# Saint Cloud Area Planning Organization Transportation Performance Monitoring Report





Photos courtesy of APO

## **DISCLAIMER AND TITLE VI ASSURANCE**

### DISCLAIMER

The preparation of this document was funded in part by the United States Department of Transportation with funding administered through the Minnesota Department of Transportation, the Federal Highway Administration, and the Federal Transit Administration. Additional funding was provided locally by the member jurisdictions of the Saint Cloud Area Planning Organization: Benton County, Sherburne County, Stearns County, City of Sartell, City of Sauk Rapids, City of Saint Cloud, City of Saint Joseph, City of Waite Park, LeSauk Township, and Saint Cloud Metropolitan Transit Commission. The United States Government and the State of Minnesota assume no liability for the contents or use thereof.

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Ururka Qorsheynta Deegaanka ee Cloud Cloud (APO) wuxuu halkan ku siinayaa ogeysiis dadweyne in ay tahay sharciga APO in ay si buuxda u hoggaansanto Cinwaanka VI ee Xuquuqda Madaniga ee 1964 iyo Sharciga Soo-celinta Xuquuqda Madaniga ee 1987, Amarka Fulinta 12898 ee ku saabsan Cadaaladda Deegaanka, Iyo qaynuunada iyo qawaaniinta la xiriira barnaamijyada iyo nashaadaadka. Cinwaanka VI wuxuu xaqiijinayaa in qofna, sabab asal, midab, ama asal qaran ah, laga reebi doonin kaqeybgalka, loo diidi doonin faa'iidooyinka, ama haddii kale lagula takoorin barnaamij kasta ama waxqabad ee APO ay ku hesho kaalmada maaliyadeed ee Federaalka . Qof kasta oo aaminsan inuu ka xanaaqay fal sharci darro ah oo takoor ay ku sameysay APO wuxuu xaq u leeyahay inuu dacwad rasmi ah u gudbiyo APO, MnDOT ama US DOT. Cabasho kasta oo kale waa inay ahaataa mid qoraal ah lagana xaraystaa maareeyaha u hoggaansamida cinwaankeeda ee 'APO' VI VI waa boqol iyo siddeetan (180) maalmood gudahood taarikhda dhacday markii la sheegay in ay dhacday midabtakoor. Macluumaad dheeri ah, ama si aad u hesho Foomka Cabashada Kala-Takoorida Cinwaan ee 'VI kalasooc Foom', fadlan ka eeg bogga internetka ee 'Cloud Cloud APO' (www.stcloudapo.org) ama waxaad ka arki kartaa nuqul xafiiskayaga 1040 County Road 4, Saint Cloud, MN 56303.

### GARANTÍA DEL TÍTULO VI

La Organización de Planificación del Área de Saint Cloud (APO en inglés) da un aviso público con la presente de que es política de la APO el cumplir plenamente con el Título VI de la Ley de Derechos Civiles de 1964 y de la Ley de Restauración de Derechos Civiles de 1987, de la Orden Ejecutiva 12898 sobre la Justicia Ambiental, y los estatutos y reglamentos relacionados en todos los programas y actividades. El Título VI asegura que ninguna persona, por motivos de raza, color o nacionalidad, podrá quedar excluida de la participación en, se le podrán negar los beneficios de, o de algún modo podrá ser objeto de discriminación en virtud de cualquier programa o actividad por la cual la APO recibe asistencia financiera Federal. Cualquier persona que cree que ha sido perjudicada por una práctica discriminatoria ilegal por la APO 2 SAINT CLOUD AREA PLANNING ORGANIZATION TRANSPORTATION PERFORMANCE MONITORING REPORT 2019 tiene el derecho de presentar un reclamo formal con la APO MnDOT o U.S. DOT. Cualquiera de estos reclamos debe ser por escrito y debe ser presentado ante el Gerente de Cumplimiento del Título VI de la APO dentro de los ciento ochenta (180) días naturales siguientes a la fecha en que la presunta ocurrencia discriminatoria. Para obtener más información, o para obtener un Formulario de Reclamo por Discriminación del Título VI, por favor, dirígete al Sitio web de la APO de Saint Cloud (www.stcloudapo.org) o puedes ver una copia en nuestra oficina en 1040 County Road 4, Saint Cloud, MN 56303.

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Hay'adda Qorsheynta ee Saint Cloud Area Organisation (APO) waxay siisaa ogeysiis dadweyne inay tahay siyaasada APO inay si buuxda ugu hoggaansanto Sharciga Naafada Mareykanka ee 1990 (ADA) iyo Sharciga Baxnaaninta 1973 (Sharciga Baxnaaninta) iyo qawaaniinta iyo qawaaniinta la xiriira Dhammaan barnaamijyada iyo nashaadaadka. Qodobka II ee Sharciga Naafada Mareykanka (ADA) wuxuu u baahan yahay dhammaan hay'adaha gobolka iyo kuwa maxalliga ah inay qaadaan tillaabooyinka ku habboon si loo hubiyo in xiriirka lala yeesho codsadayaasha, ka qeybgalayaasha, iyo xubnaha bulshada naafada ah ay u la mid yihiin sida xiriirka lala yeesho kuwa kale. Qof kasta oo aaminsan inuu ka xanaaqay fal sharci darro ah oo takooris ah oo ay sameysay APO wuxuu xaq u leeyahay inuu dacwad rasmi ah u gudbiyo APO, MnDOT, ama US DOT. Cabasho kasta oo noocan oo kale ahi waa inay ahaataa mid qoraal ah oo ay kujirto macluumaad ku saabsan takoorida la soo sheegay sida magaca, cinwaanka, taleefan lambarka cabashada, iyo goobta, taariikhda, iyo faahfaahinta dhibaatada. Hab kale oo lagu xareeyo cabashada, sida wareysiyada shaqsiyeed ama cajalad duuban cabashada, ayaa loo heli doonaa sidii wax looga badali karo macquul ahaan dadka naafada ah markii la codsado. Ashtakooyinka waa in ay soo gudbiyaan cabashada iyo / ama wakiilkiisa / wakiilkiisa sida ugu dhakhsaha badan 3 SAINT CLOUD AREA PLANNING ORGANIZATION TRANSPORTATION PERFORMANCE MONITORING REPORT 2019 ee suurtogalka ah laakiin aan ka dambayn lixdan (60) maalmood taariikhi ah ka dib dhacdada la xiriirta midab kala sooca waana in lagu fayl gareeyaa Agaasimaha Fulinta APO. Macluumaad dheeri ah, ama si aad u hesho Foomka Cabashada Kala-Takoorida, fadlan eeg bogga internetka ee 'Cloud Cloud APO' (www.stcloudapo.org) ama waxaad ka arki kartaa nuqul xafiiskayaga 1040 County Road 4, Saint Cloud, MN 56303.

### GARANTÍA DEL TÍTULO II

La Organización de Planificación del Área de Saint Cloud (APO en inglés) da un aviso público con la presente de que es política de la APO el cumplir plenamente con la Ley sobre los Estadounidenses con Discapacidad de 1990 (ADA en inglés) y con la Ley de Rehabilitación de 1973 (Ley de Rehabilitación) y con los estatutos y reglamentos en todos los programas y actividades. El Título II de la Ley sobre los Estadounidenses con Discapacidad de 1990 (ADA en inglés) requiere que todas las agencias de gobierno estatales y locales tomen las medidas adecuadas para asegurar que la comunicación con los aplicantes, participantes y miembros del público con discapacidades sea tan efectiva como la comunicación con otros. Cualquier persona que cree que Cualquier persona que cree que ha sido perjudicada por una práctica discriminatoria ilegal por la APO tiene el derecho de presentar un reclamo formal con la APO MnDOT o U.S. DOT. Cualquiera de estos reclamos debe ser por escrito y debe contener información sobre la presunta discriminación tales como el nombre, la dirección, el número de teléfono del denunciante, y la ubicación, la fecha y la descripción del problema. Los medios alternativos de presentar un reclamo, tales como una entrevista personal o una grabación de audio del reclamo, estarán disponibles como una modificación razonable para las personas con discapacidades a petición. Los reclamos deben ser presentados por el denunciante y/o su persona designada tan pronto como sea posible pero no más tarde de sesenta (60) días naturales después de la presunta ocurrencia discriminatoria y deben ser presentados ante el Director Ejecutivo de la APO. Para obtener más información, o para obtener un Formulario de Reclamo por Discriminación, por favor, dirígete al Sitio web de la APO de Saint Cloud (www.stcloudapo.org) o puedes ver una copia en nuestra oficina e 1040 County Road 4, Saint Cloud, MN 56303.

