

Chapter 6. Peer Agency Modal Analysis

There are several regional transit services in the Twin Cities that can be directly compared to services in other regions. Metro Transit's bus and light-rail systems can be compared to other large transit providers across the country. Metro Mobility, the region's ADA service, can be compared to ADA programs. This chapter compares these programs to similar programs in other regions of the country using standardized statistical measures.

Use of Peer Group Comparisons

The use of peer group comparisons for identifying differences among transit systems is a valuable tool for broad policy assessments. However, some caution should be taken. While the NTD data is reported using the same rules, differences exist among the systems that are not easily discerned from the data. Among these are:

- The institutional arrangements for delivering transit services differ among the comparable regions. Therefore, the proportion of the total regional transit services provided by the reporting system may vary. The relationships between agencies in the region can also affect reporting statistics. For example, in the Twin Cities area, other agencies provide smaller-bus transit service; Metro Transit only provides service only with 40-foot and larger buses.
- The extent of the service area compared to the urbanized area differs. While some transit services operate beyond the boundaries of their census-defined urbanized area, others service only a portion.
- The use of private contractors to provide transit service differs among regions. This can affect the mix of relatively low-cost local and high-cost express service operated by the regions.

Metro Transit Peer Agency Comparisons

As the largest single transit provider in the Twin Cities region, Metro Transit has counterparts in other parts of the country that are comparable in the types of services provided and agency size. This allows for certain agency-to-agency comparisons and mode-to-mode comparisons. Whereas Chapter 5 aggregated all of the transit systems in a region to give a region-to-region comparison, this chapter compares Metro Transit to comparable transit providers elsewhere in the nation.

In previous transit system evaluations, done by the Metropolitan Council, a six-peer transit system group was identified to benchmark Metro Transit's bus operations. This evaluation expands upon the previous data series by adding similar agencies and an exclusive light-rail section. There are two sets of peer agency comparisons for Metro Transit – bus and light rail. The following agencies and their listed modes are used for comparisons:

- Baltimore: Maryland Transit Administration (MTA); bus and light rail
- Cleveland: Greater Cleveland Regional Transit Authority (RTA); bus and light rail
- Dallas: Dallas Area Rapid Transit (DART); bus and light rail

- Denver: Regional Transportation District (RTD); bus and light rail
- Houston: Metropolitan Transit Authority of Harris County (Metro); bus and light rail
- Pittsburgh: Port Authority of Allegheny County (PAT); bus and light rail
- Portland: Tri-County Metropolitan Transit Authority (Tri-Met); bus and light rail
- Seattle: King County Department of Transportation (Metro); bus only
- St. Louis: Bi-State Development Agency (METRO); light rail only
- San Diego: San Diego Trolley; light rail only

Seattle does not provide light-rail service but its bus service is comparable to the Metro Transit bus system. St. Louis and San Diego provide light-rail service, but its bus systems are less comparable in scope to the Metro Transit bus system. The NTD does not distinguish between light rail and streetcar systems; thus, streetcar systems are included in the light-rail statistics and comparisons. For the purposes of this evaluation, the rail and bus systems within each agency are compared separately.

Metro Transit Bus Peer Group Characteristics

Population size and population density are important considerations in defining peer groups. The service area is based on where transit services are operated. For bus services, the service area is defined as the area within ¼-mile of either side of a bus route.

Table 6-1. 2008 Demographic Characteristics of Metro Transit Bus Peer Group

Measure	Metro Transit	Eight-Peer Group Avg.	Percent of Peer Avg.	Rank Among 9 (1 = Highest)
Service Area (2008 NTD)				
Population	1,761,308	2,009,479	88%	6
Area (Sq. Miles)	589	1,255	47%	7
Population Density	2,990	1,601	187%	3

