

2021 REGIONAL ROUTE PERFORMANCE ANALYSIS

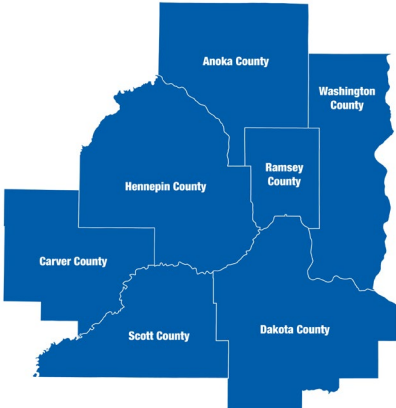


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The Metropolitan Council is the regional planning organization for the seven-county Twin Cities area. The Council operates the regional bus and rail system, collects and treats wastewater, coordinates regional water resources, plans and helps fund regional parks, and administers federal funds that provide housing opportunities for low- and moderate-income individuals and families. The 17-member Council board is appointed by and serves at the pleasure of the governor.

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2021 REGIONAL ROUTE PERFORMANCE ANALYSIS

The Regional Route Performance Analysis evaluates how transit service in the Twin Cities region performed in 2021 relative to the 2040 Transportation Policy Plan (2040 TPP) performance standards. This report provides a summary of the performance standards in the 2040 TPP, the results of the analysis, the cost allocation methodology of each provider, and a definition of the data collected from each provider. In addition, this year's edition of the Regional Route Performance Analysis also includes an acknowledgement of the impacts that the COVID-19 pandemic has had on transit performance and includes an analysis of the service design decisions that transit providers took in the face of the pandemic's impacts.

TRANSIT PERFORMANCE STANDARDS

The Metropolitan Council adopted the transit performance standards within Appendix G of the 2040 TPP. Performance standards are used to evaluate the relative productivity and efficiency of the services provided throughout the region. To be responsible and dynamic, a transit system must consistently measure and adjust service on unproductive routes and address insufficient service in productive areas. These standards serve as indicators of route performance and call attention to routes that may need to be adjusted. The use of multiple performance standards provides better insight into the operational and financial performance of individual services and allows transit providers to balance the cost and ridership of each route with its role in the regional transit network. The primary performance standards to measure service are Subsidy per Passenger and Passengers per In-Service Hour.

Because different types of routes are expected to have different levels of performance, each route's performance is compared to its peers. Each peer group is identified in the 2040 TPP.

REGIONAL TRANSIT SERVICE PROVIDERS

This performance analysis includes the transit services provided by Metro Transit (a division of the Metropolitan Council), Metropolitan Transportation Services (a division of the Metropolitan Council), and the suburban transit providers (Maple Grove, Minnesota Valley Transit Authority, Plymouth, and SouthWest Transit).

Tables shown at the end of this report summarize by service type ridership, hours of service, and total cost of service for each of these providers.

ALLOCATION METHODOLOGY

The various regional providers deliver transit services either through direct operations (Metro Transit – all operations, Southwest Transit – maintenance only) or through a contract with a third-party vendor. Providers submitted data on their direct and indirect costs, fare revenue, passengers, and in-service hours. To verify accuracy of the data, the data submitted by the providers was reconciled with data submitted to the National Transit Database (NTD). The NTD is used because it is a report to the Federal Transit Administration.

The allocation of costs and revenues by provider are summarized in the table below. The greatest variance in allocation methodology is in the indirect cost allocation to each route by provider, summarized in the following table.

