Saint Cloud Area Planning Organization Transportation Performance Monitoring Report





DISCLAIMER

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Common Acronyms

ADT: Average Daily Traffic.

APO: Saint Cloud Area Planning Organization.

AQI: Air Quality Index.

CNG: Compressed Natural Gas.

DOT: Department of Transportation.

CR: County Road.

CSAH: County State-Aid Highway.

D3: Minnesota Department of Transportation District 3.

DAR: Dial-a-Ride.

DEED: Minnesota Department of Employment and Economic Development.

DIV: Digital Inspection Vehicle.

EDR: Economic Development Region.

FAST Act: Fixing America's Surface Transportation Act.

FHWA: Federal Highway Administration.

FR: Fixed Route.

FTA: Federal Transit Administration.

GPS: Global Positioning System.

HPMS: Highway Performance Monitoring System.

HSIP: Highway Safety Improvement Program.

IRI: International Roughness Index.

MAP-21: Moving Ahead for Progress in the 21st Century Act.MN: Minnesota.

MnDOT: Minnesota Department of Transportation. MPCA: Minnesota Pollution Control Agency. **MPO:** Metropolitan Planning Organization.

MTC: Saint Cloud Metropolitan Transit Commission (Saint Cloud Metro Bus).

MTP: Metropolitan Transportation Plan.

NCB: Northstar Commuter Bus.

NHS: National Highway System.

NHTSA: National Highway Traffic Safety Administration

NPMRDS: National Performance Management Research Data Set.

NTD: National Transit Database.

PBP: Performance-Based Planning.

SEP: Stakeholder Engagement Plan.

SGR: State of Good Repair.

SOV: Single-Occupancy Vehicle.

STC: Saint Cloud Regional Airport

STIP: Statewide Transportation Improvement Program.

TAC: Saint Cloud APO's Technical Advisory Committee.

TERM: Transit Economic Requirements Model.

TH: Trunk Highway.

TIP: Transportation Improvement Program.

TPMR: Transportation Performance Management Report.

Tri-CAP: Tri-County Action Program.

TSM: Transportation System Management.

TTTR: Truck Travel Time Reliability.

VMT: Vehicle Miles Traveled.

APO Planning Area



The Saint Cloud Area Planning Organization (APO) is an independent, regional body responsible for transportation planning for the Saint Cloud metropolitan area. The APO serves as the region's Metropolitan Planning Organization (MPO) - an organizational body created under the Federal Aid Highway Acts of 1962 and 1973 designed in part to coordinate transportation planning efforts for urban areas with a population of at least 50,000. MPOs, like the APO, assist local officials in collaboratively deciding how federal transportation funds will be allocated within the planning area.

The APO Urbanized Area is designated by the U.S. Census Bureau every census year. Criteria for defining this area includes population density and density of development. The APO approves a 20-year planning boundary that not only includes the Censusdefined Urbanized Area, but also considers expected urbanized growth within that time period.

The APO is comprised of member jurisdictions: Stearns County, Benton County, Sherburne County, City of Saint Cloud, City of Sartell, City of Sauk Rapids, City of Waite Park, City of Saint Joseph, LeSauk Township and Saint Cloud Metropolitan Transit Commission (MTC). The cities of Rockville, Saint Stephen, and Saint Augusta, along with Brockway Township, Haven Township, Minden Township, Sauk Rapids Township, Saint Wendel Township, Saint Joseph Township, and Watab Township are located within the designated APO planning boundary but are not formal member agencies. Instead they are represented through their respective counties. The APO works cooperatively with MnDOT in planning related activities in the region.

1966

Year the APO was incorporated.

135,441

Estimated population in the Saint Cloud APO planning area in 2018.

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey 5-Year 5 Estimates 5

Performance Measures

The APO and Performance Measures

This Transportation Performance Monitoring Report (TPMR) includes a set of performance measures that will track the regions progress towards achievement of transportation goals. Performance measures are designed to serve as a benchmark to evaluate and quantify progress. This performance-based approach is meant to improve accountability of Federal transportation investments, assess risks related to different performance levels, and increase transparency. This progress report serves as an annual snapshot of the region to help the APO and its planning partners better understand current and anticipated performance of the transportation system and how well it is moving towards achieving the goals stated in the APO's Metropolitan Transportation Plan (MTP).

The APO approved its 2045 MTP in October 2019. During that process, staff incorporated federally mandated performance measures into the MTP including but not limited to, those found within this report. In addition, APO staff have been working to develop a variety of other performance measures to assist in future planning and project implementation. It is the goal of the APO that these performance measures identified in the MTP will help further align current and future projects with the overall goals and objectives established in the MTP.

Based on the Transportation Performance Management (<u>TPM</u>) assessment tool, the APO is currently working towards a maturity level two, the developing phase. Work is underway to strengthen transportation performance management in the APO. A transportation performance management framework is being defined to provide alignment across the organization and across different planning and programming functions. Modifications to data collection and management processes and analysis tools are being planned in order to better support the performance framework. Organizational roles are being defined and a strategy for training and workforce development in support of transportation performance management is being developed.

Strategic Direction

•The APO is developing a collaborative process to set goals and objectives with linkages between agency functions and broader societal concerns still being clarified.

Target Setting

•The APO is collaboratively developing a methodology to understand baselines and set targets within agreed-upon

Performance-Based Planning

•The APO is defining a data-driven process for understanding current and future performance to identify and develop strategies.

Performance-Based Programming

•The APO is developing a performance-based programming methodology and process that will: enable project selection to reflect agency goals; determine priorities in planning documents; and identify funding constraints, risk factors,

Monitoring and Adjustment

•The APO is developing a plan for system and program/ project monitoring tied to its strategic direction. This will include: a definition of output, outcome measures, frequency of data collection, external influencing factors and users.

Reporting and Communication

•The APO is defining requirements for internal reports to ensure consistency, alignment with strategic direction, and provision of actionable information.

Performance Measures

What are Performance Measures?

Performance measures are indicators of progress toward attaining a goal, objective, or target (a desired level of future performance).

What is Transportation Performance Management?

Transportation Performance Management (TPM) is a strategic approach that uses system information such as performance measures to assist policy decisions in order to achieve performance goals.

What is Performance-Based Planning?

Performance-Based Planning (PBP) is the use of agency goals, objectives, and performance trends to drive the development of strategies and priorities in long-range planning documents like the MTP. The resulting documents such as the short-term transportation programming document, the Transportation Improvement Program (TIP) have become the blueprint for how an agency intends to achieve its desired performance outcomes.

How does the APO use performance measures?

Because the APO's transportation system improvement needs exceed available funding, resources are invested in the most strategic, effective, and efficient ways possible. Performance measures provide useful "feedback" and are integrated into the APO's planning practice on three levels as indicated in the adjacent graphic.



Strategic Level

Performance measures help to establish and inform goals, objectives, and strategies as well as to monitor the APO's mission attainment. Performance measures also communicate progress toward achieving goals in transportation plans and programs such as the MTP and TIP.

Decision Making Level Performance measures are used to inform and assess the financial policies for allocating funds among programs such as highway preservation, system expansion, public transportation, multimodal trails, etc. These programs are defined in the TIP. Decision makers also consider various trends impacting transportation system

Project Delivery Level After projects are selected, performance measures help to monitor the efficiency and effectiveness of projects and services. Performance measures also support organizational and operational

Performance Measures

Why does the APO use Performance Measures?

- To assess how well the APO's multimodal transportation system is functioning—including feedback from and collaboration with key stakeholder organizations.
- To provide information to support and inform decision-making.
- To assess how effectively and efficiently transportation programs, projects, and services are being delivered.
- To demonstrate transparency and accountability to the APO's citizens and to foster collaboration between member jurisdictions transportation system stakeholders.

Why set targets?

Federal regulations require the APO to either 1) Support MnDOT's performance targets for each performance measure, or 2) Set its own regional target(s). The APO has decided to set its own targets for each of the performance measures.

Overall, the targets established by MnDOT have been determined to be of limited value to the APO, especially when compared with the existing conditions and priorities of the APO. Therefore, by adopting differing targets from the state, the APO can focus on localized issues within its region and target funding that will work toward the goals of the APO as established within its MTP.

Who sets the targets?

APO staff along with planning partners, the APO's Technical Advisory Committee (TAC), the APO's Policy Board and Metropolitan Transit Commission (MTC) have collaborated to establish these targets.

What are the desired characteristics of performance measures?

- *Measureable with available tools/data*—May require or minimal additional cost for data collection.
- *Forecastable*—Enables data-driven target setting based on future conditions.
- *Clear to the public and policymakers*—Allows performance storytelling to citizens and policymakers.
- Agency has influence over results—Measure agency activities rather than impact of external factors.



Federal Performance Measures.

The Moving Ahead for Progress in the 21st Century Act (MAP-21), signed into law in 2012, included several provisions that collectively are transforming the Federal surface transportation program to be focused on the achievement of performance outcomes.

The Fixing America's Surface Transportation (FAST) Act, signed in 2015, built on the MAP-21 changes and provided long-term funding certainty for surface transportation infrastructure planning and investment.

The graphic below contains the list of Federally required performance measures:

The first federally required performance period began Jan. 1, 2018, and ends on Dec. 31, 2021. Exceptions to this timeframe include roadway safety, transit management, and state of good repair which have an annual calendar year reporting period.

Targets established should be reasonable and based on the analysis of trends and projections of future efforts. These efforts include projects identified in the TIP, MTP, and general maintenance of existing infrastructure completed by the counties, municipalities, and townships in the APO planning area. Targets established in accordance with Federal Highway Administrations (FHWA) performance measures rules should be considered as interim condition/performance levels that lead toward the accomplishment of longer-term performance expectations in state department of transportations (DOT) and MPOs' transportation plans.

Roadway Safety	Roadway Accessibility, Mobility, and Connectivity	Roadway Management and Preservation	Roadway Metropolitan Vitality and Economic Development
 Number of fatalities. Rate of fatalities. Number of serious injuries. Rate of serious injuries. Number of non- motorized fatalities and serious injuries. Transit Safety. 	 Annual percent of person -miles traveled on the Interstate and non- Interstate National Highway System that are reliable. State of Good Repair for equipment, facilities, and rolling stock. Transit Economic Requirements Model (TERM) scale for transit. 	 Interstate system pavement conditions. Non-Interstate NHS pavement conditions. Bridge conditions. Transit Mechanical Failures. 	 Truck Travel Time Reliability Index.

