DATE: November 10, 2020

TO: Governor's Blue Ribbon Committee on the Metropolitan Council's Structure and Services

FROM: Judd Schetnan

SUBJECT: 2018 Regional Transit Statistics and Peer Region Comparisons

Definitions

Metrics

The following are definitions of key metrics used in the subsequent tables and analysis.

- Farebox Recovery – The percent of total operating costs covered by farebox revenue.
- Ridership – Number of people who board a transit vehicle.
- In-Service Hours - Time when vehicle is traveling on the route and available for picking up passengers. Calculated from first time point to last time point on each vehicle trip. Excludes layover/recovery and deadhead.
- Subsidy per Passenger – Net operating subsidy (i.e. operating cost minus fare revenue) divided by ridership.
- Passengers per Hour – Ridership divided by in-service hours.

Bus Route Types

The following are definitions of non-transitway, fixed-route bus service types from the Transportation Policy Plan (TPP) that are used to evaluate routes against similar routes. Figure 1 is a map of Transit Market Areas from the TPP.

- Core Local – Core Local routes typically serve the denser urban areas of Transit Market Areas I and II, usually providing access to a downtown or major activity center along important commercial corridors. They form the base of the core bus network and are typically some of the most productive routes in the system.
- Supporting Local – Supporting local routes are typically designed to provide crosstown connections within Transit Market Areas I and II. Typically, these routes do not serve a downtown but play an important role connecting to core local routes and ensuring transit access for those not traveling downtown.
- Suburban Local – Suburban local routes typically operate in Transit Market Areas II and III in a suburban context and are often less productive that core local routes. These routes serve an important role in providing a basic level of transit coverage throughout the region. Provider-specific variations on suburban local bus include community routes and feeder routes.
- Commuter and Express - Commuter and express bus routes primarily operate during peak periods to serve commuters to downtown or a major employment center. These routes typically operate non-stop on highways for portions of the route between picking up passengers in residential areas or at park-and-ride facilities and dropping them off at a major destination.

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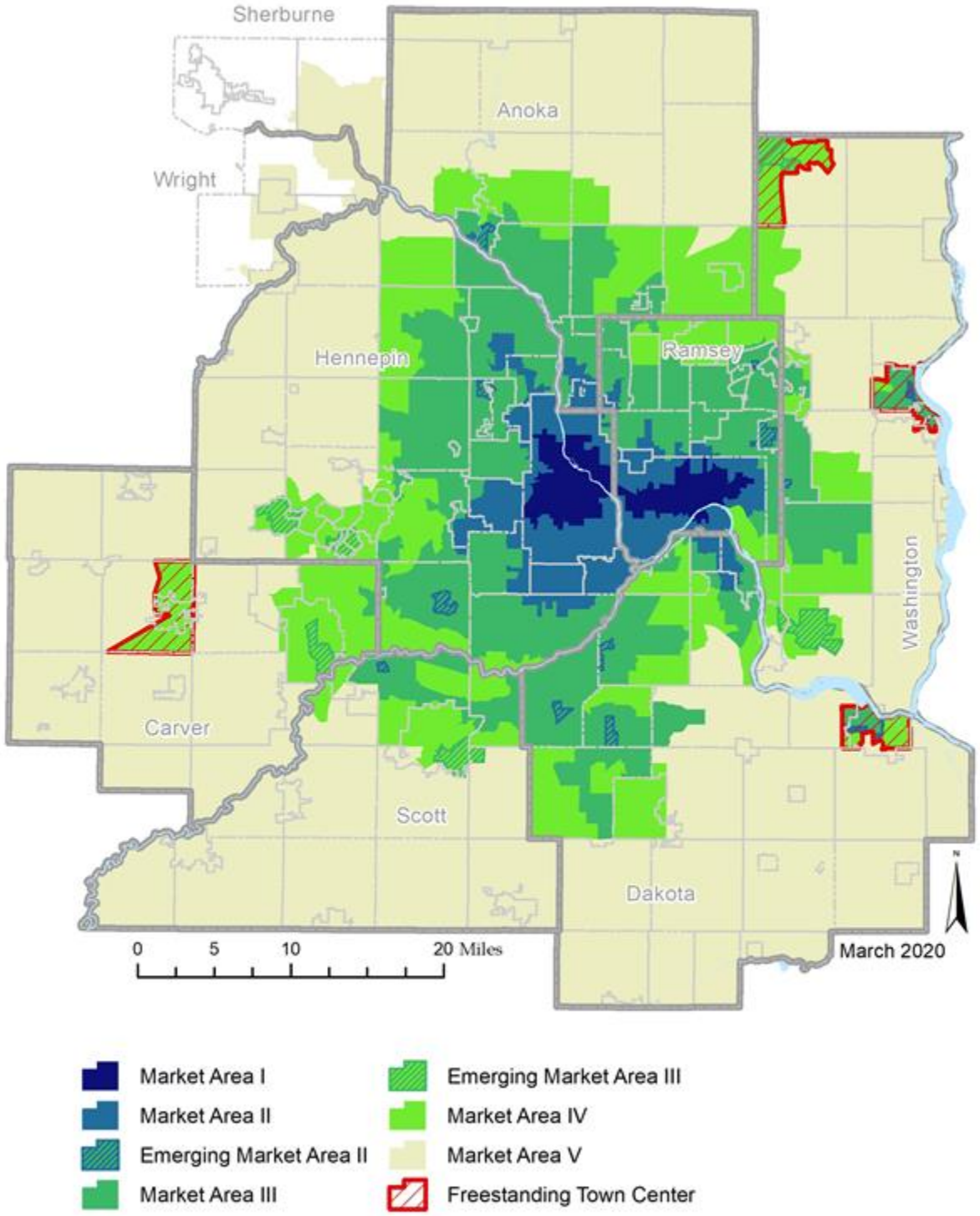
Figure 1 – Transit Market Areas



