

CHAPTER 5 : GOALS, OBJECTIVES, STRATEGIES, AND PERFORMANCE MEASURES

INTRODUCTION

The goals, objectives, and performance measures established by the APO are designed to provide direction and guidance for MAPPING 2045. The goals were developed based on the analysis of the existing conditions, performance data, and public input detailed in the previous chapters. For each goal, specific measurable actions (i.e., objectives) were identified to help the region reach the desired goal. In some cases, important methods and capabilities to achieve objectives (i.e., strategies) are also identified. Performance measures were developed as ways to measure the level of attainment of the goals and objectives.



**FIGURE 5.1 – RELATIONSHIP OF GOALS, OBJECTIVES, STRATEGIES, AND TACTICS**  
 Source: Federal Highway Administration Office of Operations

Federal regulation<sup>1</sup> establishes the following national surface transportation goals:

1. **Safety** – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
2. **Infrastructure Condition** – To maintain the highway infrastructure asset system in a state of good repair.
3. **Congestion Reduction** – To achieve a significant reduction in congestion on the National Highway System.

<sup>1</sup> 23 USC 150(b)

4. **System Reliability** – To improve the efficiency of the surface transportation system.
5. **Freight Movement and Economic Vitality** – To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
6. **Reduced Project Delivery Delays** – To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies’ work practices.

In addition, FAST Act §134(h)(2) requires that goals and objectives set forth by the APO “shall provide for the establishment and use of a performance-based approach to transportation decision making.” Therefore, for each goal below, a series of performance measures and/or performance indicators has been identified to help inform transportation investment decision-making. The APO will regularly report on the performance measures and indicators.

As a local and regional transportation plan, MAPPING 2045 must reflect the national transportation goals, but may also supplement them in ways that make sense for the local and regional networks.

## REGIONAL GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

The APO has identified five overall goals for MAPPING 2045:

- I. Maintain and Enhance Transportation Safety;
- II. Increase System Accessibility, Mobility, and Connectivity;
- III. Efficiently Manage Operations and Cost-Effectively Preserve the System;
- IV. Support Metropolitan Vitality and Economic Development; and
- V. Promote Energy and Environmental Conservation.

In the sections that follow, each of these goals will be further addressed through identification of objectives and strategies to be implemented by the APO to achieve those goals. In order to monitor the effectiveness of the objectives and strategies used to achieve the above goals, data-driven performance measures and performance indicators have also been included.

### **Goal 1: Maintain and Enhance Transportation Safety**

**Goal Statement:** Develop and maintain a transportation system that is safe for all users.

- 1) **Objective:** Build and maintain roadways that include appropriate safety infrastructure to help prevent crashes.
  - a) **Strategy:** The APO shall encourage and support the installation of roundabouts, where appropriate, to help reduce right-angle crashes.

- b) **Strategy:** The APO shall encourage and support the installation of shoulder and centerline rumble and mumble strips and stripes, where appropriate, to warn drivers they are leaving their travel lane.
- c) **Strategy:** The APO shall encourage and support the installation of median barrier systems, crash cushions, and guiderail end treatments, where appropriate, to reduce the severity of lane departure crashes.
- 2) **Objective:** Identify and prioritize high-crash locations for investment and/or mitigation activities, as warranted.
  - a) **Strategy:** APO staff will continue to monitor crash rates on the Federal-Aid roadway system to help identify high-crash locations.
- 3) **Objective:** Reduce the regional rates of bicycle and pedestrian fatalities and serious injuries.
  - a) **Strategy:** APO staff will collect and evaluate bicycle and pedestrian crash data to help determine the most common causes of serious injuries and fatalities and to identify action steps for the mitigation of crashes.
  - b) **Strategy:** APO staff will continue to work with organizations and government agencies on multimodal transportation projects and programs that enhance access to schools through the use of Safe Routes to Schools funding.
  - c) **Strategy:** APO staff will encourage member jurisdictions to integrate pedestrian and bicycle safety into their transportation planning documents.
- 4) **Objective:** Support, to the extent practical, efforts by outside agencies and stakeholders to reduce bad driving behavior such as driving under the influence and distracted driving.
  - a) **Strategy:** APO staff will continue their participation in the 'Toward Zero Deaths' Stearns-Benton coalition.
  - b) **Strategy:** The APO will study crash data to potentially uncover commonalities or predictive characteristics that could be used to help reduce occurrences of bad driving behavior.
- 5) **Objective:** Support, to the extent practical, a safe transit system.
  - a) **Strategy:** APO staff, in cooperation with Saint Cloud Metro Bus staff, will monitor and report on transit safety performance.
- 6) **Objective:** Define and support transportation security
  - a) **Strategy:** The APO staff, in cooperation with member jurisdictions, will develop a regional transportation security framework and appropriate performance measure(s).

