

---

# Additional Comparisons of Metropolitan Transit Systems Across the Country

## APPENDIX

---

**Figure A.1: Urbanized Areas and Transit Agencies in Our Comparison Group**

**Atlanta, GA**

Cobb Community Transit  
Douglas County Rideshare  
Metropolitan Atlanta Rapid Transit Authority (MARTA)

**Baltimore, MD**

Harford County Transit Service  
Mass Transit Administration (MTA)  
The Columbia Transit System

**Boston, MA**

Cape Ann Transportation Authority  
Massachusetts Bay Transportation Authority (MBTA)

**Buffalo-Niagara Falls, NY**

Niagara Frontier Transit System, Inc. (NFTA)

**Cincinnati, OH-KY**

Southwest Ohio Regional Transit Authority (SORTA)  
Transit Authority of Northern Kentucky

**Cleveland, OH**

Brunswick Transit Alternative  
Greater Cleveland Regional Transit Authority (RTA)  
LAKETRAN

**Columbus, OH**

Central Ohio Transit Authority (COTA)

**Dallas-Forth Worth, TX**

City of Mesquite Parks and Recreation  
Dallas Area Rapid Transit Authority (DART)  
Dart Contract Services  
Fort Worth Transportation Authority (The T)  
Handitran Special Transit Division

**Denver, CO**

Regional Transportation District (RTD)

**Detroit, MI**

City of Detroit Department of Transportation  
Detroit Transportation Corporation  
Suburban Mobility Authority for Regional Transportation

**Fort Lauderdale-Hollywood-Pompano Beach, FL**

Broward County Mass Transit Division  
Broward Contract Services  
Tri-County Commuter Rail Authority

**Houston, TX**

Metropolitan Transit Authority of Harris County (Metro)

**Indianapolis**

Indianapolis Public Transportation Corporation (Metro)

**Kansas City, MO-KS**

Johnson County Transportation Department  
Kansas City Area Transportation Authority (KCATA)

**Miami-Hialeah, FL**

Metro-Dade Transit Agency (MDTA)  
MDTA Contract Services

**Milwaukee, WI**

Milwaukee County Paratransit System  
Milwaukee County Transit System  
Waukesha County Transportation Department  
Waukesha Transit System Utility

**Minneapolis-Saint Paul, MN**

Metro Transit

**New Orleans, LA**

Louisiana Department of Transportation  
Louisiana Transit Company, Inc.  
Regional Transit Authority  
Westside Transit Lines

**Norfolk-Virginia Beach, Newport News, VA**

Peninsula Transportation District Commission  
Tidewater Transportation District Commission

**Phoenix, AZ**

City of Mesa  
City of Scottsdale Transit Department  
Glendale Dial-A-Ride  
Maricopa County Special Transportation Services  
Peoria Transit  
Public Transit Department (PTD)  
Regional Public Transit Authority  
Sun Cities Area Transit System  
Surprise Dial-A-Ride Transit System

**Pittsburgh, PA**

Beaver County Transit Authority  
G G & C Bus Company, Inc.  
Port Authority of Alleghney County (PAT)  
PAT Contract Service  
Westmoreland County Transit Authority

## Figure A.1: Urbanized Areas and Transit Agencies in Our Comparison Group, Continued

### Portland-Vancouver, OR-WA

Clark County Public Transportation Authority (C-Tran)  
Tri-County Metropolitan Transportation District (Tri Met)

### Riverside-San Bernardino, CA

City of Corona Transit System  
City of Riverside Special Transportation  
Riverside Transit Agency  
OMNITRANS

### Sacramento, CA

Sacramento Regional Transit District (RT)  
Yolo County Transit Authority

### Saint Louis, MO-IL

Bi-State Development Agency (Bi-State)  
Madison County Transit District

### San Antonio, TX

VIA Metropolitan Transit (VIA)

### San Diego, CA

North San Diego County Transit Development Board  
San Diego Regional Transportation Service  
San Diego Transit Corporation  
San Diego Trolley, Inc.