Develop and maintain a transportation system that is safe for all users.



Photos courtesy of APO

Saint Cloud APO Transportation Results Scorecard

to the tenth decimal place.

Measure	2018 Target	2018 Result	Multi-Year Trend	Analysis
Number of Crashes: Total number of crashes that occurred on roadways within the MPA.	Performance Indicator	2,842	2,472 2,209 3,064 2,773 2,842 2014 2015 2016 2017 2018	The total number of crashes in 2018 was at 2,842. This is a 2.5% increase from 2,773 in 2017 or an increase of 69 crashes. There was a 7.3% decrease in 2018 from the five-year high of 3,064 in 2016. The APO desires the total number of crashes to decrease.
Rate of Crashes: Number of crashes that occurred on roadways within the MPA per 100 million vehicle miles traveled (VMT).	Performance Indicator	201.704	228.513 201.186 230.844 201.704 2014 2015 2016 2017 2018	The total crash rate in 2018 was at 201.704. This is a 23.8% decrease from the five-year high of 264.745 in 2016. The APO desires the total crash rate to decrease.
Number of Fatalities: Number of fatalities for each of the most recent five consecutive years ending in the year for which the targets are established.	Performance Indicator	9	13 8 9 6 7 8 9 2014 2015 2016 2017 2018	Nine fatalities were reported in 2018, an increase of one from 2017. This is a 30.8% decrease from the five-year high of 13 in 2015. The APO desires the number of fatalities to decrease.
Number of Fatalities Five Year Average: Number of fatalities for each of the most recent five consecutive years ending in the year for which the targets are established, dividing by five, and rounding	7.8	8.6	8.6 8.6 8.6 Target 7.8 8.2 8.4 8.6 8.6 7.6 2014 2015 2016 2017 2018	The five year average for fatalities in 2018 was 8.6. This is a 13.2% increase from 2014 and is a five-year high. The APO has set a 2018 target of less than 7.8 fatalities.

Saint Cloud APO Transportation Results Scorecard

Measure	2018 Target	2018 Result	Multi-Year Trend	Analysis
Rate of Fatalities : Calculation of the number of fatalities per 100 million VMT (100M VMT) for each of the most recent five consecutive years ending in the year for which the targets are established, adding the results, dividing by five, and rounding to the thousandth decimal place.	0.598	0.730	0.704 0.756 0.765 0.769 0.730 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td>The five year average fatality rate for 2018 was at 0.730. This is a 5.1% decrease from 2017 and the second lowest rate in five years. The APO set a 2018 fatality rate target of less than 0.598.</td>	The five year average fatality rate for 2018 was at 0.730. This is a 5.1% decrease from 2017 and the second lowest rate in five years. The APO set a 2018 fatality rate target of less than 0.598.

Number of Suspected

Serious Injuries: Addition of the number of suspected serious injuries for each of the most recent five consecutive years ending in the year for which the targets are established.

Performance Indicator

13.9

20

23.0

		36			
			25	_	
15	19			20	
2014	2015	2016	2017	2018	

The number of suspected serious injuries in 2018 was 20. This is a 20.0% decrease from 2017's 25 suspected serious injuries in 2017. This was a 44.4% decrease from the five year high of 36 in 2016. The APO desires the number of suspected serious injuries to decrease.

Number of Suspected Serious Injuries Five Year

Average: Addition of the number of suspected serious injuries for each of the most recent five consecutive years ending in the year for which the targets are established, dividing by five, and rounding to the tenth decimal place.



The five-year average for suspected serious injuries in 2018 was 23.0. This is a 0.6% decrease from the five year high of 23.6 in 2017. The APO has set a 2018 target of less than 13.9 serious injuries.

Saint Cloud APO Transportation Results Scorecard

to the tenth decimal place.



Saint Cloud APO Transportation Results Scorecard

Measure	2018 Target	2018 Result	t Multi-Year Trend		d	Analysis		
Number of Chemical Impairment Crashes: Addition of the number of crashes wherein the driver had been drinking or taking drugs for each of the most recent five consecutive years ending in the year for which the targets are established.	Performance Indicator	87	92 92 2014 2015	2016	90	87 2018	The number of chemical impairment crashes in 2018 was at 87. This is a 3.39 decrease or three less crashes compared to 2017. This was also an 18.7% decrease from the five year high of 107 crashes in 2016. The APO desires the number of chemical impairment crashes to decrease.	ж 1

Percent of Chemical Impairment Crashes:

Addition of the number of chemical impairment crashes divided by the total number of crashes for each of the most recent five consecutive years ending in the year for which the targets are established, expressed as a percent.

Performance Indicator



3.7%	4.2%	2 50/-			
		3.3%	3.2%	3.1%	
					┥
2014	2015	2016	2017	2010	

The percent of chemical impairment crashes in 2018 was 3.1%. This is a 1.1 percentage point decrease from the five year high of 4.2% in 2015. The APO desires the percent of chemical impairment crashes to decrease.

Fatal Chemical Impairment

Crashes: Addition of the number of fatal crashes wherein the driver had been drinking or taking drugs for each of the most recent five consecutive years ending in the year for which the targets are established.





The number of fatal chemical impairment crashes in 2018 was one. In the past five years the fatal chemical impairment crashes have not rose above one. The APO desires fatal chemical impairment crashes to decrease.

Saint Cloud APO Transportation Results Scorecard

Measure	2018 Target	2018 Result	Multi-Year Trend	Analysis
Percent of Fatal Chemical Impairment Crashes: Addition of the number of fatal chemical impairment crashes divided by the total number of crashes for each of the most recent five consecutive years ending in the year for which the targets are established, expressed as a percent.	Performance Indicator	11.1%	16.7% 12.5% 11.1% 0.0% 0.0% 2017 2018	The percent of fatal chemical impairment crashes in 2018 was 11.1%. This is a 5.6 percentage point decrease from the five-year high of 16.7% in 2014. The APO desires the percent of fatal chemical impairment crashes to decrease.
Suspected Serious Injury Chemical Impairment Crashes: Addition of the number of suspected serious injury crashes wherein the driver had been drinking or taking drugs for each of the most recent five consecutive years ending in the year for which the targets are established.	Performance Indicator	6	6 4 3 2014 2015 2016 2017 2018	The number of suspected serious injury chemical impairment crashes in 2018 was six. This is a 20% increase from five crashes in 2017 and is tied with 2014 for a five year high. The APO desires suspected serious injury chemical impairment crashes to decrease.
Percent of Suspected Serious Injury Chemical Impairment Crashes:				The percent of suspected serious injury

Addition of the number of serious injury chemical impairment crashes divided by the total number of crashes for each of the most recent five consecutive years ending in the year for which the targets are established, expressed as a percent.

Performance Indicator

30%



The percent of suspected serious injury chemical impairment crashes in 2018 was 30%. This is a 10 percentage point increase from 20% in 2017. This was a 10 percentage point decrease from the five year high of 40% in 2014. The APO desires the percent of suspected serious injury chemical impairment crashes to decrease.

Saint Cloud APO Transportation Results Scorecard

Measure	2018 Target	2018 Result	Multi-Year Trend	Analysis
Distracted Driving Crashes: Addition of the number of crashes of all types involving distracted driving for each of the most recent five consecutive years ending in the year for which the targets are established.	Performance Indicator	243	419 400 265 241 243 2014 2015 2016 2017 2018	The number of distracted driving crashes in 2018 was 243. This is a 42% decrease from the five-year high of 419 in 2014. The APO desires the number of distracted driving crashes to decrease.

Percent of Distracted



Fatal Distracted Driving

Crashes: Addition of the number of fatal crashes of all types involving distracted driving for each of the most recent five consecutive years ending in the year for which the targets are established.





The number of fatal distracted driving crashes in 2018 was two. The five-year high is two. The APO desires the number of fatal distracted driving crashes to decrease.

Saint Cloud APO Transportation Results Scorecard



Distracted Driving Suspected Serious Injury

Crashes: Addition of the number of suspected serious injury crashes of all types involving distracted driving for each of the most recent five consecutive years ending in the year for which the targets are established.

Performance Indicator

2

10%



The number of distracted driving suspected serious injury crashes in 2018 was two. This is a 50% decrease from the five year high of four in 2015. The APO desires the number of distracted driving suspected serious injury crashes to decrease.

Percent of Distracted Driving Suspected Serious

Injury Crashes: Addition of the number of suspected serious injury crashes of all types involving distracted driving divided by the total number of crashes for each of the most recent five consecutive years ending in the year for which the targets are established, expressed as a percent.

Performance Indicator



The percent of distracted driving suspected serious injury crashes in 2018 was 10%. This is a 11.1 percentage point decrease from the five year high of 21.1% in 2015. The APO desires percent of distracted suspected serious injury crashes to decrease.

Goal 1: Maintain and Enhance Transportation Safety Saint Cloud APO Transportation Results Scorecard 2018 Result **Multi-Year Trend** Analysis Measure Target The total number of reportable FR Number of Fixed Route (FR) fatalities over the past five years have Fatalities: Total number of TBD in 2020 0 been zero. The APO desires the number reportable FR fatalities. of FR fatalities to stay at zero. 0 0 0 0 2014 2015 2016 2017 2018 The FR fate of fatalities over the past five Rate of Fatalities (FR): years have been zero. The APO desires Number of fatalities divided by TBD in 2020 0 total vehicle revenue miles. the rate of FR fatalities to stay at zero. 0 0 n 0 n 2018 2014 2015 2016 2017 The total number of reportable FR injuries was five in 2018. This is a 66.7% Number of FR Injuries: 5

Total number of reportable FR TBD in 2020 injuries.



increase from three injuries in 2017. The APO desires the number of FR injuries to decrease.

Rate of Injuries (FR):

Number of injuries divided by total vehicle revenue miles. TBD in 2020 Numbers are in the ten thousandths place 0.039 = 0.0000039



0.039

The rate of reportable FR injuries was 0.039 in 2018. This is a 69.6% increase from 0.023 in 2017. The APO desires the rate of FR injuries to decrease.