Regional Statistics

Statistic Summaries by Provider

Table 1 provides a summary of key metrics for all transit providers and their services for the year 2018. Subsidy per passenger and passengers per in-service hour are measures of productivity and cost effectiveness, respectively, established in Appendix G of the 2040 Transportation Policy Plan. These metrics are used to evaluate the relative productivity and efficiency of the services provided.

Table 1: 2018 Regional Transit Operating Statistics by Provider

Service	Operating Cost	Fare Revenue	Farebox Recov.	Ridership	In-Service Hours	Subsidy per Pass.	Pass. Per Hour
Metropolitan Council - Directly Operated							
Metro Transit Bus	$306,888,958	$60,692,161	19.8%	51,956,679	1,591,282	$4.74	32.7
Metro Transit Light Rail	$73,123,680	$26,713,177	36.5%	24,955,618	117,621	$1.86	212.2
Metro Transit Commuter Rail	$16,213,833	$2,631,695	16.2%	787,327	3,191	$17.25	246.7
Arterial BRT	$8,218,440	$1,755,637	21.4%	1,618,203	37,722	$3.99	42.9
Metro Transit Subtotal	**$404,444,911**	**$91,792,669**	**22.7%**	**79,317,827**	**1,749,817**	**$3.94**	**45.3**
Metropolitan Council - MTS Contracted							
Contracted Regular Route	$13,487,826	$2,508,724	18.6%	2,142,720	163,358	$5.12	13.1
Highway BRT	$2,535,853	$217,044	8.6%	254,125	12,060	$9.12	21.1
Metro Mobility	$74,512,361	$7,976,511	10.7%	2,381,781	1,435,798	$27.94	1.7
Transit Link	$7,007,241	$957,534	13.7%	243,857	109,827	$24.81	2.2
Metro Vanpool	$833,156	$563,125	67.6%	117,252	31,763	$2.30	3.7
MTS Subtotal	**$98,376,437**	**$12,222,938**	**12.4%**	**5,139,735**	**1,752,806**	**$16.76**	**2.9**
Other Transit Providers							
MVTA	$24,727,576	$5,427,156	21.9%	2,532,177	154,471	$7.62	16.4
SouthWest Transit	$10,700,759	$2,713,704	25.4%	999,191	67,276	$7.99	14.9
Maple Grove Transit	$4,874,832	$2,263,944	46.4%	836,668	30,592	$3.12	27.3
Plymouth Metrolink	$4,811,870	$1,154,709	24.0%	519,337	35,787	$7.04	14.5
University of Minnesota	$5,647,307	-	-	3,954,752	57,497	$1.43	68.8
Other Transit Providers Subtotal	**$50,762,344**	**$11,559,513**	**22.8%**	**8,842,125**	**345,622**	**$4.43**	**25.6**
Regional Total	**$553,583,692**	**$115,575,120**	**20.9%**	**93,299,687**	**3,848,245**	**$4.69**	**24.2**

