2016 Regional Peer Review

PERFORMANCE MEASURES

Regional Transportation Authority

March 2018
Prepared by the Division of
Planning & Market Development

CONTENTS

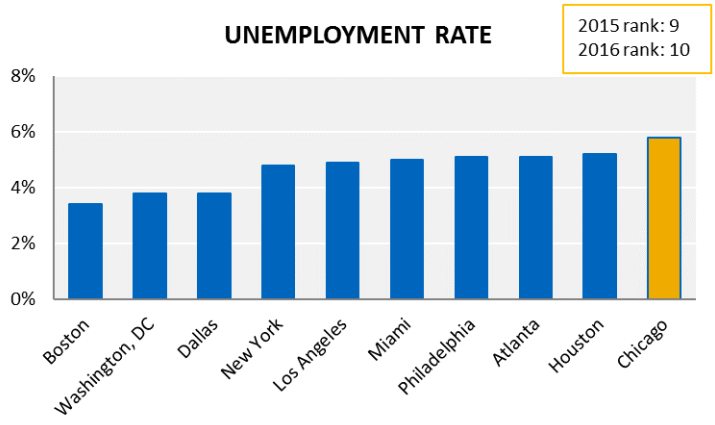
EXECUTIVE SUMMARY

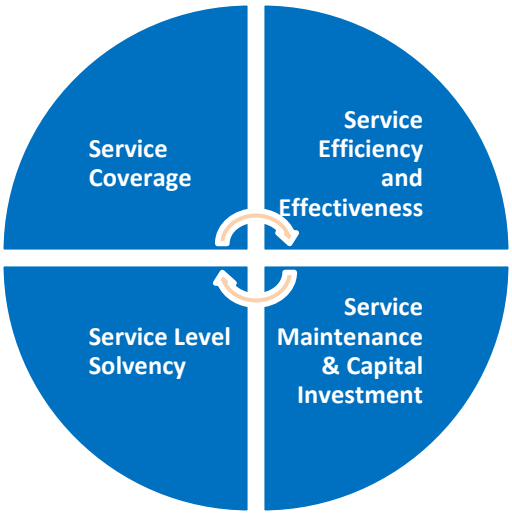
The regional peer report card was developed to provide context to the performance of the Chicago region's transit service by relating it to comparable peer regions from across the country. To accomplish this goal, the Regional Peer Review incorporates data reported to the National Transit Database (NTD) by all transit agencies that receive federal funding. This report includes NTD data for report year 2016, the most currently available, which was published in October 2017.

Peer regions were selected based on population, so that the top ten US metropolitan statistical areas (MSAs) are represented: Atlanta, Boston, Dallas, Houston, Los Angeles, Miami, New York, Philadelphia, and Washington, DC, with the Chicago metropolitan area being the third-largest. For each of the top ten regions, the main transit operators were determined so as to best represent each region's public transportation service.

Chicago-area transit ranked in the top half of the peer regions in fourteen of the sixteen measures included in this report and as one of the top three performers for seven of the measures. There were four upward rank changes for the year, two downward rank changes, and ten measures for which Chicago's ranking remained unchanged from 2015. Particular strengths were noted for operating cost per passenger mile, for which Chicago transit ranked first among its peers for the sixth consecutive year. Additionally, the Chicago region gained one rank position for two measures of solvency: fare revenue per passenger trip and fare shortfall per trip. Declining capital program expenditures in the Chicago region resulted in a lower position ranking for another solvency measure.

As shown in the chart to the right, eight regions included in the peer review experienced declines in unemployment rates in 2016, while Houston saw an increase and Chicago saw no change, putting the region in last place. RTA system ridership, which had experienced declines in 2009 and 2010, rebounded in 2011 and 2012 coinciding with improvements in the unemployment rate, followed by unfavorable ridership results for 2013 – 2016 despite continued improvements in unemployment rates through 2015.





Service Coverage: Chicago placed in the top half compared to its peer regions for each measure of coverage. Chicago's rankings for each of the coverage measures had remained unchanged since 2011 -- until the region overtook Los Angeles for annual ridership in 2016 and moved to second place. Chicago region residents took 605.3 million trips in 2016, down 3.3% from 2015, but Los Angeles ridership dropped 7.6%. The Chicago region was one of seven regions to see ridership decreases in 2016; for the first time since 2010, Chicago-area residents traveled fewer than four billion annual passenger miles.

Service Efficiency and Effectiveness: Although the Chicago region saw unfavorable increases for each service efficiency and effectiveness measure, it retained its rank positions for cost per unit of transit capacity and cost per passenger mile and improved one position for cost per passenger trip. The Chicago region has ranked first for having the lowest operating cost per passenger mile each year since 2011.

Service Maintenance and Capital Investment: The Chicago region's percentage of vehicles beyond minimum useful life decreased by 3.5 percentage points in 2016, not enough to change its rank position. However, the Chicago region dropped three rank positions for the performance measure miles between major mechanical failures, ensuing from a nearly 29% increase in failures.

Service Level Solvency: Outperforming seven other regions, Chicago saw a 0.7% decrease in fare revenue in 2016, resulting in upward rank movements for fare revenue per passenger trip and fare shortfall per passenger trip, and maintaining fourth place rank for fare recovery ratio. Capital program expenditures decreased by 8.5% in Chicago in 2016, yet it maintained its fourth place rank position. On a per-resident basis, Chicago's capital expenditures dropped down one position to sixth; the Chicago region expends roughly one-third what New York does on a per-capita basis for capital investment.