Saint Cloud APO Transportation Results Scorecard

Measure	Target	2018 Result	Multi-Year Trend	Analysis
Number of FR Safety Events: Total number of reportable FR safety events.	TBD in 2020	5	5 4 3 2014 2015 2016 2017 2018	The total number of safety events was five in 2018. This is a 66.7% increase from three safety events in 2017. The APO desires the number of FR safety events to decrease.
Safety Event Rate (FR): Rate of FR safety events divided by total vehicle revenue miles. Numbers are in the ten thousandths place 0.039=0.0000039	TBD in 2020	0.039	0.041 0.033 0.023 0.023 0.023 0.023 0.023 0.023 0.023	The rate of reportable rate of FR safety events was 0.039 in 2018. This is a 69.6% increase from 0.023 in 2017. The APO desires the rate of FR safety events to decrease.
Number of Dial-a-Ride (DAR) Fatalities: Total number of reportable DAR fatalities.	TBD in 2020	0	0 0 0 0 0 2014 2015 2016 2017 2018	The total number of reportable DAR fatalities over the past five years have been zero. The APO desires the number of DAR fatalities to stay at zero.
Fatality Rate (DAR): Number of fatalities divided by total vehicle revenue miles.	TBD in 2020	0	0 0 0 0 0	The DAR fate of fatalities over the past five years have been zero. The APO desires the rate of DAR fatalities to stay at zero.

2014 2015 2016 2017 2018

Measure	Target	2018 Result	Multi-Year Trend	Analysis
Number of DAR Injuries: Total number of reportable DAR injuries.	TBD in 2020	4	3 2 1 2014 2015 2016 2017 2018	There were four reportable DAR injuries in 2018. This is a 300% increase from one in 2017. The APO desires the number of DAR injuries to decrease.
Rate of Injury (DAR): Number of injuries divided by total vehicle revenue miles. Numbers are in the ten thousandths place 0.067=0.0000067	TBD in 2020	0.067	0.056 0.035 0.017 2014 2015 2016 2017 2018	The rate of reportable DAR injuries increased 294.1% from 0.017 in 2017 to 0.067 in 2018. The year 2018 marks a five year high. The APO desires the rate of DAR injuries to decrease.
Number of DAR Safety Events: Total number of reportable DAR safety events.	TBD in 2020	4	4 4 2 1 2014 2015 2016 2017 2018	The total number of reportable DAR safety events was at four in 2018. This is a 300% increase from one in 2017. The APO desires the number of DAR safety events to decrease.
Safety Event Rate (DAR): Rate of DAR safety events divided by total vehicle revenue miles. Numbers are in the ten thousandths place 0.067=0.0000067	TBD in 2020	0.067	0.074 0.035 0.017 2014 2015 2016 2017 2018	The rate of reportable DAR safety events increased 294.1% from 0.017 in 2017 to 0.067 in 2018. The APO desires the rate of DAR safety events to decrease.

Saint Cloud APO Transportation Results Scorecard

Measure	Target	2018 Result	Multi-Year Trend	Analysis
Number of Northstar Commuter Bus (NCB) Fatalities: Total number of reportable NCB fatalities.	TBD in 2020	0	0 0 0 0 0 2014 2015 2016 2017 201	The total number of reportable NCB fatalities over the past five years have been zero. The APO desires the number of NCB fatalities to stay at zero.
Rate of Fatalities (NCB): Number of fatalities divided by total vehicle revenue miles.	TBD in 2020	0	000000 2014 2015 2016 2017 201	The NCB fate of fatalities over the past five years have been zero. The APO desires the NCB rate of fatalities to stay at zero.
Number of NCB Injuries: Total number of reportable NCB injuries.	TBD in 2020	1	2 0 0 0 2014 2015 2016 2017 201	The total number of reportable NCB injuries was at one in 2018. This is a 50% decrease from the five year high of two injuries in 2015. The APO desires the number of NCB injuries to decrease.
Rate of Injuries (NCB):			0.115	The rate of reportable NCB injuries was at

Number of injuries divided by
total vehicle revenue miles.
Numbers are in the tenTBD in 20200.0580.058=0.00000580.0580.0580.058



Desired Trend

The rate of reportable NCB injuries was at 0.058 in 2018. This is a 49.6% decrease from the five year high of 0.115 in 2015. The APO desires the rate of NCB injury rate to decrease.

Saint Cloud APO Transportation Results Scorecard

Measure	Target	2018 Result	Multi-Year Trend	Analysis
Number of NCB Safety Events: Total number of reportable NCB safety events.	TBD in 2020	1	2 1 0 0 0 2014 2015 2016 2017 2018	There was one reportable safety event in 2018. This is a 50% decrease from the five year high of two safety events in 2015. The APO desires the number of NCB safety events to decrease.
Safety Event Rate (NCB): Rate of NCB safety events divided by total vehicle revenue miles. Numbers are in	TBD in 2020	0.058	0.115 0.058	The rate of reportable NCB safety events was at 0.058 in 2018. This is a 49.6% decrease from the five year high of 0.115 in 2015. The APO desires the NCB safety

0.000

2014

2015

0.000

2016

0.000

2017

2018

divided by total vehicle TBD in 2020 0.058 revenue miles. Numbers are in the ten thousandths place 0.058=0.0000058

decrease from the five year high of 0.115 in 2015. The APO desires the NCB safety events to decrease.

Fatality and Rate of Fatalities

Fatalities are calculated for the most recent five consecutive years and rate of fatalities is the number of fatalities per 100 million VMT for each of the most recent five consecutive years



Fatal Crashes

Displayed in Figure 1.1 are traffic fatalities and their locations within the APO planning area from 2014 to 2018. The majority of these crashes occurred on the National Highway System (NHS), which typically has a higher annual average daily traffic (AADT). There are no high concentrations of fatalities at any one intersection, but a couple of areas contain crashes within close proximity. Around the US 10 and MN 23 interchange there have been three fatalities within a quarter mile and near the MN 15 bridge in Sartell/Sauk Rapids, there were four fatalities in 2016.

Seriousness of Crash	
Fatal crash	Any crash in which a death has occurred as a result of the crash.
Suspected Serious Injury	Includes injuries serious enough to prevent normal activity for at least one day, such as massive blood loss, broken bones, etc.
Suspected Minor Injury	Injuries that are evident at the scene, but not serious enough to prevent normal activity, such as cuts, bruises, limping, etc.
Possible injury	Non-visible injuries but there are complaints of pain or momentary unconsciousness, such as headaches, etc.
Property Damage	No injuries as a result of the crash.

Suspected Serious Injuries and Rate of Suspected Serious Injuries

Suspected serious injuries are calculated for the most recent five consecutive years and rate of suspected serious injuries are the number of suspected serious injuries per 100 million VMT for each of the most recent five consecutive years



Suspected Serious Injury Crashes

Figure 1.2 illustrates suspected serious injury crashes and their locations within the APO planning area from 2014 to 2018. The four highest crash types for the region are right angle, other, head-on, and run-off-road-right side. The four highest crash locations are at intersections, four legged intersections, T-intersections, and intersection-related. There is a higher concertation of crashes occurring near MN 23/Division Street in Saint Cloud and in the City of Saint Cloud in general.

The average cost per crash was developed in 2018 by U.S. Department of Transportation on a per crash basis for use in calculating benefit/cost comparisons. The costs include economic cost factors and a measure of the value of lost quality of life that society is willing to pay to prevent deaths and injuries associated with motor vehicle crashes. Costs reflect US DOT procedures contained in <u>Benefit-Cost Analysis Guidance for Discretionary</u> <u>Grant Programs.</u>

Average Cost Per Crash	(2017 Dollars)
Fatal	\$9,600,000
Suspected Serious Injury	\$459,100
Suspected Minor Injury	\$125,000
Possible Injury	\$63,900
Property Damage	\$4,300

Non-Motorized Fatalities and Suspected Serious Injuries

The number of non-motorized fatalities and non-motorized suspected serious injuries for each of the most recent five consecutive years



Non-Motorized Fatalities and Suspected Serious Injury Crashes

Figure 1.3 illustrates non-motorized fatalities and suspected serious injury crashes and their locations within the APO planning area from 2014-2018. The majority of the crashes occurred within the City of Saint Cloud, in part because it is the most populated and urban walkable area in the region.

Accident Type for All Non-Motorized Crashes

- ◊ Right Angle: 48.6%.
- ♦ Other: *17.9%.*
- Head-On: *9.1%.*
- ♦ Right Turn: 6.4%.
- Left Turn: 5.9%.

Location of All Non-Motorized Crashes

- Not at Intersection: 21.8%.
- 4-Legged Intersection: 41.3%.
- **T-Intersection:** *19.2%.*
- **Intersection-Related:** 8.41%.
- Alley or Driveway: 5.5%.

Chemical Impairment Crashes

The number of crashes wherein the driver had been drinking or taking drugs



Chemical Impairment Crashes

Figure 1.4 displays the locations where chemical impairment crashes occurred in the Saint Cloud planning area from 2014 to 2018. In the five year timeframe, there were 468 chemically impaired crashes which averages to 93.6 crashes per year. Chemical impairment crashes contributed to 30% of the total suspected serious injury crashes in 2018 and 3% of all crashes. There were many outliers but the majority of crashes are clustered in the Saint Cloud core metropolitan area.

Why Driving After Drinking is Dangerous.

"Driving after drinking is deadly. Yet it still continues to happen across the United States. If you drive while impaired, you could get arrested, or worse—be involved in a traffic crash that causes serious injury or death."

"Approximately one-third of all traffic crash fatalities in the United States involve drunk drivers (with blood alcohol concentrations [BACs] of .08 of higher). In 2016, there were 10,497 people killed in these preventable crashes. In fact, on average over the 10-year period from 2006-2016, more than 10,000 people died every year in drunk-driving crashes."

"In every state, it is illegal to drive with a BAC of .08 or higher, yet one person was killed in a drunk-driving crash every 50 minutes in the United States in 2016."

Distracted Crashes

Number of crashes involving distracted driving



Distracted Driving Crashes

Shown in Figure 1.5 there were 1,568 distracted driving crashes between 2014 and 2018 with a five-year average of 313.6. The way they define distracted driving changed in 2016 which reflects why the data went down. The majority of crashes occurred in the core region of the metropolitan area. Though it is hard to design infrastructure which limits distracted driving, as of Aug 1, 2019, Minnesota's "No Texting while Driving" law went into effect. It is now illegal for drivers to read/compose/ send text messages and emails, or access the Internet using a wireless device while the vehicle is in motion or a part of traffic — including stopped in traffic or at a traffic light

What Is Distracted Driving?