Table 1 - Allocation Methodology

Providers	Direct Costs	Indirect Costs	Fare Revenue
Metro Transit	Allocated by annual platform hour for each route.	Total indirect, less non-attributable costs, allocated by annual platform hour.	Fare earned by each route.
Metropolitan Transportation Services	Allocated to each route based on contract rates.	Allocated based on number of in-service hours for each route.	Fare earned by each route.
Maple Grove	Allocated to each route based on contract rates.	Allocated based on ridership.	Fare earned by each route. Some allocation of fares is done for connecting services.
MVTA	Allocated to each route based on contracted rates and fuel.	Allocated based on calculated percentage of route direct costs to total direct costs.	Fare earned by each route.
Plymouth	Allocated to each route based on contracted rates.	Divided equally among routes.	Fare earned by each route. Some allocation of fares is done for connecting services.
SouthWest Transit	Allocated by platform hour and total revenue hour.	Allocated based on total revenue hour for each route.	Fare earned by each route.

REGIONAL SYSTEM PERFORMANCE

Cost Effectiveness

The cost effectiveness of a route is measured by the subsidy required to operate the route per passenger trip delivered. Subsidy per passenger for each route is calculated by dividing the net subsidy by the number of passenger trips delivered, with net subsidy being equal to total cost minus passenger fares. Certain other revenue may be collected by a provider for items such as advertising and shared use rentals to reduce the taxpayer burden for the service. Those revenues do not reduce the net cost of service but are considered sources for funding the subsidy.

Subsidies per passenger continue to be significantly impacted by the COVID-19 pandemic’s impact on travel behavior. Demand for public transportation travel have yet to return to pre-pandemic levels, which is reflected cost-effectiveness measures such as subsidy per passenger.

The table below shows both route-level average peer subsidy per passenger (left half of table below) and system subsidy per passenger (right half of table below). The route-level subsidy standard is used for performance comparison, as described later in this document.

The route-level average is determined by calculating the subsidy per passenger per route then creating an average of those values and is used for route performance purposes. The system subsidy per passenger is calculated by dividing the total subsidy for a route type by the total number of passengers on that route type, e.g., total subsidy of all commuter and express routes divided by total number of passengers for the route type. The following table shows a comparison of the peer average subsidy per passenger and the system subsidy per passenger by type of service.

Table 2 - Subsidy per Passenger by Type of Service

Route Type	Route Performance Average Peer Subsidy Per Passenger (Route-Level)				System Subsidy Per Passenger (Passenger-Level)			
	Weekday	Saturday	Sunday	Total	Weekday	Saturday	Sunday	Total
Commuter and Express Bus	\$91.43	\$27.13	\$29.13	N/A	\$31.41	\$26.81	\$27.99	\$31.26
Core Local Bus	\$15.90	\$16.67	\$17.33	N/A	\$12.42	\$13.38	\$13.52	\$12.63
Supporting Local Bus	\$17.72	\$20.90	\$23.10	N/A	\$16.21	\$20.37	\$23.67	\$17.44
Suburban Local Bus	\$39.50	\$38.48	\$54.78	N/A	\$18.58	\$18.93	\$24.48	\$19.06
Arterial BRT	\$7.73	\$8.22	\$9.75	N/A	\$7.65	\$8.21	\$9.73	\$7.96
Highway BRT	\$31.41	\$21.05	\$32.72	N/A	\$27.46	\$20.82	\$25.32	\$26.31
Light Rail Transit	\$7.42	\$7.09	\$8.28	N/A	\$7.22	\$7.04	\$8.28	\$7.34
Commuter Rail	\$174.34	NA	NA	N/A	\$174.34	NA	NA	\$174.34
General Public Dial-A-Ride	\$36.70	\$14.71	Na	N/A	\$42.92	\$14.71	N/A	\$42.50
Metro Mobility/ADA	N/A	N/A	N/A	\$42.59	N/A	N/A	N/A	\$42.59

System Subsidy per Passenger by Provider

The table at the end of this document shows the system subsidy per passenger (passenger-level) for each provider and service type. The accompanying Excel file provides the route-level detail to this table.

Subsidy per Passenger – Route-Level

For the cost effectiveness standard in the 2040 TPP, each route and day of service was compared against the route-level subsidy per passenger for its peer group. The 2040 TPP specifies a monitoring goal and possible corrective action for routes that fall within certain levels compared to the peer average, which are shown in the table below.

