

A Peer City Public Transportation Review Update

Evaluating Metro's Operational Efficiency, Service Capacity, and Government Funding

Prepared for

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EXECUTIVE SUMMARY

In 2013 and 2014, the Economics Center evaluated Metro's operational efficiency, service capacity, and local and state operations funding compared to 11 peer cities. Using the same benchmarks, methodology, and data sources, the Economics Center updated this report to include additional data from 2015. The most recent available 2015 data were compared to the original report metrics in 2013 and 2014.

- When Metro is compared to 11 peer cities' public transportation systems in 2015:
 - Metro continued to be among the most efficient systems and ranked second in operational efficiency of all peer cities (in past reports, Metro ranked as the most operationally efficient system). Metro was the most efficient (#1) in terms of fare revenues earned per operating expense and fare revenue earned per passenger trip. The system has among the highest (#3) amount of fare revenues earned per vehicle revenue hour but ranked lower (#9) with regard to operating expenses per passenger mile.
 - o In terms of service capacity, Cincinnati remained in the middle of its peer cities (#8) as it did in the 2013 and 2014 reports. With 19.7 passenger trips per hour, Cincinnati ranked near the middle of peer cities among all cities in terms of passenger trips per capita and vehicle hours per capita. Metro ranks better in terms of service capacity relative to city population than it does for the larger service area.
 - Metro received the lowest amount of government contributions for operations when controlled for the service territory and population. In 2012, Metro ranked eleventh lowest. While Metro ranks eighth in terms of local operations funding per capita and tenth in local funds per passenger mile, lower state funding than other cities meant Cincinnati received the lowest local and state funds when controlled for population and passenger mile.
 - Metro has had the second-largest decrease in unlinked bus trips per capita of all peer cities since 2007, with a 38.4 percent decline. While all cities have experienced decreases in unlinked bus trips per capita except Columbus and Raleigh, Cincinnati has had the largest decrease aside from St. Louis, which had a decrease of 42.1 percent.
- As compared to the four peer cities that maintain bus-only public transportation systems:
 - o Metro remained the most operationally efficient (#1).
 - o Metro maintained the highest service capacity (#1).
 - Metro had the lowest local and state revenues for operations when compared to the size of the system (#5).
- Metro's is the only public transportation system among peer cities funded primarily through an earnings tax. Sales taxes are the most common funding mechanism and are present in seven of eleven peer cities. Metro receives the majority of its revenue from the City of Cincinnati's earnings tax of 2.1 percent, of which 0.3 percent is dedicated to public transit.
 - o In 2015, Metro received \$47 million in local funds as compared to \$45.8 million in 2014 and \$37.2 million in 2011. Metro received \$790,114 in operations funding from the State of Ohio in 2015, \$783,772 in 2014, and \$862,269 in 2011.
 - Even as local funding to Metro has increased in recent years, Metro has moved from receiving the second-lowest local and state funding for operations to having the lowest (#12).



METHODOLOGY

All data in this report originate from the Federal Transit Administration's National Transit Database unless otherwise noted. For the report, the Economics Center consulted 2015 Annual Database Agency Information, Fare Revenue, Service, Operating Funding Time Series, Service Data and Operating Expenses Time-Series by System, and Total Funding Time-Series

All passenger trips in this report are unlinked passenger trips such that the number of passengers who board public transportation vehicles are counted each time they board regardless of the number of vehicles ridden from the riders' origin to their destination.

Total local funds include total local funds from a local government's general fund and other directly generated revenues such as dedicated taxes levied by the transit authorities themselves. Other revenues include park and ride revenues, auxiliary transportation revenues, non-transportation funds, other transportation revenues, subsidies from other sectors of operations, and revenues accrued through a purchased transportation agreement.²

Table 1: Peer Cities Population Change

		p		
City	2011 (1-Year Estimate)	2015 (1-Year Estimate)	Absolute Change	Percentage Change
Austin, TX	820,601	931,840	111,239	13.6%
Charlotte, NC	751,074	827,121	76,047	10.1%
Cincinnati, OH	296,236	298,537	2,301	0.8%
Cleveland, OH	393,804	388,059	-5,745	-1.5%
Columbus, OH	796,014	849,067	53,053	6.7%
Denver, CO	619,968	682,545	62,577	10.1%
Indianapolis, IN	824,232	848,423	24,191	2.9%
Louisville, KY	746,906	763,623	16,717	2.2%
Minneapolis, MN	387,736	410,935	23,199	6.0%
Pittsburgh, PA	307,498	304,385	-3,113	-1.0%
Raleigh, NC	416,126	451,949	35,823	8.6%
St. Louis, MO	318,069	315,685	-2,384	-0.7%