"Distracted driving is any activity that diverts attention from driving, including talking or texting on your phone, eating and drinking, talking to people in your vehicle, fiddling with the stereo, entertainment or navigation system—anything that takes your attention away from the task of safe driving."

"Texting is the most alarming distraction. Sending or reading a text takes your eyes off the road for five seconds. At 55 mph, that's like driving the length of an entire football field with your eyes closed."

"You cannot drive safely unless the task of driving has your full attention. Any non-driving activity you engage in is a potential distraction and increases your risk of crashing."

Increase the accessibility and mobility options for people and freight across and between all modes for all users



Photo courtesy of Saint Cloud Metropolitan Transit Commission (MTC) and the APO.

Measure	2021 Target	2018 Result	Multi-Year Trend	Analysis
Non-Interstate NHS Reliability: Annual percent of person-miles traveled that are reliable.	90%	97.4%	Target 90% 97.3% 97.4% Pure pure pure pure pure pure pure pure p	Non-Interstate NHS reliability has increased by 0.1 percentage points, from 97.3% in 2017 to a five year high of 97.4% in 2018. The APO has set a 2021 target of at least 90% reliability.
Interstate Reliability: Annual percent of person- miles traveled that are reliable.	100%	100%	Target 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100%<	The Interstate has maintained a 100% reliability rating since 2014. The APO has set a 2021 target of at least 100% reliability.
Vehicle Miles Traveled (VMT): Number of miles traveled by motor vehicle expressed in billions.	Performance Indicator	1.408 Billion	1.081 1.097 1.157 1.201 1.408 2014 2015 2016 2017 2018	VMT has increased 30.3% from 1.081 billion miles in 2014 to a five year high of 1.408 billion miles in 2018. The APO does not have a set target.
VMT Per Capita: Number of miles traveled by motor vehicle divided by population.	Performance Indicator	10,520	8,246 8,339 8,710 8,969 10,520 2014 2015 2016 2017 2018	VMT per capita has increased 17.3% from 8,969 in 2017 to a five year high of 10,520 in 2018. The APO does not have a set target but desires VMT per capita to decrease.

Measure	Target	2018 Results	Multi-Year Trend	Analysis
Number of Annual Fixed Route (FR) Transit Riders: Annual number of transit riders by FR.	Performance Indicator	1.62 Million	2.15 2.04 1.94 1.75 1.62 pegggggggggggggggggggggggggggggggggggg	The number of annual FR transit riders have decreased by 24.4% since 2014 to a five-year low of 1.62 million riders in 2018. The APO desires the number of fixed route transit riders to increase.
Total Revenue Miles (FR): Annual number of revenue miles served by FR.	Performance Indicator	1.28 Million	1.23 1.23 1.23 1.21 2015 2016 2017 2018	Total FR revenue miles have decreased by 1.4% from the five year high of 1.30 million in 2017 to 1.28 million in 2018. The APO does not have a set target.
Passengers Per Revenue Mile (FR): The number of passengers divided by the number of miles traveled by FR.	Performance Indicator	1.26	1.77 1.66 1.57 1.35 1.26 2014 2015 2016 2017 2018	FR passengers per revenue mile has decreased by 6.7% from 2017 with 2018 being a five-year low of 1.26. The APO desires FR passengers per revenue mile to increase.
Total Revenue Hours (FR): Annual number of revenue hours served by FR.	Performance Indicator	96,058	86,129 86,982 88,011 97,698 96,058 2014 2015 2016 2017 2018	FR total revenue hours have decreased by 1.7% since the five year high of 97,698 hours in 2017. The APO does not have a set target.
Passengers Per Revenue Hour (FR): The number of passengers divided by the number of hours traveled by FR.	Performance Indicator	16.9	24.93 23.47 22.04 18.0 16.9 16.9 2014 2015 2016 2017 2018	FR passengers per revenue hour has decreased by 6.1% since 2017 to a five- year low of 16.9 in 2018. The APO desires FR passengers per revenue hour to increase.

Measure	Target	2018 Results	Multi-Year Trend	Analysis
Number of Annual Dial-a- Ride (DAR) Transit Riders: Annual number of transit riders by DAR.	Performance Indicator	139,399	133,303 139,414 136,422 139,399 128,087 2015 2016 2017 2018	The number of annual DAR transit riders have increased by 2.2% from 2017, and by 8.8% since 2014 to 139,399 transit riders in 2018. The APO desires the number of DAR transit riders to increase.
Total Revenue Miles (DAR): Annual number of revenue miles served by DAR.	Performance Indicator	598,096	509,876 538,194 572,903 572,227 598,096 2014 2015 2016 2017 2018	Total revenue DAR miles have increased by 4.5% since 2017, and by 17.3% since 2014 to 598,096 total revenue miles in 2018. The APO does not have a set target.
Passengers Per Revenue Mile (DAR): The number of passengers divided by the number of miles traveled by DAR.	Performance Indicator	0.23	0.25 0.25 0.24 0.24 0.24 0.23 2014 2015 2016 2017 2018	DAR passengers per revenue mile have decreased by 4.2% since 2017, and by 8% since 2014 to 0.23 passengers per revenue mile in 2018. The APO desires DAR passengers per revenue mile to increase.
Total Revenue Hours (DAR): Annual number of revenue hours served by DAR.	Performance Indicator	47,167	43,469 44,278 44,827 47,167 40,933 2015 2016 2017 2018	Total revenue DAR hours have increased by 5.2% in 2017, and by 15.2% since 2014 to 44,278 revenue hours in 2018. The APO does not have a set target.
Passengers Per Revenue Hour (DAR): The number of passengers divided by the number of hours traveled by DAR.	Performance Indicator	2.96	3.13 3.15 3.04 2.96 2014 2015 2016 2017 2018	DAR passengers per revenue hour have decreased 2.6% since 2017, to 2.96 passengers per revenue hour. The APO desires DAR passengers per revenue hour to increase.

Measure	Target	2018 Results	Multi-Year Trend	Analysis
Number of Annual Northstar Commuter Bus (NCB) Transit Riders: Annual number of transit riders on NCB.	Performance Indicator	47,570	59,225 57,642 51,569 50,305 47,570 Purpose 2014 2015 2016 2017 2018	Annual NCB transit riders have decreased by 5.4% since 2017. Ridership decreased by 19.7% from the five year high of 59,225 riders in 2014 to 47,570 riders in 2018. The APO desires the NCB transit riders to increase.
Total Revenue Miles (NCB): Annual number of revenue miles served by NCB.	Performance Indicator	172,753	173,824 174,828 173,886 172,753 151,999 2014 2015 2016 2017 2018	Total revenue miles have decreased by 0.7% since 2017. This is a 1.2% decrease from the five year high of 174,828 revenue miles in 2016. The APO does not have a set target.
Passengers Per Revenue Mile (NCB): The number of passengers divided by the number of miles traveled by NCB.	Performance Indicator	0.28	0.39 0.33 0.29 0.29 0.29 0.28 9019 2014 2015 2016 2017 2018	Passengers per revenue mile have decreased by 3.5% from 2017. This is a 28.2% decrease from the five year high of 0.39 passenger per revenue mile in 2014. The APO desires NCB passengers per revenue mile to increase.
Total Revenue Hours (NCB): Annual number of revenue hours served by NCB.	Performance Indicator	5,832	5,868 5,900 5,867 5,832 5,110 2014 2015 2016 2017 2018	Total revenue hours have decreased by 0.6% since 2017. This is a 1.2% decrease from the five year high of 5,900 revenue hours in 2016. The APO does not have a set target.
Passengers Per Revenue Hour (NCB): The number of passengers divided by the number of hours traveled by NCB.	Performance Indicator	8.16	11.59 9.82 8.74 8.57 8.16 Puilting 2014 2015 2016 2017 2018	Passenger per revenue hour have decreased by 4.8% from 2017. This is a 29.6% decrease from the five year high of 11.59 in 2014. The APO desires NCB passengers per revenue hour to increase.

Saint Cloud APO Transportation Results Scorecard

Measure	Target	2018 Result	Multi-Year Trend	Analysis
Travel Time to Work: Time it takes to travel from residence to place of employment.	Performance Indicator	See Graph	25.0% 20.0% 15.0% 10.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.	The 10 to 14 minute time range of travel time to work had the largest percent at 23.2% in 2018. The 5 to 24 minute time range accounts for 74.9% of the travel time to work. The APO does not have a set target.
Percent of Single			81.0%	The percent of SOV travel in 2018 was

Occupancy Vehicle (SOV) Travel: Percent of travel alone in a motorized vehicle. Performance Indicator

81%



The percent of SOV travel in 2018 was 81%. This is one percentage point increase from 80 percent in 2017. The APO desires SOV travel to decrease.

Level of Travel Time Reliability

Annual percent of person-miles traveled on the Interstate and non-Interstate National Highway System (NHS) that are reliable



Level of Time Travel Reliability

Time travel reliability ratings consider the average amount of time it would take for a vehicle to travel at the 50th percentile speed or average on a stretch of roadway. For example, if a one mile stretch of roadway with a 60mph average speed has a time travel reliability rating of 1.5 it would take the average vehicle 1 minute 30 seconds to travel that roadway when normally it would take 1 minute. A time travel reliability rating above 1.5 is deemed unreliable by Federal Highway Administration (FHWA) standards.

The areas within the APO planning boundaries which experience unreliable travel time above 1.5 are both directions of MN 15 between the stoplights of HWY 23/Division Street, eastbound CSAH 75 from 10th Avenue S to MN 15 in Waite Park and northbound US 10 from the MN 23 exit north to the Benton Drive South exit.

- ⇒ Level of Travel Time Reliability (LOTTR) is defined as the ratio of the 80th percentile travel time of a reporting segment to a "normal" travel time (50th percentile), using data from FHWA's National Performance Management Research Data Set (NPMRDS).
- ⇒ INRIX was selected by FHWA to collect Global Positioning System (GPS) probe data from a wide array of commercial vehicle fleets, connected cars, and mobile apps to produce the NPMRDS travel time data.
- $\Rightarrow\,$ Data is collected in 15-minute segments for the following time periods:
 - ♦ 6 10 a.m. weekdays
 - ♦ 10 a.m. 4 p.m. weekdays
 - ♦ **4 8 p.m.** weekdays
 - ♦ 6 a.m. 8. p.m. weekends

Data Source: NPMRDS.

Vehicle Miles Traveled

Vehicle Miles Traveled (VMT) is a measure of all the miles driven



Interstate 94 in Saint Cloud. Photo courtesy of the APO.