Statistic Summaries by Service Type

Table 2 provides a summary of key metrics for all transit providers and their services for the year 2018. Subsidy per passenger and passengers per in-service hour are measures of productivity and cost effectiveness, respectively, established in Appendix G of the 2040 Transportation Policy Plan. These metrics are used to evaluate the relative productivity and efficiency of the services provided. Of note for 2018, there were only one highway BRT, one arterial BRT, one commuter rail, and two light rail lines in operation.

Table 2: Performance Metrics by Service Type, 2018

Service	Operating Cost	Fare Revenue	Farebox Recov.	Ridership	In-Service Hours	Subsidy per Pass.	Pass. Per Hour
Core Local Bus	$219,499,577	$38,075,913	17.3%	43,620,347	1,227,968	$4.16	35.5
Supporting Local Bus	$23,679,031	$2,701,434	11.4%	2,829,581	152,447	$7.41	18.6
Suburban Local Bus	$31,758,386	$4,109,970	12.9%	4,014,508	246,953	$6.89	16.3
Commuter & Express Bus	$93,184,269	$29,514,353	31.7%	12,310,495	423,051	$5.17	29.1
Regular Route Bus Subtotal	**$368,121,263**	**$74,401,669**	**20.2%**	**62,774,931**	**2,050,419**	**$4.68**	**30.6**
Light Rail	$73,123,680	$26,713,177	36.5%	24,955,618	117,621	$1.86	212.2
Commuter Rail	$16,213,833	$2,631,695	16.2%	787,327	3,191	$17.25	246.7
Arterial BRT	$8,218,440	$1,755,637	21.4%	1,618,203	37,722	$3.99	42.9
Highway BRT	$2,535,853	$217,044	8.6%	254,125	12,060	$9.12	21.1
ADA Dial-a-Ride	$74,512,361	$7,976,511	10.7%	2,381,781	1,435,798	$27.94	1.7
General Dial-a-Ride	$10,025,106	$1,316,262	13.1%	410,450	159,671	$21.22	2.6
Vanpool	$833,156	$563,125	67.6%	117,252	31,763	$2.30	3.7
Regional Total	**$553,583,692**	**$115,575,120**	**20.9%**	**93,299,687**	**3,848,245**	**$4.69**	**24.2**

Subsidy Per Passenger by Provider and Route Type

Table 3 provides a summary of subsidy per passenger by transit provider and route for 2018. Of note for 2018, there were only one highway BRT, one arterial BRT, one commuter rail, and two light rail lines in operation.

Table 3: System Subsidy per Passenger by Provider and Route Type, 2018

Provider	Core Local	Supporting Local	Suburban Local	Arterial BRT	Highway BRT	Light Rail	Commuter & Express Bus	Commuter Rail	General Public Dial-a-Ride	ADA/ Dial-a Ride	Comm. Vanpool	Total All Types
Maple Grove							$2.20		$20.13			$3.12
Metro Transit	$4.43	$8.52	$5.98	$3.99		$1.86	$4.96	$17.25				$3.94
MTS		$4.40	$5.30		$9.12		$8.18		$24.81	$27.94	$2.30	$16.76
MVTA			$11.99				$6.25					$7.62
Plymouth							$4.50		$39.35			$7.04
SW Transit			$18.42				$7.48		$8.20			$7.99
Total All Providers	**$4.43**	**$7.41**	**$6.89**	**$3.99**	**$9.12**	**$1.86**	**$5.17**	**$17.25**	**$21.22**	**$27.94**	**$2.30**	**$4.89**

Peer Region Statistics

Population

When looking at the performance of peer region transit systems, it is important to consider both population size and population density. These regional characteristics have a large impact on transit demand and, subsequently, a large impact on transit performance within each region.

