WMATA is Efficient and Effective

One method for assessing how well an organization operates is benchmarking: comparing that organization's efficiency (good use of available resources) and effectiveness (producing the most with those resources) with similar organizations to determine relative performance. In the transit industry, the data source that provides the broadest and most comparable such information is the National Transit Database, information collected by the Federal Transit Administration on transit agencies throughout the country. With some caveats, this source allows one to analyze critical agency performance areas against national norms.

The analyses below compare WMATA to other transit agencies in the commonly-used performance measures of fare recovery, operating costs per passenger trip and passenger trips per vehicle mile. In the rail comparisons the national average is computed both with and without New York's statistics. This is because New York's extensive, dense, and heavily used subway service accounts for about half of the national average figure. The comparison of WMATA to other transit agencies shows that WMATA is above average on practically all measures, and an industry leader in many areas.

In productivity both Metrobus and Metrorail are above national norms. Passenger trips per vehicle mile measures how much use the system gets for the service provided. Even including New York, Metrorail is above the national average, and when New York transit is excluded, Metrorail productivity is 25% above the norm. Metrobus performs even more effectively, at 40% above the national average. Metro provides service effectively to its ridership.

Metrobus costs less than the national average and Metrorail just above average on a measure of efficiency: operating cost per passenger trip, or how much does it cost to carry each passenger. Thus Metrobus is cost effective compared to the national norm. Although Metrorail is above the average, when compared to similar systems it come out well. Compared to Metrorail at $1.90 per passenger trip, BART in San Francisco costs $3.41 per passenger trip, the Miami rail system is at $4.47, the New Jersey Port Authority costs $3.38, and Chicago is $1.99. Metro provides substantial service to a growing ridership at a low cost, relative to its peers.

Fare recovery measures how much of the cost of providing service is paid for by the passengers, and in that measure, Metrorail is second only to New York City, with its exceptionally heavily used rail transit service. Metrobus is lower than the national average because as the rail system has expanded Metrobus has increasingly become a feeder service to rail, and as a policy decision fares have been kept low. What this measure shows is that overall the taxpayers contribute less to subsidizing Metro, compared to what the passengers contribute, than is the case nationally.

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Benchmarking Temperature Gauges

The comparative data discussed above are shown below:

Passenger Trips Per Vehicle Mile
Rail Transit Statistics
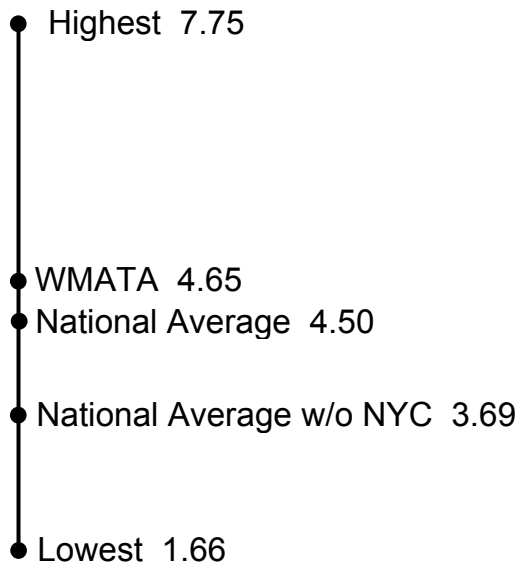
● Highest 7.75

● WMATA 4.65
● National Average 4.50

● National Average w/o NYC 3.69

● Lowest 1.66

The measure of passenger trips per vehicle operating mile gives insight to the volume of passengers moved through respective systems. WMATA's Metrorail system is ranked above the national average by 0.15 more passengers operating mile and 0.96 more than the average when New York City transit is removed from the calculation. Ahead of WMATA are New York City Transit and the Port Authority of NY and NJ. Systems in Atlanta, San Francisco's BART and Maryland's (Baltimore) Mass Transit Administration have lower passenger trips per operating mile.