<b>SAFETY PERFORMANCE MEASURES &amp; INDICATORS</b>	
<b>ROADWAY SAFETY PERFORMANCE MEASURES</b>	<b>METHOD OF CALCULATION</b>
<b>Number of Crashes – Annual</b>	Total number of crashes that occurred on roadways within the MPA.
<b>Rate of Crashes – Annual</b>	The number of crashes that occurred on roadways within the MPA per 100 million vehicle-miles traveled (VMT).
<b>Number of Fatalities – Annual</b>	Number of fatalities for each of the most recent five consecutive years ending in the year for which the targets are established.
<b>Number of Fatalities – Five Year Average</b>	Number of fatalities for each of the most recent five consecutive years ending in the year for which the targets are established, dividing by 5, and rounding to the tenth decimal place.
<b>Rate of Fatalities – Five Year Average</b>	Calculation of the number of fatalities per 100 million VMT (100M VMT) for each of the most recent five consecutive years ending in the year for which the targets are established, adding the results, dividing by 5, and rounding to the thousandth decimal place.
<b>Number of Serious Injuries – Annual</b>	Addition of the number of serious injuries for each of the most recent five consecutive years ending in the year for which the targets are established.
<b>Number of Serious Injuries – Five Year Average</b>	Addition of the number of serious injuries for each of the most recent five consecutive years ending in the year for which the targets are established, dividing by 5, and rounding to the tenth decimal place.
<b>Rate of Serious Injuries – Five Year Average</b>	Calculation of the number of serious injuries per 100 million VMT (100M VMT) for each of the most recent five consecutive years ending in the year for which the targets are established, adding the results, dividing by 5, and rounding to the thousandth decimal place.
<b>Number of Non-Motorized Fatalities and Serious Injuries – Annual</b>	Addition of the number of non-motorized fatalities to the number of non-motorized serious injuries for each of the most recent five consecutive years ending in the year for which the targets are established.

ROADWAY SAFETY PERFORMANCE MEASURES	METHOD OF CALCULATION
<b>Number of Non-Motorized Fatalities and Serious Injuries – Five Year Average</b>	Addition of the number of non-motorized fatalities to the number of non-motorized serious injuries for each of the most recent five consecutive years ending in the year for which the targets are established, dividing by 5, and rounding to the tenth decimal place.
<b>Number and Percent of Crashes, Fatalities, and Serious Injuries that Involved Chemical Impairment – Annual</b>	Addition of the number of crashes of all types wherein the driver had been drinking or taking drugs; this value will also be expressed as a percentage of all crashes, percent of all fatal crashes, and percent of all crashes resulting in a serious injury.
<b>Number and Percent of Crashes, Fatalities, and Serious Injuries that Involved Distracted Driving – Annual</b>	Addition of the number of crashes of all types involving distracted driving; this value will also be expressed as a percentage of all crashes, percent of all fatal crashes, and percent of all crashes resulting in a serious injury.
<b>Commercial Vehicle Crashes and/or Severity – Annual</b>	Addition of the number of crashes of commercial vehicles; this value will also be expressed as a percentage of all crashes, percent of all fatal crashes, and percent of all crashes resulting in a serious injury.
<b>Transportation Security Performance Measure(s)</b>	To be determined.

To the extent possible, roadway crashes will be assigned locations and maps will be produced to help identify “hot spot” locations, if any.

TRANSIT SAFETY PERFORMANCE MEASURES	METHOD OF CALCULATION
<b>Number and Rate of Fatalities – Annual</b>	Fatalities are measured by the total number of reportable fatalities and rate per total vehicle revenue miles by mode.
<b>Number and Rate of Injuries – Annual</b>	Injuries are measured by the total number of reportable injuries and rate per total vehicle revenue miles by mode.
<b>Number and Rate of Safety Events – Annual</b>	Safety events are measured by the total number of reportable events and rate per total vehicle revenue miles by mode. The safety events measure captures all reported safety events that occur during transit operations and the performance of regular supervisory or maintenance activities.