What is VMT?

VMT is a measure of all the miles driven within an area within a specified period. VMT can be influenced by a multitude of factors including population growth, the health of the economy, fuel and parking costs, accessibility of public transit and other transportation alternatives, weather, mix of land uses, and more.

What Do Changes in VMT Mean?

VMT reflects the extent of motor vehicle operation on roadways. Increase in VMT typically correlates to a region's growth in population and economic development. However, increases in VMT also contribute to traffic congestion and air pollution. Since regional population is growing and the APO cannot feasibly reduce absolute VMT, it is important to target per capita VMT. Reductions in VMT per capita will improve air quality and congestion on the transportation system.

Municipality	Annual Vehicle Miles Traveled (2017)	Annual Vehicle Miles Traveled (2018)	Percent Change (2017- 2018)
Saint Cloud	559,221,371	560,856,605	0.29%
Waite Park	82,694,939	83,768,888	1.28%
Sartell	76,303,468	78,290,580	2.54%
Sauk Rapids	59,731,802	60,530,578	1.32%
Rockville	58,280,880	58,492,469	0.36%
Saint Augusta	64,821,651	63,736,717	-1.70%
Saint Joseph	31,619,640	32,089,659	1.46%
Saint Stephen	3,789,187	3,789,150	0.00%

Data Source: MnDOT.

VMT Travel by Municipality

Sartell had the largest growth in VMT compared to other municipalities. This is most likely due to larger population growth within Sartell. Many other municipalities experienced VMT growth with the exception of Saint Augusta which saw a slight decline.

Strategies to Lower VMT:

- Complete Streets.
- Encourage and promote biking and walking.
- Expand public transportation.
- High-occupancy vehicle lanes.
- Promote connectivity.
- Ride-sharing programs.
- Safe Routes to School.
- Traffic calming.

Average Work Trip Travel Time

Average travel time it takes an employee to travel between their residence and place of employment

Travel Time to Work

Within the APO region in 2018, 82.8% of workers 16 years and older who did not work from home had a commute time of 30 minutes or less as depicted in figure 2.2 The travel time with the highest percent is the 10 to 14 minute range at 23.2%. The travel time to work percent experiences a sharp decline at the 25 to 29 minute interval. Only 17.2% of workers have a travel time of 30 minutes or longer. Comparing travel time to work from 2010 to 2018 shows little change.

According to the Centers for Disease Control and Prevention (CDC), an estimated one in three adults and almost 17% of young people in this country are obese. Because the transportation system helps shape how communities are designed and operate, it can have a profound influence.

The benefits of physical activity are well known: Exercise, including "active transportation" activities like walking and bicycling, can help prevent weight gain and lower the risks of obesity, diabetes, and heart disease.

Transportation also is a source of pollution, generating air, soil, water, and noise pollutants. Pollutant's include particulate matter, carbon monoxide, nitrogen oxide, and carcinogens. Reports by the American Public Health Association and others have linked air pollution to negative health outcomes, including asthma, respiratory illness, heart disease, poor birth outcomes, cancer, and premature death.



Figure 2.2-Travel Time to Wrok Data Source: U.S. Census Bureau, 2010-2014 and 2014-2018 American Community Survey 5-Year Estimates

Region's Top Employers and the Number of Employees

- Saint Cloud Hospital/CentraCare Health 6,334
- State of Minnesota* 1,930
- Saint Cloud VA Health Care System 1,915
- Saint Cloud Area School District 742 1,852
- Coborn's Inc. 1,384
- Pilgrim's 1,250
- Stearns County 955
- College Saint Benedict/Saint John's University 935

*Includes Saint Cloud State University, Saint Cloud Technical and Community College, Saint Cloud Correctional Facility and MnDOT.

Data Source: Saint Cloud Area Chamber of Commerce.

Means of Transportation to Work

Percent of single-occupancy vehicle (SOV) travel



Figure 2.3-Means of Transportation to Work

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates.

Means of Transportation to Work

Depicted in Figure 2.3, of workers 16 years and older 88.5% or 63,315 used a car, truck or van as their means of transportation to work. Of those 88.5%, only 7.5% or 5,349 carpooled.

The next most common forms of work commuting transportation include: working from home at 4.4%, walking at 3.6%, public transportation at 1.9%, bicycling at 0.7%, other means at 0.6%, taxicab at 0.3%, and motorcycle at 0.1%.

Compared with 2010 census data, means of transportation to work by all modes have remained constant within one percentage point of each other.

Figure 2.4-SOV Travel

Data Source: U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates.



SOV Travel

Shown in Figure 2.4, 81% of commuters drove alone to their place of employment, while 19% used other modes. Encouraging alternative means of transportation will not only help the environment, by improving air quality, pollution, and congestion but could potentially be good for personal health by encouraging more walking and bicycling.

Single occupancy vehicle (SOV) vehicle trips are the total number of unique trips made by a single private vehicle, such as an automobile, van, pickup truck, or motorcycle carrying only one person.

Saint Cloud Metropolitan Transit Commission (MTC)

The Saint Cloud Metropolitan Transit Commission (MTC) was created by the Minnesota Legislature in 1969 to operate as a transit commission. The MTC – more commonly known as Saint Cloud Metro Bus or simply "Metro Bus" – is responsible for the daily management, operation, and maintenance of Fixed Route (FR), Dial-a-Ride (DAR), and Commuter Bus (CB) systems. The transit commission provides service for the communities of Saint Cloud, Sartell, Sauk Rapids, and Waite Park.

The Metro Bus FR service operates seven days a week and includes 16 regular public routes as well as three routes servicing Saint Cloud State University (SCSU). The system includes four transit hubs: the Downtown Saint Cloud Transit Center, Crossroads Center mall, the Miller Learning Resources Center at SCSU and Epic Shopping Center in Sartell.

Passengers Per Revenue Mile

* The number of passengers divided by the number of miles traveled by commuter bus, demand response, and fixed route.

Passengers Per Revenue Hour

* The number of passengers divided by the number of hours traveled by commuter bus, demand response, and fixed route.

Number of Annual Transit Riders

* Annual number of transit riders by commuter bus, demand response, and fixed route.

Total Revenue Hours and Revenue Miles

* Annual number of revenue hours and miles served by commuter bus, demand response, and fixed route.

Metro Bus by the numbers:

- \Rightarrow First in the nation to have all fixed bus routes have 100% transit signal priority coverage since 2004.
- \Rightarrow First in the state to open a mobility training center in 2014.
- \Rightarrow First in the state to operate a fleet of compressed natural gas (CNG) fueled buses since 2014.
- \Rightarrow First in the state to operate a CNG fueling station with outside sales since 2014.
- ⇒ First in the state to partner with a state university to subsidize bus rides for students.
- \Rightarrow Seventy-seven percent of daily bus riders, ride five or more days a week.
- \Rightarrow Thirty-one percent of riders have been riding for six or more years.
- \Rightarrow Eighty-four percent of riders don't have a car available to them.

Fixed Route Buses



Photo courtesy of Saint Cloud MTC.

Fixed Route Buses

Fixed route passengers per revenue mile decrease 28.8% from 2014 to 2018. Revenue miles declined by 5.7% in that same timeframe. Passenger per revenue hour decreased 32.2% from 2014 to 2018, while revenue hour decreased 11.5% in that same timeframe. Overall, FR has experienced a 24.4% or 523,831 passenger trips decrease since 2014.

As Metro Bus has added and expanded routes within the metropolitan area, its revenue miles and hours have increased. But, it has not been able to acquire additional ridership. In fact, Metro Bus has lost ridership since 2014. This could be due to many economic factors such as cheaper gas prices or the growth of on-demand shared transportation sources such as Uber and Lyft that have entered the market.

30 \$⁴ Fixed route buses Asset v

\$4,761,347

Asset value of fixed route buses

67

Bus shelters





FIXED ROUTE PASSENGERS PER REVENUE MILE







Data Source: National Transit Database (NTD).

Goal 2: Increase System Accessibility, Mobility, and Connectivity Dial-a-Ride Buses



Photo courtesv of Saint Cloud MTC.

Dial-a-Ride Buses

38

DAR buses

Metro Bus Dial-a-Ride (DAR) is a shared ride service for individuals with disabilities who are unable to ride fixed route buses and require door-to-door driver-assisted service.

DAR passengers per revenue mile decreased 8% from 2014 to 2018, even though revenue miles went up 17.3% in that same timeframe. Passenger per revenue hour decreased 5.4% from 2014 to 2018, while vehicle revenue hour increased 15.2% in that same timeframe. Overall, DAR has experienced a 8.8% increase in passengers trips since 2014 equivalent to an additional 139,399 trips.

One explanation of why revenue miles and hours are increasing while passenger per mile and hour is decreasing is based on the service type. As Metro Bus has expanded its service area to individuals living further out of the metropolitan area, passengers are traveling longer distances to get to their destinations. According to U.S. Census data, there is a large aging population in rural areas. This population is now relying on services such as DAR as their main source of transportation.

\$16,383,870

Asset value of DAR buses

DAR fueled by CNG

81%

DIAL-A-RIDE UNLINKED PASSENGER TRIPS 128,000 126,000

DIAL-A-RIDE VEHICLE & PASSENGER CAR **REVENUE MILES**



DIAL-A-RIDE PASSENGERS PER REVENUE MILE





DIAL-A-RIDE PASSENGERS PER REVENUE HOUR



Data Source: NTD.

Goal 2: Increase System Accessibility, Mobility, and Connectivity Northstar Commuter Buses



Photos courtesy of Saint Cloud MTC and MnDOT.

Northstar Commuter Bus

The Northstar Link provides bus service from the Downtown Transit Center in Saint Cloud, SCSU's Miller Center, and the east Saint Cloud park and ride direct to the Northstar Commuter Rail line station in Big Lake. From there, commuters can ride the rail from Big Lake to downtown Minneapolis. As part of the state's first commuter rail line, the Northstar Link and the Northstar Commuter Rail line offer a fast, reliable, and safe alternative to workday commuters. Northstar Commuter rail and Northstar Link are a service of the counties of Anoka, Hennepin, Sherburne, and Stearns in cooperation with the Metropolitan Council which operates Metro Transit. The bus service is operated by Saint Cloud MTC.