Table 3 - Subsidy Performance Standards

Threshold No.	Level of Subsidy per Passenger Performance	Monitoring Goal	Possible Action
1	> 20% to 35% over peer average	For Quick Review	Minor Modifications
2	> 35% to 60% over peer average	For Intense Review	Major Changes
3	> 60% over peer average	For Significant Change	Restructure/Eliminate

The following table shows a summary of the routes by service type and day of service and the number of routes in each threshold.

Table 4 - Number of Routes, by Route Type, Meeting Subsidy Performance Standards

Service Type	Day of Service	Peer Group Subsidy Average	Threshold Information				
			Level Number	Description	Min	Max	Routes
Commuter and Express Bus	Weekday	\$91.43	Meets	Less than 20% over peer average		\$109.71	61
			1	20% to 35% over peer average	\$109.72	\$123.43	1
			2	35% to 60% over peer average	\$123.44	\$146.28	1
			3	60 % over peer average	\$146.29		1
Commuter and Express Bus	Saturday	\$27.93	Meets	Less than 20% over peer average		\$33.51	3
			1	20% to 35% over peer average	\$33.52	\$37.70	0
			2	35% to 60% over peer average	\$37.71	\$44.68	0
			3	60 % over peer average	\$44.69		0
Commuter and Express Bus	Sunday	\$27.93	Meets	Less than 20% over peer average		\$33.51	2
			1	20% to 35% over peer average	\$33.52	\$37.70	0
			2	35% to 60% over peer average	\$37.71	\$44.68	0
			3	60 % over peer average	\$44.69		0
Core Local	Weekday	\$15.53	Meets	Less than 20% over peer average		\$18.62	21
			1	20% to 35% over peer average	\$18.63	\$20.95	4
			2	35% to 60% over peer average	\$20.96	\$24.84	3
			3	60 % over peer average	\$24.85		1
Core Local	Saturday	\$17.08	Meets	Less than 20% over peer average		\$20.49	22
			1	20% to 35% over peer average	\$20.50	\$23.05	1
			2	35% to 60% over peer average	\$23.06	\$27.33	1
			3	60 % over peer average	\$27.34		2
Core Local	Sunday	\$16.54	Meets	Less than 20% over peer average		\$19.84	18
			1	20% to 35% over peer average	\$19.85	\$22.32	2

Service Type	Day of Service	Peer Group Subsidy Average	Threshold Information				
			Level Number	Description	Min	Max	Routes
			2	35% to 60% over peer average	\$22.33	\$26.45	1
			3	60 % over peer average	\$26.46		2
Supporting Local	Weekday	\$17.72	Meets	Less than 20% over peer average		\$21.26	9
			1	20% to 35% over peer average	\$21.27	\$23.92	1
			2	35% to 60% over peer average	\$23.93	\$28.35	1
			3	60 % over peer average	\$28.36		1
Supporting Local	Saturday	\$20.90	Meets	Less than 20% over peer average		\$25.07	8
			1	20% to 35% over peer average	\$25.08	\$28.20	0
			2	35% to 60% over peer average	\$28.21	\$33.43	3
			3	60 % over peer average	\$33.44		0
Supporting Local	Sunday	\$21.81	Meets	Less than 20% over peer average		\$26.16	9
			1	20% to 35% over peer average	\$26.17	\$29.43	0
			2	35% to 60% over peer average	\$29.44	\$34.88	0
			3	60 % over peer average	\$34.89		0
Suburban Local	Weekday	\$39.50	Meets	Less than 20% over peer average		\$47.39	32
			1	20% to 35% over peer average	\$47.40	\$53.31	1
			2	35% to 60% over peer average	\$53.32	\$63.19	2
			3	60 % over peer average	\$63.20		6
Suburban Local	Saturday	\$42.45	Meets	Less than 20% over peer average		\$50.93	20
			1	20% to 35% over peer average	\$50.94	\$57.30	1
			2	35% to 60% over peer average	\$57.31	\$67.91	1
			3	60 % over peer average	\$67.92		5
Suburban Local	Sunday	\$68.50	Meets	Less than 20% over peer average		\$82.19	16
			1	20% to 35% over peer average	\$82.20	\$92.46	2
			2	35% to 60% over peer average	\$92.47	\$109.59	0
			3	60 % over peer average	\$109.60		3
Arterial BRT	Weekday	\$7.73	Meets	Less than 20% over peer average		\$9.27	2
			1	20% to 35% over peer average	\$9.28	\$10.43	0
			2	35% to 60% over peer average	\$10.44	\$12.36	0
			3	60 % over peer average	\$12.37		0
Arterial BRT	Saturday	\$8.22	Meets	Less than 20% over peer average		\$9.85	2
			1	20% to 35% over peer average	\$9.86	\$11.08	0
			2	35% to 60% over peer average	\$11.09	\$13.14	0
			3	60 % over peer average	\$13.15		0
	Sunday	\$9.75	Meets	Less than 20% over peer average		\$11.69	2
1			20% to 35% over peer average	\$11.70	\$13.16	0	