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### **Common Acronyms**

**MPCA:** Minnesota Pollution Control Agency. **ADT:** Average Daily Traffic. **APO:** Saint Cloud Area Planning Organization. **MPO:** Metropolitan Planning Organization. **AQI:** Air Quality Index. MTC: Saint Cloud Metropolitan Transit Commission (Saint Cloud Metro Bus). **ATAC:** Active Transportation Advisory Committee. **MTP:** Metropolitan Transportation Plan. **CNG:** Compressed Natural Gas. **NCB**: Northstar Commuter Bus. **DOT:** Department of Transportation. **NHS:** National Highway System. **CR:** County Road. **NHTSA:** National Highway Traffic Safety Administration. **CSAH:** County State-Aid Highway. **NPMRDS:** National Performance Management Research Data Set. **D3:** Minnesota Department of Transportation District 3. **NTD:** National Transit Database. **DAR:** Dial-a-Ride. **PBP:** Performance-Based Planning. **DEED:** Minnesota Department of Employment and Economic Development. SEP: Stakeholder Engagement Plan. **DIV:** Digital Inspection Vehicle. SGR: State of Good Repair. **EDR:** Economic Development Region. **SOV:** Single-Occupancy Vehicle. **FAST Act:** Fixing America's Surface Transportation Act. **STC:** Saint Cloud Regional Airport. **FHWA:** Federal Highway Administration. **STIP:** Statewide Transportation Improvement Program. FR: Fixed Route. **TAC:** Saint Cloud APO's Technical Advisory Committee. **FTA:** Federal Transit Administration. **TERM:** Transit Economic Requirements Model. **GPS:** Global Positioning System. **TH:** Trunk Highway. **HPMS:** Highway Performance Monitoring System. **TIP:** Transportation Improvement Program. **HSIP:** Highway Safety Improvement Program. **TPMR:** Transportation Performance Management Report. **IRI:** International Roughness Index. Tri-CAP: Tri-County Action Program. MAP-21: Moving Ahead for Progress in the 21st Century Act. **TSM:** Transportation System Management. MN: Minnesota. **TTTR:** Truck Travel Time Reliability. **MnDOT:** Minnesota Department of Transportation. **VMT:** Vehicle Miles Traveled.

# Introduction 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 Minnesota Department of Transportation (MnDOT) in planning related activities in the region.

# 1966

Year the APO was incorporated.

# 137,093

Estimated population in the Saint Cloud APO planning area in 2019.

Data Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year 7 Estimates **Performance Measures** 

### **The APO and Performance Measures**

This Transportation Performance Monitoring Report (TPMR) includes a set of performance measures that will track the region's progress toward achievement of transportation goals as defined in the APO's Metropolitan Transportation Plan (MTP). 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. The intent is to use the identified performance measures to further align current and future projects with the overall goals and objectives of the <u>MTP</u>.

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 areas.

#### **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, and relative needs across performance areas.

#### **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.

# Introduction

**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 way 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 monitoring 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 improvements.

# Introduction

#### 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 the transportation systems of APO member jurisdictions.

#### 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 APO's existing conditions and priorities. By adopting its own targets, the APO can focus on localized issues and target funding that will work toward achieving the goals established in the 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?

- Measurable data—Data is quantifiable and able to be tracked year after year.
- *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 time frame 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's) performance measure rules should be considered as interim condition/performance levels that lead toward the accomplishment of longer-term performance expectations in transportation plans developed by state departments of transportation (DOTs) and MPOs.

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.	<ul> <li>Annual percent of person -miles traveled on the Interstate and non- Interstate National Highway System that are reliable.</li> <li>State of Good Repair for equipment, facilities, and rolling stock.</li> <li>Transit Economic Requirements Model (TERM) scale for transit.</li> </ul>	<ul> <li>Interstate system pavement conditions.</li> <li>Non-Interstate NHS pavement conditions.</li> <li>Bridge conditions.</li> <li>Transit Mechanical Failures.</li> </ul>	<ul> <li>Truck Travel Time Reliability Index.</li> </ul>

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



Photos courtesy of APO

#### Saint Cloud APO Transportation Results Scorecard

Measure	2019 Target	2019 Result	Multi-Year Trend	Analysis
Number of Crashes Five Year Rolling Average: Number of crashes for five consecutive years (i.e., 2015- 2019), dividing by five, and rounding to the nearest whole number.	Performance Indicator	2,792	2010 2,251 2011 2,274 2012 2,210 2013 2,200 2014 2,216 2015 2,231 2015 2,399 2017 2,554 2018 2,701 2018 2,701	The 2019 five year rolling average for number of crashes was 2,792. This is a 3.4% increase from the 2018 five year rolling average of 2,701 and a 26.9% increase from the 10 year low from 2013. The APO desires the total number of crashes to decrease.

#### Rate of Crashes Five Year

**Rolling Average:** Number of crashes per 100 million vehicle miles traveled (VMT) for five consecutive years (i.e., 2015-2019), dividing by five, and rounding to the thousandth decimal place.

Performance Indicator

222.902

9.0



The five year rolling average for total crash rate in 2019 was at 222.902. This is a 1.9% decrease from the 10 year high of 227.263 in 2018. The APO desires the total crash rate to decrease.

### Number of Fatalities Five Year Rolling Average:

Number of fatalities for each of the most recent five consecutive years (i.e., 2015-2019), dividing by five, and rounding to the tenth decimal place.

< 8.6



The five year rolling average for fatalities in 2019 was 9.0. This is a 50% increase from the 10 year low of 6.0 in 2011 and is a 10 year high. The APO had set a 2019 target of less than 8.6 fatalities.

#### Saint Cloud APO Transportation Results Scorecard

Measure	2019 Target	2019 Result	Multi-Year Trend	Analysis
<b>Rate of Fatalities Five Year</b> <b>Rolling Average</b> : Calculation of the number of fatalities per 100 million VMT (100M VMT) for each of the most recent five consecutive years (i.e., 2015- 2019), adding the results, dividing by five, and rounding to the thousandth decimal place.	< 0.730	0.731	2010         0.624           2011         0.628           2012         0.560           2013         0.560           2014         0.704           2015         0.765           2016         0.765           2017         0.765           2018         0.765           2019         0.765           2018         0.7730           2019         0.7330	The 2019 five year rolling average for fatality rate was 0.731. This is a 0.1% increase from the 2018 five year rolling average and a 30.5% increase from the 10 year low of 0.560 from 2011. The APO set a 2019 fatality rate target of less than 0.730.

Number of Suspected Serious Injuries Five Year Rolling Average: Addition of the number of suspected serious injuries for each of the most recent five consecutive years (i.e., 2015-2019), dividing by five, and rounding to the tenth decimal place.





The five year rolling average for suspected serious injuries in 2019 was 24.8. This is a 7.8% increase from the five year rolling average of 23.0 in 2018. The 2019 five year rolling average still remains below the 10 year high of 32.4 reported in 2010. The APO had set a 2019 target of less than 23.0 serious injuries.

## Rate of Suspected Serious

**Injuries Five Year Rolling Average:** Calculation of the number of suspected serious injuries per 100 million VMT for each of the most recent five consecutive years (i.e., 2015-2019), adding the results, dividing by five, and rounding to the thousandth decimal place.

< 1.946 2.006



The five year rolling average for the suspected serious injury rate in 2019 was 2.006. While this is an increase from the 2018 five year rolling average, the 2019 numbers remain below the 10 year high of 3.117 reported in 2010. The APO had set a serious injury rate 2019 target less than 1.946.

### Saint Cloud APO Transportation Results Scorecard

(i.e., 2015-2019), dividing by

five, and rounding to the tenth decimal place, expressed as a

Measure	2019 Target	2019 Result	Multi-Year Trend	Analysis
Number of Non-Motorized Fatalities and Suspected Serious Injuries Five Year Rolling Average: Addition of the number of non-motorized fatalities and suspected serious injuries for each of the most recent five consecutive years (i.e., 2015-2019), dividing by five, and rounding to the tenth decimal place.	< 8.2	8.6	2010 7.0 2011 6.6 2013 6.8 2014 5.2 2014 5.2 2015 7.8 2015 7.8 2015 7.8 2015 7.8 2015 7.8 2019 8.2 2019 8.2	The five year rolling average for non- motorized fatalities and suspected serious injuries in 2019 was 8.6, a 10-year high. This is a 4.9% increase from the 2018 five year rolling average of 8.2. The APO had set a 2019 target of less than 8.2 fatalities and suspected serious injuries.
Number of Chemical Impairment Crashes Five Year Rolling Average: Addition of the number of crashes wherein the driver had been drinking or taking drugs for each of the most recent five consecutive years (i.e., 2015-2019), dividing by five, and rounding to the tenth decimal place.	Performance Indicator	90.8	2010     105.6       2011     104.4       2012     103.4       2013     100.2       2014     97.4       2015     97.4       2016     96.0       2018     92.4       2019     90.8	The five year average for number of chemical impairment crashes in 2019 was at 90.8 from the five year rolling average reported in 2010 of 105.6 (the 10 year high). The APO desires the number of chemical impairment crashes to decrease.
<b>Percent of Chemical</b> <b>Impairment Crashes Five</b> <b>Year Rolling Average:</b> Addition of the number of chemical impairment crashes divided by the total number of crashes for each of the most recent five consecutive years	Performance Indicator	3.3%	4.7% 4.6% 4.7% 4.6% 4.4% 4.4% 4.1% 3.8% 3.3% 3.3%	The percent of chemical impairment crashes for the five year period ending in 2019 was 3.3%. This is a 1.4 percentage point decrease from the 10 year high of 4.7% in 2010. The APO desires the percent of chemical impairment crashes to decrease.