Table 6-2. 2008 Operating Characteristics of Metro Transit Bus Peer Group

Per 2008 NTD Measure	Metro Transit Bus	Eight-Peer Group Avg.	Peer Minimum	Peer Maximum
Passengers	71,614,100	69,827,938	44,752,300	97,091,100
Operating Expense	\$229,035,300	\$274,269,075	\$178,474,200	\$422,229,300
Fare Revenue	\$73,238,600	\$57,566,420	\$30,948,254	\$96,456,346
Peak Vehicles	747	735	532	1,027
Revenue Hours	1,986,900	2,175,438	1,554,700	2,823,400
Revenue Miles	23,279,400	28,385,800	18,665,000	39,620,300
Peak-to-Base Ratio	2.49	1.96	1.44	2.60

This summary illustrates a few characteristics of the Metro Transit bus system relative to peer systems. Metro Transit provides less bus service and focuses its service more on the peak period. Metro Transit Bus also collects more fare revenue than the peer systems, a reflection of the fare structure. Metro Transit Bus has seen a steady increase in ridership because of high fuel prices and efforts by the agency to promote ridership. The following analysis will explain how service has changed over the last four years and the efficiency of the Metro Transit bus service relative to peer agency systems.

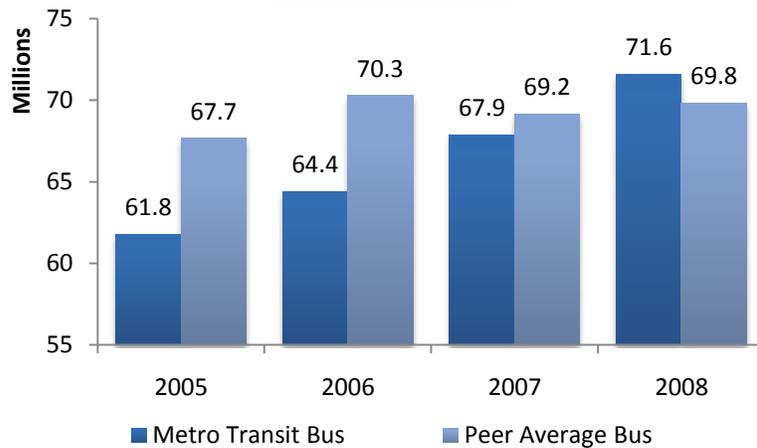
Metro Transit Bus Peer Analysis

Metro Transit bus ridership has seen a strong resurgence since the 2004 driver strike, while peer bus ridership has increased slightly.

From 2002 through 2004, Metro Transit bus ridership decreased by 22.4%. Both the bus drivers strike and the opening of the Hiawatha light rail partially explain the large drop in ridership. However, from 2005 to 2008, ridership on Metro Transit bus ridership

increased 15.9%. This increase was in contrast to the increases seen at peer bus agencies. The eight peer agencies experienced an increase of 3.1% over the same period.

Bus Ridership



Metro Transit's bus operating budget has grown slower than peer bus operating budgets, but new LRT resources were realized concurrently.

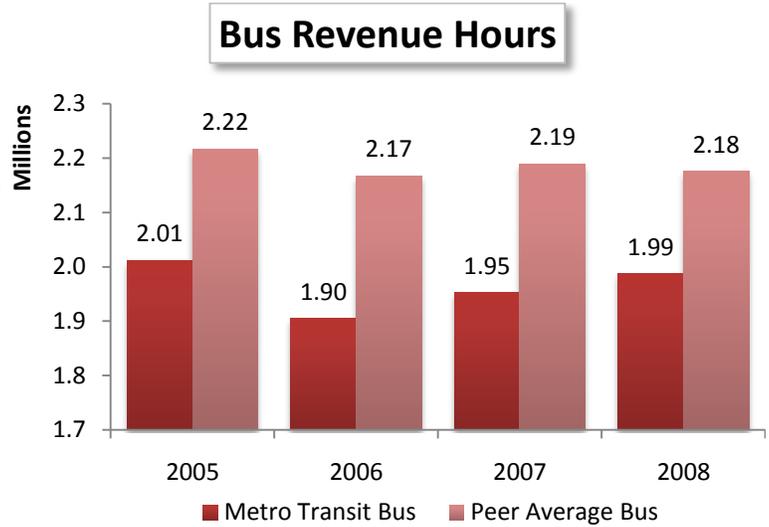
The budgets for both Metro Transit and for its peer bus systems increased between 2005 and 2008. Metro Transit's grew more slowly during this period, 14%, as opposed to the budgets of its peers, which grew 20%. The slow growth for the Twin Cities is primarily due to declining motor vehicle sales tax in the state.