SNAPSHOT

The table below shows the ranking of the Chicago-area transit operators for each performance measure contained within this report. Rankings are provided for 2015 and 2016 report years and reflect a scale of 1-10, with 1 indicating the most favorable performance. The right-most column illustrates changes in rankings from 2015 to 2016, with green upward arrows indicating a favorable change in rank position and red downward arrows showing an unfavorable change in rank position.

Performance Measure	Rank 2015	Rank 2016	Rank Change
SERVICE COVERAGE			
Transit Capacity (Trips) per Area Resident	5	5	--
Vehicle Revenue Miles per Service Area Square Mile	3	3	--
Unlinked Passenger Trips (Ridership)	3	2	↑
Passenger Trips per Area Resident	4	4	--
Passenger Miles Traveled	2	2	--
Passenger Miles Traveled per Area Resident	2	2	--
SERVICE EFFICIENCY AND EFFECTIVENESS			
Operating Cost per Unit of Transit Capacity	3	3	--
Operating Cost per Passenger Trip	6	5	↑
Operating Cost per Passenger Mile	1	1	--
SERVICE MAINTENANCE AND CAPITAL INVESTMENT			
Percent of Vehicles Beyond Useful Life	6	6	--
Miles between Major Mechanical Failures	1	4	↓
SERVICE LEVEL SOLVENCY			
Fare Revenue per Passenger Trip	3	2	↑
Fare Revenue Shortfall per Passenger Trip	5	4	↑
Fare Recovery Ratio	4	4	--
Capital Program Expenditures	4	4	--
Capital Program Expenditures per Area Resident	5	6	↓

PEER SELECTION

The peer group selected for use in the Regional Peer Review consists of the top ten metropolitan statistical areas (MSAs) as defined by the US Bureau of the Census: Chicago, Atlanta, Boston, Dallas, Houston, Los Angeles, Miami, New York, Philadelphia, and Washington, DC. Population and land area data correlate to each MSA region. For consistency with the six-county RTA area, the main transit properties serving each MSA were included in this report.

PEER AGENCIES INCLUDED WITHIN METROPOLITAN STATISTICAL AREAS

Geographic Region	Transit Agencies Included
Chicago	Chicago Transit Authority, Metra, Pace
Atlanta	Metropolitan Atlanta Rapid Transit Authority, Cobb County Department of Transportation Authority
Boston	Massachusetts Bay Transportation Authority
Dallas/Fort Worth	Dallas Area Rapid Transit, Fort Worth Transportation Authority
Houston	Metropolitan Transit Authority of Harris County
Los Angeles	Access Services, Foothill Transit, Long Beach Transit, Los Angeles County Metropolitan Transportation Authority, Los Angeles Department of Transportation, Montebello Bus Lines, Omnitrans, Orange County Transportation Authority, Riverside Transit Agency, Santa Monica Big Blue Bus, Southern California Regional Rail Authority
Miami	Broward County Transit, Miami-Dade Transit, PalmTran, South Florida Regional Transportation Authority
New York	All Metropolitan Transportation Authority (MTA) operating agencies (Long Island Rail Road, Metro-North Commuter Railroad, MTA Bus, New York City Transit, Staten Island Railway), Nassau Inter-County Express, New York City Department of Transportation, Port Authority Trans-Hudson, Suffolk County Transportation Division, Westchester County Bee-Line System
Philadelphia	Port Authority Transit Corporation, Southeastern Pennsylvania Transportation Authority
Washington, DC	City of Alexandria DASH, Ride-On Montgomery County Transit, Virginia Railway Express, Washington Metropolitan Area Transit Authority

NOTES/METHODOLOGY

1. This report is based on 2016 published data from the National Transit Database (NTD), the most currently available data, released in October, 2017. The data submission by transit agencies is a requirement of receiving federal funding and thus follows guidelines and procedures established by the Federal Transit Administration (FTA).

2. The fare recovery ratio used in this report follows the NTD definition, which is the proportion of operating costs that are covered by fare revenues paid by passengers. The NTD recovery ratio differs from the RTA recovery ratio, which takes into account certain adjustments as enumerated in the RTA Act such as the exclusion of various costs, the treatment of depreciation, and the inclusion of in-kind services.

3. The use of the metropolitan statistical area (MSA) was selected as the standard representation for each urban area and has been incorporated into this report for both population and square mileage data. *Source: Cumulative Estimates of Resident Population Change and Rankings: April 1, 2010 to July 1, 2016. U.S. Census Bureau, Population Division.*

4. New Jersey Transit, which serves both the New York and Philadelphia regions, has been excluded from this and prior year reports because there is no way to disaggregate the data between the two urban areas. As a result, there is some under-representation of transit service for these urban areas. Similarly, the Maryland Transit Administration, which primarily serves the Baltimore region and also serves the DC area, has not been included in this or prior reports as its operating data cannot be divided among the DC and Baltimore metropolitan statistical areas. As a result, Washington, DC metropolitan area transit service is slightly understated.