Source: U.S. Census American Community Survey

² (Federal Transit Administration 2007-2015)



¹ (Federal Transit Administration 2007-2015)

Table 2: Peer Cities - Transportation Data, 2015

City	Fare	Total	Passenger	Populati	on (2015)³	Funding		
City	Revenues Earned	Operating Expenses	Trips	City	Service Area	Local	Local and State	
Austin	\$23,967,827	\$194,645,347	34,700,250	931,840	1,163,204	\$147,485,850	\$147,485,850	
Charlotte	\$28,971,099	\$113,087,745	27,165,943	827,121	1,098,944	\$86,039,968	\$97,234,791	
Cincinnati	\$29,172,660	\$91,246,055	16,174,753	298,537	845,303	\$47,034,369	\$47,824,483	
Cleveland	\$47,561,770	\$240,024,901	47,021,540	388,059	1,412,140	\$178,695,379	\$179,790,810	
Columbus	\$20,033,741	\$111,763,375	19,202,529	849,067	1,081,405	\$89,810,506	\$90,429,965	
Denver	\$121,163,241	\$471,257,485	102,250,731	682,545	2,876,000	\$354,095,388	\$354,095,388	
Indianapolis	\$11,232,693	\$62,872,905	9,951,627	848,423	928,281	\$29,464,693	\$40,150,673	
Louisville	\$12,571,841	\$76,220,645	14,684,241	763,623	806,893	\$48,684,333	\$50,288,650	
Minneapolis	\$94,965,642	\$376,937,167	85,832,184	410,935	1,837,223	\$30,536,726	\$260,745,937	
Pittsburgh	\$102,438,868	\$377,183,767	65,202,493	304,385	1,415,244	\$34,449,997	\$250,885,477	
Raleigh	\$4,060,971	\$31,802,095	5,994,537	451,949	347,729	\$16,702,002	\$20,288,039	
St. Louis	\$52,655,827	\$250,834,623	46,640,767	315,685	1,621,261	\$196,348,816	\$197,017,784	

Source: Federal Transit Administration National Transit Database and U.S. Census American Community Survey

Table 3: Operational Efficiency, 2015

					<u>, , , , , , , , , , , , , , , , , , , </u>			
City	Fare Rever Earned po Operating Ex	er Ear	Revenue ned per enger Trip	Earned	Revenue per Vehicle nue Hour	Opera Expens Passeng	e per	Relative Ranking
Austin	# 12 \$0.	.12 # 1	1 \$0.69	# 10	\$14.46	# 7	\$1.06	# 11
Charlotte	# 4 \$0.	26 #	7 \$1.07	# 6	\$27.01	# 12	\$0.76	# 8
Cincinnati	# 1 \$0.	.32 #	1 \$1.80	# 3	\$35.60	# 9	\$0.92	# 2
Cleveland	# 7 \$0.	20 #	9 \$1.01	# 7	\$26.16	# 6	\$1.10	# 8
Columbus	# 8 \$0.	.18 #	8 \$1.04	# 8	\$17.79	# 1	\$1.50	# 5
Denver	# 3 \$0.	26 #	3 \$1.18	# 4	\$29.52	# 11	\$0.81	# 34
Indianapolis	# 9 \$0.	.18 #	5 \$1.13	# 9	\$16.67	# 2	\$1.41	# 5
Louisville	# 10 \$0.	.16 # 1	0 \$0.86	# 11	\$14.22	# 4	\$1.28	# 10
Minneapolis	# 5 \$0.	25 #	6 \$1.11	# 2	\$38.58	# 8	\$1.02	# 34
Pittsburgh	# 2 \$0.	27 #	2 \$1.57	# 1	\$43.43	# 3	\$1.39	# 1
Raleigh	# 11 \$0.	.13 # 1	2 \$0.68	# 12	\$8.46	# 5	\$1.15	# 11
St. Louis	# 6 \$0.	21 #	4 \$1.13	# 5	\$27.23	# 10	\$0.86	# 5

⁴ The median rankings for Denver and Minneapolis tied for third.