Service Type	Day of Service	Peer Group Subsidy Average	Threshold Information				
			Level Number	Description	Min	Max	Routes
Arterial BRT			2	35% to 60% over peer average	\$13.17	\$15.59	0
			3	60 % over peer average	\$16.60		0
Highway BRT	Weekday	\$31.41	Meets	Less than 20% over peer average		\$37.68	2
			1	20% to 35% over peer average	\$37.69	\$42.40	0
			2	35% to 60% over peer average	\$42.41	\$50.25	0
			3	60 % over peer average	\$50.26		0
Highway BRT	Saturday	\$21.05	Meets	Less than 20% over peer average		\$25.25	2
			1	20% to 35% over peer average	\$25.26	\$28.40	0
			2	35% to 60% over peer average	\$28.41	\$33.67	0
			3	60 % over peer average	\$33.68		0
Highway BRT	Sunday	\$32.72	Meets	Less than 20% over peer average		\$39.25	1
			1	20% to 35% over peer average	\$39.26	\$44.16	1
			2	35% to 60% over peer average	\$44.17	\$52.34	0
			3	60 % over peer average	\$52.35		0
Light Rail	Weekday	\$7.42	Meets	Less than 20% over peer average		\$8.90	2
			1	20% to 35% over peer average	\$8.91	\$10.01	0
			2	35% to 60% over peer average	\$10.02	\$11.87	0
			3	60 % over peer average	\$11.88		0
Light Rail	Saturday	\$7.09	Meets	Less than 20% over peer average		\$8.50	2
			1	20% to 35% over peer average	\$8.51	\$9.57	0
			2	35% to 60% over peer average	\$9.58	\$11.34	0
			3	60 % over peer average	\$11.35		0
Light Rail	Sunday	\$8.28	Meets	Less than 20% over peer average		\$9.92	2
			1	20% to 35% over peer average	\$9.93	\$11.17	0
			2	35% to 60% over peer average	\$11.18	\$13.24	0
			3	60 % over peer average	\$13.25		0
Commuter Rail	Weekday	\$174.34	Meets	Less than 20% over peer average		\$209.20	1
			1	20% to 35% over peer average	\$209.21	\$235.35	0
			2	35% to 60% over peer average	\$235.36	\$278.93	0
			3	60 % over peer average	\$278.94		0
General Public Dial-a-Ride	Weekday	\$23.91	Meets	Less than 20% over peer average		\$28.69	4
			1	20% to 35% over peer average	\$28.70	\$32.27	1
			2	35% to 60% over peer average	\$32.28	\$38.25	0
			3	60 % over peer average	\$38.26		0
	Saturday	\$14.71	Meets	Less than 20% over peer average		\$17.64	1
			1	20% to 35% over peer average	\$17.65	\$19.85	0