PEER CHARACTERISTICS

2016	CHICAGO	ATLANTA	BOSTON	DALLAS	HOUSTON	LOS ANGELES	MIAMI	NEW YORK	PHILADELPHIA	WASHINGTON, DC
Population Ranking	3	9	10	4	5	2	8	1	7	6
Population (thousands)	9,513	5,790	4,794	7,233	6,772	13,310	6,066	20,154	6,071	6,132
Square Miles	7,197	8,339	3,487	8,928	8,827	4,848	5,077	6,687	4,602	5,598
Population Density	1,322	694	1,375	810	767	2,745	1,195	3,014	1,319	1,095
Vehicle Revenue Miles (millions)	238	58	96	57	74	280	96	714	96	155
Passenger Trips (millions)	605	136	403	74	90	605	148	3,964	365	412
Passenger Miles (millions)	3,962	766	1,834	483	584	3,355	915	18,773	1,679	2,135
Operating Cost (millions)	$2,524	$513	$1,501	$557	$505	$2,686	$838	$13,300	$1,287	$1,906
Fare Revenue (millions)	$972	$144	$619	$76	$70	$596	$172	$6,260	$501	$789
Capital Funds Expended (millions)	$712	$179	$710	$220	$132	$1,915	$198	$4,266	$548	$1,027
Average Trip Length (miles)	6.5	5.6	4.5	6.5	6.5	5.5	6.2	4.7	4.6	5.2
Average Vehicle Passenger Capacity	74.5	58.6	121.1	59.7	39.9	40.9	56.6	104.7	87.4	87.6

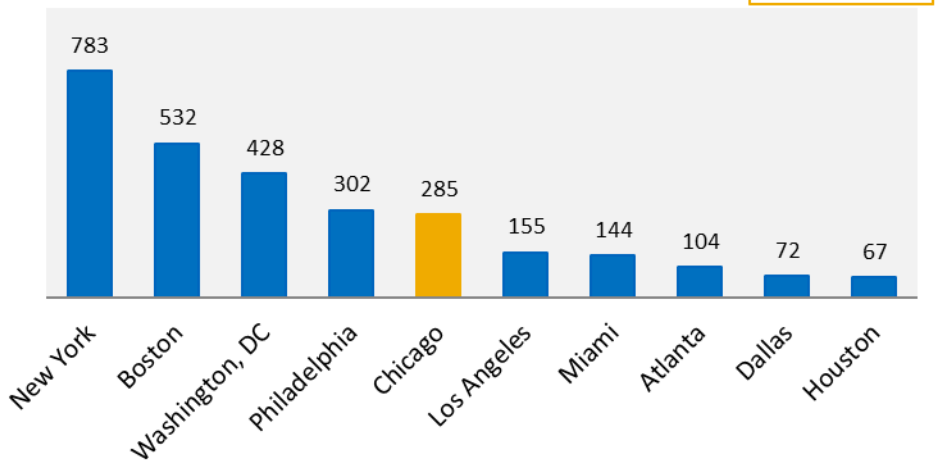
RESULTS

Service Coverage

Transit Capacity per Area Resident is the amount of available service, as measured by average vehicle capacity and vehicle revenue miles, per person in each region.

TRANSIT CAPACITY PER AREA RESIDENT

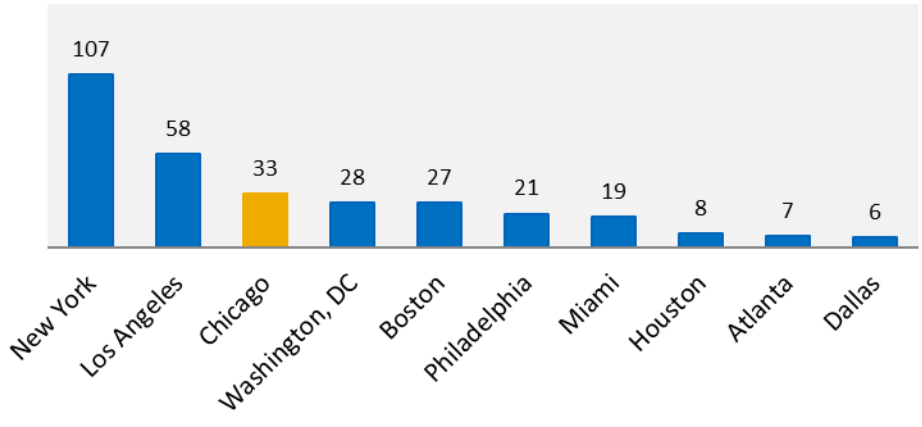
2015 rank: 5
2016 rank: 5



Vehicle Revenue Miles per Square Mile is the total number of miles traveled annually by transit operators in a region per square mile of the metropolitan statistical area (MSA).

