportation relationship in which they buy service from Metropolitan Transit Authority (NTDID: 40004), and in which the data are captured in another report for mode CB/PT.

http://www.metrotransit.org/
560 Sixth Avenue, North
Minneapolis, MN 55411

Metro Transit

2014 Annual Agency Profile

General Manager, Metro Transit: Mr. Brian Lamb
612-349-7510

General Information

Urbanized Area Statistics - 2010 Census

Minneapolis-St. Paul, MN-WI
1,022 **Square Miles**
2,650,890 **Population**
16 **Pop. Rank out of 498 UZAs**

Service Consumption

374,842,330 **Annual Passenger Miles (PMT)**
84,535,513 **Annual Unlinked Trips (UPT)**
273,036 **Average Weekday Unlinked Trips**
162,025 **Average Saturday Unlinked Trips**
117,666 **Average Sunday Unlinked Trips**

Database Information

NTDID: 50027
Reporter Type: Full Reporter

Service Area Statistics

657 **Square Miles**
1,843,207 **Population**

Service Supplied

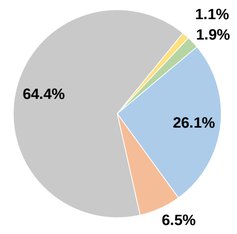
28,508,353 **Annual Vehicle Revenue Miles (VRM)**
2,392,470 **Annual Vehicle Revenue Hours (VRH)**
861 **Vehicles Operated in Maximum Service (VOMS)**
1,015 **Vehicles Available for Maximum Service (VAMS)**

Financial Information

Sources of Operating Funds Expended

Fare Revenues	$93,601,193	26.1%
Local Funds	$23,239,773	6.5%
State Funds	$230,940,263	64.4%
Federal Assistance	$3,974,636	1.1%
Other Funds	$6,756,258	1.9%
Total Operating Funds Expended	**$358,512,123**	100.0%

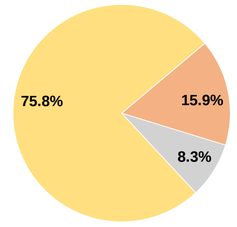
Operating Funding Sources



Sources of Capital Funds Expended

Fare Revenues	$0	0.0%
Local Funds	$37,554,825	15.9%
State Funds	$19,697,273	8.3%
Federal Assistance	$179,485,079	75.8%
Other Funds	$0	0.0%
Total Capital Funds Expended	**$236,737,177**	100.0%

Capital Funding Sources



Summary of Operating Expenses (OE)

Salary, Wages, Benefits	$273,251,327	79.2%
Materials and Supplies	$48,672,982	14.1%
Purchased Transportation	$3,628,193	1.1%
Other Operating Expenses	$19,384,396	5.6%
Total Operating Expenses	**$344,936,898**	100.0%
Reconciling OE Cash Expenditures	$13,575,222	
Purchased Transportation (Reported Separately)	$0	

Modal Characteristics

Modal Overview

Mode	Vehicles Operated in Maximum Service: Directly Operated	Vehicles Operated in Maximum Service: Purchased Transportation	Uses of Capital Funds: Revenue Vehicles	Uses of Capital Funds: Systems and Guideways	Uses of Capital Funds: Facilities and Stations	Uses of Capital Funds: Other	Uses of Capital Funds: Total
Commuter Rail	-	20	$0	$7,206,489	$227,683	$0	$7,434,172
Light Rail	72	-	$46,782,124	$106,477,945	$2,792,273	$2,579,315	$158,631,657
Bus	769	-	$38,688,751	$8,474,808	$21,670,876	$1,836,913	$70,671,348
Total	**841**	**20**	**$85,470,875**	**$122,159,242**	**$24,690,832**	**$4,416,228**	**$236,737,177**

Operation Characteristics

Mode	Operating Expenses	Fare Revenues	Uses of Capital Funds	Annual Passenger Miles	Annual Unlinked Trips	Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours	Fixed Guideway Directional Route Miles	Vehicles Available for Maximum Service	Vehicles Operated in Maximum Service	Percent Spare Vehicles	Average Fleet Age in Years[1]
Commuter Rail	$15,238,880	$2,349,875	$7,434,172	18,259,201	721,214	528,744	16,077	77.9	24	20	16.7%	5.2
Light Rail	$48,918,097	$15,405,531	$158,631,657	72,641,886	15,999,993	4,005,704	329,077	44.3	86	72	16.3%	3.5
Bus	$280,779,921	$75,845,786	$70,671,348	283,941,243	67,814,306	23,973,905	2,047,316	4.7	905	769	15.0%	4.7
Total	**$344,936,898**	**$93,601,192**	**$236,737,177**	**374,842,330**	**84,535,513**	**28,508,353**	**2,392,470**	**126.9**	**1,015**	**861**	**15.2%**	