³ (U.S. Census Bureau 2008-2016)

Table 4: Service Capacity, 2015

Passenger Trips per		Passenger Trips per Capita			Vehicle Hours per Capita				Vehicle Miles per Capita				Relative		
City	•	s per our		vice ea	Ci	ty ⁵	Serv Are		Cit	:y³		vice rea	С	ity³	Ranking
Austin	# 7	20.9	# 5	29.8	# 7	37.2	# 3	1.4	# 7	1.8	# 3	21.7	# 7	27.1	# 6
Charlotte	# 4	25.3	# 7	24.7	# 8	32.8	# 10	1.0	# 9	1.3	# 7	17.2	# 8	22.9	# 7
Cincinnati	# 8	19.7	# 8	19.1	# 6	54.2	# 11	1.0	# 6	2.7	# 9	15.2	# 6	43.2	# 8
Cleveland	# 3	25.9	# 4	33.3	# 5	121.2	# 6	1.3	# 5	4.7	# 6	18.7	# 5	68.0	# 5
Columbus	# 9	17.0	# 10	17.8	# 9	22.6	# 9	1.0	# 8	1.3	# 8	16.8	# 9	21.4	# 9
Denver	# 5	24.9	# 3	35.6	# 3	149.8	# 2	1.4	# 3	6.0	# 2	24.1	# 3	101.7	# 2
Indianapolis	# 11	14.8	# 12	10.7	# 12	11.7	# 12	0.7	# 12	8.0	# 11	12.2	# 11	13.4	# 12
Louisville	# 10	16.6	# 9	18.2	# 10	19.2	# 8	1.1	# 10	1.2	# 10	15.1	# 10	16.0	# 10
Minneapolis	# 1	34.9	# 1	46.7	# 2	208.9	# 5	1.3	# 4	6.0	# 5	20.1	# 4	89.9	# 3
Pittsburgh	# 2	27.6	# 2	46.1	# 1	214.2	# 1	1.7	# 1	7.7	# 1	27.3	# 1	127.1	# 1
Raleigh	# 12	12.5	# 11	17.2	# 11	13.3	# 4	1.4	# 11	1.1	# 12	9.9	# 12	7.6	# 11
St. Louis	# 6	24.1	# 6	28.8	# 4	147.7	# 7	1.2	# 2	6.1	# 4	20.3	# 2	104.4	# 4

Source: Federal Transit Administration National Transit Database

Table 5: Local and State Funding for Operations, 2015

City	Fund	ll Operations ds per Capita ervice Area)	Fund	State Operations Is per Capita rvice Area)	Fun	perations ds per nger Mile	Operati	& State ions Funds senger Mile	Relative Ranking
Austin	# 1	\$126.79	# 4	\$126.79	# 4	\$0.80	# 6	\$0.80	# 3
Charlotte	# 6	\$78.29	# 7	\$88.48	# 9	\$0.58	# 10	\$0.65	# 87
Cincinnati	# 8	\$55.64	# 11	\$56.58	# 10	\$0.47	# 12	\$0.48	# 12
Cleveland	# 2	\$126.54	# 3	\$127.32	# 3	\$0.82	# 5	\$0.82	# 16
Columbus	# 5	\$83.05	# 8	\$83.62	# 1	\$1.20	# 1	\$1.21	# 16
Denver	# 3	\$123.12	# 5	\$123.12	# 7	\$0.61	# 11	\$0.61	# 6
Indianapolis	# 10	\$31.74	# 12	\$43.25	# 6	\$0.66	# 3	\$0.90	# 8 ⁷
Louisville	# 7	\$60.34	# 9	\$62.32	# 2	\$0.82	# 4	\$0.85	# 48
Minneapolis	# 12	\$16.62	# 2	\$141.92	# 12	\$0.08	# 8	\$0.71	# 11
Pittsburgh	# 11	\$24.34	# 1	\$177.27	# 11	\$0.13	# 2	\$0.92	# 7
Raleigh	# 9	\$48.03	# 10	\$58.34	# 8	\$0.60	# 7	\$0.73	# 10
St. Louis	# 4	\$121.11	# 6	\$121.52	# 5	\$0.68	# 9	\$0.68	# 48

 $^{^{\}rm 8}$ The median rankings for Louisville and St. Louis tied for fourth.



⁵ (U.S. Census Bureau 2008-2016)

⁶ The median rankings for Cleveland and Columbus tied for first.

 $^{^{\}rm 7}$ The median rankings for Charlotte and Indianapolis tied for eighth.

Table 6: Base Fares and Local Funds, 2017

City	Base Fare	Main Types of Local Funding ⁹
Austin	\$1.25 ¹⁰	Sales Tax
Charlotte	\$2.205	Sales Tax
Cincinnati	\$1.75	City Earnings Tax
Cleveland	\$2.50 ⁵	Sales Tax
Columbus	\$2.0011	Sales Tax
Denver	\$2.605	Sales Tax
Indianapolis	\$1.75 ¹²	Property tax, State
Louisville	\$1.75	Occupational tax
Minneapolis	\$1.75	Sales Tax
Pittsburgh	\$2.50	County, State, Misc.
Raleigh	\$1.25 ^{5,13}	City General Fund
St. Louis	\$2.00	Sales Tax

Source: Transit authorities' respective websites

Table 7: Bus Only Peer Cities Ordering, 2015

City	Operational Service Efficiency Capacity		Local and State Funding for Operations
Cincinnati	# 1	# 1	# 5
Columbus	# 2	# 2	# 1
Indianapolis	# 2	# 5	# 3
Louisville	# 4	# 3	# 2
Raleigh	# 5	# 4	# 4

¹³ Wake County, which contains Raleigh, passed a half-cent sales tax increase in fall 2016 to fund public bus and train systems in the area. (Schoonmaker 2016)



⁹ Funding mechanisms for peer cities were assumed the same as previous reports.