Measure	2019 Target	2019 Result	Multi-Year Trend	Analysis
Number of Fatal and Suspected Serious Injury Chemical Impairment Crashes Five Year Rolling Average: Addition of the number of fatal and suspected serious injury crashes wherein the driver had been drinking or taking drugs for each of the most recent five consecutive years (i.e., 2015- 2019), dividing by five, and rounding to the tenth decimal place.	Performance Indicator	5.2	2010 6.8 2011 6.8 2012 6.4 2013 6.4 2014 6.8 2015 6.2 2015 5.0 2017 5.4 2018 5.0 2018 5.0	The five year average for number of fatal and suspected serious injury chemical impairment crashes in 2019 was 5.2. This is a 23.5% decrease from the five year rolling average of 6.8 reported in 2010, 2011, 2012, and 2014. The APO desires fatal and suspected serious injury chemical impairment crashes to decrease.
<b>Percent of Fatal and Suspected</b> <b>Serious Injury Chemical</b> <b>Impairment Crashes Five Year</b> <b>Rolling Average:</b> Addition of the number of fatal and suspected serious injury chemical impairment crashes divided by the total number of fatal and suspected serious injury crashes for each of the most recent five consecutive years (i.e., 2015- 2019), dividing by five, and rounding to the tenth decimal place, expressed as a percent.	Performance Indicator	15.9%	2010     17.7%       2011     20.1%       2012     20.1%       2013     20.1%       2014     23.8%       2014     23.8%       2014     23.8%       2015     17.3%       2016     17.3%       2018     17.5%       2019     15.9%	The percent of fatal and suspected serious injury chemical impairment crashes for the five year period ending in 2019 was 15.9%. This is a 7.9 percentage point decrease from the 10 year high of 23.8% in 2015. The APO desires the percent of fatal and suspected serious injury chemical impairment crashes to decrease.
<b>Distracted Driving Crashes Five</b> <b>Year Rolling Average:</b> Addition of the number of crashes of all types involving distracted driving for each of the most recent five consecutive years (i.e., 2015- 2019), dividing by five, and rounding to the tenth decimal place. *Statewide definition of distracted driving was redefined in 2015	Performance Indicator	244.8	2010     442.4       2011     454.2       2012     454.2       2013     455.6       2014     435.6       2015     435.2       2016     384.8       2017     364.0       2018     364.0       2019     244.0       2019     244.0       2019     244.0	The five year average for the number distracted driving crashes in 2019 was 244.8. This is a 46.1% decrease from the 10 year high of 454.2 reported for the 2011 five year rolling average. The APO desires the number of distracted driving crashes to decrease.

#### Saint Cloud APO Transportation Results Scorecard

Measure	2019 Target	2019 Result	Multi-Year Trend	Analysis
<b>Percent of Distracted</b> <b>Driving Crashes Five Year</b> <b>Rolling Average:</b> Addition of the number of crashes of all types involving distracted driving divided by the total number of crashes for each of the most recent five consecutive years (i.e., 2015-2019), and rounding to the tenth decimal place, expressed as a percent.	Performance Indicator	9.3%	2010     19.7%       2011     20.0%       2012     20.0%       2013     19.9%       2014     19.8%       2015     19.6%       2016     16.7%       2017     14.1%       2018     11.7%       2019     9.3%	The percent of distracted driving crashes for the five year period ending in 2019 was 9.3%. This is a 10.7 percentage point decrease from the 10 year high of 20.0% reported in both 2011 and 2012. The APO desires the percent of distracted driving crashes to decrease.
Number of Fatal and Suspected Serious Injury Distracted Driving Crashes Five Year Rolling Average: Addition of the number of fatal and suspected serious injury crashes of all types involving distracted driving for each of the most recent five consecutive years (i.e., 2015-2019), and rounding to the tenth decimal place.	Performance Indicator	3.0	2010     4.4       2011     2.4       2012     1.8       2013     1.8       2013     2.2       2014     2.2       2015     2.2       2015     3.6       2017     3.6       2018     3.6       2019     3.6       2019     3.6	The number of fatal and suspected serious injury distracted driving crashes for the five year period ending in 2019 was 3.0. This is a 31.8% decrease from the 10 year high of 4.4 reported for the five year period ending in 2010. The APO desires the number of fatal and suspected serious injury distracted driving crashes to decrease.

#### Percent of Fatal and Suspected Serious Injury Distracted Driving Crashes Five Year

**Rolling Average:** Addition of the number of fatal and suspected serious injury distracted driving crashes divided by the total number of fatal and suspected serious injury crashes for each of the most recent five consecutive years (i.e., 2015-2019), and rounding to the tenth decimal place, expressed as a percent.

Performance Indicator



The percent of fatal and suspected serious injury distracted driving crashes for the five year period ending in 2019 was 9.1%. This is a 2.7 percentage point decrease from the 10 year high of 11.8% in 2016. The APO desires the percent of fatal and suspected serious injury distracted crashes to decrease.

Transit Measure	Target	2019 Result	Multi-Year Trend	Analysis
<b>Number of Fixed Route (FR)</b> <b>Fatalities:</b> Total number of reportable FR fatalities.	TBD in 2020	0	2002 0 2003 0 2004 0 2005 0 2006 0 2009 0 2010 0 2014 0 2014 0 2014 0 2015 0 2014 0 2015 0 2014 0 2013 0 2014 0 2013 0 2014 0 2013 0 2014 0 2000 0 2000 0 2000000000000000000000	The total number of reportable FR fatalities since 2002 have been zero. The APO desires the number of FR fatalities to stay at zero.
<b>Rate of Fatalities (FR):</b> Total vehicle revenue miles divided by number of fatalities expressed per 65,000 vehicle revenue miles.	TBD in 2020	0	2002 0 2003 0 2004 0 2005 0 2008 0 2009 0 2010 0 2013 0 2014 0 2013 0 2014 0 2013 0 2015 0 2015 0 2016 0 2016 0 2016 0 2016 0 2017 0 2016 0 2017 0 2016 0 2017 0 2000 0 2000 0 2000 0 2000 0 000000000	The FR fate of fatalities per 65,000 vehicle revenue miles since 2002 have been zero. The APO desires the rate of FR fatalities to stay at zero.
<b>Number of FR Injuries:</b> Total number of reportable FR injuries.	TBD in 2020	3	2002 0 2003 2 2004 0 2005 0 2006 0 2009 0 2010 1 2014 4 2013 2 2013 2 2014 4 2013 2 2013 3 2014 4 2013 3 2013 3 2013 3 2014 4 2013 3 2013 3 2014 4 2013 3 2013 3 2013 3 2014 0 2015 0 2000 0 2000 0 2000 0 2000 0 2000 0 2000 000	A total of three reportable FR injuries occurred in 2019. This is a 40% decrease from the a 18 year high of five in 2018. The APO desires the number of FR injuries to decrease.
<b>Rate of Injuries (FR):</b> Total vehicle revenue miles divided by number of injuries expressed per 65,000 vehicle revenue miles.	TBD in 2020	0.15	2002 0.00 0.14 2003 0.00 0.14 2006 0.00 2005 0.00 2009 0.00 2009 0.00 2011 0.00 2013 0.11 0.01 2013 0.13 0.21 2015 0.05 2013 0.15 0.21 2015 0.22 2015 0.22 2016 0.05 2017 0.15 0.21 2016 0.05 2017 0.15 0.21 2016 0.05 2017 0.15 0.21 2016 0.05 2017 0.05 2017 0.05 2017 0.05 2017 0.05 2017 0.05 2017 0.05 2016 0.05 2017 0.05 2017 0.05 2017 0.05 2017 0.05 2017 0.05 2017 0.05 2017 0.05 2017 0.05 2017 0.05 2014 0.05 2015 0.05 2016 0.05 2017 0.05 2017 0.05 2017 0.05 2017 0.05 2017 0.05 2017 0.05 2017 0.05 2014 0.05 2000 0.05 2000 0.05 2000 0.05 2000 0.05 2000 0.05 2000 0.05 2000 0	The rate of reportable FR injuries per 65,000 vehicle revenue miles was 0.15 in 2019. This is a 40% decrease from 0.25 in 2018. The APO desires the rate of FR injuries to decrease.