### San Francisco-Oakland, CA

Bay Area Rapid Transit District  
CalTrain Peninsula Corridor Joint Powers Board  
Central Contra Costa Transit Authority  
Contra Costa Transit District  
Golden Gate Bridge District  
Livermore/Amador Valley Transit Authority  
Oakland Ferry Service  
San Francisco Municipal Railway  
San Mateo County Transit District  
Vallejo Transit  
Western Contra Costa Transit Authority

### San Jose, CA

Santa Clara County Transit District (SCCTD)

### Seattle, WA

City of Seattle Monorail  
Everett Transit  
King County Department of Metropolitan Services  
Senior Services of Snohomish County  
Snohomish County Transportation Benefit Area Corporation  
Washington State Department of Transportation

### Tampa Bay-Saint Petersburg-Clearwater, FL

Hillsborough Area Regional Transit Authority  
Pasco Area Transportation Service  
Pinellas Suncoast Transit Authority

### Washington, DC-MD-VA

Fairfax Connector  
Potomac and Rappahannock Transportation Commission  
Ride-On Montgomery County Government  
Virginia Railway Express  
Washington Metro. Area Transit Authority (WMATA)

**Table A.1: Taxes Dedicated for Transit, 1995 Data for 31 of the 32 Urbanized Areas**

<u>Urbanized Area</u>	<u>Dedicated Taxes as a Percentage of Operating Funds</u>		<u>Dedicated Property Taxes as a Percentage of Operating Funds</u>	
	<u>Percent</u>	<u>Rank</u>	<u>Percent</u>	<u>Rank</u>
Atlanta	48%	14	0%	
Baltimore	0	29	0	
Boston	0	30	0	
Buffalo	42	16	8	2
Cincinnati*	51	13	0	
Cleveland	66	6	0	
Columbus*	59	9	0	
Dallas*	81	1	0	
Denver	73	3	0	
Detroit	37	19	0	
Ft. Lauderdale	21	21	0	
Houston*	64	8	0	
Indianapolis*	N/A	N/A	N/A	N/A
Kansas City*	57	10	0	
Miami	0	31	0	
Milwaukee*	1	27	0	
New Orleans	42	17	0	
Norfolk*	15	22	0	
Phoenix*	1	26	0	
Pittsburgh	0	28	0	
Portland	69	5	0	
Riverside*	66	7	0	
Sacramento	1	25	0	
Saint Louis	7	23	0	
San Antonio*	69	4	0	
San Diego	41	18	0	
San Francisco	36	20	2	5
San Jose	80	2	0	
Seattle	57	11	3	3
Tampa Bay	54	12	0	
<b>Twin Cities-Metro Transit* &amp;<sup>a</sup></b>	<b>45</b>	<b>15</b>	<b>45</b>	<b>1</b>
Washington	4	24	2	4
<b>All Systems in the Twin Cities Area*</b>	<b>43%</b>	<b>15</b>	<b>43%</b>	<b>1</b>

NOTE: N/A means data is not available.

\*Urbanized area with rail in 1995.

<sup>a</sup>Includes its opt-out services.

SOURCE: Program Evaluation Division analysis of transit operating data from Federal Transit Administration, *Data Tables for the 1995 National Transit Database Report Year*, Tables 1, 2, 3, and 4 and from unpublished data from the Metropolitan Council's Transportation Division.

**Table A.2: Fare and Non-Fare Operating Funds, 1995 Data for All 32 Urbanized Areas**

Urbanized Area	Fare Revenue per Rider		Fare Revenue as Percentage of Operating Funds		Non-Fare Operating Funds per Rider		Non-Fare Operating Funds per Capita	
	Dollars	Rank	Percent	Rank	Dollars	Rank	Dollars	Rank
Atlanta	\$0.53	24	33.7%	7	\$1.04	31	\$ 60.74	12
Baltimore	0.82	2	37.9	4	1.35	25	74.67	10
Boston	0.63	15	29.3	14	1.52	20	175.45	1
Buffalo	0.72	9	33.0	8	1.45	22	44.39	18
Cincinnati*	0.68	12	30.3	12	1.57	19	34.83	24
Cleveland	0.74	7	23.0	21	2.48	4	85.95	8
Columbus*	0.61	17	21.0	24	2.29	6	39.92	21
Dallas*	0.48	27	12.5	32	3.37	1	55.23	14
Denver	0.45	30	17.9	29	2.06	9	80.74	9
Detroit	0.59	19	23.0	20	2.00	11	36.62	23
Ft. Lauderdale	0.65	14	24.0	19	2.05	10	40.62	20
Houston*	0.56	21	24.2	18	1.73	16	43.06	19
Indianapolis*	0.62	16	26.5	17	1.71	17	19.03	31
Kansas City*	0.57	20	20.3	25	2.23	7	24.46	28
Miami	0.79	3	31.1	11	1.75	15	71.19	11
Milwaukee*	0.60	18	34.2	6	1.15	28	53.79	15
New Orleans	0.49	26	39.7	2	0.75	32	55.50	13
Norfolk*	0.78	4	35.3	5	1.42	23	14.68	32
Phoenix*	0.45	29	26.9	16	1.24	27	20.52	30
Pittsburgh	0.75	5	28.2	15	1.91	12	86.99	6
Portland	0.48	28	21.1	23	1.80	13	94.86	5
Riverside*	0.54	22	18.1	28	2.47	5	26.90	27
Sacramento	0.71	10	29.4	13	1.70	18	34.36	25
Saint Louis	0.50	25	21.8	22	1.79	14	47.44	17
San Antonio*	0.26	32	17.2	30	1.24	26	48.40	16
San Diego	0.72	8	38.7	3	1.15	29	32.72	26
San Francisco	0.70	11	32.2	9	1.47	21	155.86	3
San Jose	0.45	31	13.6	31	2.84	3	85.99	7
Seattle	0.75	6	20.2	26	2.94	2	166.79	2
Tampa Bay	0.54	23	20.2	27	2.14	8	23.03	29
<b>Twin Cities-Metro Transit* &amp; a</b>	<b>0.65</b>	<b>13</b>	<b>31.6</b>	<b>10</b>	<b>1.41</b>	<b>24</b>	<b>38.64</b>	<b>22</b>
Washington	0.88	1	44.2	1	1.11	30	114.84	4
<b>All Systems in the Twin Cities Area*</b>	<b>\$0.67</b>	<b>13</b>	<b>27.1%</b>	<b>15</b>	<b>\$1.79</b>	<b>14</b>	<b>\$ 52.02</b>	<b>16</b>

