

**APPENDIX A:  
FEDERAL & STATE PLANNING  
CONSIDERATIONS**

**(Air Quality, Environmental Justice &  
Environmental Mitigation)**

## AIR QUALITY

The Clean Air Act Amendments of 1990 (CAAA) represented a major revision to the Nation's air quality regulations. Metropolitan Planning Organizations (MPOs) are required to make an affirmative determination of "conformity" to State or Federal Implementation Plans of Transportation Plans, Programs and Projects Developed, Funded, or Approved under Title 23 U.S.C. or the Federal Transit Law.

### Conformity

Transportation Conformity is a process used to ensure that federal funding and approval are given to those transportation activities that are consistent with federal and State air quality goals. Conformity of an implementation plan is defined as conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of such standards. In addition, federal activities may not cause or contribute to new violations of air quality standards, exacerbate existing violations, or interfere with timely attainment or required interim emission reductions towards attainment (EPA's 40 CFR Part 51 and 93). If conformity is not obtained, the City of St. Cloud (city) and the APO could face sanctions and other penalties, including the possibility of losing highway funds. Therefore, project exemptions are documented in both the Transportation Improvement Plan (TIP) and the Transportation Plan ([Plan](#)). This task will continue to be conducted with assistance from Minnesota Pollution Control Agency (MPCA) and the Environmental Protection Agency (EPA).

Metropolitan Planning Organizations (MPOs) and the United States Department of Transportation (DOT) are required to make Conformity Determinations on metropolitan transportation plans and Transportation Improvement Programs (TIPs) before they are adopted, approved, or accepted. In addition, highway or transit projects, which are developed, funded, or approved by the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA) must be found to conform before they are approved or funded by the DOT or an MPO.

### Non-Attainment

The St. Cloud APO meets the NAAQS for all six pollutants, with the exception of Carbon Monoxide (CO). Pursuant to provisions of the CAAA of 1970, in November 1977 the EPA designated the APO Planning Area as non-attainment area under the 8-hour standard for CO. The 8-hour standard is triggered on the 2<sup>nd</sup> maximum 8-hour value.

The EPA determined that the CO problem was localized within the City and not regional. Therefore, it was deemed unnecessary to conduct a regional emissions analysis. All other jurisdictions within the APO Planning Area were considered "unclassifiable/attainment", and as such, they were/are not subject to conformity requirements.

### Carbon Monoxide

Carbon Monoxide is a colorless, odorless gas that is produced when carbon based fuels such as gasoline, are not burned completely. Therefore, high concentrations of CO tend to occur along congested roadsides and at major intersections while automobiles, trucks and buses are idling.

### Provisions of the Conformity rule apply in all non-attainment and maintenance areas for the following pollutants:

- Carbon Monoxide
- Lead
- Nitrogen Dioxide
- Ozone
- Particulate Matter 2.5/10
- Sulfur Dioxide

### What are the General Conformity Rule Criteria & Procedures?

- Incorporate the Latest Planning Assumptions
- Complete an Extensive Inter-agency Consultation Process
- Complete an Extensive Public Consultation Procedures
- Timely Implementation of Transportation Control Measures (TCMs)
- Adhere to Fiscal Constraints
- Adhere to the Federal Motor Vehicle Emissions Control Program
- Review and Determine Exempt & Non-Exempt Projects

The APO projects an increase from 30 to 329 congested lane miles over the next 22 years in a do-nothing scenario. In an attempt to reduce congestion on the system, the APO Board has proposed a balanced multi-modal approach to funding transportation projects with its local federal funding forecast. The balanced approach includes using 50 percent of available funding for expansion projects, while using the other 50 percent for operational and safety improvements, system preservation, and bike/pedestrian and transit capital projects. A minimum 10 percent target has been established for multi-modal improvements.

Implementation of the 2035 financially constrained Roadway Plan expansion projects are expected to reduce this congestion to 315 lane miles. Additional information about specific financing and projects can be found in Chapters 6 and 7, Financial Understanding & Evaluation and Roadway Transportation.

It is important to note that other system improvements, such as signal timing, intersection geometrics, etc. also play a role in the flow of traffic, and the ultimate affects on air quality. These types of safety/operational improvements are eligible for to compete for the annual District 3 local Highway Safety Improvement Program (HSIP) safety set-a-side, as well as the APO's annual local federal funding in this Plan.

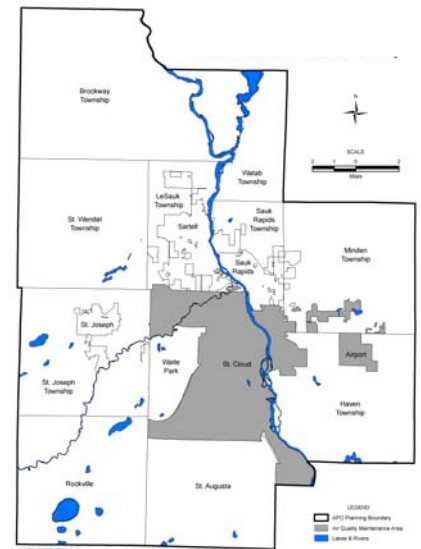
### CO Standards

EPA sets the NAAQS to protect the general welfare and health of the public. Primary standards are designed to protect against adverse health effects, while secondary standards protect against welfare effects, such as damage to crops, buildings, etc. In Minnesota, an area is considered in violation if it exceeds the designated concentration level within a given timeframe. CO has both a one-hour standard of 9 parts per million (ppm) and an eight-hour standard of 30 ppm (35 ppm is the federal standard). Areas that do not meet the NAAQS are designated as "nonattainment".