## **Goal 2: Increase System Accessibility, Mobility, and Connectivity**

**Goal Statement:** Increase the accessibility and mobility options for people and freight across and between all modes for all users.

- 1) **Objective:** Increase accessibility of people and freight.
  - a. **Strategy:** APO staff will build relationships with public and private providers of transportation to help ensure coordination of services, optimal use of resources, and filling of service gaps.
  - b. **Strategy:** The APO will encourage and support transportation facilities that are compliant with the Americans with Disabilities Act (ADA) and meet Title VI and Environmental Justice (EJ) requirements.
- 2) **Objective:** Increase mobility of people and freight.
  - a. **Strategy:** The APO will preserve and enhance long-distance commuter connections to the Twin Cities, including, but not limited to, the extension of the Northstar Commuter Rail to the Saint Cloud metro.
  - b. **Strategy:** The APO will identify, preserve, and enhance important long-distance commuter corridors for workers who commute into the greater Saint Cloud metropolitan area.
  - c. **Strategy:** The APO will encourage and support, to the extent possible, the regular evaluation of public transit routes and service to help ensure efficient operations and optimal ridership.
  - d. **Strategy:** APO staff will continue to collect and analyze data related to travel time reliability, level of service, and vehicle miles travel to identify areas for congestion mitigation measures.
  - e. **Strategy:** The APO will encourage and support, to the extent possible, appropriate densities and mixing of appropriate land uses to help reduce commute distances, encourage non-motorized options, and maximize the efficient delivery of public services to residents.
  - f. **Strategy:** In cooperation with local partners, the APO will study the costs and benefits of various potential operational improvements to arterials roadways. MN 15 will be the first arterial roadway reviewed.
  - g. **Strategy:** APO staff will work with member jurisdictions to explore the feasibility, costs, and potential benefits of a bypass ring road corridor for longer distance and through movements around the MPA.
  - h. **Strategy:** APO staff will identify and support the efficient operations of important local first- and last-mile freight corridors.
  - i. **Strategy:** APO staff will continue to monitor the development and likely impacts of driverless vehicles.
  - j. **Strategy:** The APO will support, to the extent possible, the expansion of interconnected traffic signals and the active management of them.
- 3) **Objective:** Identify and maintain viable non-motorized transportation options.

- a. **Strategy:** APO staff will identify, map, and monitor the use of bicycle and pedestrian routes and facilities to determine gaps in the network and opportunities for improvements.
  - b. **Strategy:** Working cooperatively with jurisdictional partners, APO staff will develop, maintain, and champion the implementation of a Regional Active Transportation Plan.
  - c. **Strategy:** APO staff shall establish a regular meeting schedule for the Active Transportation Advisory Committee (ATAC), which shall assist and advise APO staff on the development of the Regional Active Transportation Plan and the mapping and monitoring of bicycle and pedestrian facilities.
  - d. **Strategy:** The APO shall complete a feasibility study for a potential local bike-share program.
  - e. **Strategy:** APO staff will continue to coordinate with MnDOT regarding where regional and statewide bike trails enter the Saint Cloud metro area, and where they intersect with other local and regional bike trails.
- 4) **Objective:** Enhance connectivity across and between modes of transportation.
- a. **Strategy:** APO staff will monitor and regularly report on the connectivity of roadways and bike trails.
  - b. **Strategy:** The APO shall encourage and support, to the extent possible, the regular evaluation of bus stops, bus shelter locations, condition, and auxiliary amenities to help ensure the needs of the traveling public are being met. Such an evaluation shall also include an evaluation of ADA-compliant pedestrian access to the bus stop location.
  - c. **Strategy:** The APO will complete a study aimed at better understanding how ridesharing services in the Saint Cloud metro area augment, supplement, or replace other transportation options for residents.