Passenger Trips Per Vehicle Mile
Bus Transit Statistics
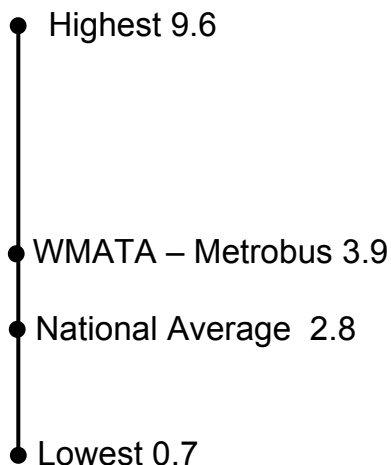
● Highest 9.6

● WMATA – Metrobus 3.9

● National Average 2.8

● Lowest 0.7

2002 NTD Transit Statistics

The measure of passenger trips per vehicle operating mile gives insight to the volume of passengers moved through respective systems. WMATA's Metrobus system is ranked above the national average by 1.1 more passengers operating mile. Ahead of WMATA are Los Angeles, Chicago, and the extremely heavily used New York bus system leads the pack with 9.6 trips per vehicle mile.
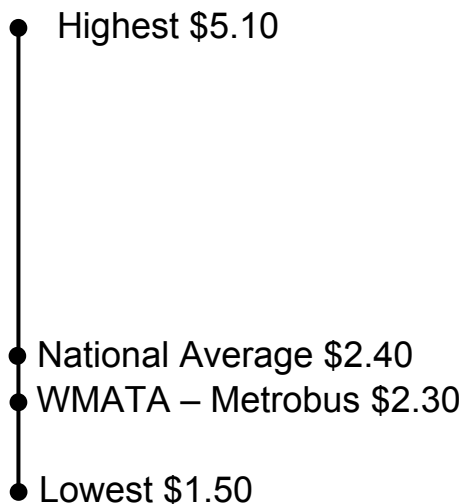
**Operating Cost Per Passenger Trip
Rail Transit Statistics**
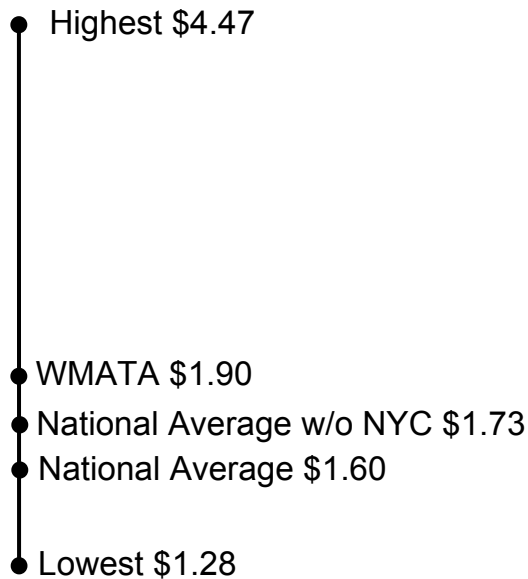
- Highest $4.47

- WMATA $1.90
- National Average w/o NYC $1.73
- National Average $1.60

- Lowest $1.28

The measure of operating cost per passenger trip gives a gauge of efficiency of service delivery. WMATA's Metrorail system is ranked in the middle of the pack at just above the national average by $0.30 per passenger trip or $0.17 above the average when New York City transit is removed from the calculation. Labor costs (often reflecting living costs) and density of use drive this factor, and Chicago, San Francisco's BART and Maryland's (Baltimore) Mass Transit Administration have higher rates for operating cost per passenger trip.