The two largest regions included in the group of peers analyzed are Dallas, TX and Houston, TX.; however, the peer regions with the highest population densities are San Diego, CA and Denver, CO. Population density levels are correlated with the suitability of different transit modes. More intensive transit modes, such as rail modes, are more suitable when population densities are higher.

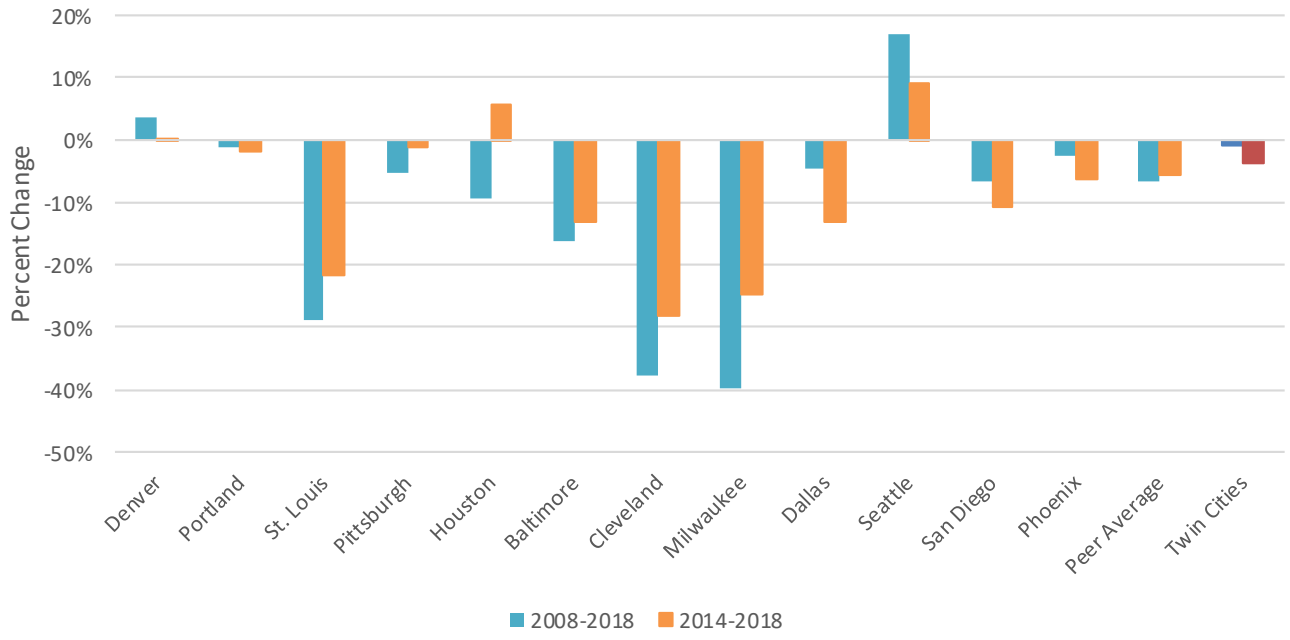
Table 4: Peer Region Urbanized Area Population, Areas and Population Densities

Region	Population (2017 UZA)	Land Area (Sq. Mi)	Population Density (Pop/Sq. Mi)	Density Rank
Baltimore	2,275,937	742	3,067.3	8th
Cleveland	1,765,779	778	2,269.6	12th
Dallas	5,618,620	1,815	3,095.7	6th
Denver	2,605,031	682	3,819.7	2nd
Houston	5,507,172	1,694	3,251.0	5th
Milwaukee	1,390,634	565	2,461.3	10th
Phoenix	3,929,596	1,151	3,414.1	4th
Pittsburgh	1,737,262	921	1,886.3	13th
Portland	1,989,163	538	3,697.3	3rd
San Diego	3,136,669	761	4,121.8	1st
Seattle	3,333,028	1,077	3,094.7	7th
St. Louis	2,161,737	935	2,312.0	11th
Twin Cities	2,796,036	1,111	2,516.7	9th

Ridership

With the exception of Seattle and Denver, transit ridership has declined in all peer regions since 2008. The prevalence of ridership decline is in line with overall trends of ridership decline in transit throughout the country. Transit ridership in the Twin Cities has a declined a slower rate than the peer average with ridership declining 0.9% since 2008 and 3.7% since 2014, compared to the peer average of a 6.7% decline 2008 and a 5.4% decline since 2014. Each exception to this decline can be explained by regions investing heavily into transit or reconfiguring outdated networks. Both Seattle and Denver have made broad and significant investments into their transit networks in the past ten years while Houston underwent a significant restructuring of their bus network in addition to expanding their light rail network.