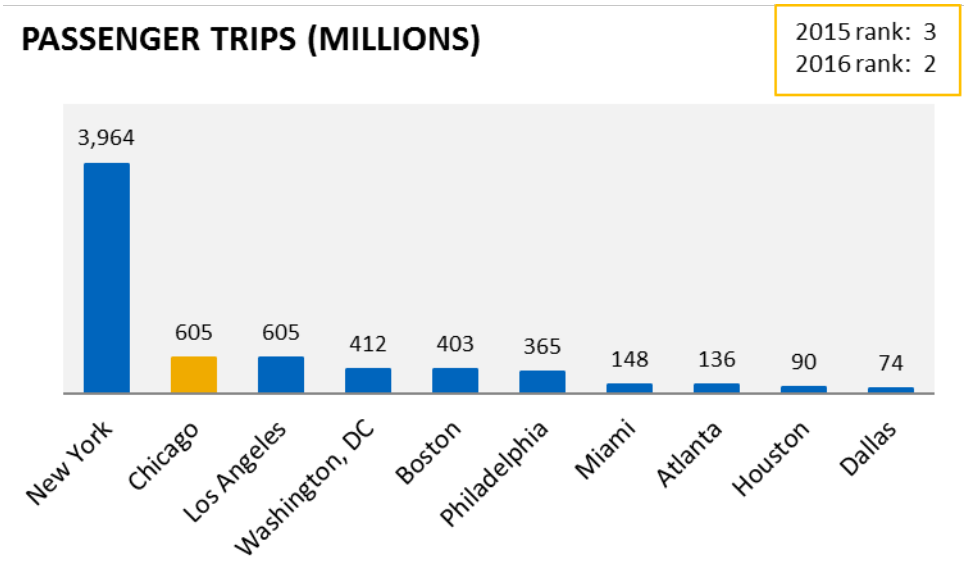
VEHICLE REVENUE MILES PER SQUARE MILE (THOUSANDS)

2015 rank: 3
2016 rank: 3

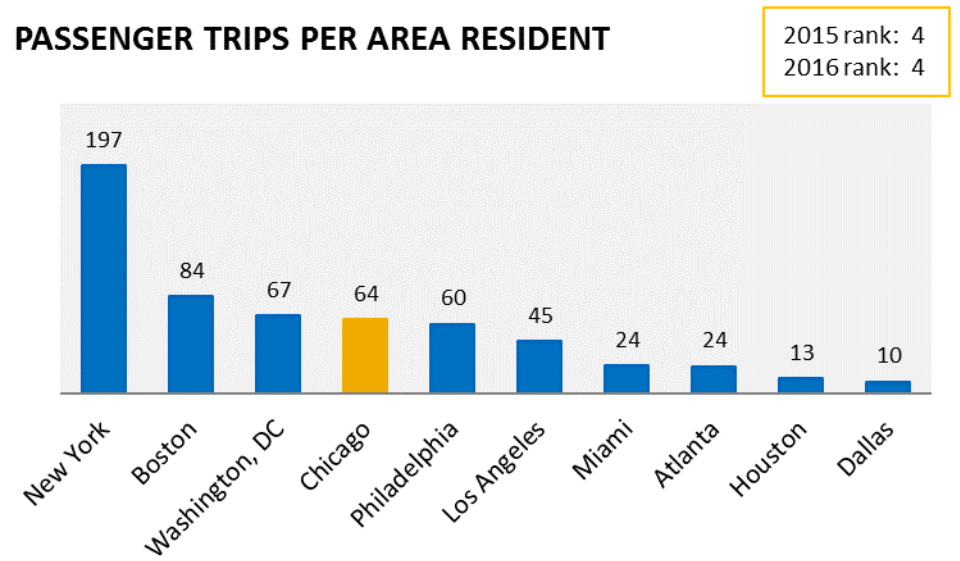


Service Coverage

Unlinked Passenger Trips, or ridership, refers to the number of passengers who board public transportation vehicles. Passengers are counted each time they board vehicles no matter how many vehicles they use to travel from their origin to their destination.

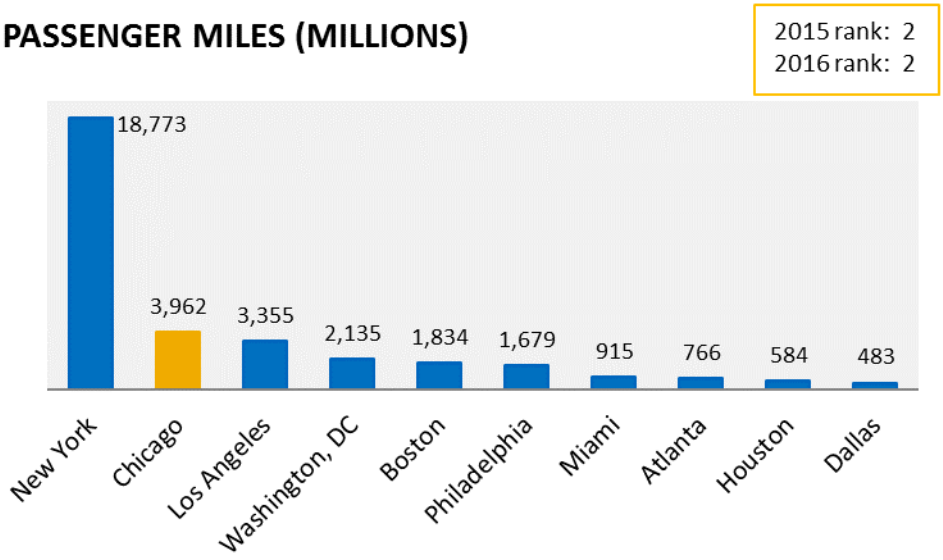


Passenger Trips per Area Resident is the average number of rides taken per resident annually.