Performance Measures

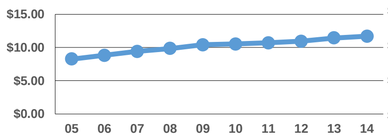
Service Efficiency

Mode	Operating Expenses per Vehicle Revenue Mile	Operating Expenses per Vehicle Revenue Hour
Commuter Rail	$28.82	$947.87
Light Rail	$12.21	$148.65
Bus	$11.71	$137.15
Total	**$12.10**	**$144.18**

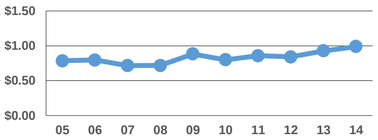
Service Effectiveness

Mode	Operating Expenses per Passenger Mile	Operating Expenses per Unlinked Passenger Trip	Unlinked Trips per Vehicle Revenue Mile	Unlinked Trips per Vehicle Revenue Hour
Commuter Rail	$0.83	$21.13	1.4	44.9
Light Rail	$0.67	$3.06	4.0	48.6
Bus	$0.99	$4.14	2.8	33.1
Total	**$0.92**	**$4.08**	**3.0**	**35.3**

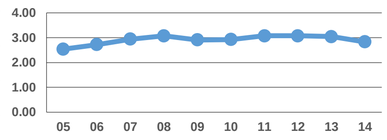
Operating Expense per Vehicle Revenue Mile: Bus



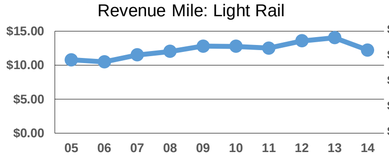
Operating Expense per Passenger Mile: Bus



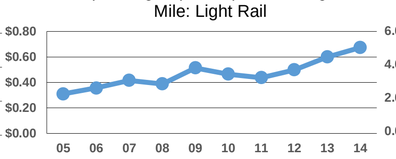
Unlinked Passenger Trip per Vehicle Revenue Mile: Bus



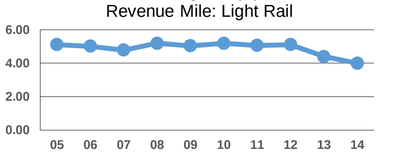
Operating Expense per Vehicle Revenue Mile: Light Rail



Operating Expense per Passenger Mile: Light Rail



Unlinked Passenger Trip per Vehicle Revenue Mile: Light Rail



Notes:

[1]Demand Response - Taxi (DT) and non-dedicated fleets do not report fleet age data.

http://www.golynx.com/
455 North Garland Avenue
Orlando, FL 32801

Central Florida Regional Transportation Authority (LYNX)

2014 Annual Agency Profile

Chief Executive Officer: CEO Susan Black
407-254-6058

General Information

Urbanized Area Statistics - 2010 Census

Orlando, FL

598 **Square Miles**
1,510,516 **Population**
32 **Pop. Rank out of 498 UZAs**

Other UZAs Served

117 Kissimmee, FL; 0 Florida Non-UZA

Service Area Statistics

2,538 **Square Miles**
1,959,812 **Population**

Service Consumption

178,129,638 **Annual Passenger Miles (PMT)**
30,141,247 **Annual Unlinked Trips (UPT)**
96,419 **Average Weekday Unlinked Trips**
64,623 **Average Saturday Unlinked Trips**
40,748 **Average Sunday Unlinked Trips**

Service Supplied

26,583,075 **Annual Vehicle Revenue Miles (VRM)**
1,730,506 **Annual Vehicle Revenue Hours (VRH)**
610 **Vehicles Operated in Maximum Service (VOMS)**
698 **Vehicles Available for Maximum Service (VAMS)**

Database Information

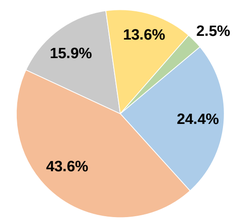
NTDID: 40035
Reporter Type: Full Reporter

Financial Information

Sources of Operating Funds Expended

Fare Revenues	$29,081,116	24.4%
Local Funds	$51,992,837	43.6%
State Funds	$18,900,180	15.9%
Federal Assistance	$16,257,850	13.6%
Other Funds	$2,947,245	2.5%
Total Operating Funds Expended	**$119,179,228**	100.0%

Operating Funding Sources



Sources of Capital Funds Expended

Fare Revenues	$0	0.0%
Local Funds	$4,170,762	12.2%
State Funds	$2,528,405	7.4%
Federal Assistance	$27,585,879	80.5%
Other Funds	$0	0.0%
Total Capital Funds Expended	**$34,285,046**	100.0%

Capital Funding Sources

Summary of Operating Expenses (OE)

Salary, Wages, Benefits	$69,212,102	57.7%
Materials and Supplies	$23,620,914	19.7%
Purchased Transportation	$22,383,195	18.7%
Other Operating Expenses	$4,671,796	3.9%
Total Operating Expenses	**$119,888,007**	100.0%
Reconciling OE Cash Expenditures	-$708,779	
Purchased Transportation (Reported Separately)	$0	