**ACCESSIBILITY, MOBILITY, AND CONNECTIVITY PERFORMANCE MEASURES & INDICATORS**

ROADWAY ACCESSIBILITY, MOBILITY, AND CONNECTIVITY PERFORMANCE MEASURES	METHOD OF CALCULATION
<p><b>Annual Percent of Person-Miles Traveled on the Interstate that are Reliable.</b></p>	<p>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 free National Performance Management Research Data Set (NPMRDS) or equivalent. Data is collected in 15 minute segments during all time periods other than 8 p.m.-6 a.m. local time. The measures are the percent of person-miles traveled on the relevant Interstate that are reliable.</p>



<b>Annual Percent of Person-Miles Traveled on the Non-Interstate NHS that are Reliable.</b>	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 free National Performance Management Research Data Set (NPMRDS) or equivalent. Data is collected in 15-minute segments during all time periods other than 8 p.m.-6 a.m. local time. The measures are the percent of person-miles traveled on the relevant Non-Interstate NHS that are reliable.
<b>Annual Vehicle Miles Traveled.</b>	The number of vehicle miles traveled for the most recent year for which the target is being established, rounded to the tenth decimal place.
<b>Average Work Trip Travel Time</b>	Average travel time it takes an employee to travel between their residence and place of employment for the most recent year for which the target is being established.
<b>Bicycle Network Gaps</b>	Maintain and update on an annual basis a network map of regional bike and multi-use routes. Conduct a visual assessment of connectivity for existing and/or future planned routes.
<b>Transit Shed of Routes Connecting to Freight Clusters</b>	Percent of freight clusters served by a transit stop within one-half mile.
<b>Roadway Connectivity</b>	One divided by the quotient of the average block length of an area over the link-node ratio of that same area, all multiplied by 1000.
<b>Percent of Non-SOV Travel</b>	Non-SOV travel is defined as any travel mode other than driving alone in a motorized vehicle, such as single occupancy vehicle or SOV travel, including travel avoided by telecommuting.

<b>TRANSIT ACCESSIBILITY, MOBILITY, AND CONNECTIVITY PERFORMANCE MEASURES</b>	<b>METHOD OF CALCULATION</b>
<b>Passengers Per Revenue Mile</b>	The number of passengers divided by the number of miles traveled by commuter bus, demand response, and fixed route.
<b>Passengers Per Revenue Hour</b>	The number of passengers divided by the number of hours traveled by commuter bus, demand response, and fixed route.
<b>Number of Annual Transit Riders</b>	Annual number of transit riders by commuter bus, demand response, and fixed route.



TRANSIT ACCESSIBILITY, MOBILITY, AND CONNECTIVITY PERFORMANCE MEASURES	METHOD OF CALCULATION
<b>Total Revenue Hours and Revenue Miles</b>	Annual number of revenue hours and miles served by commuter bus, demand response, and fixed route.

**Goal 3: Efficiently Manage Operations and Cost-Effectively Preserve the System**

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

- 1) **Objective:** Prioritize the maintenance and preservation of the existing transportation network.
  - a. **Strategy:** The APO shall maintain and regularly update its pavement condition database to help identify areas in need of repair.
  - b. **Strategy:** The APO shall develop and maintain a planning and programming process that prioritizes funding for bridges with a 'poor' condition rating and roadways with 'poor' International Roughness Index (IRI) ratings more highly than other bridges or roadways.
  - c. **Strategy:** APO staff will work with public transit to ensure achievement and maintenance of a state of good repair for public transit assets.
  - d. **Strategy:** APO staff shall develop a process for monitoring and evaluating the condition of bike paths and multi-use paths and shall report their findings to the member jurisdictions.
- 2) **Objective:** Invest in cost-effective transportation solutions.
  - a. **Strategy:** The APO shall develop one or more performance measures to capture transportation asset utilization and return on investment (ROI) for transportation assets and will regularly report on such performance measure(s).
  - b. **Strategy:** The APO shall use and shall encourage its member jurisdictions to use life-cycle cost estimates when evaluating changes to the transportation system.
  - c. **Strategy:** APO staff will work to identify and explore the feasibility of local funds dedicated to transportation upgrades and maintenance including the possibility of public-private partnerships.
  - d. **Strategy:** Identify funding to upgrade traffic signal controllers to Cobalt or newer for greater efficiency, and to upgrade the existing Opticon system.
- 3) **Objective:** Efficiently manage the transportation system.
  - a. **Strategy:** The APO will develop and regularly report on performance measures aimed at evaluating how efficiently and effectively the transportation systems are being operated/managed.