Service Type	Day of Service	Peer Group Subsidy Average	Threshold Information				
			Level Number	Description	Min	Max	Routes
General Public Dial-a-Ride			2	35% to 60% over peer average	\$19.86	\$23.53	0
			3	60 % over peer average	\$23.54		1

Passengers per In-Service Hour

The 2040 TPP establishes average and minimum passenger per in-service hour standards for light rail transit, big bus fixed-route service, small bus fixed-route service, and paratransit operations. Passengers per in-service hour represents the total passengers carried divided by the in-service time (time a vehicle is traveling on routes and available for passenger pickups). The standard for each type of service is shown in the table below.

As with cost-effectiveness measures, productivity measures have been significantly impacted by the COVID-19 pandemic’s impact on travel demand. The following analysis shows that demand for transit services has yet to return to the levels seen before the pandemic.

For this analysis, the measure is analyzed at the route/day of service level.

Table 5 - Productivity (Passengers per In Service Hour) Performance Standards

Type of Service	Average Passengers per In-Service Hour Standard
Core Local Bus	≥20
Supporting Local Bus	≥15
Suburban Local Bus	≥10
Arterial BRT	≥25
Highway BRT	≥25
Light Rail Transit	≤70
Commuter & Express Bus	Peak ≥20; Off-peak ≥10
Commuter Rail	≥70
General Public Dial-a-Ride	≥2

Table 6 - Number of Routes, by Route Type, Meeting Productivity Standards

Route Type	Weekday		Saturday		Sunday	
	Meets Standard	Below Standard	Meets Standard	Below Standard	Meets Standard	Below Standard
Arterial BRT	2	0	2	0	1	1
Highway BRT	0	2	0	2	0	2
Commuter & Express Bus	3	61	0	3	0	2
Commuter Rail	0	1				
Core Local Bus	4	25	1	25	3	20
General Demand Response	3	1	1	0		
Light Rail	2	0	2	0	2	0
Suburban Local Bus	5	36	8	27	4	17
Supporting Local Bus	1	11	1	10	0	11

Table references

The following tables with route-level subsidy per passenger information are attached:

- Table 1 – Commuter & Express – Subsidy per passenger and passengers per hour for commuter and express bus service, sorted by day of service and route number.
- Table 2 – Core Local – Subsidy per passenger and passengers per hour for core local bus service, sorted by day of service and route number.
- Table 3 – Supporting Local – Subsidy per passenger and passengers per hour for supporting local bus service, sorted by day of service and route number.
- Table 4 – Suburban Local – Subsidy per passenger and passengers per hour for suburban local bus service, sorted by day of service and route number.
- Table 5 – Arterial BRT – Subsidy per passenger and passengers per hour for Arterial BRT, sorted by day of service.
- Table 6 – Highway BRT – Subsidy per passenger and passengers per hour for Highway BRT, sorted by day of service and route number.
- Table 7 – Light Rail Transit – Subsidy per passenger and passengers per hour for light rail transit, sorted by day of service and route number.
- Table 8 – Commuter Rail – Subsidy per passenger and passengers per hour for commuter rail, sorted by day of service and route number.
- Table 9 – General Public Dial-a-Ride – Subsidy per passenger and passengers per hour for dial-a-rides.

Appendix: Additional Tables

Table 7 - Passenger Trips

Provider	Core Local	Supporting Local	Suburban Local	Arterial BRT	Highway BRT	Light Rail	Commuter & Express	Commuter Rail	General DR	ADA DAR	Vanpool	Grand Total	%
Maple Grove							74,494		24,303			98,797	0.3%
Metro Transit	17,206,314	687,429	961,907	2,215,273	124,479	10,673,555	790,110	50,433				32,709,500	89.2%
MTS	81,167	425,062	578,591				4,293		115,684	1,799,809	56,594	3,061,281	8.4%
MVTA			287,414				259,810					547,224	1.5%
Plymouth							52,685		32,798			85,483	0.2%
SW Transit							85,529		62,667			148,196	0.4%
Grand Total	17,287,481	1,112,491	1,827,912	2,215,273	124,479	10,673,555	1,266,921	50,433	235,452	1,799,890	56,594	36,650,481	100%
Percent	47.2%	3.0%	5.0%	6.0%	0.3%	29.1%	3.5%	0.1%	0.6%	4.9%	0.2%	100%	