After being designated as nonattainment for CO, the City developed a Transportation Control Plan (TCP) identifying alternative strategies for the reduction of carbon monoxide concentrations. The TCP contained Transportation Control Measures (TCM) to obtain and maintain ambient air quality standards for CO (Table A-1).

The last CO violation of the 8-hour standard occurred in February 1985 and by 1993 the EPA re-designated the City to "attainment" status and is currently classified as a "maintenance" area for CO. In 1993 CO levels monitored in downtown St. Cloud were 5.0ppm. Currently, the City's 8-hour maximum is significantly lower at 1.6ppm. To remain in conformity, within the State of Minnesota, the 8-hour emissions rate must be below 9 ppm for a twenty-year period. Accordingly, the City will remain a maintenance area until the year 2013, barring a future violation.

To verify attainment status for the City, over the duration of the 20-year maintenance period, a continuous air quality monitor was installed. The monitor, shown to the right, is mounted on the north side of St. Cloud's City Hall, located near the intersection of trunk highway 23 (Division Street) and 4<sup>th</sup> Avenue. The MPCA will continue to operate this monitoring network in accordance with 40 CFR Part 58.



**APO Planning Area with Maintenance Area for Air Quality**



**Table A-1  
Transportation Control Measures to Obtain Maintenance Status**

<b>TCM Implementation Strategies &amp; Status</b>		
<b>Item #</b>	<b>Strategy</b>	<b>Status</b>
1	Signing change: no parking 3-6 p.m. for 4 stalls to corner on north side of street to allow right turns from West St. Germain to 10th Avenue.	Implemented 1977 by City of St. Cloud
2	Signing change: no-right-turn-on-red removed for eastbound traffic on West St. Germain at corner of 8th Avenue.	Implemented 1977 by City of St. Cloud
3	Bus stop relocated from near Paramount Theatre (formerly St. Germain Hotel) to US Bank (formerly Tempo store) on block West.	Implemented 1977 by City of St. Cloud
4	Change in signal timing and roadway geometry, which included widening 10th Avenue and providing left turn lane for both northbound and southbound traffic.	Implemented 1977 by City of St. Cloud
5	Signal changes at West St. Germain and 10th Avenue.	Implemented 1978 by City of St. Cloud
6	Transit, car-pool and van-pool strategies.	Goals set in 1979 by St. Cloud APO
7	Continuing, comprehensive route evaluation will be pursued. Route performance will be based upon comparison with established standards. Strategies of improvement will be developed for non-conforming routes.	On-going Program initiated by MTC in 1979
8	A continuing evaluation of transit fares throughout the system will be accomplished under the TSM document.	On-going Program initiated by MTC in 1979
9	The program for transportation of handicapped and elderly persons will be evaluated continuously, and service improvement strategies will be developed based on the evaluation analysis.	On-going Program initiated by MTC in 1979
10	An improved transit informational program will be investigated and evaluated as part of the annual TSM.	On-going Program initiated by MTC in 1979
11	Conduct feasibility study regarding use of plugs-ins to reduce cold starts	In 1980 deemed not feasible
12	Review and redevelop downtown traffic plan.	On-going
13	Implementation of transportation system management strategies and physical improvements, as needed to achieve compliance with 1982 air quality standards and complying with conclusions of the feasibility study and plans developed by items 11 and 12.	On-going
14	Ordinance prohibiting double parking on West St. Germain Street from 8th Avenue to 10th Avenue.	Implemented 1981 by City of St. Cloud
15	Downtown signing plan to discourage use of West St. Germain corridor between 8th Avenue to 10th Avenue.	Implemented 1981 by City of St. Cloud
16	Media campaign and pamphlet to increase public awareness of air quality and to encourage use of transportation routes and means, which will improve air quality in the City.	Implemented 1982 by City of St. Cloud
17	Division Street improvements between 19½ Avenue and 31st Avenue (new signals and left turn lanes).	Implemented 1982 by City of St. Cloud
18	Improve signalization at Wilson Avenue and East St. Germain.	Implemented 1982 by City of St. Cloud
19	10th Avenue intersection improvements.	Implemented 1984 by City of St. Cloud

## Maintenance Area

Section 175A of the 1990 CAAA requires that a maintenance plan be developed to include contingency measures, as necessary, to promptly correct any violation of the NAAQS for CO that occurs after redesignation of the area. A “10-Year Limited Maintenance Plan” was adopted in October 1995 and updated in October 2003. Copies of the Maintenance Plans can be viewed at the APO offices.