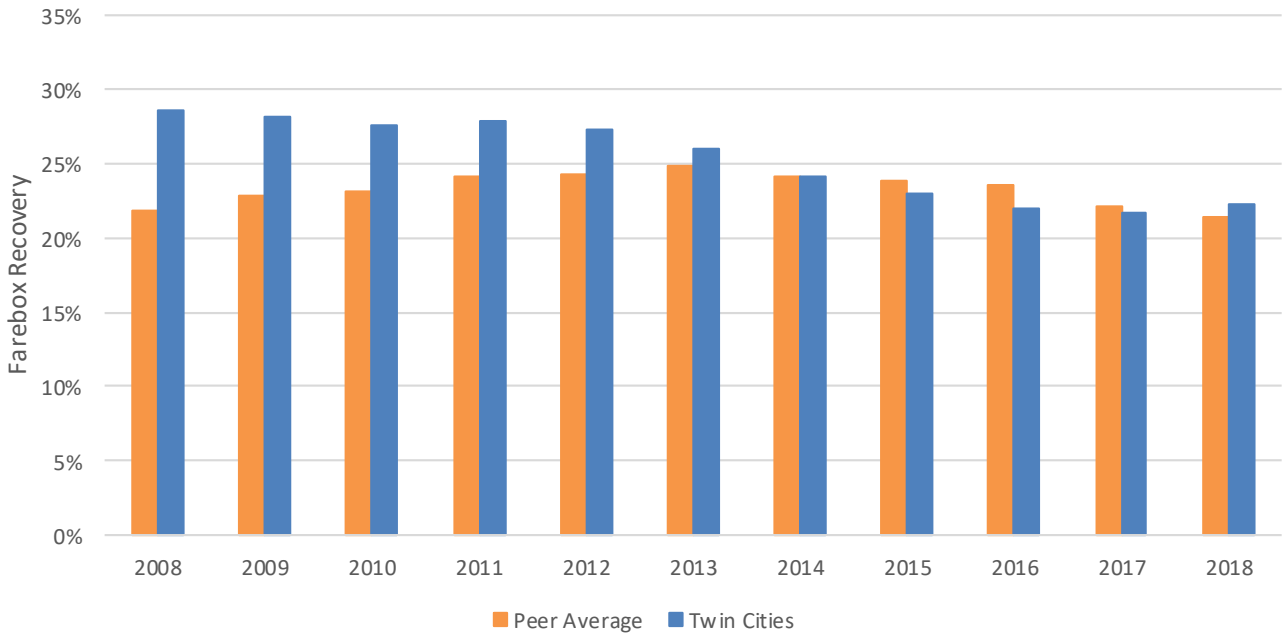
Figure 2: Ridership Change in Peer Regions, 2008-2018, 2014-2018



Farebox Recovery

Farebox recovery is the percentage of operating costs covered by passenger fares. **Figure 3** shows the Twin Cities region's farebox recovery is slightly higher than the peer group average. Fares paid by the region's transit riders cover 22.3 percent of transit operating costs compared to 21.4 percent for peer regions. There has been a general trend in a slight decrease in farebox recovery ratios in the past five years, though farebox recovery has been declining at a slower rate than the peer average; farebox recovery declined by 7.5% since 2014 in the region compared to an average decline of 11.2% amongst peer regions. Declining farebox recovery in the Twin Cities since 2014 is influenced by two major trends: bus operating costs have been increasing while bus revenues have been declining and Metro Mobility costs have been increasing significantly faster than revenues have. Since 2014 bus operating costs increased by 12% while revenue have shrunk 7%, and in the same time period Metro Mobility costs have increased 35% while revenues increased at only have the rate at 17%. The introduction of the Green Line was met with robust ridership but also introduced costs at a rate that contributed to the overall trend of decreased farebox recovery in the region.