Northstar Commuter Bus (NCB) passengers per revenue mile decreased 28.2% from 2014 to 2018, even though revenue miles went up 13.7% in that same timeframe. Passenger per revenue hour decreased 29.6% from 2014 to 2018, while revenue hour increased 14.1% in that same timeframe. Overall, NCB has experienced a 19.7% decrease in passengers trips since 2014 or a decrease of 11,655 passenger trips.

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Northstar Commuter

Buses

\$3,000,820

Asset Value of Northstar Commuter Buses 787,327

Ridership on the Northstar Commuter Rail in 2018



NORTHSTAR COMMUTER UNLINKED PASSENGER TRIPS



Data Source: NTD.

Develop a transportation system that is cost-feasible, maintains a state of good repair, and satisfies public transportation priorities.



Photos courtesy of MnDOT and APO

Measure	2021 Target	2018 Result	Multi-Year Data	Analysis
	Good > 85%	96.4%	Target 85% 90.3% 96.4% 2017 2018	Interstate pavement in 2018 was rated at 96.3% in good condition. This is a 6.1 percentage point increase from 90.3% in 2017. The APO has set a 2021 target of at least 85% in good condition.
Interstate Pavement Condition: Percent of total lane miles that are rated in good, fair, and poor condition.	Fair < 14%	3.2%	Target 14% 9.7% 3.2% 2017 2018	Interstate pavement in 2018 was rated at 3.2% in fair condition. This is a 6.5 percentage point decrease from 9.7% in 2017. The APO has set a 2021 target of less than 14% in fair condition.
	Poor < 1%	0.4%	Target 1% Put Para 0% 0.4% 2017 2018	Interstate pavement in 2017 was rated at 0.4% in poor condition. This is a 0.4 percentage point increase from zero percent in 2017. The APO has set a 2021 target of less than 1% in poor condition.
	Good > 60%	64.9%	Target 60%	Non-Interstate NHS pavement in 2018 was rated at 64.9% in good condition. This is a 5.9 percentage point increase from 59% in 2017. The APO has set a 2021 target of at least 60% in good condition.
Non-Interstate NHS Pavement Condition: Percent of total lane miles that are rated in good, fair, and poor condition.	Fair < 39%	35.0%	2017 2018 Target 39% 40.8% 35.0% 2017 2018	Non-Interstate NHS pavement in 2018 was rated at 35% in fair condition This is a 5.8 percentage point decrease from 40.8% in 2017. The APO has set a 2021 target of less than 39% in fair condition.
	Poor < 1%	0.1%	Target 1% 0.2% 0.1% 2017 2018	Non-Interstate NHS pavement in 2018 was rated at 0.1% in poor condition. This is a 0.1 percentage point decrease from 0.2% in 2017. The APO has set a 2021 target of less than 1% in poor condition.

Measure	2021 Target	2018 Result	Multi-Year Data	Analysis
National Highway	Good > 60%	66.9%	Targe: 64.5% 64.7% 66.9% 2015 2016 2017 2018	NHS bridge condition in 2018 was rated at 66.9% in good condition. This is a 2.2 percentage point increase from 64.7 in 2017. The APO has set a 2021 target of at least 60% in good condition.
System (NHS) Bridge Condition: Percent of bridges by deck area classified in good, fair, and poor condition.	Fair < 39%	33.1%	Target 39% 30.3% 35.5% 35.3% 33.1% 2015 2016 2017 2018	NHS bridge condition in 2018 was rated at 33.1% in fair condition. This is a 2.2 percentage point decrease from 35.3% in 2017 The APO has set a 2021 target of less than 39% in fair condition.
	Poor < 1%	0%	D.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% <th< td=""><td>There were no NHS bridges rated in poor condition in any of the previous years. The APO has set a 2021 target of less than 1% in poor condition.</td></th<>	There were no NHS bridges rated in poor condition in any of the previous years. The APO has set a 2021 target of less than 1% in poor condition.
	Good - Performance Indicator	73.9%	73.8% 73.9% 2017 2018	Total bridge condition in 2018 was rated at 73.9% in good condition. This is a 0.1 percentage point increase from 73.8% in 2017. The APO does not have a set target.
Condition of All Bridges: Percent of bridges, including NHS bridges by deck area classified in good, fair, and poor condition.	Fair - Performance Indicator	26.1%	25.5% 26.1% 2017 2018	Total bridge condition in 2018 was rated at 26.1% in fair condition. This is a 0.6 percentage point increase from 25.5% in 2017. The APO does not have a set target.
	Poor - Performance Indicator	0%	0.6% 0.0% 2017 2018	Total bridge condition in 2018 was rated at zero percent in poor condition. This is a 0.6 percentage point decrease from 0.6% in 2017. The APO does not have a set target.

Measure	Target	Result	Multi-Year Data	Analysis
Bridge Weight Restrictions: Number and condition of bridges with a capacity rating posting.	Performance Indicator	6	7 6 2017 2018	There was a total of six bridges with weight restrictions in the APO planning area in 2018. One was rated in good condition, five in fair condition, and zero in poor condition. The APO has not set target.
Major Mechanical Failures (FR): Mean distance between major mechanical failures by FR. Numbers are in the ten thousandths place 0.187=0.0000187	TBD in 2020	0.187	0.305 0.138 0.097 2014 2015 2016 2017 2018	The mean distance between major mechanical failures by FR was at 0.187 in 2018. This is a 28.4% decrease from the five year high of 0.305 in 2014. The APO desires the number of FR mechanical failures to decrease.
Major Mechanical Failures (DAR): Mean distance between major mechanical failures by DAR. Numbers are in the ten thousandths place 0.167=0.0000167	TBD in 2020	0.167	0.039 0.037 0.0167 0.140 0.167 0.140 0.167 0.140 0.167 0.140 0.167 0.140 0.167 0.140 0.167 0.140 0.167 0.140 0.167	The mean distance between major mechanical failures by DAR was at 0.167 in 2018, a 19.3% increase and a five-year high. The APO desires the number of DAR mechanical failures to decrease.
Major Mechanical Failures (NCB): Mean distance between major mechanical failures by NCB. Numbers are in the ten thousandths place 0.232=0.0000232	TBD in 2020	0.232	0.748 0.744 0.633 0.232 0.132 2015 2016 2017 2018	The mean distance between major mechanical failures by NCB was at 0.232 in 2018. This is a 63.4% decrease from the 0.633 in 2017. The APO desires the number of NCB mechanical failures to decrease.

Saint Cloud APO Transportation Results Scorecard

Transit State of Good Repair (SGR)

Saint Cloud Metropolitan Transit Commission (MTC) State of Good Repair (SGR): Measured by calculating the percentage of assets that have met or exceeded the useful life benchmark. (2018 data not available to APO staff)



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Saint Cloud APO Transportation Results Scorecard

Transit State of Good Repair (SGR)

Saint Cloud Metropolitan Transit Commission (MTC) State of Good Repair (SGR): Measured by calculating the percentage of assets that have met or exceeded the useful life benchmark. (2018 data not available to APO staff)



2017

2019

Saint Cloud APO Transportation Results Scorecard

Transit State of Good Repair (SGR)

Saint Cloud Metropolitan Transit Commission (MTC) State of Good Repair (SGR): Measured by calculating the percentage of assets that have met or exceeded the useful life benchmark. (2018 data not available to APO staff)



Saint Cloud APO Transportation Results Scorecard

Transit State of Good Repair (SGR)

Saint Cloud Metropolitan Transit Commission (MTC) State of Good Repair (SGR): Measured by calculating the percentage of assets that have met or exceeded the useful life benchmark. (2018 data not available to APO staff)



Interstate and Non-Interstate National Highway System (NHS) Pavement Conditions

Interstate and non-Interstate NHS pavement condition is based on the percent of total lane miles that are rated in good, fair, and poor condition



Photos courtesy of MnDOT.

How is Pavement Condition Calculated?

- Pavement condition is calculated using the International Roughness Index (IRI). IRI is a statistic used to estimate the amount of roughness on a roadway.
- * IRI uses three types of pavement distress as measurements:
 - 1) Cracking.
 - 2) Rutting.
 - 3) Faulting.

Data Collection Method

Pavement data is collected by MnDOT using a Digital Inspection Vehicle (DIV). The vehicle is driven over every mile of NHS annually, in both directions. This vehicle is equipped with two cameras to collect images for the video log. For pavement distress and rutting measurements, a scanning laser and a 3D laser/ camera system are used to produce images of the pavement surface, from which the type, severity, and amount of cracking can be determined. The vehicle is also equipped with laser height sensors that measure the longitudinal pavement profile from which pavement roughness is calculated.

Types of Distress

Example

Cracking – A visible line in the surface of the pavement due to a variety of environmental conditions and vehicle usage.

Rutting - A surface depression located in the wheel path of the travel lane.

Faulting – A difference in elevation between adjacent pavement due to environmental conditions and vehicle usage.

Data and photos courtesy of MnDOT.

Equipment Used

Example

MnDOT currently collects pavement condition data using a Pathway Services, Inc. Digital Inspection Vehicle (DIV).





Data Source: MnDOT.

Pavement Conditions

Pavement condition is based on the percent of total lane miles that are rated in good, fair, and poor condition



Pavement Condition

A majority of pavement within the APO planning area is in good to fair condition as displayed in Figure 3.1. There are roadways in poor condition throughout the planning area which the APO will continue to monitor.

Pavement condition data is used to monitor the performance of the system, to aid in project selection, and to identify future pavement maintenance or rehabilitation needs. An effective pavement preservation program will address pavement while it is still in good condition and before serious damage occurs. By applying a cost-effective treatment at the right time, the pavement can be restored almost to its original condition. The right treatment to the right road at the right time.

International Roughness Index (IRI)

IRI is a mathematical simulation used to estimate the amount of vertical movement a standard vehicle would experience if driven down the road. In the past, MnDOT has taken a rating panel of 30 to 40 people into the field and driven them over hundreds of test sections to get their perception of the smoothness of various pavement sections. Following right behind them was the digital inspection vehicle. This provides them with a direct correlation between the IRI, as measured by the van, and the perceived roughness, as felt by the rating panel.

Data Source: MnDOT.

Bridge Condition

Percent of bridges by deck area classified in good, fair, and poor condition



Photos courtesy of MnDOT.

How is a Condition of a Bridge Calculated?

Bridge condition is calculated using the National Bridge Inventory (NBI) ratings for deck, superstructure, substructure, and culvert that are in good, fair, and poor condition. The percentage of bridges in good or poor condition is based on the total deck area of the bridges, not the raw number of bridges in each category.