\*Urbanized area without rail in 1995.

<sup>a</sup>Includes its opt-out services. Metro Transit categorizes contract payments from opt-out communities as fares; we recategorized them as non-fare operating funds.

SOURCE: Program Evaluation Division analysis of transit operating data from Federal Transit Administration, *Data Tables for the 1995 National Transit Database Report Year*, Tables 1 and 26 and from unpublished data from the Metropolitan Council's Transportation Division. The population estimates for urbanized areas were developed by the Program Evaluation Division.

**Table A.3: Performance of Bus Operations, 1995 Data for All 32 Urbanized Areas**

Urbanized Area	Operating Cost per Rider		Operating Cost per Vehicle Mile		Peak to Base Ratio <sup>a</sup>		Riders per Vehicle Mile	
	Dollars	Rank	Dollars	Rank	Number	Rank	Number	Rank
Atlanta	\$1.71	27	\$4.79	21	2.01	15	2.80	7
Baltimore	1.59	29	6.67	4	2.52	6	4.19	2
Boston	1.96	23	7.82	1	1.64	23	4.00	3
Buffalo	2.33	11	5.95	11	2.20	9	2.55	14
Cincinnati*	2.12	17	4.59	24	2.16	10	2.17	22
Cleveland	2.85	4	6.37	7	2.02	14	2.24	20
Columbus*	2.51	7	5.64	13	1.98	16	2.25	19
Dallas*	2.91	3	5.18	17	2.65	2	1.78	29
Denver	2.24	15	4.89	20	2.10	13	2.19	21
Detroit	2.32	13	6.02	9	1.93	18	2.60	12
Ft. Lauderdale	1.77	26	4.33	26	1.05	32	2.45	15
Houston*	2.18	16	4.63	23	2.25	8	2.12	23
Indianapolis*	2.39	10	4.64	22	1.54	25	1.94	25
Kansas City*	2.60	5	5.02	19	2.40	7	1.93	26
Miami	1.95	24	5.25	15	1.45	26	2.69	9
Milwaukee*	1.61	28	5.03	18	1.67	22	3.14	5
New Orleans	1.27	32	6.64	5	2.63	4	5.23	1
Norfolk*	2.06	19	3.21	31	1.83	19	1.56	30
Phoenix*	1.44	30	3.92	27	1.35	28	2.73	8
Pittsburgh	2.30	14	5.98	10	2.13	11	2.60	11
Portland	2.02	22	5.22	16	1.80	20	2.58	13
Riverside*	2.49	8	3.58	30	1.06	31	1.44	32
Sacramento	2.44	9	5.72	12	1.42	27	2.35	16
Saint Louis	2.33	12	4.46	25	2.11	12	1.92	27
San Antonio*	1.32	31	3.10	32	1.95	17	2.34	17
San Diego	1.78	25	3.68	29	1.30	29	2.07	24
San Francisco	2.06	20	6.42	6	1.76	21	3.12	6
San Jose	3.10	2	7.02	3	1.62	24	2.26	18
Seattle	3.38	1	6.15	8	2.53	5	1.82	28
Tampa Bay	2.58	6	3.80	28	1.20	30	1.48	31
<b>Twin Cities-Metro Transit*<sup>a,b</sup></b>	<b>2.05</b>	<b>21</b>	<b>5.46</b>	<b>14</b>	<b>2.74</b>	<b>1</b>	<b>2.67</b>	<b>10</b>
Washington	2.06	18	7.38	2	2.65	3	3.58	4
<b>All Bus Systems in the Twin Cities Area*<sup>a,c</sup></b>	<b>\$2.17</b>	<b>17</b>	<b>\$5.19</b>	<b>16</b>	<b>N/A</b>	<b>N/A</b>	<b>2.39</b>	<b>15</b>

NOTE: N/A means data is not available.