**Operating Cost Per Passenger Trip
Bus Transit Statistics**

- Highest $5.10

- National Average $2.40
- WMATA – Metrobus $2.30

- Lowest $1.50

2002 NTD Transit Statistics

The measure of operating cost per passenger trip gives a gauge of efficiency of service delivery. WMATA's Metrobus system is ranked in the more effective range, below the national average by $0.10 per passenger trip. New Jersey Transit, Seattle and Pittsburgh have higher cost per trip and Boston, Chicago, Los Angeles and New York City Transit all have lower cost per trip.
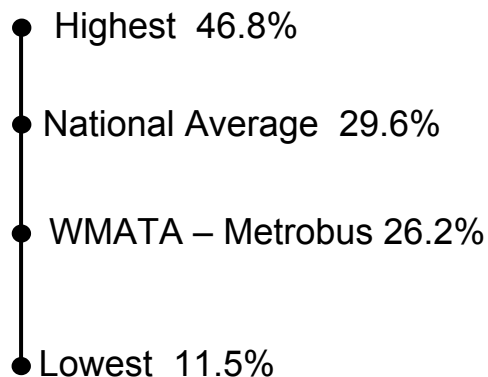
Fare Recovery Ratio
Heavy Rail Systems
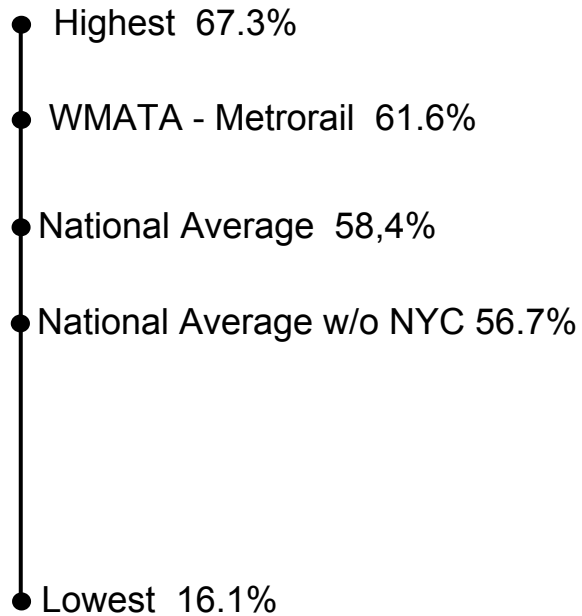
- Highest 67.3%

- WMATA - Metrorail 61.6%

- National Average 58,4%

- National Average w/o NYC 56.7%

- Lowest 16.1%

Fare recovery ratio is the performance measure of fare revenues per operating expense. WMATA's Metrorail system is ranked second behind New York City Transit at 67.3%, and ahead of the national average. When NYC is removed from the national figures, WMATA's Metrorail system is even farther ahead.

Fare Recovery Ratio
Bus Systems

- Highest 46.8%

- National Average 29.6%

- WMATA – Metrobus 26.2%

- Lowest 11.5%

Fare recovery ratio is the performance measure of fare revenues per operating expense. WMATA's Metrobus system is a feeder system to rail, and therefore has deliberately low fares, ranking it below the national average.

2002 NTD Transit Statistics

Other items from the Nation Transit Database in 2002:

Metrorail is second to Chicago in longest average revenue mile runs before a failure **121,017mi**

Metrobus is second to Boston in longest average revenue mile runs before a failure **4,360mi**

Metro carries nearly the same number of passengers as Boston and
Atlanta combined each year **377M/yr**

Only New York delivers more passenger miles than WMATA each year **1.8B/yr**

*Examining WMATA's own records, after adjusting
for inflation between 1996 and 2004…*

Cost per vehicle mile is **down 14%**

Cost per passenger is **down 16%**

Average fare per passenger is **down 16%**

*In the same time span, by not allowing inflationary (CPI) "creep" into fares and
costs…*

Metro has **saved passengers almost $360M** in foregone fare actions

Metro has **contained inflationary expense pressure of almost $600M**

Information sources on transit efficiency and effectiveness:

2002 National Transit Database   www.ntdprogram.com
National Transit Database, National Transit Summaries and Trends – FTA 2002
Counting Transit So That Transit Counts – www.apta.com
Transit Finance Learning Exchange (TFLEx)   www.tflex.org