Bus Operating Expenses



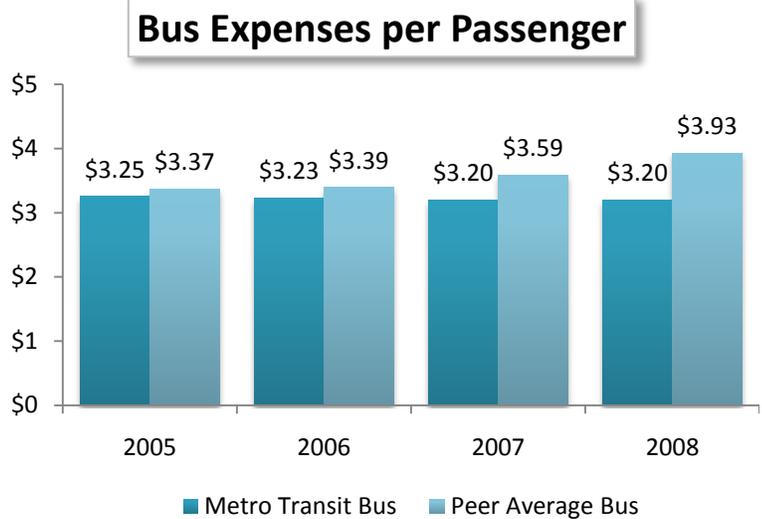
Bus revenue hours at Metro Transit have remained relatively stable since 2005, similar to the peer average for bus systems.

The number of hours of bus transit service provided by Metro Transit declined by 1% from 2005 to 2008 and the peer average decreased by 2%. In 2008, Metro Transit provided 9% less bus service than the peer average.



The operating expense per passenger for Metro Transit Bus decreased from 2005 to 2008 and remains significantly below that of peer systems.

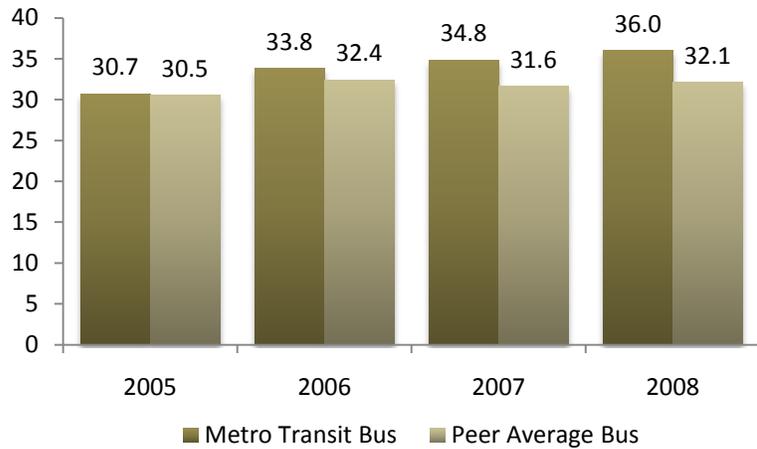
Between 2005 and 2008, the operating cost per passenger for Metro Transit's bus service decreased 2% while the rate for the peer average increased 17%. In 2008, Metro Transit's operating cost per passenger was approximately 19% below other regions because of a large increase in the peer average between 2007 and 2008.



Metro Transit Bus provides more rides per hour of service than its peers do.