Table 8 - In Service Hours

Provider	Core Local	Supporting Local	Suburban Local	Arterial BRT	Highway BRT	Light Rail	Commuter & Express	Commuter Rail	General DR	ADA DAR	Vanpool	Grand Total	%
Maple Grove							6,851		10,654			17,505	0.5%
Metro Transit	1,071,657	61,303	62,943	76,205	13,058	101,798	86,264	888				1,474,117	45.5%
MTS	13,803	67,793	94,125				987		82,836	1,287,167	16,434	1,563,145	48.3%
MVTA			81,298				38,181					119,480	3.7%
Plymouth							13,381		11,561			24,942	0.8%
SW Transit							11,743		26,605			38,348	1.2%
Grand Total	1,085,460	129,096	238,366	76,205	13,058	101,798	157,407	888	131,656	1,287,167	16,434	3,237,536	100%
Percent	33.5%	4.0%	7.4%	2.4%	0.4%	3.1%	4.9%	0.0%	4.1%	39.8%	0.5%	100%	

Table 9 - Operating Costs

Provider	Core Local	Supporting Local	Suburban Local	Arterial BRT	Highway BRT	Light Rail	Commuter & Express	Commuter Rail	General DR	ADA DAR	Vanpool	Grand Total	%
Maple Grove							\$1,900,344		\$957,958			\$2,858,302	0.5%
Metro Transit	\$234,977,270	\$14,157,102	\$15,263,666	\$19,190,999	\$3,359,606	\$85,108,480	\$22,451,371	\$8,939,965				\$403,448,459	73.7%
MTS	\$1,251,394	\$6,461,278	\$8,737,585				\$303,392		\$7,562,863	\$82,783,426	\$632,074	\$107,7535,012	19.7%
MVTA			\$12,660,502				\$8,442,483					\$21,102,985	3.9%
Plymouth							\$2,970,842		\$1,151,172			\$4,122,014	0.8%
SW Transit							\$6,931,480		\$1,124,292			\$8,055,772	1.5%
Grand Total	\$236,231,664	\$20,618,380	\$36,661,753	\$19,190,999	\$3,359,606	\$85,108,480	\$42,999,912	\$8,939,965	\$10,796,285	\$82,783,426	\$632,074	\$547,322,544	100%
Percent	43.2%	3.8%	6.7%	3.5%	0.6%	15.5%	7.9%	1.6%	2.0%	15.1%	0.1%	100%	

Table 10 - System Subsidy per Passenger

Provider	Core Local	Supporting Local	Suburban Local	Arterial BRT	Highway BRT	Light Rail	Commuter & Express	Commuter Rail	General DR	ADA DAR	Vanpool	Grand Total
Maple Grove							\$22.76		\$37.82			\$26.46
Metro Transit	\$12.62	\$19.41	\$14.98	\$7.96	\$26.31	\$7.34	\$25.50	\$174.34				\$11.41
MTS	\$14.46	\$14.25	\$13.99				\$68.38		\$61.15	\$42.59	\$5.19	\$32.55
MVTA			\$42.88				\$30.31					\$36.91
Plymouth							\$55.07		\$32.88			\$46.56
SW Transit							\$78.29		\$14.94			\$51.10
Grand Total	\$12.63	\$17.44	\$19.06	\$7.96	\$26.31	\$7.34	\$31.26	\$174.34	\$42.50	\$42.59	\$5.19	\$13.84



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