Routine Inspection

Regularly scheduled inspections of bridges occur every 24 months and consist of: observations and/or measurements to determine the condition of the bridge, identification of any changes from previously recorded conditions, and ensuring that the structure continues to satisfy service requirements.



Bridge Condition

Percent of bridges by deck area classified in good, fair, and poor condition



Condition of All Bridges

Of the 112 bridges in the APO planning area, 76 are rated in good condition, 36 are in fair condition, with none in poor condition as illustrated in Figure 3.2.

In 2017 there were two bridges within the planning area in poor condition. Bridge 71503 on CSAH 3 (a rural major collector) spanning the Elk River was rated in poor condition in 2017 was replaced in 2019. The existing bridge was replaced having two 12 foot driving lanes and 8-foot shoulders. Bridge 71511 on CSAH 16 (a rural minor collector) spanning the Elk River was rated in poor condition in 2017 but was upgraded to fair condition in 2018.



Sartell bridge rated in fair condition. Photo courtesy of the APO.

Data Source: MnDOT.

Saint Cloud Metropolitan Transit Commission (MTC) state of good repair (SGR)

Facilities are measured on the Transit Economic Requirements Model (TERM) Scale

TERM Rating	Condition	Description
Excellent	4.8-5.0	No visible defects, near-new condition.
Good	4.0-4.7	Some slightly defective or deteriorated components.
Adequate	3.0-3.9	Moderately defective or deteriorated components.
Marginal	2.0-2.9	Defective or deteriorated components in need of replacement.
Poor	1.0-1.9	Seriously damaged components in need of immediate repair.

Factors involved with TERM Scale rating:

Substructure

- Electrical
- Equipment
- Plumbing

Interiors

Shell

- HVAC
- Fire Protection

- Fare Collection
- Site
- Conveyance (Elevators and Escalators)



Transit Economic Requirements Model (TERM) Rating

Operations Facility: Built in 1985, the MTC Operations Facility received a TERM rating of 3. This facility is the headquarters of the Saint Cloud MTC and houses administrative offices, DAR call center, maintenance shop, and vehicle storage.

Transit Center: Located on the corner of Fifth Avenue South and First Street South in downtown Saint Cloud, the MTC Transit Center received a TERM rating of 4. The Transit Center was opened in 1992 and has had renovation and expansion projects in 2010 and 2012 respectively.

The Mobility Training Center: Located at 700 West Saint Germain Street in downtown Saint Cloud, the Mobility Training Center received a TERM rating of 5. It features a simulated street environment for training and assessing an individual's physical and cognitive abilities as they pertain to using public transportation. The Mobility Training Center is also home to the Community Outreach and Travel Training programs.



Photos courtesy of Saint Cloud MTC.

Saint Cloud Metropolitan Transit Commission (MTC) State of Good Repair (SGR) for all assets

SGR is measured by calculating the percentage of assets that have met or exceeded the useful life benchmark

State of Good Repair (SGR)

A capital asset is in a State of Good Repair (SGR) if it meets the following objective standards:

- The capital asset is able to perform its designed function.
- The use of the asset in its current condition does not pose an identified, unacceptable safety risk.
- The life-cycle investment needs of the asset have been met or recovered, including all scheduled maintenance, rehabilitation, and replacements.

Overall in 2019, 63% of Saint Cloud MTC assets are in a SGR. Dial-a-Ride buses and the Northstar Link Commuter bus's were both at 100% in SGR while fixed route buses were at 90%. Other assets which have a high SGR are the Transit Center at 67%, Operations Facility at 78%, Mobility Training Center at 100%, other buildings at 67%, IT equipment (non-rolling stock) at 83%, shelters at 60%, transit signal priority and land both at 100%. Assets with a majority exceeding their useful life are trolleys at 100%, IT equipment (rolling stock) at 66% and furnishings and equipment at 53%.



Metro Bus State of Good Repair

Support the economic vitality of the APO area by enabling global competitiveness, productivity, and efficiency while enhancing travel and tourism.





Photos courtesy of the APO.

Saint Cloud APO Transportation Results Scorecard

Measure	2021 Target	2018 Result	Multi-Year Trend	Analysis
Truck Travel Time Reliability (TTR): Calculated by dividing the ratio of the 95th percentile time by the normal time (50th percentile).	1.24	1.12	Target 1.24 1.30 1.17 1.11 1.11 1.10 2014 2015 2016 2017 2018	Truck Travel Time Reliability (TTR) index has increased by 1.8% in 2018. The APO has set a 2021 target of less than 1.24.
<i>Air Passengers at Saint</i> <i>Cloud Regional Airport</i> <i>(STC):</i> Annual number of customers served.	Performance Indicator	43,743	59,705 41,745 43,743 37,817 33,292 41,745 2015 2014 2015 2016 2017 2018	Air passengers at the STC have increased 4.8% from 41,745 passengers in 2017 to 43,743 passengers in 2018. But the 2018 passenger count has decreased 26.7% from the five year high of 59,705 passengers in 2014. The APO does not have a set target.
Tri-CAP One-Way Public Transit Trips: Annual number of transit trips.	Performance Indicator	128,540	103,240 120,341 121,519 125,721 128,540 103220 2015 2015 2017 2018	Tri-CAP one-way public transit trips increased 2.2% from 125,721 trips in 2017 to 128,540 trips in 2018. This is a five year high and an increase of 24.5% trips from 2014. The APO does not have a set target.

Tri-CAP One-Way Volunteer Driver Trips:

Annual number of transit trips.

Performance Indicator

20,374



Tri-CAP one-way volunteer trips decreased 4.7% from 21,370 trips in 2017 to 20,374 trips in 2018. This is a five year low and a decrease of 43.2% trips from 2014. The APO does not have a set target.

Saint Cloud APO Transportation Results Scorecard

Measure	Target	2018 Result	Multi-Year Trend	Analysis
Amtrak Ridership: Annual passengers using the Saint Cloud Amtrak station.	Performance Indicator	9,566	10,431 9,950 10,325 9,566 2014 2015 2016 2017 2018	Amtrak annual ridership decreased 7.4% from 10,325 passengers in 2017 to 9,566 passengers in 2018. This is a decreased of 29.3% from the five year high of 11,457 passengers in 2016. The APO does not have a set target.



In 2018, the percent of monthly household budgets spent on transportation for one adult and no children is highest in Benton County at 27.6% followed by Central Minnesota at 26.8%, Stearns County at 26%, EDR-7W Central at 25.7%, and Sherburne County at 25.7%. All are above the states 24.4% of one adult, no children household budget spent on transportation.

In 2018, the percent of monthly household budgets spent on transportation for one adult and one child is highest in Benton County at 18.6%, followed by Stearns County at 17.4%, Central Minnesota at 17.2%, EDR-7W Central at 16.6%, and Sherburne County at 16%. All are above the states 14% of one adult, one child household budget spent on transportation.

Percent of Monthly Household Budgets Spent on Transportation (One Working Adult, One Child): Average percent of monthly budget spent on transportation.



See Graph



Saint Cloud APO Transportation Results Scorecard

Measure	Target	Result	Multi-Year Trend	
Percent of Monthly Household Budgets Spent on Transportation (Two Working Adults, One Child): Average percent of monthly budget spent on transportation.	Performance Indicator	See Graph	17.6%15.6%16.4%16.0%16.6%13.7%BentonBentonSherburneCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCountyCount	In 2 hou tran and Cou Min at 1 and are adu

In 2018, the percent of monthly household budgets spent on transportation for two working adults and one child is highest in Benton County at 17.6%, followed by Central Minnesota at 16.6%, Stearns County at 16.4%, EDR-7W Central at 16%, and Sherburne County at 15.6%. All are above the states 13.7% of two adults, one child household budget spent on transportation.

Analysis



In 2018, the percent of monthly household budgets spent on transportation for two working adults and two children is highest in Benton County at 14.5%, followed by Central Minnesota at 13.1%, Stearns County at 13%, EDR-7W Central at 12.5%, and Sherburne County at 12%. All are above the states 10.7 of two adults, two children household budget spent on transportation.

Truck Travel Time Reliability (TTTR) Index

The TTTR Index is generated by dividing the ratio of the 95th percentile time by the normal time (50th percentile)



Interstate Truck Travel Time Reliability

Truck travel time reliability ratings consider the average amount of time it would take for a truck to travel at the 50th percentile speed or average on a stretch of roadway. For example, if a onemile stretch of roadway with a 60mph average speed has a time travel reliability rating of 1.5 it would take the average vehicle 1 minute 30 seconds to travel that roadway when normally it would take 1 minute. A time travel reliability rating above 1.5 is deemed unreliable by Federal Highway Administration (FHWA) standards.

Interstate 94 corridor that passes through the APO boundaries is below the 1.5 threshold. This means the system is operating within normal capacity as shown in Figure 4.1. Currently data consisting of truck travel time reliability is only available for the Interstate.

How is TTTR Measured?

- ⇒ Reporting of freight movement is divided into five periods:
 - ♦ *Morning peak (6-10 a.m.)* weekdays
 - ♦ *Midday (10 a.m.-4 p.m.)* weekdays
 - ♦ *Afternoon peak (4-8 p.m.)* weekdays
 - (6 a.m.-8 p.m.) weekends
 - (8 p.m.-6 a.m.) Overnights for all days
 - The TTTR ratio is generated by dividing the 95th percentile time by the normal time (50th percentile) for each segment. Then, the TTTR Index will be generated by multiplying each segment's largest ratio of the five periods by its length, then dividing the sum of all length -weighted segments by the total length of Interstate.

Data Source: NPMRDS.

Saint Cloud Regional Airport and Tri-County Action Program (Tri-CAP)

Annual number of customers served at the Saint Cloud Regional Airport and number of trips Tri-CAP provides annually

Saint Cloud Regional Airport

The Saint Cloud Regional Airport (STC) was officially opened in 1970 at it current location at 1550-45th Ave. SE in Saint Cloud. It is the only publicly operated air facility within the APO planning region. The City of Saint Cloud owns and operates the airport.

About 100 general aviation planes are based at STC. The airport owns 55 airplane hangars and contracts directly with plane owners.

Allegiant Airlines has a schedule of two destinations – Phoenix Mesa Gateway International Airport (IWA or AZA) and Punta Gorda, Florida (PGD) – which the airline files to twice a week.