The number of passengers carried per revenue hour of service has steadily increased for Metro Transit Bus from 2005 to 2008. During this time, productivity for Metro Transit increased by 17% while the peer average increased by only 5%. In 2008, Metro Transit Bus provided 11% more rides per hour of service than the peer bus systems.

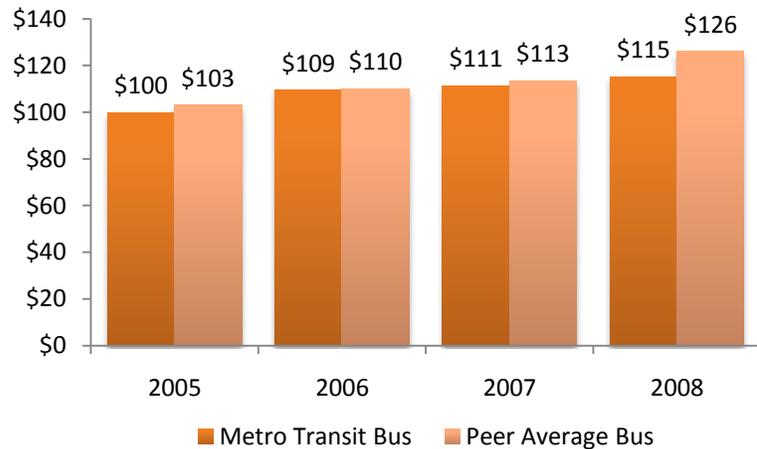
Bus Passengers per Revenue Hour



Metro Transit Bus operating expenses per hour remain slightly lower than its peers.

Metro Transit's operating cost per revenue hour increased 15% from 2005 to 2008. The peer region had been increasing at a similar rate, however, in 2008, the peer average increased by around \$13 with a four-year increase of 22%. Metro Transit is 9% below the peer average for expense per revenue hour.

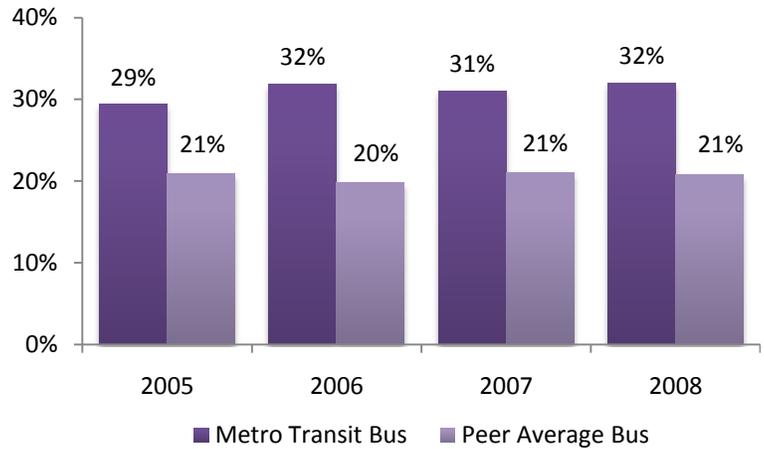
Bus Expenses per Revenue Hour



Metro Transit Bus collects significantly more revenue from fares than peer bus systems.

Metro Transit continues to collect significantly more costs from fares than peer bus agencies. In 2008, Metro Transit's fare recovery on the bus system was 52% higher than the peer average and 28% higher than the highest peer agency.