Transit Measure	Target	2019 Result	Multi-Year Trend	Analysis
<b>Number of FR Safety</b> <b>Events:</b> Total number of reportable FR safety events.	TBD in 2020	3	2002 0 2004 0 2005 0 2005 0 2008 0 2008 0 2013 1 2014 1 2014 1 2014 1 2013 2 2014 1 2014 2 2014 1 2014 1 20	Three safety events were reported in 2019. This is a 40% decrease from five safety events in 2018. The APO desires the number of FR safety events to decrease.
<b>Safety Event Rate (FR):</b> Total vehicle revenue miles divided by number of fixed route safety events expressed per 65,000 vehicle revenue miles.	TBD in 2020	0.15	2002 0.00 2003 0.014 2004 0.00 2005 0.00 2008 0.00 2008 0.00 2010 0.00 2013 0.00 2013 0.00 2013 0.00 2014 0.00 2014 0.00 2015 0.05 2015 0.05 2016 0.05 2017 0.00 2017 0.00 200 0.00 2000 0.00 2000 0.0000000000	The 2019 FR reportable safety event rate per 65,000 vehicle revenue miles was 0.15. This is a 40% decrease from 0.25 in 2018. The APO desires the rate of FR safety events to decrease.
<b>Number of Dial-a-Ride</b> ( <b>DAR</b> ) <b>Fatalities:</b> Total number of reportable DAR fatalities.	TBD in 2020	0	2002 0 2003 0 2004 0 2005 0 2008 0 2008 0 2010 0 2011 0 2013 0 2013 0 2014 0 2014 0 2015 0 2015 0 2016 0 2016 0 2018 0 2000 0 2000 0 2000 0 2000 0 2000 0 2000 0 000 0 0000 000	No DAR fatalities have been reported over the past 18 years. The APO desires the number of DAR fatalities to stay at zero.
<b>Fatality Rate (DAR):</b> total vehicle revenue miles divided by number of fatalities per 65,000 vehicle revenue miles.	TBD in 2020	0	2002 0 2003 0 2004 0 2005 0 2008 0 2003 0 2011 0 2011 0 2013 0 2014 0 2014 0 2015 0 2015 0 2015 0 2016 0 2016 0 2017 0 2018 0 0 2018 0 2018 0 2000 00	The DAR fate of fatalities per 65,000 vehicle revenue miles over the time frame have been zero. The APO desires the rate of DAR fatalities to stay at zero.

Transit Measure	Target	2019 Result	Multi-Year Trend	Analysis
<b>Number of DAR Injuries:</b> Total number of reportable DAR injuries.	TBD in 2020	3	2002 0 2003 0 2005 0 2005 0 2008 0 2009 0 2010 0 2014 1 2014 1 2014 3 2014 1 2014 1 20	There were three reportable DAR injuries in 2019. This is a 25% decrease from four reported in 2018. The APO desires the number of DAR injuries to decrease.
<b>Rate of Injury (DAR):</b> Total vehicle revenue miles divided by number of injuries expressed per 65,000 vehicle revenue miles.	TBD in 2020	0.29	2002 0.00 2004 0.15 2006 0.00 2006 0.00 2008 0.00 2008 0.00 2010 0.00 2011 0.00 2013 0.00 2014 0.13 2014 0.13 2016 0.23 2016 0.23 2016 0.23 2016 0.23 2016 0.23 2016 0.16 2017 0.01 2017 0.01 2017 0.01 2017 0.01 2017 0.00 2017 0.00 2010 0.00 2000 0.0000000000	The rate of reportable DAR injuries per 65,000 vehicle revenue miles decreased 32.6% from 0.43 in 2018 to 0.29 in 2019. The APO desires the rate of DAR injuries to decrease.
<b>Number of DAR Safety</b> <b>Events:</b> Total number of reportable DAR safety events.	TBD in 2020	3	2002 0 2003 0 2005 0 2006 1 2008 0 2009 0 2019 0 2014 1 2014 1 2014 2 2015 2 2015 0 2015 2 2015 0 2015 2 2016 2 2017 0 2017 0 2000 0 2000 0 2000 0 2000 0 2000 0 2000 0 2000 0 200000000	Three DAR safety events were reported in 2019. This is a 25% decrease from four in 2018. The APO desires the number of DAR safety events to decrease.
<b>Safety Event Rate (DAR):</b> Total vehicle revenue miles divided by number of safety events expressed per 65,000 vehicle revenue miles.	TBD in 2020	0.29	2003 0.00 2004 0.15 2006 0.14 2006 0.14 2009 0.00 2010 0.00 2011 0.00 2013 0.00 2013 0.00 2013 0.00 2014 0.13 2013 0.00 2014 0.13 2013 0.00 2014 0.13 2019 0.23 2019 0.23 2019 0.23 2010 0.00 2014 0.13 2016 0.23 2016 0.23 2016 0.23 2016 0.23 2016 0.23 2016 0.23 2017 0.11 2016 0.23 2016 0.23 2017 0.00 2016 0.00 2016 0.00 2017 0.00 2017 0.00 2017 0.00 2018 0.00 2019 0.00 2019 0.00 2019 0.00 2014 0.00 2000 0.00 2000 0.00 2000 0.00 2000 0.00 2000 0.0000000000	The rate of reportable DAR safety events per 65,000 vehicle revenue miles decreased 32.6% from 0.43 in 2018 to 0.29 in 2019. The APO desires the rate of DAR safety events to decrease.

Transit Measure	Target	2019 Result			Μι	ılti-	Ye	ar 1	Гre	nd			Analysis	
Number of Northstar Commuter Bus (NCB) Fatalities: Total number of reportable NCB fatalities.	TBD in 2020	0	2011 0	2012 0	2013 0	2014 0	2015 0	2016 0	2017 0	2018 0	2019 0	Desired Trend	No fatalities have been reported since the NCB service began in 2011. The APO desires the number of NCB fatalities to stay at zero.	
<b>Rate of Fatalities (NCB):</b> total vehicle revenue miles divided by number of fatalities expressed per 65,000 vehicle revenue miles.	TBD in 2020	0	2011 0	2012 0	2013 0	2014 0	2015 0	2016 0	2017 0	2018 0	2019 0	Desired Trend	The NCB rate of fatalities per 65,000 vehicle revenue miles since the service began in 2011 has been zero. The APO desires the NCB rate of fatalities to stay at zero.	
<b>Number of NCB Injuries:</b> Total number of reportable NCB injuries.	TBD in 2020	0	2011 0	2012 0	2013 0	2014 0	2015	2016 0	2017 <b>0</b>	2018 1	2019 0	Desired Trend	No NCB injuries were reported in 2019. This is down from the one injury reported in 2018. The APO desires the number of NCB injuries to decrease.	
<b>Rate of Injuries (NCB):</b> Total vehicle revenue miles divided by number of injuries expressed per 65,000 vehicle revenue miles.	TBD in 2020	0.00	2011 0.00	2012 0.00	2013 0.00	2014 0.00	2015 0.75	2016 0.00	2017 0.00	2018 0.38	2019 0.00	Desired Trend	The rate of reportable NCB injuries per 65,000 vehicle revenue miles was at 0.00 in 2019. This is down from the 0.38 injury rate reported in 2018. The APO desires the rate of NCB injury rate to decrease.	

Transit Measure	Target	2019 Result	Multi-Year Trend Analysis
<b>Number of NCB Safety</b> <b>Events:</b> Total number of reportable NCB safety events.	TBD in 2020	0	There were no reportable safety events in 2019. This was down from the one safety event reported in 2018. The APO desires the number of NCB safety events to decrease.
<b>Safety Event Rate (NCB):</b> total vehicle revenue miles divided by number of safety events expressed per 65,000 vehicle revenue miles.	TBD in 2020	0.00	80       80 <td< td=""></td<>

#### **Fatality and Rate of Fatalities**

Fatalities are calculated for the most recent five consecutive years. The 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 2015 to 2019. The majority of these crashes occurred on the National Highway System (NHS), which typically has a higher annual average daily traffic (AADT) count. 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.

About one-third of all fatal crashes in the MPA involved either pedestrian or people who cycle. Just over half of all fatal crashes occurred at intersections (57.8%). And about a quarter of all fatal crashes within the MPA were angle crashes (22.2%). Even though majority of VMT occurs during daylight hours, about two out of every five fatal crashes (42.2%) take place at night. This could be explained because nearly 40% of fatal crashes occur when daylight hours are shorter in the late fall/winter months of October, November, December, and January.

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. The 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.



#### Figure 1.2-Suspected Serious Injury Crashes

Data Source: MnDOT.

#### **Suspected Serious Injury Crashes**

Figure 1.2 illustrates suspected serious injury crashes and their locations within the APO planning area from 2015 to 2019. Nearly one-quarter of suspected serious injury crashes (23.4%) involve pedestrians or people who cycle. This is followed by single vehicle run off the road crashes (20.2%) and angle crashes (16.1%). Intersection related crashes accounted for nearly half of the crashes at 47.6%.

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. For more information about the cost analysis visit the *Benefit-Cost Analysis Guidance for Discretionary Grant Programs* guide (https://www.greenway.org/uploads/attachments/cjikc7sf12ofitnqiw9vgtdot-benefit-cost-analysis-guidance-2018.pdf).

Average Cost Per Crash	(2018 Dollars)
Fatal	\$9,600,000
Suspected Serious Injury	\$459,100
Suspected Minor Injury	\$125,000
Possible Injury	\$63,900
Property Damage	\$3,200

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 2015 to 2019. The majority of the crashes occurred within the City of Saint due to its high population and large availability of active transportation infrastructure.

More than half of all fatal and serious injury non-motorized crashes (61.3%) occurred when it was dark. It is recommend to wear high-colored, high-visibility clothing, reflective clothing and have lights when walking or cycling when it is dark.

Non-motorized crashes happen for a variety of reasons, such as the motorized vehicle or pedestrian/bicyclist were inattentive/ distracted or there was alcohol involved. The design of our roadways are also a factor in the seriousness of crashes. In Addition, motor vehicle speed can play a major role in the seriousness of non-motorized crashes. Studies show (https:// www.ite.org/technical-resources/topics/speed-management-forsafety/speed-as-a-safety-problem/) that pedestrians hit by vehicles traveling 40 mph are given a 20% survival rate versus those struck by vehicles traveling at 20 mph who have a 90% survival rate.