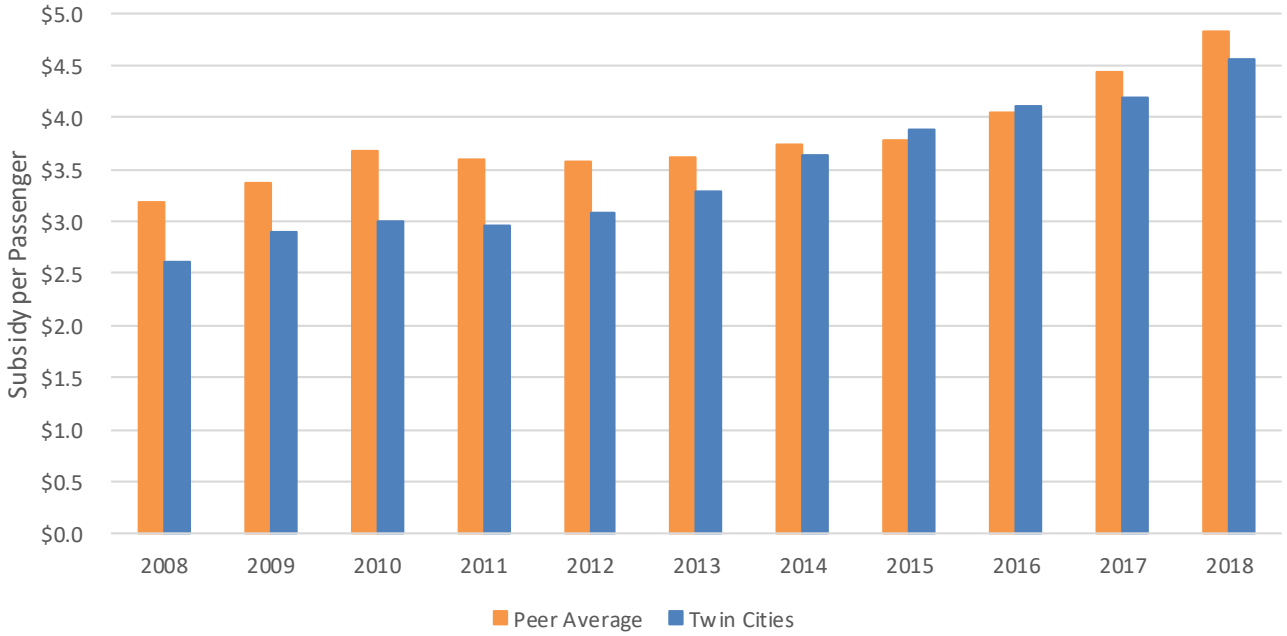
Figure 3: Farebox Recovery, Twin Cities and Peer Region, 2008-2018



Subsidy per Passenger

Subsidy per passenger is the cost made up by government subsidies after user revenues (fares) are deducted. The source of this funding is a combination of federal, state, and local tax revenues as well as other revenues such as advertising. The subsidy per passenger trip in 2018 in the Twin Cities was $4.56, slightly lower than the peer average of $4.83. With national trends of decreased ridership and increased operating costs seen among peers, subsidies per passenger trip have trended upwards. In the past 10 years subsidies per passenger trip in the Twin Cities have increased at a faster rate than the peer average. When accounting for inflation, subsidies per passenger in the Twin Cities have increased 49.6% since 2008, while the peer average subsidy per passenger has increased 30.2%. Increases in subsidies per passenger in the Twin Cities for the past five years have been more in line with average increases in peer subsidies per passenger; subsidies per passenger have increased by 18.1% between 2014 and 2018, and have increased by 21.7% in the same time period on average for peer regions.

Figure 4: Subsidy per Passenger, Twin Cities and Peers, 2008-2018, Not Adjusted for Inflation



Transit Rides per Capita

Amongst its peers the Twin Cities had a slightly higher of transit trips per capita than its peers, with 35.5 trips per capita in 2018, compared to the peer average of 30.8 trips per capita. Though higher than average, the Twin Cities still has a significantly lower number of trips per capita than peer regions that have more intensive investments in to the their transit networks such as Seattle (65.7 trips per capita), Portland (59.7 trips per capita), Baltimore (45.4 trips per capita) and Denver (44.2 trips per capita).

Figure 5: Transit Trips per Capita, 2018