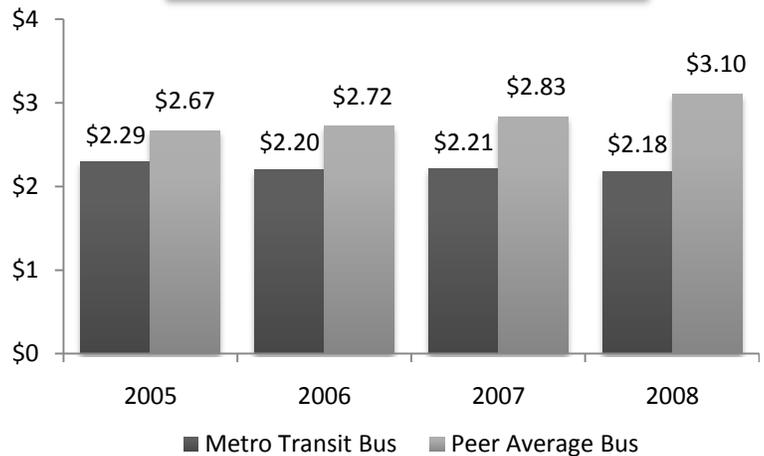
Bus Fare Recovery



Metro Transit Bus subsidy per passenger is declining and remains significantly lower than peer agencies.

The Metro Transit Bus subsidy has seen a decline in recent years and in 2008, was 30% less than the peer bus agencies. This reflects ridership growing faster than costs and increased fare revenues from regional fare increases.

Bus Subsidy per Passenger



Metro Transit Rail Peer Group Characteristics

Population and population density are important considerations in the development of peer groups. The service area is based on where transit services are operated. For rail services, the service area is defined as the area within a ¾-mile radius of a rail station but may also include the area within a 1½-mile radius of end stations or outlying stations.

Table 6-3. 2008 Demographic Characteristics of Metro Transit Rail Peer Group

Measure	Metro Transit	Nine-Peer Group Avg.	Percent of Peer Avg.	Rank Among 10 (1 = Highest)
Service Area (2008 NTD)				
Population	1,761,308	1,996,888	88%	6
Area (Sq. Miles)	589	988	60%	6
Population Density	2,990	2,021	148%	4

Table 6-4. 2008 Operating Characteristics of Metro Transit Rail Peer Group

Per 2008 NTD Measure	Metro Transit Rail	Nine-Peer Group Avg.	Peer Minimum	Peer Maximum
Passengers	10,221,700	18,493,511	3,262,000	38,931,600
Operating Expense	\$23,697,500	\$48,705,989	\$13,685,700	\$89,218,00
Fare Revenue	\$8,989,861	\$15,261,743	\$2,685,208	\$31,495,353
Car Revenue Hours	134,800	254,489	55,900	488,700
Revenue Miles	1,969,900	3,890,567	799,600	9,405,700
Passenger Miles	61,059,200	107,352,244	19,271,300	206,923,800

These statistics represent the fourth full year of light rail service operation by Metro Transit. Most of the peer agency systems are more developed than Metro Transit’s and include multiple lines. The following analysis will demonstrate the efficiency of the Metro Transit rail system relative to peer agency systems. It will also allow demonstrate how Hiawatha light rail has progressed from its first through fourth full year of operation.

Metro Transit Rail Peer Analysis

The cost per passenger for Metro Transit Rail is significantly below that of peer agencies.

Operating expenses per passenger have increased slightly from 2005 to 2008 but remain below the peer agencies' rail systems. In 2008, peer agencies cost 13% higher per passenger than Metro Transit Rail.

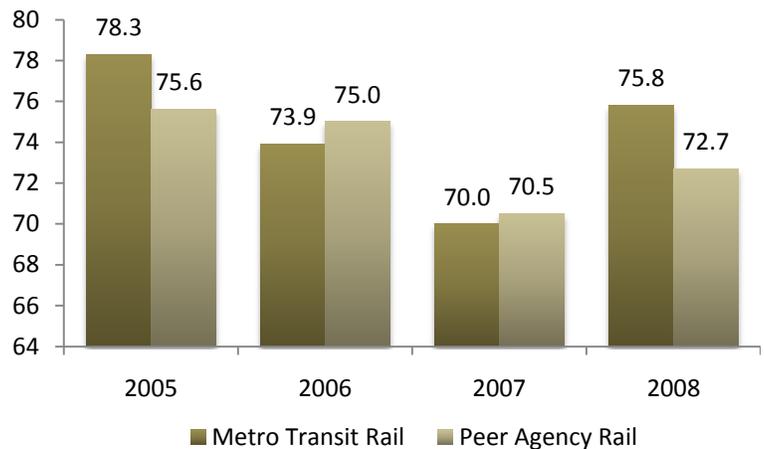
Light Rail Expenses per Passenger



Metro Transit Rail provides about the average number of trips per service hour for each light-rail vehicle (LRV).