Sun Country Airlines charters two destinations - Laughlin, Nevada/Bullhead City, Arizona International Airport; and Don Laughlin's Riverside Resort Hotel and Casino in Nevada.

What is the Tri-County Action Program?

The Tri-County Action Program (Tri-CAP) is a non-profit organization based in Waite Park that provides a variety of services to "expand opportunities for the economic and social well-being of our residents and the development of our communities." Tri-CAP provides services under three different umbrellas: Basic Needs, Self-Sufficiency, and Building Stability. Tri-CAP also provides transportation services.

Tri-CAP Transit Connection hubs out of four locations within its service area: Little Falls, Elk River, Sauk Centre and Waite Park. The majority of service provided by Tri-CAP for the Saint Cloud MPA is done out of the Waite Park hub. From this hub, residents living within a 15-mile radius of the Waite Park facility can receive transportation access to and from areas outside of the Saint Cloud Metro Bus service area.

Tri-CAP also provides a volunteer drivers program where drivers provide rides in their own vehicles to residents of Benton, Morrison, Mille Lacs, Sherburne, and Stearns counties. This service is externally funded and primarily used by health insurance providers to transport people to and from medical appointments.

Several of the Tri-CAP service counties will also utilize the volunteer driver service for Department of Human Services work primarily centered on foster care. That work is also funded externally. Drivers with this service are reimbursed the federal mileage rate and are provided a stipend for meals. They are initially given a \$4 startup fee as well. As of November 2017, Tri-CAP estimated it has 36 volunteer drivers available.

1,400

Number of acres the airport resides on.

\$20 Million

Estimated annual impact on the local economy.

Transportation Costs

Percent of monthly household budgets spent on transportation

Percent of monthly household budgets spent on transportation

The percent of monthly household budgets spent on transportation in each chart assumes that the adult(s) are working full time. Average yearly costs of transportation is calculated as part of the Cost of Living data gathered by the Minnesota Department of Employment and Economic Development (DEED). The data is broken down by county; the economic development region (EDR) 7W Central composed of (Stearns County, Benton County, Sherburne County, and Wright County), Central Minnesota (Stearns County, Sherburne County, Benton County, Wright County, Kandiyohi County, Meeker County, Renville County, McLeod County, Mille Lacs County, Kanabec County, Isanti County, Chisago County, and Pine County), and the State.

Based on the four graphs on the right, the state as a whole has a lower percent of monthly household budgets spent on transportation than Central Minnesota, EDR 7W Central, Benton County, Sherburne County and Stearns County. In all the household sizes, the difference between Minnesota and the highest percent of monthly household budgets spent on transportation are within 5 percentage points of each other.

Methodology

The cost of living study provides a yearly estimate of the basic needs cost of living in Minnesota for both individuals and families. Results are broken down by county, region, and statewide. The study examines monthly living costs in seven cost categories: food, housing, health care, transportation, child care, other necessities, and net taxes. Total costs are presented as yearly and hourly dollar amounts.

Rather than describing what families are spending as the Consumer Expenditure Survey does, the study estimates the cost of living. The Cost of Living represents neither a poverty-level living nor a middle-class living but rather a living that meets basic needs for health and safety.

Transportation figures are derived from the basic costs of owning and operating a car. These basic costs include those for commuting to work, conducting necessary family and personal business, and getting to and from school and place of worship. Costs for social and recreational uses are not included. Public transportation cost estimates are not used in the computations.



Data Source: Minnesota Department Employment and Economic Development.

Support transportation improvements that promote energy conservation and improve public health and quality of life, while sustaining and improving the resiliency and reliability of the transportation system.



Photo courtesy of the APO.

Measure	Target	2018 Result	Multi-Year Trend	Analysis
Air Quality - Annual count of days in each Air Quality Index (AQI) category; good, moderate, unhealthy for sensitive groups and unhealthy.	Good - Performance Indicator	90%	89% 92% 92% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% <td>The percent of days with good air quality increased 3 percentage points since 2013, from 87% to 90% in 2017, but decreased 2 percentage points from 2016. The APO desires the air quality of improve.</td>	The percent of days with good air quality increased 3 percentage points since 2013, from 87% to 90% in 2017, but decreased 2 percentage points from 2016. The APO desires the air quality of improve.
	Moderate - Performance Indicator	10%	13% 11% 8% 8% 10% pg pairs 2013 2014 2015 2016 2017	The percent of days with moderate air quality decreased three percentage points since 2013, and increased two percentage points since 2016. The APO desires the air quality of improve.
Annual Percentage of Transportation Investments in Minority Environmental Justice Census Blocks: The percentage of transportation investments in high minority population census blocks.	Performance Indicator	93%	93% 7% • Minority population	Identified in the 2020-2023 Transportation Improvement Program (TIP), 93% of programmed projects intersect with census blocks with a high minority population.
Annual Percentage of Transportation Investments in low-income Environmental Justice Census Blocks: The percentage of transportation investments in census blocks with persons with low-income.	Performance Indicator	84%	84% 16% • Persons with low-income population	Identified in the 2020-2023 Transportation Improvement Program (TIP), 84% of programmed projects intersect with census blocks with a low -income population.

Saint Cloud APO Transportation Results Scorecard





In 2018, there were zero percent of Northstar Commuter Buses using CNG, 81.6% of Dial-a-Ride buses using CNG, and 52.8% of fixed route buses using CNG.

Air Quality

Annual count of days in each Air Quality Index (AQI) category; good, moderate, unhealthy for sensitive groups and unhealthy



Photos courtesy of the Saint Cloud APO.

Air Quality	
Good	Current air quality is considered satisfactory and poses little or no health risk.
Moderate	Air quality is acceptable; however individuals who are very sensitive to air pollution may experience adverse health effects.
Unhealthy for Sensitive Groups	People with lung or heart disease, older adults, children and people participating in activities that require heavy or extended exertion may experience adverse health effects.
Unhealthy	Everyone may begin to experience adverse health effects and members of sensitive groups may experience more serious health effects.





Figure 5.1-Annual Air Quality Index Data Source: Minnesota Pollution Control Agency (MPCA)

Annual Air Quality Index (AQI)

The AQI has seen the share of good air quality days increase 3 percentage points from 2013 to 2017 as shown in Figure 5.1. In 2017, 90% of days had good air quality and 10% had moderate quality. There were no days with an AQI that was unhealthy for sensitive groups and one day in 2016 that was unhealthy in general. Changes in technology such as fuel efficient vehicles and manufacturing innovations have helped keep air quality in good condition.

24%

Air pollution caused by on-road vehicles.

21%

Air pollution caused by off-road vehicles (construction and agricultural).

Water Quality

Number of bodies of water that have not meet water quality standards



Water Quality

As displayed in Figure 5.2, there are a total of five lakes that are being monitored for pollution in the APO planning area: Donovan, Little Rock, Grand, Sagatagan, and George Lake.

There are a total of 15 rivers or streams being monitored for pollution within the APO planning area: Elk River, Mill Creek, Spunk Creek, Watab River (North and South Fork), County ditch 12 & 13, Mississippi River, Sauk River, Elk River, Mayhew Creek, Luxemburg Creek, Johnson Creek (Meyer Creek), and Robinson Hill Creek.

The most common pollutant in the APO planning area are Escherichia Coli (E. Coli), mercury in fish tissue (Hg-F), and Fecal Coliform (FC).



Photo courtesy of the Saint Cloud APO.

Vehicles Registered and Sold

Percent of vehicles sold and registered within Minnesota and Minnesota 6th congressional District by powertrain

Vehicles Registered by Powertrain

In 2018, as depicted in Figure 5.3, the highest percent of vehicles registered by powertrain for both Minnesota Congressional District 6 and Minnesota as a whole were cars at 39.2% and 39.8% respectively as depicted in figure 5.3. Pickups came in second with 22.3% in Minnesota Congressional District 6, followed by Crossover Utility Vehicle (CUVs), Sport Utility Vehicle (SUVs) and Vans/Minivans. Minnesota Congressional District 6 has slightly higher registration numbers for pickups and SUVs.

Figure 5.4-Sold by Powertrain

Data Source: Alliance of Automobile Manufacturers.



Median monthly new car payment in Minnesota Congressional District 6.

Average MSRP per new car in Minnesota Congressional District 6.

Registration by Powertrain



Figure 5.3-Registration by Powertrain Data Source: Alliance of Automobile Manufacturers.

Vehicles Sold by Powertrain

In 2018, as depicted in Figure 5.4, the highest percent of vehicles sold by powertrain for both Minnesota Congressional District 6 and Minnesota as a whole were CUVs at 41.2% and 44.1% respectively. In both geographical regions, pickups came in second, cars in third, SUVs in fourth and vans/minivans in fifth. Vehicles sold by powertrain indicate the type of vehicles that are becoming popular and will likely be seen on the roads in future years. There is a cultural shift from cars to larger vehicles such as CUVs, pickups and SUVS.

273

Gasoline stations in Minnesota Congressional District 6. 20

Electric charging stations in Minnesota Congressional District 6

Vehicles Registered and Sold

Percent of vehicles registered and sold within Minnesota and Minnesota 6th congressional District by fuel type

Vehicles Registered by Fuel Type

In 2018, as depicted in Figure 5.5, the highest percent of vehicles registered by fuel type for both Minnesota Congressional District 6 and Minnesota as a whole was gas at 95.3% and 95.5% respectively. Diesel for both geographic areas came in second, followed by hybrid in third, electric in fourth, and plug-in hybrid in fifth.

Figure 5.6-Sold by Fuel Type Data Source: Alliance of Automobile Manufacturers.



Registration by Fuel Type



Figure 5.5-Registration by Fuel Type Data Source: Alliance of Automobile Manufacturers.

Vehicles Sold by Fuel Type

In 2018, as depicted in Figure 5.6, the highest percent of vehicles sold by fuel type for both Minnesota Congressional District 6 and Minnesota as a whole were gas at 93.4% and 94.1% respectively. Diesel for both geographic areas came in second, followed by hybrid in third, electric in fourth, and plug-in hybrid in fifth. Alternative fuel types such as plug-in hybrid, electric and hybrids have been slow to gain traction in Minnesota Congressional District 6 and Minnesota as a whole. The percent sold and currently registered is about equal.

\$1.05 Billion

Car sales in Minnesota Congressional District 6.

9,966

Total auto-related employers in Minnesota Congressional District 6.