Modal Characteristics

Modal Overview

Mode	Vehicles Operated in Maximum Service: Directly Operated	Vehicles Operated in Maximum Service: Purchased Transportation	Uses of Capital Funds: Revenue Vehicles	Uses of Capital Funds: Systems and Guideways	Uses of Capital Funds: Facilities and Stations	Uses of Capital Funds: Other	Uses of Capital Funds: Total
Commuter Bus	-	2	$0	$0	$0	$0	$0
Demand Response	-	221	$2,239,890	$36,366	$0	$35,277	$2,311,533
Bus	237 [2]	14 [2]	$12,273,006	$2,493,713	$612,257	$2,141,005	$17,519,981
Bus Rapid Transit	9	-	$8,159,943	$2,768,141	$0	$1,209,037	$12,137,121
Vanpool	-	127	$2,316,411	$0	$0	$0	$2,316,411
Total	**246**	**364**	**$24,989,250**	**$5,298,220**	**$612,257**	**$3,385,319**	**$34,285,046**

Operation Characteristics

Mode	Operating Expenses	Fare Revenues	Uses of Capital Funds	Annual Passenger Miles	Annual Unlinked Trips	Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours	Fixed Guideway Directional Route Miles	Vehicles Available for Maximum Service	Vehicles Operated in Maximum Service	Percent Spare Vehicles	Average Fleet Age in Years[1]
Commuter Bus	$314,544	$7,619	$0	60,636	2,968	26,068	1,053	0.0	3	2	33.3%	4.0
Demand Response	$24,557,424	$1,776,613	$2,311,533	9,966,233	774,015	9,336,051	564,321	0.0	240	221	7.9%	2.1
Bus	$91,525,654 [2]	$27,296,885 [2]	$17,519,981	155,989,136	27,987,503	14,836,301	1,072,977	0.6	298	251 [2]	15.8%	6.1
Bus Rapid Transit	$2,319,281	$0	$12,137,121	976,632	1,043,348	175,809	32,073	5.9	9	9	0.0%	0.4
Vanpool	$1,171,104	$451,751	$2,316,411	11,137,001	333,413	2,208,846	60,082	0.0	148	127	14.2%	2.1
Total	**$119,888,007**	**$29,532,868**	**$34,285,046**	**178,129,638**	**30,141,247**	**26,583,075**	**1,730,506**	**6.5**	**698**	**610**	**12.6%**	

Performance Measures

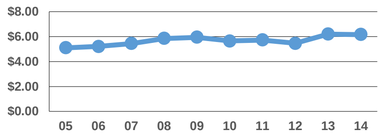
Service Efficiency

Mode	Operating Expenses per Vehicle Revenue Mile	Operating Expenses per Vehicle Revenue Hour
Commuter Bus	$12.07	$298.71
Demand Response	$2.63	$43.52
Bus	$6.17	$85.30
Bus Rapid Transit	$13.19	$72.31
Vanpool	$0.53	$19.49
Total	**$4.51**	**$69.28**

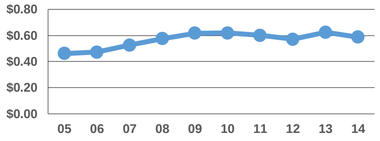
Service Effectiveness

Mode	Operating Expenses per Passenger Mile	Operating Expenses per Unlinked Passenger Trip	Unlinked Trips per Vehicle Revenue Mile	Unlinked Trips per Vehicle Revenue Hour
Commuter Bus	$5.19	$105.98	0.1	2.8
Demand Response	$2.46	$31.73	0.1	1.4
Bus	$0.59	$3.27	1.9	26.1
Bus Rapid Transit	$2.37	$2.22	5.9	32.5
Vanpool	$0.11	$3.51	0.2	5.5
Total	**$0.67**	**$3.98**	**1.1**	**17.4**

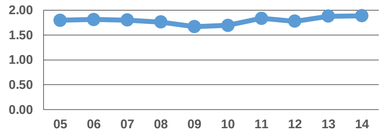
Operating Expense per Vehicle Revenue Mile: Bus



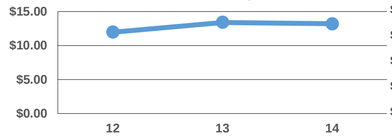
Operating Expense per Passenger Mile: Bus



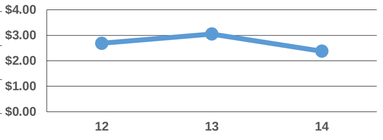
Unlinked Passenger Trip per Vehicle Revenue Mile: Bus



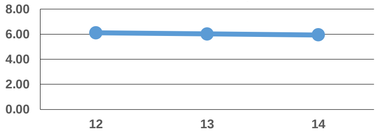
Operating Expense per Vehicle Revenue Mile: Bus Rapid Transit



Operating Expense per Passenger Mile: Bus Rapid Transit



Unlinked Passenger Trip per Vehicle Revenue Mile: Bus Rapid Transit



Notes:

[1]Demand Response - Taxi (DT) and non-dedicated fleets do not report fleet age data.
[2]Includes data for a contract with another reporter.
*This agency has a purchased transportation relationship in which they sell service to Polk County Transit Services Division - Polk County Board of County Commissioners (NTDID: 40127), and in which the data are captured in this report for mode MB/PT.
*This agency has a purchased transportation relationship in which they sell service to County of Volusia, dba: VOTRAN (NTDID: 40032), and in which the data are captured in this report for mode MB/DO.

http://www.gonctd.com/
810 Mission Avenue
Oceanside, CA 92054

North County Transit District (NCTD)

2014 Annual Agency Profile

Chief Financial Officer: Mr. Ryan Bailey
760-967-2823

General Information

Urbanized Area Statistics - 2010 Census

San Diego, CA
732 **Square Miles**
2,956,746 **Population**
15 **Pop. Rank out of 498 UZAs**

Other UZAs Served

0 California Non-UZA

Service Area Statistics

403 **Square Miles**
849,420 **Population**

Service Consumption

112,124,786 **Annual Passenger Miles (PMT)**
12,528,480 **Annual Unlinked Trips (UPT)**
40,441 **Average Weekday Unlinked Trips**[a]
20,941 **Average Saturday Unlinked Trips**[a]
16,971 **Average Sunday Unlinked Trips**[a]

Service Supplied

9,093,570 **Annual Vehicle Revenue Miles (VRM)**
584,207 **Annual Vehicle Revenue Hours (VRH)**
227 **Vehicles Operated in Maximum Service (VOMS)**
271 **Vehicles Available for Maximum Service (VAMS)**

Database Information

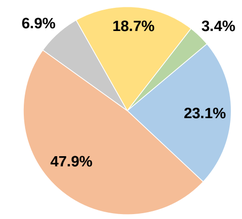
NTDID: 90030
Reporter Type: Full Reporter

Financial Information

Sources of Operating Funds Expended

Fare Revenues	$19,274,834	23.1%
Local Funds	$40,016,273	47.9%
State Funds	$5,771,888	6.9%
Federal Assistance	$15,606,957	18.7%
Other Funds	$2,820,402	3.4%
Total Operating Funds Expended	**$83,490,354**	100.0%

Operating Funding Sources



Sources of Capital Funds Expended

Fare Revenues	$0	0.0%
Local Funds	$6,273,540	23.6%
State Funds	$10,013,493	37.7%
Federal Assistance	$10,290,420	38.7%
Other Funds	$0	0.0%
Total Capital Funds Expended	**$26,577,453**	100.0%

Capital Funding Sources

Summary of Operating Expenses (OE)

Salary, Wages, Benefits	$21,007,541	25.7%
Materials and Supplies	$7,336,792	9.0%
Purchased Transportation	$44,271,920	54.2%
Other Operating Expenses	$9,124,891	11.2%
Total Operating Expenses	**$81,741,144**	100.0%
Reconciling OE Cash Expenditures	$1,749,210	
Purchased Transportation (Reported Separately)	$0	

Modal Characteristics

Modal Overview

Mode	Vehicles Operated in Maximum Service: Directly Operated	Vehicles Operated in Maximum Service: Purchased Transportation	Uses of Capital Funds: Revenue Vehicles	Uses of Capital Funds: Systems and Guideways	Uses of Capital Funds: Facilities and Stations	Uses of Capital Funds: Other	Uses of Capital Funds: Total
Commuter Rail	-	24	$14,461	$18,430,857	$447,154	$51,108	$18,943,580
Demand Response	-	8	$0	$0	$0	$0	$0
Demand Response - Taxi	-	50	$0	$77,300	$0	$0	$77,300
Bus	-	137	$2,469,210	$843,190	$2,300,035	$10,640	$5,623,075
Hybrid Rail	-	8	$1,275,904	$399,043	$166,417	$92,134	$1,933,498
Total	**-**	**227**	**$3,759,575**	**$19,750,390**	**$2,913,606**	**$153,882**	**$26,577,453**

Operation Characteristics

Mode	Operating Expenses	Fare Revenues	Uses of Capital Funds	Annual Passenger Miles	Annual Unlinked Trips	Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours	Fixed Guideway Directional Route Miles	Vehicles Available for Maximum Service	Vehicles Operated in Maximum Service	Percent Spare Vehicles	Average Fleet Age in Years[1]
Commuter Rail	$19,308,163	$7,627,368	$18,943,580	47,124,736	1,673,816	1,394,955	35,318	82.2	35	24	31.4%	17.4
Demand Response	$547,868	$43,513	$0	55,879	14,066	53,428	3,652	0.0	8	8	0.0%	4.0
Demand Response - Taxi	$4,789,180	$567,826	$77,300	1,514,976	154,162	1,400,480	75,285	0.0	50	50	0.0%	
Bus	$42,064,413	$8,272,553	$5,623,075	41,251,051	8,135,330	5,568,575	439,172	0.0	166	137	17.5%	7.9
Hybrid Rail	$15,031,520	$2,763,574	$1,933,498	22,178,144	2,551,106	676,132	30,780	44.0	12	8	33.3%	8.0
Total	**$81,741,144**	**$19,274,834**	**$26,577,453**	**112,124,786**	**12,528,480**	**9,093,570**	**584,207**	**126.2**	**271**	**227**	**16.2%**	