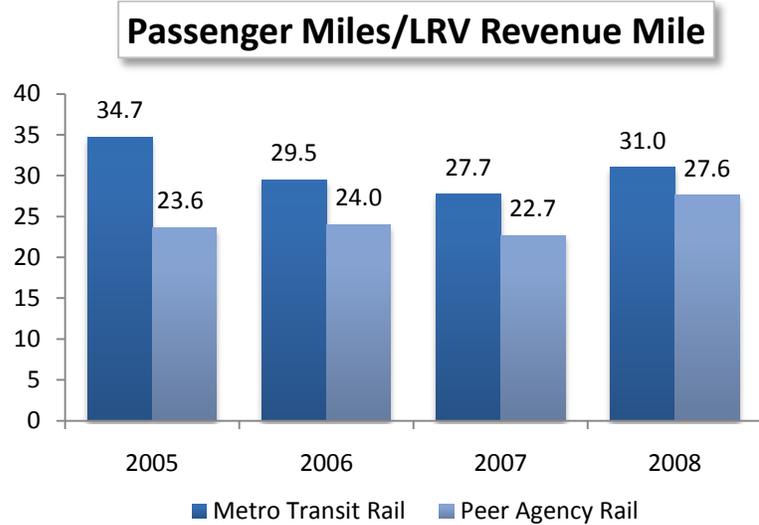
The number of passengers carried per car revenue hour of service declined for Metro Transit Rail from 2005 to 2008 but is still in line with peer agencies. In 2008, both Metro Transit Rail and the peer average increased from 2007. In 2008, Metro Transit Rail was 4% more than the peer average.

Passengers per LRV Revenue Hour



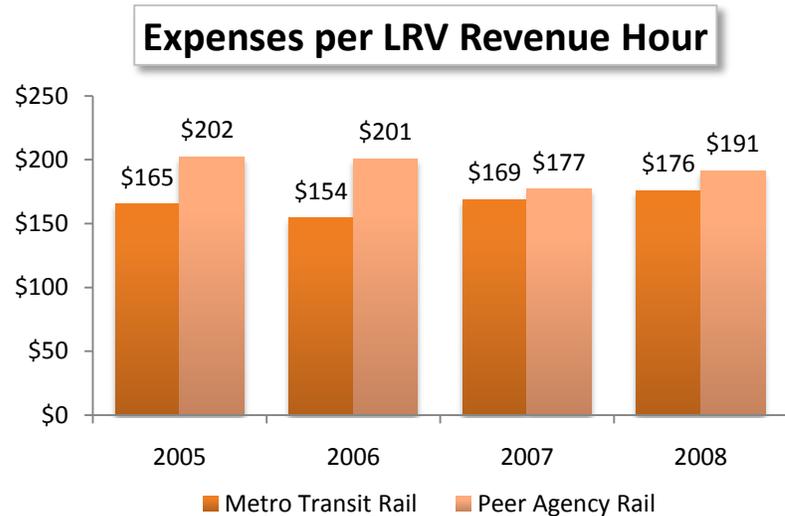
Metro Transit Rail provides more passenger miles per LRV revenue mile than the peer average.

Metro Transit Rail customers are traveling longer distances per LRV mile of service provided than the peer average. This means that LRT is taking more vehicle miles off the road than peer systems per hour in service. However, the peer average increased significantly from 2007 to 2008. In 2008, Metro Transit Rail was 12% higher in passenger miles per LRV revenue mile.



Metro Transit Rail operating costs remain lower than those of its peers, but has increased.