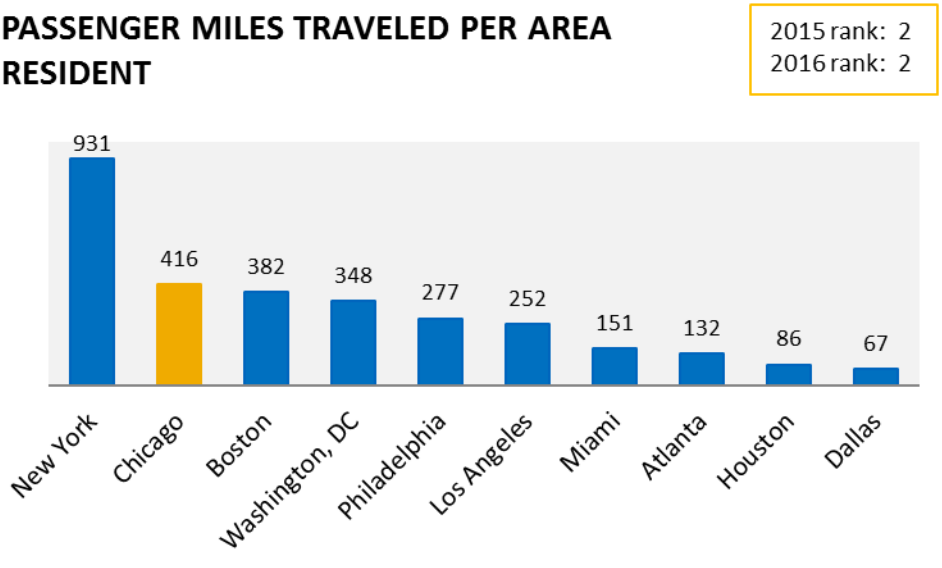


Service Coverage

Passenger Miles Traveled is the cumulative sum of the distances ridden by each passenger.



Passenger Miles Traveled per Area Resident is the average number of passenger miles traveled per resident annually.

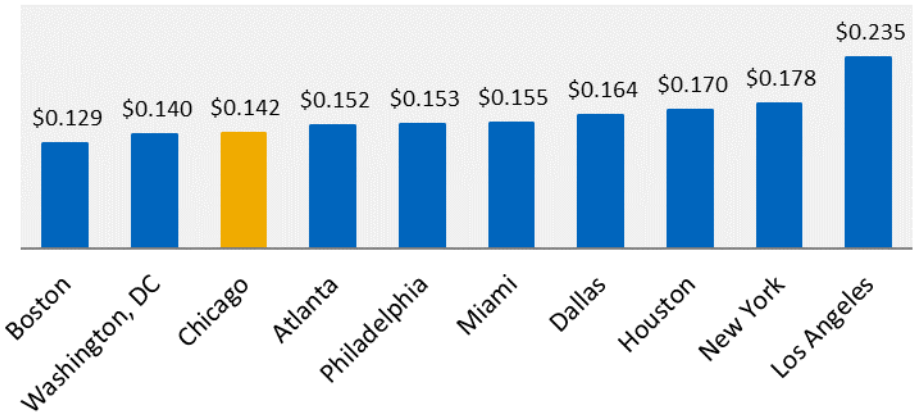


Service Efficiency and Effectiveness

Operating Cost per Unit of Transit Capacity is the average cost of providing a passenger seat (or space) for each mile of an individual trip, whether or not it is taken.

OPERATING COST PER UNIT OF TRANSIT CAPACITY

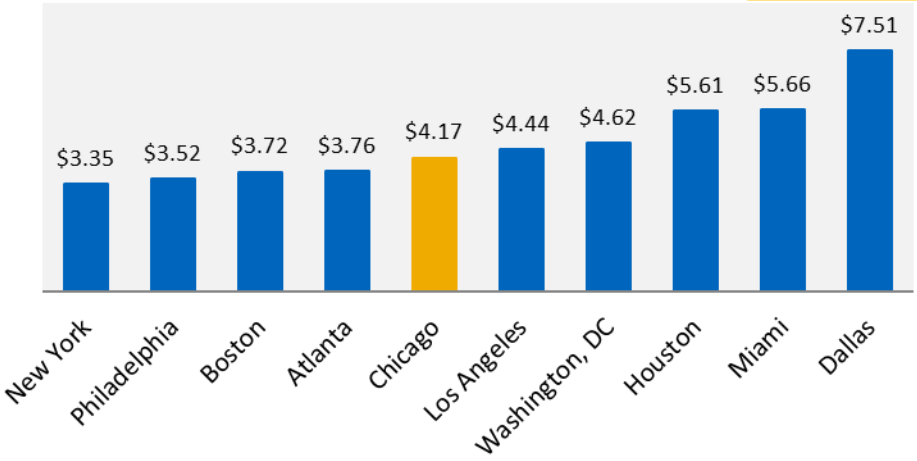
2015 rank: 3
2016 rank: 3



Operating Cost per Passenger Trip is the total operating cost divided by the total number of unlinked passenger trips taken on public transportation vehicles.