Performance Measures

Service Efficiency

Mode	Operating Expenses per Vehicle Revenue Mile	Operating Expenses per Vehicle Revenue Hour
Commuter Rail	$13.84	$546.69
Demand Response	$10.25	$150.02
Demand Response - Taxi	$3.42	$63.61
Bus	$7.55	$95.78
Hybrid Rail	$22.23	$488.35
Total	**$8.99**	**$139.92**

Service Effectiveness

Mode	Operating Expenses per Passenger Mile	Operating Expenses per Unlinked Passenger Trip	Unlinked Trips per Vehicle Revenue Mile	Unlinked Trips per Vehicle Revenue Hour
Commuter Rail	$0.41	$11.54	1.2	47.4
Demand Response	$9.80	$38.95	0.3	3.9
Demand Response - Taxi	$3.16	$31.07	0.1	2.0
Bus	$1.02	$5.17	1.5	18.5
Hybrid Rail	$0.68	$5.89	3.8	82.9
Total	**$0.73**	**$6.52**	**1.4**	**21.4**

Operating Expense per Vehicle Revenue Mile: Bus

Operating Expense per Passenger Mile: Bus

Unlinked Passenger Trip per Vehicle Revenue Mile: Bus

Operating Expense per Vehicle Revenue Mile: Hybrid Rail

Operating Expense per Passenger Mile: Hybrid Rail

Unlinked Passenger Trip per Vehicle Revenue Mile: Hybrid Rail

Notes: [a]Average Unlinked Trips not available for Demand Response Taxi.
[1]Demand Response - Taxi (DT) and non-dedicated fleets do not report fleet age data.

http://www.dcta.net/
1660 S. Stemmons Suite 250
Lewisville, TX 75067

Denton County Transportation Authority (DCTA)

2014 Annual Agency Profile

President: Mr. James Cline
972-221-4600

General Information

Urbanized Area Statistics - 2010 Census

Denton-Lewisville, TX
145 **Square Miles**
366,174 **Population**
104 **Pop. Rank out of 498 UZAs**

Other UZAs Served

6 Dallas-Fort Worth-Arlington, TX

Service Area Statistics

157 **Square Miles**
234,552 **Population**

Service Consumption

17,920,271 **Annual Passenger Miles (PMT)**
2,907,741 **Annual Unlinked Trips (UPT)**
11,157 **Average Weekday Unlinked Trips**
1,447 **Average Saturday Unlinked Trips**
0 **Average Sunday Unlinked Trips**

Service Supplied

2,545,532 **Annual Vehicle Revenue Miles (VRM)**
156,116 **Annual Vehicle Revenue Hours (VRH)**
84 **Vehicles Operated in Maximum Service (VOMS)**
97 **Vehicles Available for Maximum Service (VAMS)**

Database Information

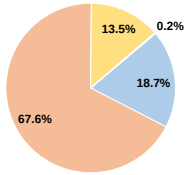
NTDID: 60101
Reporter Type: Full Reporter

Financial Information

Sources of Operating Funds Expended

Fare Revenues	$4,709,947	18.7%
Local Funds	$17,026,609	67.6%
State Funds	$0	0.0%
Federal Assistance	$3,410,607	13.5%
Other Funds	$55,177	0.2%
Total Operating Funds Expended	**$25,202,340**	100.0%

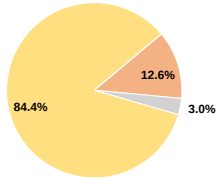
Operating Funding Sources



Sources of Capital Funds Expended

Fare Revenues	$0	0.0%
Local Funds	$614,433	12.6%
State Funds	$146,848	3.0%
Federal Assistance	$4,116,674	84.4%
Other Funds	$0	0.0%
Total Capital Funds Expended	**$4,877,955**	100.0%

Capital Funding Sources



Modal Characteristics

Modal Overview

Mode	Vehicles Operated in Maximum Service: Directly Operated	Vehicles Operated in Maximum Service: Purchased Transportation	Uses of Capital Funds: Revenue Vehicles	Uses of Capital Funds: Systems and Guideways	Uses of Capital Funds: Facilities and Stations	Uses of Capital Funds: Other	Uses of Capital Funds: Total
Demand Response	10	-	$0	$0	$0	$0	$0
Bus	41	-	$625,430	$116,842	$2,444,533	$0	$3,186,805
Vanpool	-	25	$0	$0	$0	$0	$0
Hybrid Rail	-	8	$22,169	$489,357	$3,987	$1,175,637	$1,691,150
Total	**51**	**33**	**$647,599**	**$606,199**	**$2,448,520**	**$1,175,637**	**$4,877,955**

Summary of Operating Expenses (OE)

Salary, Wages, Benefits	$9,412,156	40.1%
Materials and Supplies	$1,727,729	7.4%
Purchased Transportation	$11,046,975	47.0%
Other Operating Expenses	$1,292,391	5.5%
Total Operating Expenses	**$23,479,251**	100.0%
Reconciling OE Cash Expenditures	$1,723,089	
Purchased Transportation (Reported Separately)	$0	