**MANAGEMENT AND PRESERVATION PERFORMANCE MEASURES & INDICATORS**

<b>ROADWAY MANAGEMENT AND PRESERVATION PERFORMANCE MEASURES</b>	<b>METHODS OF CALCULATION</b>
<b>Interstate System Pavement Conditions</b>	Interstate pavement condition is based on the percent of total lane miles that are rated in good, fair and poor condition calculated using the international roughness index, cracking percent, rutting, and faulting as measurements. International Roughness Index (IRI) is a statistic used to estimate the amount of roughness in a measured longitudinal profile. The IRI is computed from a single longitudinal profile using a quarter-car simulation. If an IRI value of a pavement section is less than 95, the IRI rating is good; between 95 and 170 the IRI rating is fair; and greater than 170 the IRI rating is poor.
<b>Non-Interstate Federal-Aid Roadway and Tier 3 Freight Network Pavement Conditions</b>	Non-Interstate Federal-Aid pavement condition is based on the percent of total lane miles that are rated in good, fair and poor condition calculated using the IRI, cracking percent, rutting, and faulting as measurements. Data for the Tier 3 Freight Network shall also be collected, regardless of the functional classification of the roadway.
<b>Pavement Maintenance</b>	Measure of the number of years since last preservation treatment on a segment of roadway within the Federal-aid system.
<b>Bridge Conditions and Weight Restrictions</b>	Percent of bridges by deck area classified in good, fair and poor condition using the NBI ratings for, deck, superstructure, substructure, and culvert.
<b>Transportation Improvement Program (TIP) Investment in Existing vs. New Roads</b>	As identified in the TIP, the percent of annual investment in maintenance and improvement activities for existing roadways compared to the percent of investment in the construction of new roadways.
<b>Condition of Bike Paths and Multi-Use Paths</b>	To be determined, but may include measurement of the number of years since last preservation treatment on a segment of bike/multi-use paths within the region, and/or visual observations of surface conditions.
<b>Transportation Asset Return on Investment Performance Measure(s)</b>	To be determined.
<b>Operational Efficiency Performance Measure(s)</b>	To be determined.

TRANSIT MANAGEMENT AND PRESERVATION PERFORMANCE MEASURES	METHODS OF CALCULATION
<b>State of Good Repair for Equipment, Facilities, and Rolling Stock</b>	Revenue vehicles (rolling stock) and service vehicles (equipment), are measured by calculating the percentage of vehicles that have met or exceeded the useful life benchmark. Facilities are measured on the Transit Economic Requirements Model (TERM) scale that are rated less than 3.0.
<b>Total Number and Rate of Reportable Events Per Total Vehicle Revenue Miles by Mode</b>	System reliability is measured by the mean distance between major mechanical failures by mode. The system reliability measure expresses the relationship between safety and asset condition. The rate of vehicle failures in service, defined as mean distance between major mechanical failures, is measured as revenue miles operated divided by the number of major mechanical failures. This is a measure of how well a fleet of transit vehicles is maintained and operated.

**Goal 4: Support Metropolitan Vitality and Economic Development**

**Goal Statement:** Support the economic vitality of the APO MPA by enabling global competitiveness, productivity, and efficiency while enhancing travel and tourism.

- 1) **Objective:** Promote the efficient movement of people.
  - a. **Strategy:** The APO will complete one or more planning documents to evaluate the feasibility of various options for providing or supporting low-cost transportation options for financially stressed households.
  - b. **Strategy:** The APO will support, as appropriate, commercial passenger service at Saint Cloud Regional Airport.
  - c. **Strategy:** The APO will evaluate and support, as appropriate, the connection of public transit and the bicycle and pedestrian network with inter-regional services such as Jefferson Lines, Amtrak, Tri-CAP, Northstar Commuter Rail, the airport, Executive Express, etc.
  - d. **Strategy:** The APO staff will encourage and assist, as appropriate, long-distance-commute workers moving into the metropolitan area to assist in shortening commute trips.
- 2) **Objective:** Promote the efficient movement of goods and freight.
  - a. **Strategy:** APO staff shall develop and maintain relationships with major freight shippers in the region to better understand their operations, needs, and any problems they may face regarding the efficient movement of goods on the regional freight system.
  - b. **Strategy:** The APO staff shall keep abreast of economic development patterns and will promote consistency between economic development plans and transportation plans.

- c. **Strategy:** The APO staff, in coordination with member jurisdictions, will continue to explore and implement, as prudent, freight movement performance data collection and analysis for all freight network tiers.