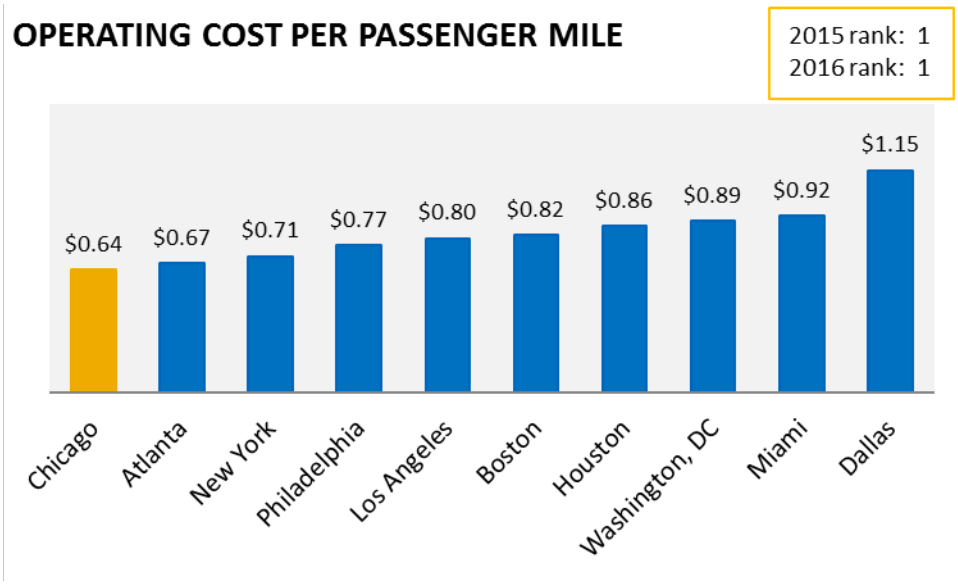
OPERATING COST PER PASSENGER TRIP

2015 rank: 6
2016 rank: 5



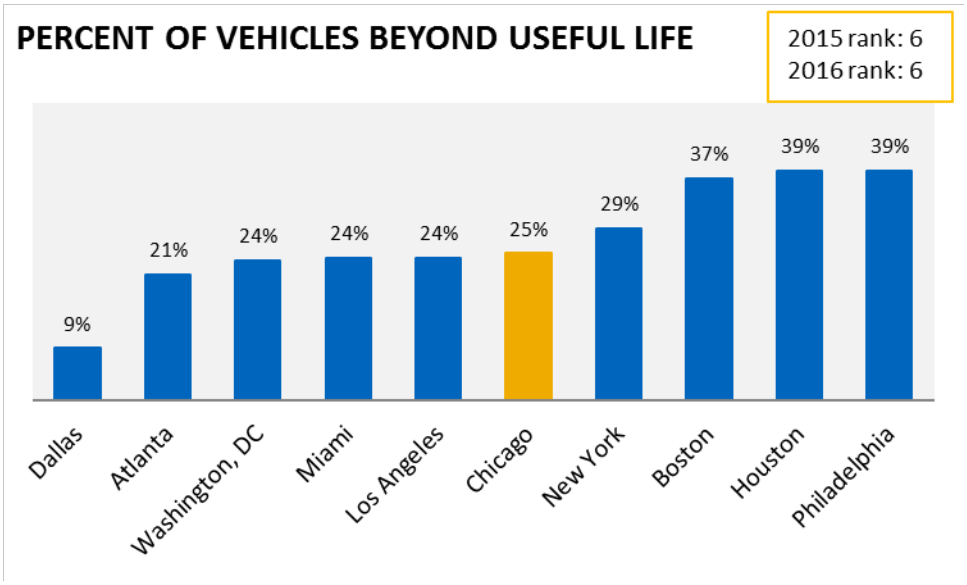
Service Efficiency and Effectiveness

Operating Cost per Passenger Mile is the total operating cost divided by the total number of miles traveled by passengers.

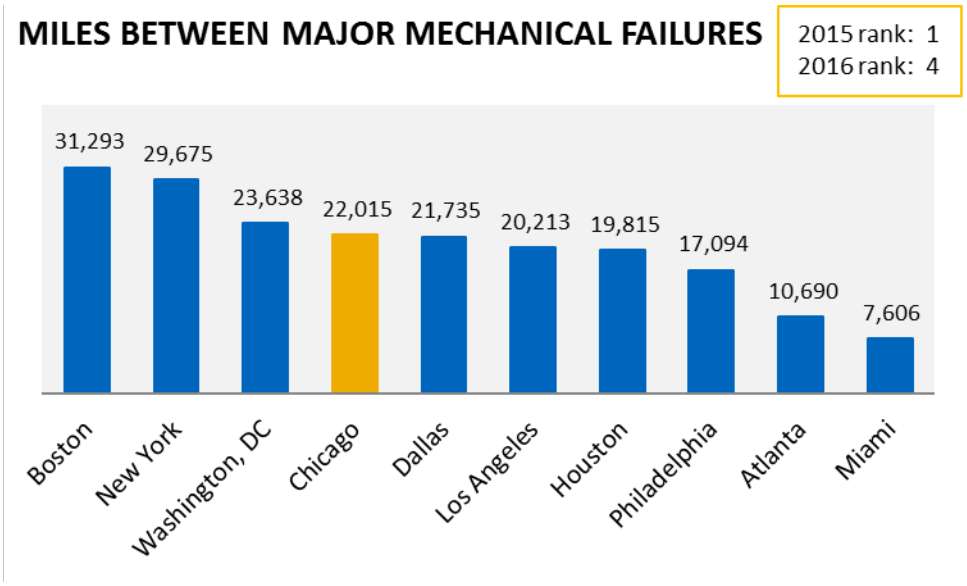


Service Maintenance and Capital Investment

Percent of Vehicles Beyond Minimum Useful Life is the percentage of vehicles in the total vehicle fleet that have reached their minimum useful life as defined by the Federal Transit Administration (4 years for new automobiles or vans, 12 years for new buses, and 25 years for new rail cars). This figure does not take into account rehabilitations that may be undertaken to keep vehicles in service beyond FTA guidelines.