Top Three Locations of Fatal and Suspected Serious Injury Non-Motorized Crashes in the MPA.

- **Not at Intersection:** *43.2%.*
- **Four-Way Intersection: 36.4%.**
- Intersection-Related: 9.1%.

*Figure 1.3-Non-Motorized Fatalities and Suspected Serious Injuries Data Source: MnDOT.* 

**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 2015 to 2019. In the five year time frame, there were 455 chemically impaired crashes, averaging 91 crashes per year. Chemical impairment crashes contributed to 21.9% of the total fatal and suspected serious injury crashes in 2019 and 2.9% 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 11-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 1,224 distracted driving crashes between 2015 and 2019 with a five year average of 244.8. 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 "Hands-Free Law" law went into effect. In addition to banning texting and driving, it prohibits a driver from holding their phone in their hand while operating a motor vehicle. Voice commands for texting and making phone calls are still legal. For more information about "Hands-Free Law," visit the Office of Traffic Safety website (*https://dps.mn.gov/divisions/ots/hands-free/ Pages/default.aspx*).

### 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."

Data Source: MnDOT.

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



Photo courtesy of Saint Cloud APO.

Measure	2021 Target	2019 Result	Multi-Year Trend	Analysis
<b>Non-Interstate NHS</b> <b>Reliability:</b> Annual percent of person-miles traveled that are reliable.	> 90%	96.5%	2013     83.9%       2014     78.5%       2015     76.0%       2016     76.0%       2017     97.3%       2018     97.4%       2019     96.5%       Desired Trend	Non-Interstate NHS reliability has decreased by 0.9 percentage points, from the seven year high of 97.4% in 2018 to 96.5% in 2019. The APO has set a 2021 target of at least 90% reliability.
<b>Interstate Reliability:</b> Annual percent of person- miles traveled that are reliable.	> 100%	100%	2011     100%       2012     100%       2013     100%       2014     100%       2015     100%       2017     100%       2018     100%       2019     100%	The Interstate has maintained a 100% reliability rating since 2011. The APO has set a 2021 target of at least 100% reliability.
<b>Vehicle Miles Traveled</b> <b>(VMT):</b> Number of miles traveled by motor vehicle expressed in billions.	Performance Indicator	1.420 Billion	2005     0.981       2006     1.027       2007     0.982       2008     1.079       2010     1.094       2011     1.076       2012     1.076       2013     1.076       2014     1.077       2015     1.077       2014     1.077       2015     1.057       2016     1.157       2017     1.201       2018     1.408       2019     1.408	VMT has increased 44.8% from 0.981 million miles in 2005 to a 15 year high of 1.420 billion miles in 2019. The APO does not have a set target.
<b>VMT Per Capita:</b> Number of miles traveled by motor vehicle divided by population.	Performance Indicator	10,363	010     8,466       011     8,356       012     8,356       013     8,355       014     8,255       015     8,339       016     8,710       017     8,969       018     10,403       019     10,363       019     10,363	VMT per capita has increased 22.4% from 8,466 in 2010 to 10,363 in 2019. The APO does not have a set target but desires VMT per capita to decrease.

Transit Measure	Target	2019 Results	Multi-Year Trend	Analysis
<b>Number of Annual Fixed</b> <b>Route (FR) Transit Riders:</b> Annual number of transit riders by FR.	Performance Indicator	1.48 Million	2002         1.51           2003         1.53           2004         1.68           2005         1.72           2006         1.72           2007         1.83           2008         1.72           2009         2.13           2009         2.13           2009         2.19           2011         2.26           2012         2.23           2013         2.26           2014         2.15           2014         2.15           2014         2.15           2013         2.04           2014         2.15           2015         1.93           2016         1.94           2017         1.175           2018         1.62           2019         1.62	The number of annual FR transit riders has decreased by 35.1% from an 18 year high of 2.28 million in 2010 to 1.48 million riders in 2019. The APO desires the number of fixed route transit riders to increase.
<b>Passengers Per Revenue</b> <b>Mile (FR):</b> The number of passengers divided by the number of miles traveled by FR.	Performance Indicator	1.16	2002         1.65           2003         1.60           2004         1.68           2005         1.76           2005         1.76           2006         1.82           2007         1.87           2008         1.87           2009         1.87           2009         1.87           2001         1.87           2012         1.87           2013         1.87           2014         1.87           2015         1.85           2014         1.77           2015         1.85           2016         1.57           2017         1.35           2018         1.56           2018         1.56           2018         1.56           2019         1.56           2019         1.56           2019         1.56           2019         1.56           2019         1.56           2019         1.56	FR passengers per revenue mile has decreased by 43.1% from an 18 year high of 2.04 in 2008 to 1.16 in 2019. The APO desires FR passengers per revenue mile to increase.
<b>Passengers Per Revenue</b> <b>Hour (FR):</b> The number of passengers divided by the number of hours traveled by FR.	Performance Indicator	15.2	20.02         2.3.45           20.03         2.3.45           20.04         2.4.30           20.05         2.4.46           20.06         2.6.82           2001         26.82           2002         26.82           2003         26.82           2014         26.82           2010         26.82           2011         26.95           2012         26.95           2013         26.95           2014         26.95           2013         26.95           2014         26.95           2013         26.95           2014         26.95           2013         26.95           2014         26.95           2013         25.96           2014         24.93           2015         25.96           2014         24.93           2015         23.47           2016         23.04           2018         16.9           2019         15.2	FR passengers per revenue hour has decreased by 47.3% from an 18 year high of 28.83 in 2008 to 15.2 in 2019. The APO desires FR passengers per revenue hour to increase.
<b>Number of Annual Dial-a-</b> <b>Ride (DAR) Transit Riders:</b> Annual number of transit riders by DAR.	Performance Indicator	152,239	2002         117,543           2003         125,292           2004         130,073           2005         131,229           2006         134,746           2008         134,565           2009         134,746           2009         134,411           2010         134,565           2010         134,746           2011         134,746           2012         132,566           2013         132,565           2013         132,565           2013         122,765           2013         123,565           2013         123,565           2014         133,303           2015         133,414           2016         133,414           2017         135,303           2018         133,303           2019         133,303           2016         135,303           2017         135,303           2018         135,303           2019         135,303           2019         135,303	The number of annual DAR transit riders has increased by 29.5% from 117,543 in 2002 to 152,239 in 2019. The APO desires the number of DAR transit riders to increase.
<b>Passengers Per Revenue</b> <b>Mile (DAR):</b> The number of passengers divided by the number of miles traveled by DAR.	Performance Indicator	0.23	2002         0.31           2003         0.31           2004         0.30           2005         0.30           2006         0.30           2007         0.29           2008         0.29           2009         0.28           2009         0.28           2001         0.26           2002         0.26           2003         0.28           2004         0.28           2005         0.26           2010         0.26           2011         0.26           2012         0.26           2013         0.26           2014         0.26           2015         0.26           2016         0.26           2017         0.26           2018         0.26           2019         0.26           2014         0.26           2015         0.26           2016         0.27           2018         0.26           2019         0.27           2019         0.26           2019         0.27	DAR passengers per revenue mile has decreased by 34.8% from 0.31 in 2002 to 0.23 in 2019. The APO desires DAR passengers per revenue mile to increase.

Saint Cloud APO Transportation Results Scorecard

Transit Measure	Target	2019 Results	Multi-Year Trend	Analysis
<b>Passengers Per Revenue</b> <b>Hour (DAR):</b> The number of passengers divided by the number of hours traveled by DAR.	Performance Indicator	3.01	2002         3,72           2003         3,69           2004         3,72           2005         3,69           2006         3,72           2007         3,67           2008         3,67           2009         3,67           2009         3,57           2009         3,56           2010         3,33           2011         3,33           2012         3,33           2013         3,33           2014         3,33           2015         3,33           2016         3,33           2017         3,33           2018         3,34           2013         3,15           2014         3,15           2015         3,07           2016         3,15           2017         3,04           2018         2,06           2019         2,01           2016         2,01           2017         2,01           2018         2,01           2019         2,01	DAR passengers per revenue hour increased 1.7% from 2.96 in 2018 to 3.01 in 2019. The APO desires DAR passengers per revenue hour to increase.
Number of Annual Northstar Commuter Bus (NCB) Transit Riders: Annual number of transit riders on NCB.	Performance Indicator	47,147	2011 41,370 2012 50,313 2013 53,152 2014 59,225 2015 57,642 2016 51,569 2016 51,569 2018 47,570 2019 47,147	Annual NCB transit riders has decreased by 0.9% from 2018. This is a 20.4% decrease from the nine year high of 59,225 annul NCB transit riders in 2014.The APO desires the NCB transit ridership to increase.
<b>Passengers Per Revenue</b> <b>Mile (NCB):</b> The number of passengers divided by the number of miles traveled by NCB.	Performance Indicator	0.27	2011     0.30       2012     0.36       2013     0.38       2014     0.38       2015     0.33       2015     0.33       2015     0.33       2016     0.32       2017     0.29       2018     0.33       2019     0.33       2019     0.33       2019     0.32       2019     0.32	Passengers per revenue mile have decreased by 3.8% from 2018 to 0.27 passengers per revenue mile in 2019. The APO desires NCB passengers per revenue mile to increase.
<b>Passengers Per Revenue</b> <b>Hour (NCB):</b> The number of passengers divided by the number of hours traveled by NCB.	Performance Indicator	8.01	2011     8.93       2012     10.68       2013     11.31       2014     11.59       2015     9.82       2016     8.74       2017     8.57       2018     8.16       2019     8.01	Passengers per revenue hour have decreased by 1.8% from 2018 to 8.01 passenger per revenue hour in 2019. The APO desires NCB passengers per revenue hour to increase.
Percent of Single Occupancy Vehicle (SOV) Travel: Percent of travel alone in a motorized vehicle.	Performance Indicator	81.1%	81.0% 81.1% 79.8% 79.4%	The percent of SOV travel in 2019 was 81.1%. This is 0.1 percentage point increase from 2018. The APO desires SOV travel to decrease.