Operation Characteristics

Mode	Operating Expenses	Fare Revenues	Uses of Capital Funds	Annual Passenger Miles	Annual Unlinked Trips	Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours	Fixed Guideway Directional Route Miles	Vehicles Available for Maximum Service	Vehicles Operated in Maximum Service	Percent Spare Vehicles	Average Fleet Age in Years[1]
Demand Response	$1,569,707	$87,309	$0	201,713	32,545	236,203	17,655	0.0	11	10	9.1%	5.2
Bus	$9,179,521	$3,597,718	$3,186,805	5,965,272	2,226,623	1,223,746	104,932	0.0	50	41	18.0%	3.9
Vanpool	$327,211	$193,808	$0	3,413,865	80,235	461,253	9,079	0.0	25	25	0.0%	1.0
Hybrid Rail	$12,402,812	$831,112	$1,691,150	8,339,421	568,338	624,330	24,450	42.6	11	8	27.3%	4.0
Total	**$23,479,251**	**$4,709,947**	**$4,877,955**	**17,920,271**	**2,907,741**	**2,545,532**	**156,116**	**42.6**	**97**	**84**	**13.4%**	

Performance Measures

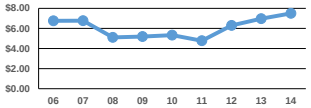
Service Efficiency

Mode	Operating Expenses per Vehicle Revenue Mile	Operating Expenses per Vehicle Revenue Hour
Demand Response	$6.65	$88.91
Bus	$7.50	$87.48
Vanpool	$0.71	$36.04
Hybrid Rail	$19.87	$507.27
Total	**$9.22**	**$150.40**

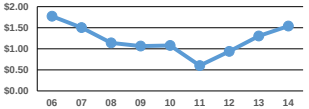
Service Effectiveness

Mode	Operating Expenses per Passenger Mile	Operating Expenses per Unlinked Passenger Trip	Unlinked Trips per Vehicle Revenue Mile	Unlinked Trips per Vehicle Revenue Hour
Demand Response	$7.78	$48.23	0.1	1.8
Bus	$1.54	$4.12	1.8	21.2
Vanpool	$0.10	$4.08	0.2	8.8
Hybrid Rail	$1.49	$21.82	0.9	23.2
Total	**$1.31**	**$8.07**	**1.1**	**18.6**

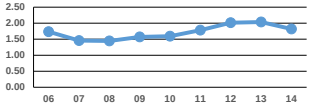
Operating Expense per Vehicle Revenue Mile: Bus



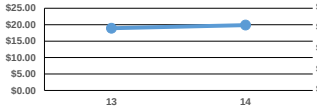
Operating Expense per Passenger Mile: Bus



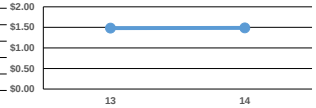
Unlinked Passenger Trip per Vehicle Revenue Mile: Bus



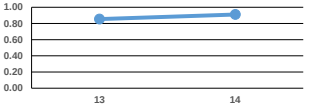
Operating Expense per Vehicle Revenue Mile: Hybrid Rail



Operating Expense per Passenger Mile: Hybrid Rail



Unlinked Passenger Trip per Vehicle Revenue Mile: Hybrid Rail



Notes:

[1]Demand Response - Taxi (DT) and non-dedicated fleets do not report fleet age data.

Financial Information updated 7/12/2016

http://www.capmetro.org/
2910 East Fifth Street
Austin, TX 78702

Capital Metropolitan Transportation Authority (CMTA)

2014 Annual Agency Profile

President/CEO: Ms. Linda Watson
512-389-7403

General Information

Urbanized Area Statistics - 2010 Census

Austin, TX

523	**Square Miles**
1,362,416	**Population**
37	**Pop. Rank out of 498 UZAs**

Other UZAs Served

0 Texas Non-UZA

Service Area Statistics

535	**Square Miles**
1,079,995	**Population**

Service Consumption

167,669,128	**Annual Passenger Miles (PMT)**
34,178,526	**Annual Unlinked Trips (UPT)**
121,241	**Average Weekday Unlinked Trips[a]**
63,235	**Average Saturday Unlinked Trips[a]**
50,321	**Average Sunday Unlinked Trips[a]**

Service Supplied

19,971,323	**Annual Vehicle Revenue Miles (VRM)**
1,496,988	**Annual Vehicle Revenue Hours (VRH)**
800	**Vehicles Operated in Maximum Service (VOMS)**
1,062	**Vehicles Available for Maximum Service (VAMS)**

Database Information

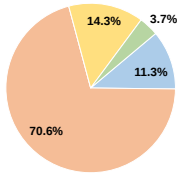
NTDID: 60048
Reporter Type: Full Reporter