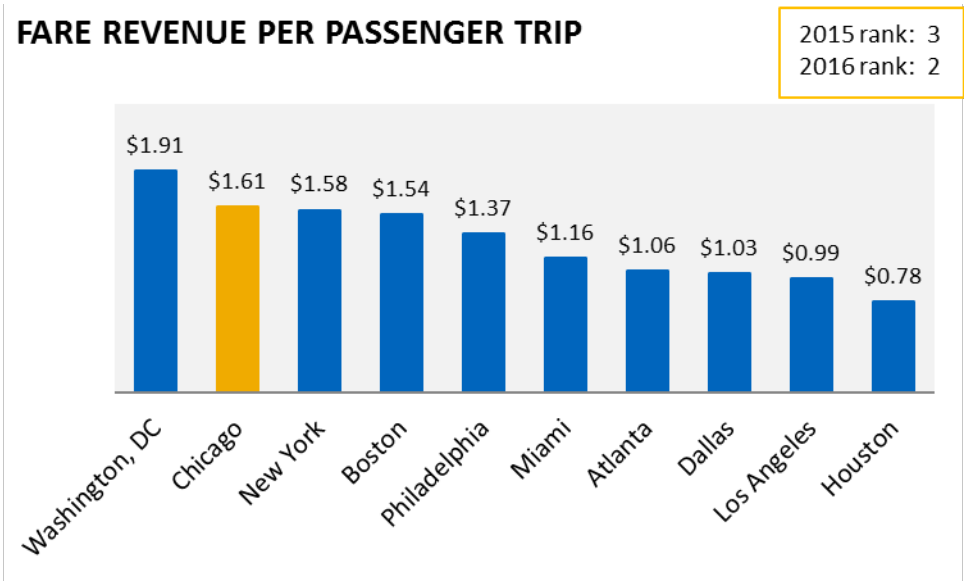


Miles between Major Mechanical Failures is the average number of miles that vehicles travel while in revenue service between failures of some mechanical element or a safety concern that prevents a vehicle from completing a scheduled trip or from starting the next scheduled trip.

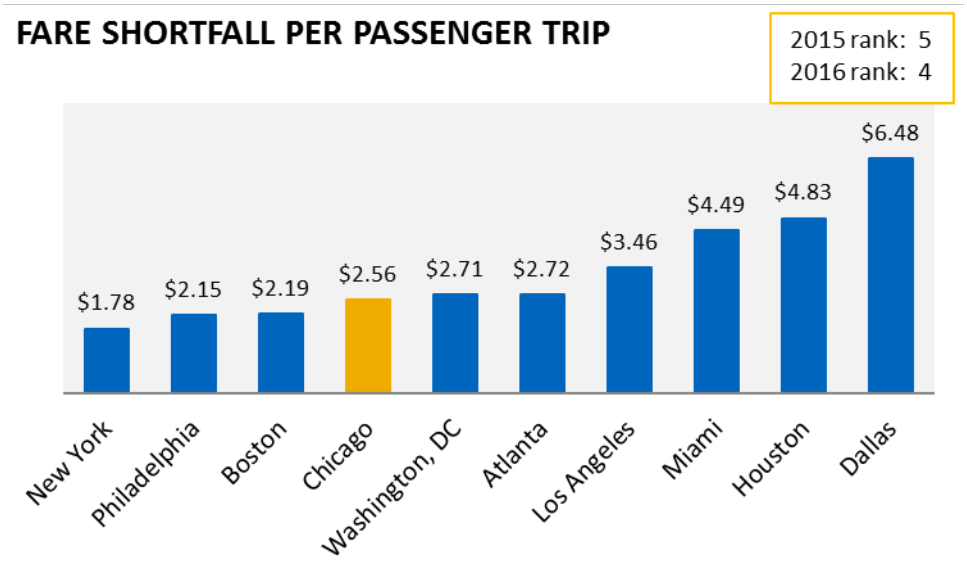


Service Level Solvency

Fare Revenue per Passenger Trip is the average fare paid by customers per trip.