2015 2016 2017 2018 2019

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 60 mph 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: the westbound lane of Division Street from MN 15 to 10th Avenue N in Waite Park; both lanes of Second Street S from MN 15 to 33rd Avenue S; northbound US 10 from the MN 23 exit north to the Benton Drive South exit; and the northbound lane on CSAH 75 (Roosevelt Road) from the I-94 exit to 33rd Street S.

- ⇒ 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 miles driving within an area within a specific period.



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

### What is VMT?

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 VMT by population (per capita VMT). Reductions in VMT per capita will improve air quality and congestion on the transportation system.

Municipality	Annual Vehicle Miles Traveled (2018)	Annual Vehicle Miles Traveled (2019)	Percent Change (2018- 2019)
Saint Cloud	560,856,605	563,919,202	0.54%
Sartell	78,290,580	82,326,235	4.90%
Sauk Rapids	60,530,578	62,989,692	3.90%
Waite Park	83,768,888	84,173,029	0.48%
Saint Joseph	32,089,659	40,742,029	21.24%
Saint Augusta	63,736,717	63,461,391	-0.43%
Rockville	58,492,469	60,929,312	4.00%
Saint Stephen	3,789,150	3,831,863	1.11%
Total	941,554,646	962,372,752	2.16%

Data Source: MnDOT.

### **VMT Travel by Municipality**

Saint Joseph had the largest growth in VMT compared to other municipalities. This is most likely due to the city partial annexation of Saint Joseph Township. In terms of residential growth, Sartell saw the largest share of population growth. 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, 82.4% of workers 16 years and older who did not work from home had a commute time of 30 minutes or less in 2019. According to Figure 2.2, about one in five workers travel between 15 and 19 minutes to work (22.9%). The travel time to work percent experiences a sharp decline at the 30 to 34 minute interval. Only 11.6% of workers have a travel time of 34 minutes or longer. Comparing travel time to work from 2010 to 2019 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. Pollutants 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 2015-2019 American Community Survey 5-Year Estimates* 

#### **Region's Top Employers and the Number of Employees**

- Saint Cloud Hospital/CentraCare 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, 2015-2019 American Community Survey Five Year Estimates.* 

#### **Means of Transportation to Work**

Depicted in Figure 2.3, of workers 16 years and older 89% (64,460) used a car, truck, or van as their means of transportation to work. Of those 89%, only 7.9% or (5,705) carpooled.

The next most common forms of work commuting transportation include: working from home (4.2%), walking (3.3%), public transportation (2%). Bicycling, taxicab, motorcycle and other means are all below one percent.

Compared with 2010 census data, means of transportation to work by all modes have remained constant.

#### *Figure 2.4-SOV Travel Data Source: U.S. Census Bureau, 2015-2019 American Community Survey Five Year Estimates.*



#### SOV Travel

Shown in Figure 2.4, 81.1% of commuters drove alone to their place of employment, while 18.9% 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 Northstar Commuter Bus (NCB) 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 fixed route, demand response, and commuter bus.

#### **Passengers Per Revenue Hour**

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

#### **Number of Annual Transit Riders**

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

#### **Total Revenue Hours and Revenue Miles**

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

## 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.
- $\Rightarrow$  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 decreased 43.1% from a peak of 2.04 in 2008 to a low of 1.16 in 2019. In addition, passengers per revenue hour also experienced a decline — down 35.1% between 2002 and 2019. However, fixed route revenue mileage and revenue hours have steadily increased between 2002 and 2019— up 40.6% and 51.6% respectively.

Despite the increase and expansion of routes, Metro Bus has not been able to acquire additional ridership. In fact, FR has experienced a decrease of 35.1% (800,602) passenger trips since its peak ridership numbers in 2010. In fact, Metro Bus has lost ridership since 2010. 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.





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



Photo courtesy of Saint Cloud MTC.



#### Dial-a-Ride 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.

Similar to FR service, DAR passengers per revenue mile and passengers per revenue hour have decreased between 2002 and 2019 — down 25.8% and 9.1% respectively. However, during this time frame both DAR revenue miles and vehicle revenue hours have increased — up 75.1% and 60.1% respectively. Despite these similar tr3ends between DAR and FR, DAR ridership has instead by nearly 30% since 2002, adding an additional 34,696 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.

37

# \$6.72

DAR buses Operating expenses per passenger mile for DAR buses

r Operating expenses per vehicle uses revenue hour for DAR buses

**\$86.72** 

DIAL-A-RIDE PASSENGERS PER REVENUE MILE







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 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 30.8% from it's peak in 2014 to 2019, even though revenue miles went up 14.8% in that same time frame. Passengers per revenue hour decreased 30.9% from 2014 to 2019, while revenue hours increased 15.1% in that same time frame. Overall, NCB has experienced a 20.4% (12,078) decrease in passenger trips since its peak in 2014.

# 5

Northstar Commuter

Buses

# \$164.87

Operating expense per vehicle revenues hour 97,821

Northstar Commuter Rail boarding's at Big Lake Station



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

#### Saint Cloud APO Transportation Results Scorecard

Measure	2021 Target	2019 Result	Multi-Year Data
	Good > 85%	96.3%	Target 85%         90.3%         96.4%         96.3%         Purson           2017         2018         2019         2019
Interstate Pavement Condition: Percent of total lane miles that are rated in good, fair, and poor condition.	Fair < 14%	3.8%	Target 14%         pugg           9.7%         3.2%         3.8%           2017         2018         2019
	Poor < 1%	0.0%	Target 1% 0% 0.4% 0% 2017 2018 2019
	Good > 60%	72.9%	Target 60%
Non-Interstate NHS Pavement Condition: Percent of total lane miles that are rated in good, fair, and poor condition.	Fair < 39%	26.3%	Target 39%         Paraget 39%           40.8%         35.0%         26.3%           2017         2018         2019
	Poor < 1%	0.0%	Target 1%         Pup

In 2019, 96.3% of the Interstate's pavement was rated in good condition. This is a 0.1 percentage point decrease from 96.4% in 2018. The APO has set a 2021 Interstate pavement contion target of at least 85% in good condition.

Analysis

In 2019, 3.8% of the Interstate's pavement was rated in fair condition. This is a 0.6 percentage point increase from 3.2% in 2018. The APO has set a 2021 Interstate pavement condition target of less than 14% in fair condition.

No Interstate pavement within the MPA was rated in poor condition in 2019. This is a 0.4 percentage point decrease from 0.4% in 2018. The APO has set a 2021 Interstate pavement condition target of less than 1% in poor condition.

Non-Interstate NHS pavement in 2019 was rated at 72.9% in good condition. This is an 8 percentage point increase from 64.9% in 2018. The APO has set a 2021 non-Interstate NHS pavement condition target of at least 60% in good condition.

Non-Interstate NHS pavement in 2019 was rated at 26.3% in fair condition. This is an 8.7 percentage point decrease from 35% in 2018. The APO has set a 2021 non-Interstate NHS pavement condition target of less than 39% in fair condition.

No non-Interstate pavement within the MPA was rated in poor condition in 2019. This is a 0.1 percentage point decrease from 0.1% in 2018. The APO has set a 2021 non-Interstate NHS pavement condition target of less than 1% in poor condition.

2019

2017

2018

Measure	2021 Target	2019 Result	Multi-Year Data	Analysis
National Highway System (NHS) Bridge Condition: Percent of bridges by deck area classified in good, fair, and poor condition.	Good > 60%	65.4%	Target 60%         Figure 60%           69.7%         64.5%         64.7%         66.9%         65.4%           2015         2016         2017         2018         2019	In 2019, 65.4% of NHS bridges were in good condition. This is a 1.5 percentage point decrease from 66.9% in 2018. The APO has set a 2021 NHS bridge condition target of at least 60% in good condition.
	Fair < 39%	33.7%	Target 39%         Target 39% <thtarget 39%<="" th="">         Target 39%         Target 3</thtarget>	In 2019, 33.7% of NHS bridges were in fair condition. This is a 0.6 percentage point increase from 33.1% in 2018. The APO has set a 2021 NHS bridge condition target of less than 39% in fair condition.
	Poor < 1%	0%	Target 1%	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.
<b>Condition of All</b> <b>Bridges:</b> Percent of bridges, including NHS bridges by deck area classified in good, fair, and poor condition.	Good - Performance Indicator	66.6%	73.8% 73.9% 66.6% 2017 2018 2019	In 2019, 66.6% of all bridges in the MPA were rated in good condition. This is a 7.3 percentage point decrease from 73.9% in 2018. The APO does not have a set target.
	Fair - Performance Indicator	33.3%	25.5% 26.1% 33.3% 2017 2018 2019	In 2019, 33.3% of all bridges in the MPA were rated in fair condition. This is a 7.2 percentage point increase from 26.1% in 2018. The APO does not have a set target.
	Poor - Performance Indicator	0.04%	0.6% 0.0% 0.04% 2017 2018 2019	In 2019, 0.04% of all bridges in the MPA were rated in poor condition. This is a 0.04 percentage point increase from 0.0% in 2018. The APO does not have a set target.