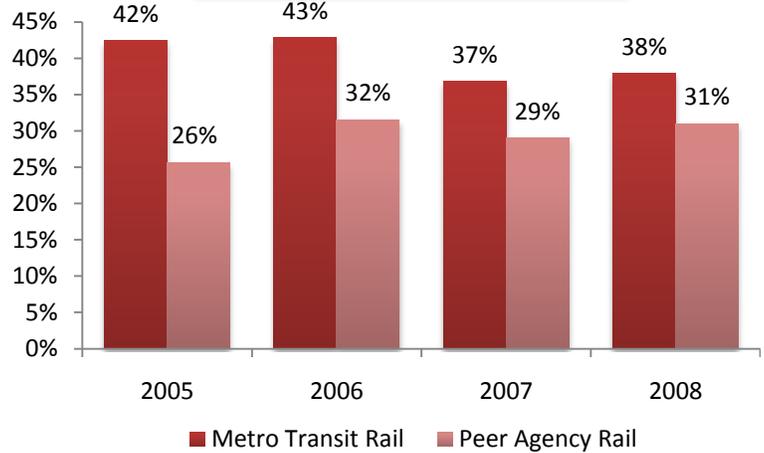
Metro Transit Rail's operating cost per LRV revenue hour increased from 2005 and have neared the same levels as the peer average. In 2005, Metro Transit Rail was 18% less to operate than the peer average. In 2008, it had increased to only 8% lower.



Metro Transit Rail recovers more revenue from passenger fares than the peer average.

Despite a 21% increase in the peer average, Metro Transit Rail still recovers more costs from fares than the peer average. Since 2005, however, Metro Transit Rail's fare recovery has decreased by 11% and is only 22% higher than peers, decreasing from 62% in 2006.

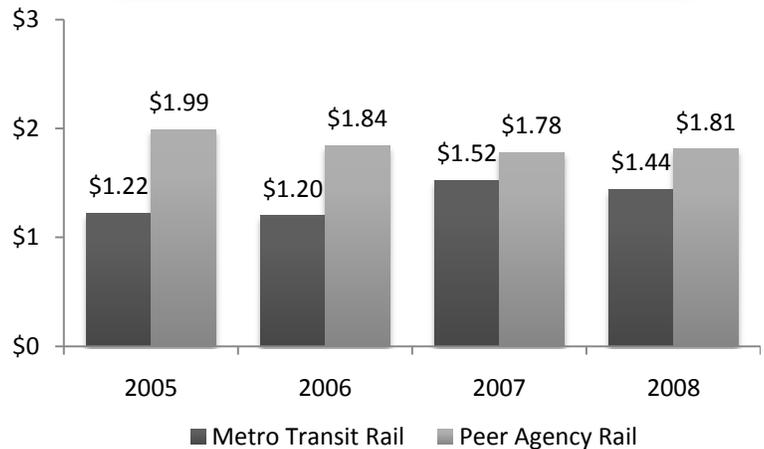
Light Rail Fare Recovery



Metro Transit Rail has a lower subsidy per passenger than the peer average.

Metro Transit Rail has the fourth lowest subsidy per passenger in the peer group. In 2008, the Metro Transit Rail subsidy per passenger was 20% lower than the peer average.