**METROPOLITAN VITALITY AND ECONOMIC DEVELOPMENT PERFORMANCE MEASURES & INDICATORS**

ROADWAY METROPOLITAN VITALITY AND ECONOMIC DEVELOPMENT PERFORMANCE MEASURES	METHODS OF CALCULATION
<p><b>Truck Travel Time Reliability Index for Tier 1 Freight Network</b></p>	<p>Freight movement will be assessed by a Truck Travel Time Reliability (TTTR) Index. Reporting is divided into five periods: morning peak (6-10 a.m.), midday (10 a.m.-4 p.m.) and afternoon peak (4-8 p.m.) Mondays through Fridays; weekends (6 a.m.-8 p.m.); and overnights for all days (8 p.m.-6 a.m.). The TTTR ratio will be 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.</p>
<p><b>Air Passengers at STC, Routes, and Frequencies</b></p>	<p>Annual number of customers served at the Saint Cloud Regional Airport.</p>
<p><b>Rail Passengers via Amtrak and Frequency</b></p>	<p>Annual boardings and alightings at Saint Cloud Amtrak station.</p>
<p><b>Northstar Link Passengers &amp; Big Lake Station Rail Passengers and Frequency</b></p>	<p>Annual Northstar Link passengers and Big Lake Station rail boardings and alightings.</p>
<p><b>Jefferson Lines Passengers, Routes, and Frequency</b></p>	<p>Annual boardings and alightings from Saint Cloud stations.</p>
<p><b>Work Trip Commute Time and Distance for Jobs Located in the MPA</b></p>	<p>Comparing the average change in travel time versus the average change in travel distance.</p>
<p><b>Percent of Monthly Household Budgets Spent on Transportation</b></p>	<p>Average monthly costs of transportation is calculated as part of the Cost of Living data gathered by the Minnesota Department of Employment and Economic Development. The data is broken down by county, economic development region (EDR), Planning Region (PR), and the state.</p>

ROADWAY METROPOLITAN VITALITY AND ECONOMIC DEVELOPMENT PERFORMANCE MEASURES	METHODS OF CALCULATION
<b>Transportation’s Impact on Economic Development Performance Measure(s)</b>	To be determined.

**APO Goal 5: Promote Energy and Environmental Conservation**

**Goal Statement:** 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.

- 1) **Objective:** Protect the environment through the promotion of energy conservation
  - a. **Strategy:** APO staff will monitor air and water quality to help ensure compliance with national and state quality standards.
  - b. **Strategy:** APO staff will work cooperatively with local jurisdictions to support and promote transportation options with the smallest net environmental impact.
  - c. **Strategy:** The APO shall encourage and support the use of low-wattage street lights (e.g., LED lights) that are Dark Skies compliant.
- 2) **Objective:** Prevent and/or minimize disproportionate adverse impacts to communities containing a high concentration of low-income and minority populations.
  - a. **Strategy:** APO staff will monitor and regularly report on transportation impacts to neighborhoods with higher percentages of low-income and/or minority populations.

**ENERGY AND ENVIRONMENTAL CONSERVATION PERFORMANCE MEASURES & INDICATORS**

ROADWAY ENERGY AND ENVIRONMENTAL CONSERVATION PERFORMANCE MEASURES	METHODS OF CALCULATION
<b>Annual Air Quality</b>	Annual count of days in each Air Quality Index (AQI) category; good, moderate, unhealthy for sensitive groups and unhealthy.
<b>Annual Water Quality</b>	Number of water quality monitoring stations that have not met water quality standards.
<b>Number and Percent of Public Transit Vehicles Using Alternative Fuels</b>	Number and percent of public transit vehicles using alternative fuel.
<b>Number and Percent of Registered Vehicles Using Alternative Fuels</b>	Annual number of vehicles registered within Minnesota and Minnesota 6 <sup>th</sup> Congressional District by powertrain and using alternative fuel.

ROADWAY ENERGY AND ENVIRONMENTAL CONSERVATION PERFORMANCE MEASURES	METHODS OF CALCULATION
<b>Number and Percent of Vehicles Sold Using Alternative Fuels</b>	Annual number of vehicles sold within Minnesota and Minnesota 6 <sup>th</sup> Congressional District by powertrain and using alternative fuel.
<b>Annual Percentage of Transportation Investments in Environmental Justice Census Blocks</b>	Ratio of transportation investments in environmental justice census blocks expressed in relation to the percent of census blocks that are environmental justice census blocks.

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