Transit Measure	Target	2019 Result	Multi-Year Data	Analysis
<b>Bridge Weight Restrictions:</b> Number and condition of bridges with a capacity rating posting.	Performance Indicator	6	7 6 2017 2018 2019	There was a total of six bridges with weight restrictions in the APO planning area in 2019. One was rated in good condition, four in fair condition, and one in poor condition. The APO has not set target.
<b>Major Mechanical Failures</b> ( <b>FR</b> ): Mean distance between FR major mechanical failures per 65,000 vehicle revenue miles.	TBD in 2020	0.76	2002 0.64 2003 0.34 2003 0.34 2006 0.99 2006 0.99 2006 0.99 2007 0.58 2007 0.58 2010 0.73 2010 0.73 2011 0.61 3.66 2011 1.08 2011 1.08 2013 1.47 2014 1.98 2013 1.47 2014 1.98 2013 1.47 2014 1.98 2013 1.47 2014 1.28 2013 0.59 2013 0.57 2014 1.28 2014 1.28 2015 0.57 2015 0.57 2014 1.28 2015 0.57 2015 0.57 2015 0.57 2016 0.57 2016 0.57 2017 1.47 2016 0.57 2016 0.57 2017 1.47 2016 0.57 2017 1.47 2016 0.57 2016 0.57 2017 1.47 2016 0.57 2017 1.47 2016 0.57 2016 0.57 2017 1.47 2016 0.57 2017 1.47 2016 0.57 2017 1.47 2016 0.57 2017 1.47 2016 0.57 2017 0.57 2017 0.57 2017 0.57 2018 0.57 2016 0.57 2017 0.57 2016 0.57 2017 0.57 2000 0.57 2	The mean distance per 65,000 vehicle revenue miles between FR major mechanical failures in 2019 was 0.76. This is a 37.7% decrease from the high of 3.66 in 2012. The APO desires the number of FR mechanical failures to decrease.
<b>Major Mechanical Failures</b> ( <b>DAR</b> ): Mean distance between DAR major mechanical failures per 65,000 vehicle revenue miles.	TBD in 2020	1.37	2003 3.36 2004 3.49 2005 4.84 2005 4.84 2009 4.84 2010 3.37 2011 2.13 2011 2.13 2013 0.45 2013 0.45 2013 0.45 2013 0.45 2013 0.45 2013 0.45 2013 1.09 2013 1.09 2014 0.55 2013 1.09 2013 1.09 2014 0.45 2013 1.09 2014 0.45 2013 1.09 2014 0.45 2013 1.09 2014 0.45 2014 0.45 2000 0.45 2000 0.45 2000 0.45 2000 0.45 2000 0.45 2000 0.45 2000 0	The mean distance per 65,000 vehicle revenue miles between DAR major mechanical failures in 2019 was 1.37, a 74.7% decrease from the high of 5.41 in 2008. The APO desires the number of DAR mechanical failures to decrease.
<b>Major Mechanical Failures</b> ( <b>NCB</b> ): Mean distance between NCB major mechanical failures per 65,000 vehicle revenue miles.	TBD in 2020	0.75	2011 6.65 2012 1.86 2014 0.86 2015 4.22 2016 4.86 4.86 4.86 2016 4.83 2019 1.51 2019 0.75 Desired Trend	The mean distance per 65,000 vehicle revenue miles between NCB major mechanical failures in 2019 was 0.75. This is a 88.7% decrease from the 6.65 in 2011. 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.

Asset	2019 Target	2019 Result	Multi-Year Data	Analysis
Fixed Route Buses	< 10%	10.3%	2019 10.3%	The percent of fixed route buses that have exceeded their useful life in 2019 was 10.3%. MTC set a 2020 target of less than 10% exceeding useful life.
Dial-a-Ride Buses	< 10%	48.6%	2019 48,6%	The percent of Dial-a-Ride buses that have exceeded their useful life in 2019 was 48.6%. MTC set a 2020 target of less than 10% exceeding useful life.
Northstar Commuter Buses	< 10%	0%	2019 0.0%	The percent of Northstar Commuter Buses that have exceeded their useful life in 2019 was 0%. MTC set a 2020 target of less than 10% exceeding useful life.
Service Automobiles	< 40%	100%	100.0%	All Metro Bus service automobiles have exceeded their useful life in 2019. MTC set a 2020 target of less than 40% exceeding useful life.

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.

Asset	2019 Target	2019 Result	Data	Analysis
Trucks and Other Rubber Tire Vehicles	< 50%	33%	33%	The percent of service trucks and other rubber tire vehicles that have exceeded their useful life in 2019 was 33%. MTC set a 2020 target of less than 50% exceeding useful life.
Administrative/ Maintenance Facilities	< 0%	33%	33%	There are 33% of administrative/ maintenance facilities rated below three on the TERM scale. MTC set a 2019 target of 0% of facilities below three on the TERM scale.
Passenger/Parking Facilities	< 0%	0%	2019 0%	No Metro Bus passenger/parking facilities were rated below a three on the TERM scale in 2019. MTC set a 2019 target of 0% of facilities below three on the TERM scale.

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 and photo courtesy of MnDOT.

#### **Pavement Conditions**

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



Figure 3.1-Pavement Condition Data Source: MnDOT and GoodPointe Technology.

#### **Pavement Condition**

In 2019, 50% of pavement within the APO planning area was in good condition, 31.1% in fair condition, and 18.9% in poor condition as displayed in Figure 3.1.

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 MnDOT with a direct correlation between the IRI, as measured by the van, and the perceived roughness, as felt by the rating panel.

#### **Bridge Condition**

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



Photos courtesy of MnDOT.

#### **How is Bridge Condition 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.



Data and photos courtesy of MnDOT.

**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, 70 are rated in good condition, 41 are in fair condition, and one is in poor condition as illustrated in Figure 3.2.

Bridge L9200 is a timber bridge spanning Sucker Creek and was rated in poor condition in 2019. The bridge is on Sucker Creek Road NW which is a local road with an estimated average daily traffic count of 28 in Watab Township.



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	Transit Economic Requirer	ments Model (TERM) Rating
Excellent	4.8-5.0	No visible defects, near-new	Operations Facility: This	
Good	4.0-4.7	Some slightly defective or	property houses the maintenance garage, employee break areas,	METRO BUS
Adequate	3.0-3.9	Moderately defective or deteriorated	paratransit call center, and administrative offices including	OPERATIONS CENTER 665 FRANKLIN AVE NE
Marginal	2.0-2.9	Defective or deteriorated components in need of replacement.	finance, planning, procurement, information technology,	CNG
Poor	1.0-1.9	Seriously damaged components in need of immediate repair.	marketing, operations and human resources.	
Factors involv	ed with TERM	1 Scale rating:		
Substructure	е.	• Electrical.	Transit Center: This property	
• Shell.		• Equipment.	buses and the customer service	
• Interiors.		• Fare Collection.	center.	
• Plumbing.		• Site.		1 St - 10 200 1
• HVAC.		Conveyance		
Fire Protection	on.	(Elevators and Escalators).	The Mobility Training Center: This property houses outreach,	
TERM	RATING OF	METRO BUS FACILITIES	travel training, and the safety departments.	
MOBILITY TRAINING C	CENTER			
TRANSIT C	CENTER		Cold Storage: This property was	
OPERATIONS C	CENTER		and is currently used for cold storage.	

Figure 3.3

Data Source: National Transit Database.

Photos courtesy of Saint Cloud MTC and APO.

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	2019 Result	Multi-Year Trend	Analysis
<b>Truck Travel Time</b> <b>Reliability (TTTR):</b> Calculated by dividing the ratio of the 95th percentile time by the normal time (50th percentile).	< 1.24	1.15	Image: Transform of transfo	Truck Travel Time Reliability (TTTR) index has increased by 2.7% from 1.12 in 2018 to 1.15 in 2019. 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	2013 28,767 2014 59,705 2015 37,817 2016 33,292 2017 41,745 2018 43,743	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 six year high of 59,705 passengers in 2014. The APO does not have a set target.
<b>Tri-CAP One-Way Transit</b> <b>Trips:</b> Annual number of transit trips.	Performance Indicator	161,572	2004         61,963           2005         74,602           2007         87,417           2008         87,417           2009         115,688           2010         115,688           2011         115,688           2012         115,688           2013         115,688           2013         115,688           2013         135,960           2014         135,960           2015         125,960           2015         125,960           2016         135,960           2017         146,737           2018         146,737           2017         146,737           2018         145,996           2018         145,796           2018         145,796           2018         145,796           2018         145,796           2018         145,914           2019         161,972	Tri-CAP one-way transit trips increased 8.5% from 148,914 trips in 2018 to 161,572 trips in 2019. This is a 16-year high and an increase of 160.9% trips from 2004. The APO does not have a set target.
<b>Amtrak Ridership:</b> Annual passengers using the Saint Cloud Amtrak station.	Performance Indicator	9,143	10,614 13,740 13,537 10,431 9,950 11,457 10,325 9,566 9,143	Amtrak annual ridership decreased 4.4% from 9,566 passengers in 2018 to 9,143 passengers in 2019. This is a decrease of 33.5% from the nine-year high of 13,740 passengers in 2012.