\*Urbanized area without rail in 1995.

<sup>a</sup>Directly operated services only. Excludes purchased services.

<sup>b</sup>Includes its opt-out services.

<sup>c</sup>Bus systems are Metro Transit, private operators, and opt-out communities.

SOURCE: Program Evaluation Division analysis of transit operating data from Federal Transit Administration, *Data Tables for the 1995 National Transit Database Report Year*, Tables 11, 26, and 28 and from unpublished data from the Metropolitan Council's Transportation Division.

**Table A.4: Change in Size of Transit Systems, 1988-95, Listed Highest to Lowest in Riders per Capita**

<u>Urbanized Area and Transit Agency</u>	<u>Riders per Capita</u>	<u>Real Operating Cost per Capita</u>	<u>Vehicle Miles per Capita</u>
Phoenix—PTD*	41.5%	2.8%	18.8%
Sacramento—RT	28.5	22.0	36.9
San Jose—SCCTD	18.8	2.4	-1.3
Miami—MDTA	13.3	3.5	19.9
Boston—MBTA	12.5	5.4	54.9
San Antonio—VIA*	11.9	41.4	55.7
Denver—RTD	10.5	4.7	12.1
Saint Louis—Bi-State	10.4	-4.1	18.1
Portland-Vancouver—Tri Met and C-Tran	4.2	26.7	5.2
Houston—Metro*	-1.1	-5.1	33.0
Washington—WMATA	-7.2	-5.7	0.1
Buffalo—NFTA	-9.5	-0.7	-12.2
Baltimore—MTA	-13.1	33.6	20.1
Indianapolis—Metro*	-13.7	-7.0	12.9
Columbus—COTA*	-16.1	-9.3	-11.8
Pittsburgh—PAT	-17.4	1.8	-35.2
Cincinnati—SORTA*	-18.4	-6.0	11.5
Dallas-Fort Worth—DART and The T*	-18.5	2.7	27.1
Atlanta—MARTA	-21.4	-8.1	-0.8
<b>Twin Cities-Metro Transit* &amp; a</b>	<b>-22.3</b>	<b>-6.4</b>	<b>-3.6</b>
Milwaukee—Milwaukee County Transit*	-24.8	4.4	-1.4
Kansas City—KCATA*	-28.4	-14.9	-7.0
Cleveland—RTA	-28.5	4.8	-3.9
<b>All Systems in the Twin Cities Area*</b>	<b>-20.5%</b>	<b>1.7%</b>	<b>N/A</b>

NOTE: N/A means data is not available.

\*Urbanized area without rail in 1995.

<sup>a</sup>Includes its opt-out services.

SOURCE: Program Evaluation Division analysis of transit operating data from David T. Hartgen and Mark W. Horner, *Comparative Performance of Major US Bus Transit Systems: 1988-1995 (Volume II: Data)*, (Charlotte, NC: University of North Carolina at Charlotte, 1997) and from unpublished data from the Metropolitan Council's Transportation Division. Population estimates for urbanized areas were developed by the Program Evaluation Division. The dollar figures were converted to constant dollars using a chain-type price index for state and local government expenditures and gross investment that was provided by the Minnesota Department of Finance.

**Table A.5: Change in Fare and Non-Fare Operating Funds, 1988-95, Listed Highest to Lowest in Real Fare Revenue per Rider**