¹⁰ Austin, Charlotte, Cleveland, Denver, and Raleigh have increased their bus fares since the original report in 2013.

 $^{^{11}}$ In fall 2016, Franklin County, which comprises Columbus, renewed its quarter-cent sales tax for public transit. (Perry 2016)

 $^{^{12}}$ Marion County, which encompasses Indianapolis, approved a 0.25 percent income tax increase that will go into effect in the fall of 2017. (Cox 2017)

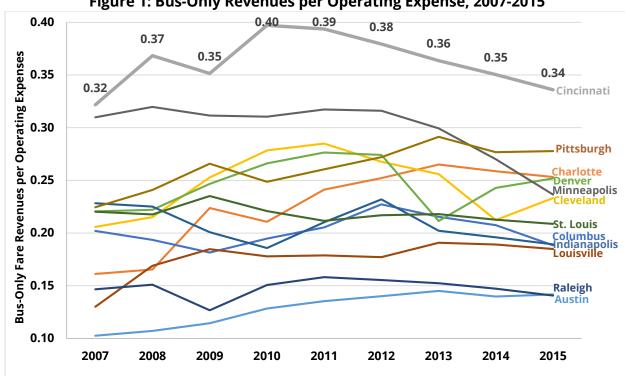
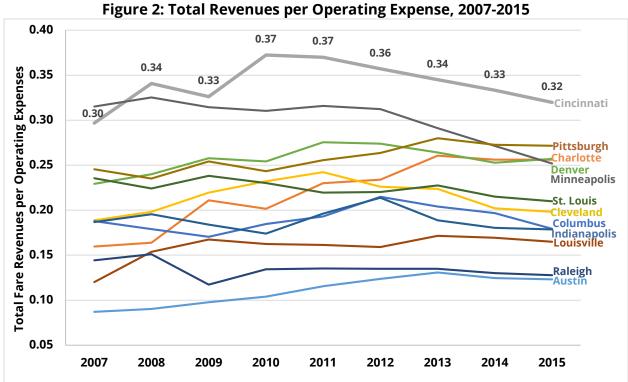


Figure 1: Bus-Only Revenues per Operating Expense, 2007-2015

Source: Federal Transit Administration National Transit Database





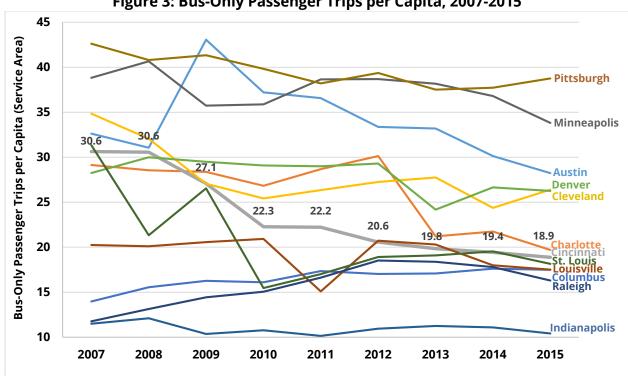


Figure 3: Bus-Only Passenger Trips per Capita, 2007-2015

Source: Federal Transit Administration National Transit Database

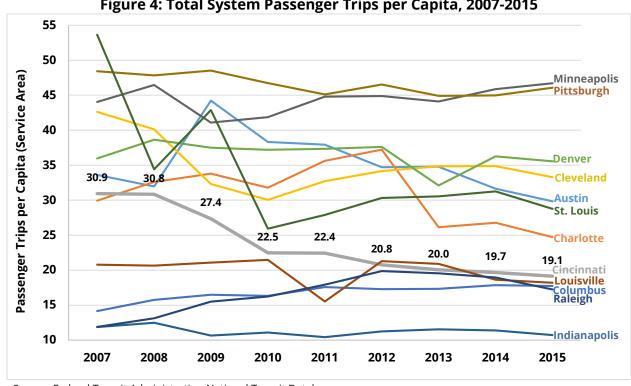


Figure 4: Total System Passenger Trips per Capita, 2007-2015



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