Financial Information

Sources of Operating Funds Expended

Fare Revenues	$22,869,856	11.3%
Local Funds	$142,982,120	70.6%
State Funds	$0	0.0%
Federal Assistance	$28,963,267	14.3%
Other Funds	$7,578,479	3.7%
Total Operating Funds Expended	**$202,393,722**	100.0%

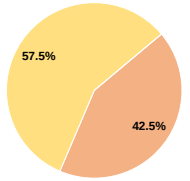
Operating Funding Sources



Sources of Capital Funds Expended

Fare Revenues	$0	0.0%
Local Funds	$10,603,316	42.5%
State Funds	$0	0.0%
Federal Assistance	$14,331,079	57.5%
Other Funds	$0	0.0%
Total Capital Funds Expended	**$24,934,395**	100.0%

Capital Funding Sources



Summary of Operating Expenses (OE)

Salary, Wages, Benefits	$47,608,683	25.7%
Materials and Supplies	$18,232,385	9.8%
Purchased Transportation	$113,472,564	61.2%
Other Operating Expenses	$6,165,625	3.3%
Total Operating Expenses	**$185,479,257**	100.0%
Reconciling OE Cash Expenditures	$16,914,465	
Purchased Transportation (Reported Separately)	$0	

Modal Characteristics

Modal Overview

Mode	Vehicles Operated in Maximum Service: Directly Operated	Vehicles Operated in Maximum Service: Purchased Transportation	Uses of Capital Funds: Revenue Vehicles	Uses of Capital Funds: Systems and Guideways	Uses of Capital Funds: Facilities and Stations	Uses of Capital Funds: Other	Uses of Capital Funds: Total
Commuter Bus	-	37	$0	$0	$0	$0	$0
Demand Response	-	132	$44,764	$55,714	$0	$0	$100,478
Demand Response - Taxi	-	88	$0	$0	$0	$0	$0
Bus	-	302	$9,149,044	$9,800,377	$527,094	$4,925,212	$24,401,727
Vanpool	98	139	$0	$0	$0	$0	$0
Hybrid Rail	-	4	$0	$0	$74,910	$357,280	$432,190
Total	**98**	**702**	**$9,193,808**	**$9,856,091**	**$602,004**	**$5,282,492**	**$24,934,395**

Operation Characteristics

Mode	Operating Expenses	Fare Revenues	Uses of Capital Funds	Annual Passenger Miles	Annual Unlinked Trips	Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours	Fixed Guideway Directional Route Miles	Vehicles Available for Maximum Service	Vehicles Operated in Maximum Service	Percent Spare Vehicles	Average Fleet Age in Years[1]
Commuter Bus	$7,722,055	$480,978	$0	8,920,034	571,212	739,055	39,564	0.0	42	37	11.9%	11.6
Demand Response	$32,953,872	$674,435	$100,478	4,944,288	613,590	4,666,043	333,772	0.0	204	132	35.3%	4.2
Demand Response - Taxi	$357,792	$55,290	$0	128,787	19,730	111,189	5,598	0.0	88	88	0.0%	
Bus	$127,143,429	$18,367,924	$24,401,727	135,348,047	31,976,519	12,982,104	1,065,774	0.0	420	302	28.1%	8.4
Vanpool	$1,492,062	$397,393	$0	6,321,183	233,924	1,193,175	40,667	0.0	302	237	21.5%	
Hybrid Rail	$15,810,047	$3,136,133	$432,190	12,006,789	763,551	279,757	11,613	64.2	6	4	33.3%	7.0
Total	**$185,479,257**	**$23,112,153**	**$24,934,395**	**167,669,128**	**34,178,526**	**19,971,323**	**1,496,988**	**64.2**	**1,062**	**800**	**24.7%**	

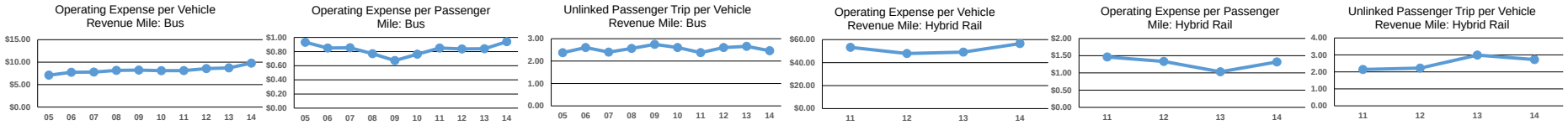
Performance Measures

Service Efficiency

Mode	Operating Expenses per Vehicle Revenue Mile	Operating Expenses per Vehicle Revenue Hour
Commuter Bus	$10.45	$195.18
Demand Response	$7.06	$98.73
Demand Response - Taxi	$3.22	$63.91
Bus	$9.79	$119.30
Vanpool	$1.25	$36.69
Hybrid Rail	$56.51	$1,361.41
Total	**$9.29**	**$123.90**