<u>Urbanized Area and Transit Agency</u>	<u>Real Fare Revenue per Rider</u>	<u>Real Non-Fare Operating Funds per Rider</u>
Cincinnati—SORTA*	46.4%	4.1%
Cleveland—RTA	40.1	42.4
Milwaukee—Milwaukee County Transit*	33.4	41.4
Atlanta—MARTA	32.6	6.6
Boston—MBTA	29.2	-11.6
Baltimore—MTA	25.6	104.2
Buffalo—NFTA	21.9	0.9
Kansas City—KCATA*	18.9	17.6
<b>Twin Cities-Metro Transit* &amp; a</b>	<b>15.8</b>	<b>19.7</b>
San Jose—SCCTD	15.3	-30.9
Pittsburgh—PAT	12.8	31.7
Columbus—COTA*	10.5	188.4
Sacramento—RT	8.3	-15.0
Washington—WMATA	3.8	-19.1
Miami—MDTA	2.4	-10.1
Portland-Vancouver—Tri Met and C-Tran	-0.9	12.4
Denver—RTD	-2.1	-10.8
Houston—Metro*	-5.1	92.0
Indianapolis—Metro*	-8.6	26.2
Saint Louis—Bi-State	-12.6	-13.0
San Antonio—VIA*	-12.6	-12.7
Phoenix—PTD*	-14.6	-20.2
Dallas-Fort Worth—DART and The T*	-15.5	-17.8
<b>All Systems in the Twin Cities Area*</b>	<b>N/A</b>	<b>N/A</b>

NOTE: N/A means data is not available.

\*Urbanized areas without rail in 1995.

<sup>a</sup>Includes its opt-out services. Operating funds reported by the University of North Carolina (UNC) at Charlotte were significantly different than the funds that the Met Council said were reported to the National Transit Database. We replaced the UNC data with the Met Council data. In addition, we adjusted the fare data for Metro Transit. Metro Transit categorizes contract payments from opt-out communities as fare revenue; we recategorized these payments as non-fare operating funds.

SOURCE: Program Evaluation Division analysis of transit operating data from David T. Hartgen and Mark W. Homer, *Comparative Performance of Major US Bus Transit Systems: 1988-1995 (Volume II: Data)*, (Charlotte, NC: University of North Carolina at Charlotte, 1997) and from unpublished data from the Metropolitan Council's Transportation Division. The dollar figures were converted to constant dollars using a chain-type price index for state and local government expenditures and gross investment that was provided by the Minnesota Department of Finance.

**Table A.6: Change in Performance of Bus Operations, 1988-95, Listed Highest to Lowest in Riders per Vehicle Mile**

<u>Urbanized Area and Transit Agency</u>	<u>Riders per Vehicle Mile</u>	<u>Real Operating Cost per Vehicle Mile</u>	<u>Real Operating Cost per Rider</u>
Phoenix—PTD*	47.9%	-0.8%	-32.9%
San Jose—SCCTD	25.1	8.2	-13.6
Sacramento—RT	13.4	5.7	-6.8
Denver—RTD	13.0	1.0	-10.6
Portland-Vancouver—Tri Met and C-Tran	8.2	17.6	8.7
Columbus—COTA*	4.1	11.2	6.8
Buffalo—NFTA	-0.3	17.3	17.7
Boston—MBTA	-0.5	10.9	11.5
San Antonio—VIA*	-2.1	4.4	6.7
Washington—WMATA	-3.6	-0.1	3.6
Baltimore—MTA	-3.8	18.3	22.9
Miami—MDTA	-6.8	-14.0	-7.7
Indianapolis—Metro*	-8.5	-1.7	7.5
Houston—Metro*	-8.8	-12.4	-3.9
Atlanta—MARTA	-9.0	4.9	15.2
Pittsburgh—PAT	-10.7	9.8	22.9
<b>Twin Cities-Metro Transit* &amp; a</b>	<b>-17.0</b>	<b>-1.7</b>	<b>18.4</b>
Saint Louis—Bi-State	-17.2	-18.6	-1.7
Kansas City—KCATA*	-17.7	-6.1	14.1
Dallas-Fort Worth—DART and The T*	-18.8	-1.9	20.9
Milwaukee—Milwaukee County Transit*	-24.3	6.8	41.1
Cincinnati—SORTA *	-24.6	-14.7	13.2
Cleveland—RTA	-35.1	6.4	64.0
<b>All Bus Systems in the Twin Cities Area* &amp; b</b>	<b>-25.8%</b>	<b>-9.2%</b>	<b>22.4%</b>

\*Urbanized area without rail in 1995.

<sup>a</sup>Includes its opt-out services.

<sup>b</sup>Bus systems are Metro Transit, private operators, and opt-out communities.

SOURCE: Program Evaluation Division analysis of transit operating data from David T. Hartgen and Mark W. Homer, *Comparative Performance of Major US Bus Transit Systems: 1988-1995 (Volume II: Data)*, (Charlotte, NC: University of North Carolina at Charlotte, 1997) and from unpublished data from the Metropolitan Council's Transportation Division. The dollar figures were converted to constant dollars using a chain-type price index for state and local government expenditures and gross investment that was provided by the Minnesota Department of Finance.