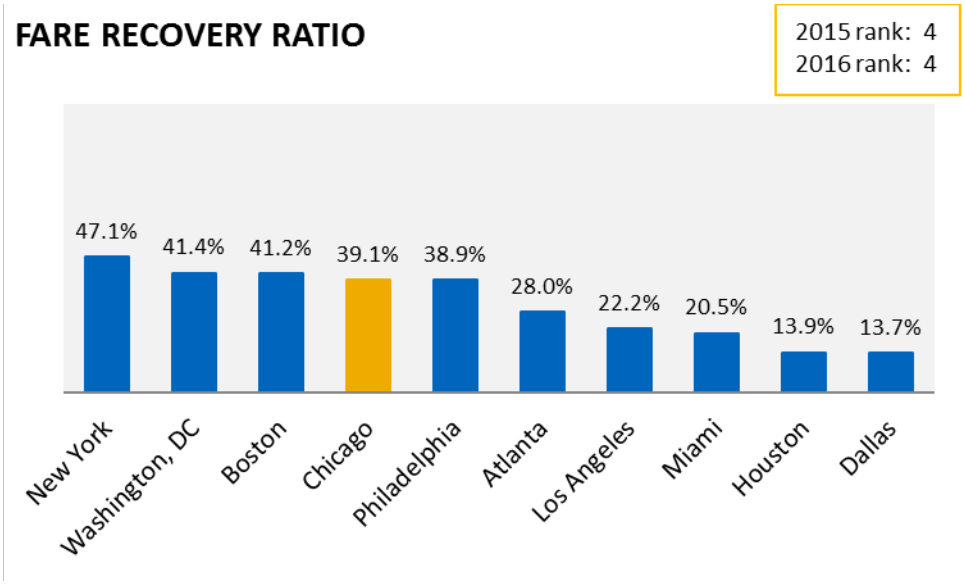


Fare Revenue Shortfall per Passenger Trip is the average cost of each trip that is not covered by the fare paid by customers. The balance of operating costs is covered by other directly-generated revenue (advertising, concessions, etc.) and public funding (local, state, and federal).



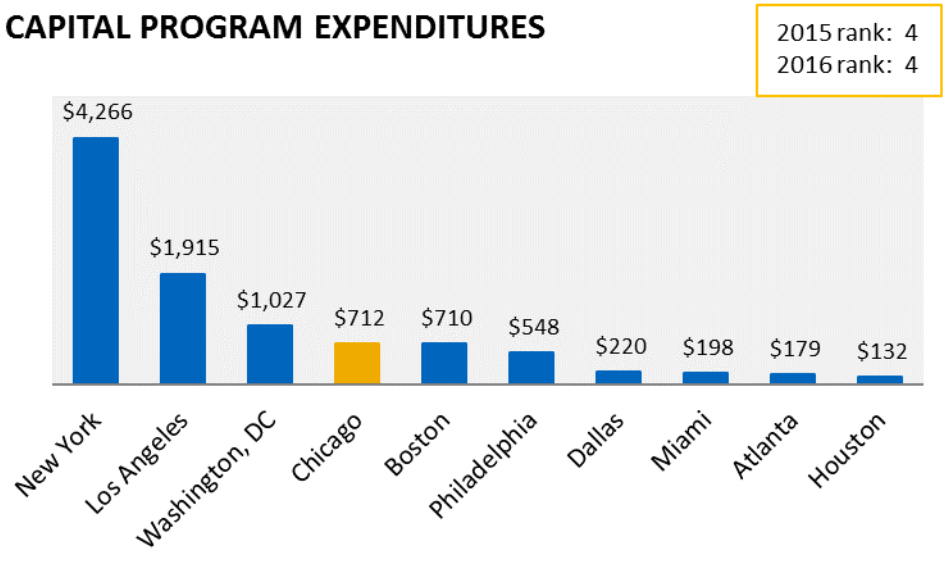
Service Level Solvency

Fare Recovery Ratio is defined by the National Transit Database (NTD) as the proportion of operating costs that are covered by fare revenues paid by passengers. The NTD fare recovery ratio differs from the RTA recovery ratio, which takes into account other system-generated revenue and certain adjustments as enumerated in the RTA Act.

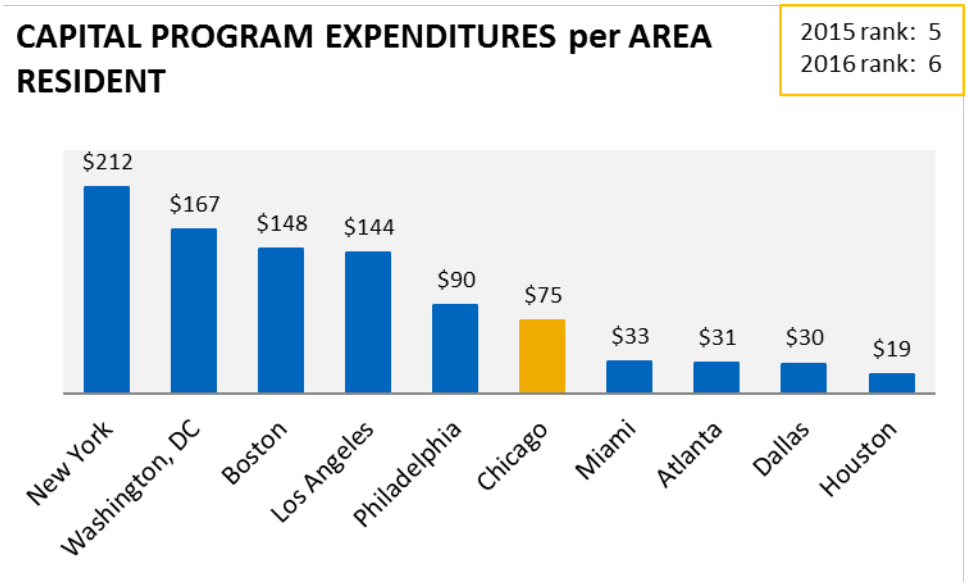


Service Level Solvency

Capital Program Expenditures is the amount of capital funds expended to finance the maintenance, enhancement, and expansion of the transit system's infrastructure. Note, capital funds expended in one year may include funding from prior years due to the longer-term nature of capital project implementation.



Capital Program Expenditures per Area Resident is the total amount of capital expenditures per resident of the metropolitan statistical area (MSA).



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