Service Effectiveness

Mode	Operating Expenses per Passenger Mile	Operating Expenses per Unlinked Passenger Trip	Unlinked Trips per Vehicle Revenue Mile	Unlinked Trips per Vehicle Revenue Hour
Commuter Bus	$0.87	$13.52	0.8	14.4
Demand Response	$6.67	$53.71	0.1	1.8
Demand Response - Taxi	$2.78	$18.13	0.2	3.5
Bus	$0.94	$3.98	2.5	30.0
Vanpool	$0.24	$6.38	0.2	5.8
Hybrid Rail	$1.32	$20.71	2.7	65.7
Total	**$1.11**	**$5.43**	**1.7**	**22.8**



Notes: [a]Average Unlinked Trips not available for Demand Response Taxi.
[1]Demand Response - Taxi (DT) and non-dedicated fleets do not report fleet age data.
Financial Information updated 7/12/2016

APPENDIX II: COMPARISON MATRIX NTD 2014

Prepared by Quandel Consultants, LLC for SmithGroupJJR, Inc.
February 2, 2017

Comparison Matrix: National Transit Database 2014 Data									
	Commuter Rail						Hybrid Rail		
	Locomotive Hauled Coaches						Non-Compliant DMU		
Service	North-South	North-South	Music City Star	Northstar	SunRail (2015)**	Coaster	Red Line	A-Train	Average Value
Option/NTDID	Option 1	Option 5B	40159	50027	40232	90030	60048	60101	of Selected
Agency	AAATA	AAATA	Regional Transportation Authority	Metro Transit	Central Florida Commuter Rail	North County Transit District	Capital Metropolitan Transportation Authority	Denton County Transportation Authority	Comparable Systems
Location	Ann Arbor	Ann Arbor	Nashville	Minneapolis	Orlando	Oceanside	Austin, TX	Denton, TX	
Fleet Characteristics	5 Diesels & 16 Gallery Cars (ex CB&Q)	3 Diesels & 6 Gallery Cars (ex CB&Q)	4 F40PH-2 Diesels & 7 Gallery Cars (ex C&NW)	6 MP36PH-3C Diesels & 18 Bombardier Bi-Level Coaches	10 MP32PH-Q Diesels and 20 Bombardier Bi-Level Coaches	7 locomotives F40PHM-2C and 2-F59PHI) and 28 bi-level passenger cars	6 Stadler GTW 2/6 DMUs	11 Stadler GTW 2/6 DMUs	
Route Miles	28.4	11.97	32	40	32.7	41	32	21	
Host Railroad	GLC	GLC	N&E	BNSF	Florida DOT	NCTD	Cap Metro	DCTA	
Amtrak/Freight Trains per Day	0/4	0/4	0/4	2/50-60	6/7	0/2	0/4-6	0/2	
Service Start			2006	2010	2014	1995	2010	2011	
Stations	6	3	6	7	12	8	9	5	
Crew Members/Train	2	2	2	2	2		1	2	
Passenger Cars per Train	3	2	3				1	2	
Weekday One-Way Revenue Trips	8	12	14	12	36	68-78	40-56	60-62	
Operating Days per Year	262	262	262	358	262	365	312	312	
Vehicles Available for Maximum Service	21	9	15	24	30	35	6	11	
Vehicles Operated in Maximum Service	16	6	7	20	30	24	4	8	
Annual Train Revenue Miles	59,526	37,634	84,200	145,868	279,449	276,960	279,757	313,062	
Annual Train Revenue Hours	2,035	1,638	2,904	4,429	8,796	7,012	11,613	12,215	
Annual Vehicle Revenue Miles	238,106	112,901	199,870	528,744	636,033	1,394,955	279,757	624,330	
Annual Vehicle Revenue Hours	8,139	4,913	6,578	16,077	20,648	35,318	11,613	24,450	
Annual Passenger Revenue	$1,456,279	$810,856	$691,698	$2,349,875	$2,116,764	$7,627,368	$3,136,133	$831,112	
Annual Passenger Miles	6,047,424	3,676,908	3,776,278	18,259,201		47,124,736	12,006,789	8,339,421	
Annual Unlinked Trips	482,080	439,112	243,133	721,214		1,673,816	763,551	568,338	
Total Operating Expense*	$11,100,488	$5,635,001	$4,332,322	$15,238,880	$33,667,907	$19,308,163	$15,810,047	$12,402,812	
OpEx per Train Revenue Mile	$186.48	$149.73	$51.45	$104.47	$120.48	$69.71	$56.51	$39.62	$73.71
OpEx per Train Revenue Hour	$5,455.14	$3,441.22	$1,491.85	$3,440.70	$3,827.64	$2,753.59	$1,361.41	$1,015.38	$2,315.09
OpEx per Vehicle Revenue Mile	$46.62	$49.91	$21.68	$28.82	$52.93	$13.84	$56.51	$19.87	$32.28
OpEx per Vehicle Revenue Hour	$1,363.79	$1,147.07	$658.61	$947.87	$1,630.57	$546.69	$1,361.41	$507.27	$942.07
OpEx per Passenger Mile	$1.84	$1.53	$1.15	$0.83		$0.41	$1.32	$1.49	$1.04
Unlinked Trips per Veh-Rev-Mi	2.02	3.89	1.22	1.36		1.20	2.73	0.91	1.48