 The APO does not have a set target.

#### Saint Cloud APO Transportation Results Scorecard

Measure	Target	2019 Result	Multi-Year Trend	Analysis
<b>Percent of Monthly</b> <b>Household Budgets Spent</b> <b>on Transportation (One</b> <b>Working Adult, No</b> <b>Children):</b> Average percent of monthly budget spent on transportation.	Performance Indicator	See Graph	27.7%26.0%26.3%30.2%27.2%25.0%BentonSherburne CountyStearnsEDR-7W CentralCentralMinnesota	In 2019, the percent of monthly household budgets spent on transportation for one adult and no children is highest in ERD-7W Central at 30.2% followed by Benton County at 27.7%, Central Minnesota at 27.2%, Stearns County at 26.3%, and Sherburne County at 26%. All are above the state's 25% of one adult, no children household budget spent on transportation.



In 2019, the percent of monthly household budgets spent on transportation for one adult and one child is highest in Benton County at 19.3% followed by Stearns County at 18%, Central Minnesota at 17.9%, EDR-7W Central at 17.1%, and Sherburne County at 16.2%. All are above the state's 14.6% of one adult, one child household budget spent on transportation.

In 2019, 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 16.8%, Stearns County at 16.3%, EDR-7W Central at 16.1%, and Sherburne County at 15.7%. All are above the states 13.9% of two adults, one child household budget spent on transportation.

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



See Graph



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 an average speed (50th percentile) 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.

The section of Interstate 94 that passes through the APO's MPA has a TTTR 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



Photos courtesy of the APO.

#### Saint Cloud Regional Airport

The Saint Cloud Regional Airport (STC) was officially opened in 1970 at it current location 1550-45th Ave. SE in Saint Cloud. It is the only publicly operated air facility within the APO planning area. 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 flies 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.

# 1,400

# **\$20 Million**

Number of acres the airport resides on.

Estimated annual impact on the local economy.

#### 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.

#### **Transportation Costs**

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 (Benton Sherburne, Stearns, and Wright counties); Central Minnesota (Benton, Chisago, Isanti, Kanabec, Kandiyohi, McLeod, Mille Lacs, Meeker, Pine, Renville, Sherburne, Stearns, and Wright counties); 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.

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.



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.

Goal 5: Promote Energy and Environmental Conservation					
Measure	Target	2019 Result	Multi-Year Trend	Analysis	
<b>Air Quality Five Year Rolling</b> <b>Average -</b> Annual count of days in each Air Quality Index (AQI) category; good, moderate, unhealthy for sensitive groups, and unhealthy.	Good - Performance Indicator	90.1%	2005 72.6% 2006 76.7% 2003 80.2% 2008 80.2% 2010 81.6% 2011 80.0% 2013 81.6% 2013 81.6% 2013 81.6% 2013 81.6% 2013 82.8% 2013 83.0% 2013 83.0% 2013 83.0%	The five year rolling average percent of days with good air quality increased 17.5 percentage points since 2005, from 72.6% to 90.1% in 2019. The APO desires the air quality of improve.	
	Moderate - Performance Indicator	9.8%	2005         26.8%           2006         22.7%           2007         21.6%           2008         19.0%           2010         17.9%           2011         19.5%           2012         19.5%           2013         19.5%           2014         19.5%           2015         19.5%           2016         11.8%           2015         10.2%           2016         11.8%           2017         9.9%           2018         10.2%           2019         2.8%	The five year rolling average percent of days with moderate air quality decreased 17 percentage points since 2005, from 26.8% to 9.8% in 2019. 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	79%	79% 21% • Minority population • Non-minority population	Identified in the 2019-2023 Transportation Improvement Program (TIP), 79% 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 high concentrations of persons with low-income.	Performance Indicator	70%	70% 30% • Persons with low-income Population	Identified in the 2019-2023 Transportation Improvement Program (TIP), 70% of programmed projects intersect with census blocks with a low -income population.	

Measure	Target	2019 Result	Multi-Year Trend	Analysis
Percent of Revenue Vehicles Using Compressed Natural Gas (CNG): Percent of CNG used by Metro Bus revenue vehicles versus all other fuel types.	Performance Indicator	79.9%	2015 57.8% 2016 57.6% 2017 61.4% 2018 72.2%	The percent of CNG has increased 22.1 percentage points since 2015, an additional 170,675 gallons.
Percent of VMT Using CNG by Revenue Vehicles: Percent of vehicle miles traveled using CNG by Metro Bus revenue vehicles versus all other fuel types.	Performance Indicator	71.8%	2015 45.9% 2016 46.7% 2017 53.9% 64.5% 2019 64.5%	The percent of vehicle miles traveled using CNG has increased 25.9 percentage points since 2015 or an additional 700,749 vehicle miles traveled.
Number of Electric Vehicles Versus Number of Public Charging Station Outlets: Number of registered electric vehicles (EVs) divided by the number of public charging station outlets.	Performance Indicator	16	2019 16	The number of EVs per number of public charging station outlets was 16 in 2019.
Number of Public Charging Stations Outlets Versus Number of Electric Vehicles: Number of public charging station outlets divided by the number of registered electric vehicles (EVs).	Performance Indicator	0.06	0.06	The number of public charging station outlets per number of EVs was 0.06 in 2019.

#### 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 Saint Cloud area AQI has seen the share of good air quality days increase 28 percentage points to 91% compared to 63% in 2001 as shown in Figure 5.1. Moderate AQI days have also fallen significantly since 2001 — down to 9% as of 2019. There has been 23 days with an AQI that was unhealthy for sensitive groups and three days that was unhealthy in general since 2011. 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.

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

20%

#### **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 Lake George.

There are a total of 13 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, Mayhew Creek, Luxemburg Creek, Johnson Creek (Meyer Creek), and Robinson Hill Creek.

The most common pollutants 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.

**Registered Electric Vehicles and Public Charging Stations** 

Percent of registered electric vehicles (EVs) divided by the number of public charging station outlets. Number of public charging station outlets divided by the number of registered electric vehicles (EVs).

95%

Percent of charging of EVs which

occur at home.

In 2020 there were 115 registered electric vehicles (EVs) in the Saint Cloud metro area compared to 96 in 2019. Of the 96 EVs 51 are in Saint Cloud, 21 in Sartell, 14 in Sauk Rapids, five in Saint Joseph, five in Saint Augusta, and zero is in Waite Park. Our region has a fraction of the 14,484 registered EVs across the State of Minnesota.

An increase in EVs will help our region and the State of Minnesota reduce greenhouse gas (GHG) emissions and provide an overall improvement in quality of life. MnDOT has designated I-94 as an alternative fuels corridor known as the Great Lakes Zero Emission Corridor. The goal of this type of alternative fuel corridor is to promote the electric vehicle charging infrastructure across Minnesota.

EV Registration by City	2019
Saint Cloud	51
Sartell	21
Sauk Rapids	14
Saint Joseph	5
Saint Augusta	5
Waite Park	0
Total	96

Figure 5.3 - EV Registration data comes from the Minnesota Pollution Control Agency, Minnesota Department of Public Safety, and Atlas Public Policy, 2019.

#### **Charging Terminology**

**Level 1:** Charging a vehicle at "Level 1" means plugging into a standard 120-volt supply. On average, a Level 1 supply provides 2 to 5 miles of vehicle range per hour the vehicle is connected. The best use cases for a Level 1 charger is workplaces and homes.

**Level 2:** Charging a vehicle at "Level 2" means plugging into a 240-volt supply. On average, Level 2 stations provide 10 to 20 miles of range per hour the vehicle is connected. Locations where owners will be staying for two hours or more are great use cases for Level 2 chargers.

**Direct Current Fast Charging (DCFC):** Is only really available as an option for public charging, and are often installed along transportation corridors. DC Fast Chargers can deliver 60-80 miles of charge in only 20 minutes of the vehicle being connected. Locations where owners will be staying for about 20 minutes are great use cases for DCFC.

There are currently six public EV charging station outlets in the Saint Cloud metro area: four being level 2 and two being a DCFC. Two of the four Level 2 chargers are located at Miller Nissan (2930 Second St. in Saint Cloud). The remaining two Level 2 chargers and the two DCFC chargers are located at 504 First St. N in Saint Cloud.

Data Source: MnDOT and Drive Electric Minnesota

# **39 Months**

Months of consecutive growth in sales for EVs.

0.6%

Percent of new car sales in Minnesota for 2017.

Data Source: Drive Electric Minnesota

65%

Percent of greenhouse gas reduction

by EVs in Minnesota.