Light Rail Subsidy per Passenger



Metro Mobility Peer Agency Comparisons

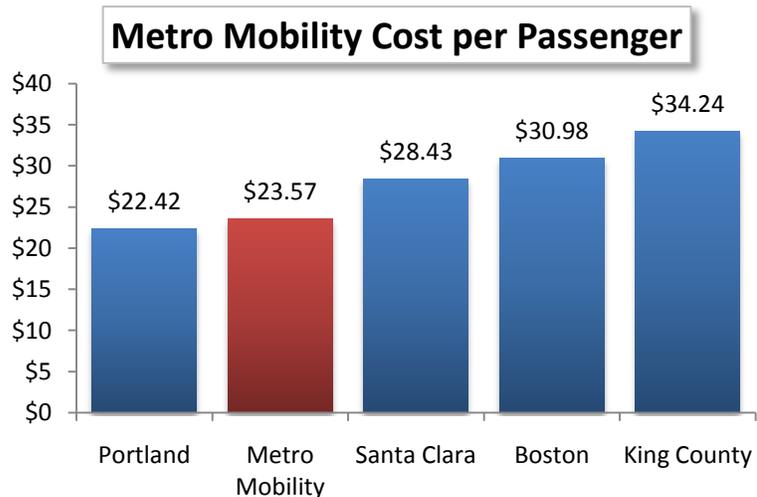
The Americans with Disabilities Act requires all major metropolitan areas with regular-route transit service to provide dial-a-ride service for persons with disabilities that restrict them from using the regular-route transit system. Metro Mobility is the program in the Twin Cities that fulfills this requirement.

Other regions have similar transit programs for persons with disabilities. A peer group was developed from a survey, conducted by Nelson Nygaard Consulting in 2007 (using 2006 data), of the largest U.S. metropolitan area ADA complementary paratransit services. Of the 10 programs included in the survey, five programs were selected as “peers” because they were most comparable to Metro Mobility in terms of service delivery policies and cost reporting. The peer group consists of Boston, King County (Seattle), Portland, Santa Clara and Metro Mobility.

Metro Mobility’s cost per passenger trip is lower than most peer systems.

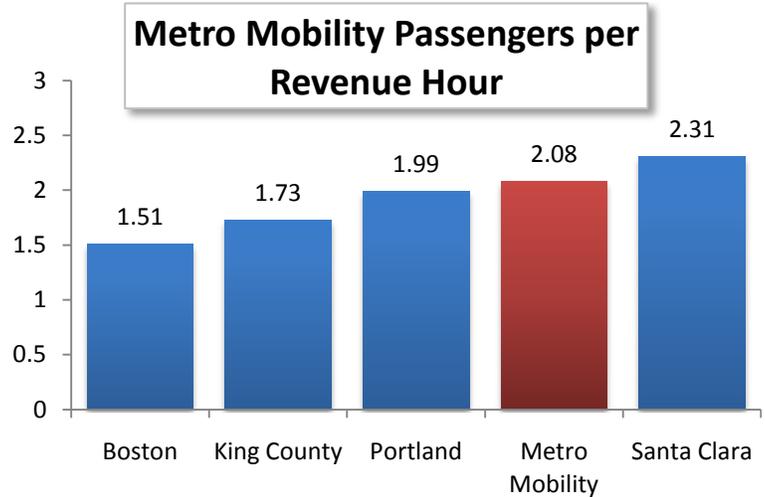
The ridership using Metro Mobility service increased by 5% between 2005 and 2006. The average cost per passenger trip is lower than most of its peers. This can be attributed to several factors. Metro Mobility competitively contracts all of its service (excluding the four county contracts) and has historically received favorable bids. In

addition, the Twin Cities area generally has lower transit labor costs when compared to other regions. Finally, Metro Mobility management has also taken steps to improve productivity rates.



Metro Mobility service is efficient.

Metro Mobility averages 2.08 trips per revenue hour despite having the longest average trip length and some of the lowest densities of these five peer cities. The average trip length for Metro Mobility is 10.6 miles. Nationally, ADA productivity has been declining due to the requirement of zero trip denials. Metro Mobility ridership continues to increase and the strain on available resources has resulted in tighter scheduling of rides and increased productivity.



Metro Mobility's on-time performance dropped in 2006 but is still above average.

In 2005, 97% of all trips were picked up within the 30-minute window. In 2006, that rate dropped to 96.5%.

Metro Mobility utilizes a 30-minute pick-up window. This is the same operating policy employed by all cities in the peer group, except Santa Clara, which has established a 40 minute on-time window. On an ongoing basis, Metro Mobility aims to find the proper balance between service efficiency and service quality.