To promptly correct any violation of the NAAQS, should they occur in the future, the MPCA has agreed to use a “monitored air quality violation” as the triggering event for the contingency measures. If a triggering event is confirmed, the City will work with the APO, MPCA and Mn/DOT to implement one or more appropriate contingency measures, approved within six months by the Commissioner of the MPCA.

The MPCA identifies Transportation Control Measures (TCMs) as the most easily implemented and effective contingency measures to correct CO hot spot problems. Should the implementation of TCMs be required, the City, with cooperation from other local, state, and federal government entities, will have one year to form policies, develop or change ordinances, amend existing legislation, and issue grants necessary to achievement attainment.

## Passenger Miles

Nationally, motor vehicle emissions have dropped considerably since 1970, therefore, CO emissions decreased 43 percent between then and 1999. These reductions have occurred even though the population, Gross Domestic Product (GDP), and Vehicle Miles Traveled (VMT) have increased considerably. Americans are traveling more than ever. Between 1980 and 1998, the number of surface passenger miles traveled increased by 1.4 trillion. Ninety-six (96) percent of all passenger miles took place in personal vehicles. Locally, VMT is projected to increase almost 100 percent by the year 2035. But CO motor vehicle emissions will continue to decline with the introduction of new technologies such as electric and electric-hybrid vehicles, and improvements to gasoline combustion engines.

## Mode Split

Americans commute to work in single occupant vehicles more than any other mode. In 1990, 73 percent of the national workforce drove to work alone. That percentage increased to 76 percent in 2000. The occupancy rate for the St. Cloud Metro Area is just under 1.5 passengers per vehicle. Locally, bike and pedestrian and transit trips consume approximately 2-5 percent of the modal split based on transit ridership numbers and bike/pedestrian visual estimates.

St. Cloud Metro Bus has developed short and long-term strategies for the area’s transit operations aimed at increasing transit ridership and reducing local dependency on the automobile. This element of the Plan, found in Chapter 5: Management & Operations and Chapter 8: Transit Services and discusses various Transportation Demand Management (TDM) strategies and techniques.

## Short-Range Plan

The APO prepares an annual Transportation System Management (TSM) document. The most current version was adopted in 2009. The TSM contains short-range recommendations to improve safety and traffic while reducing congestion through non-capital intensive means, to help

### What are Transportation Control Measures (TCMs)?

- TCMs are either listed under Section 108 of the Clean Air Act (CAA) or will reduce transportation-related emissions by reducing vehicle use or improving traffic flow

### What are Examples of TCMs from Section 108 of CAA?

- Improved public transit
- Traffic flow improvements
- High-occupancy vehicle (HOV) lanes
- Shared-ride services
- Bicycle/pedestrian facilities
- Flexible work schedules

reduce CO emissions. TSM recommendations consist of minor intersection geometric and safety improvements, which would likely improve traffic-flow, without increasing capacity.

### **Long-Range Plan**

This Plan, serving as the APO's 20-Year Transportation Plan, contains transportation improvements recommended for the surrounding urbanized areas from a multi-modal perspective encompassing capacity, transit, bicycle, pedestrian, safety, operations, preservation and freight needs. This plan uses a multi-modal approach to improve air quality in the St. Cloud Metropolitan Area. More funding for bicycle, pedestrian and transit projects means more facilities and services to address roadway congestion, thus reducing air quality issues. All State and federal transportation projects within the City of St. Cloud continue to address air quality impacts to ensure continued conformity to federal and State air quality standards.

### **Planning Assumptions**

The Conformity Determination for the 2035 Plan is based on the most recent planning assumptions in force at this time. The Land Use (Chapter 4) and Roadway Transportation (Chapter 7) components of this Plan summarize the processes used to derive estimates of current and future population, employment, travel and congestion developed by the APO. The authority to develop these estimates is given to the APO through its designation as a MPO by the Governor.

### **Modeling**

In conjunction with long-range planning efforts, the APO maintains TRANPLAN, a travel demand model to identify areas that may become congested in the future. Through these modeling efforts, the APO has the ability to proactively identify potential air quality problem areas (see Chapter 7: Roadway Transportation) for additional information about modeling).

### **Fiscal Constraint**

For non-attainment and maintenance areas, a Financial Understanding & Evaluation (Chapter 6) must be developed identifying revenues that are reasonably expected to be available through 2035. Each project and program identified, must not adversely affect air quality. Both the 2035 financially constrained and constrained illustrative projects outlined in the Roadway Transportation (Chapter 7) afford priority to projects located within the maintenance area. Projects identified in the APO financially constrained Plan are eligible for federal funding through the APO's Transportation Improvement Program (TIP). The current 2010-2013 TIP is available on the APO's website for additional information. The 2011-2015 TIP is currently being developed and will be approved in June/July 2010 for incorporation into the District 3 Area Transportation Improvement Program (ATIP) and then the State Transportation Improvement Program (STIP).

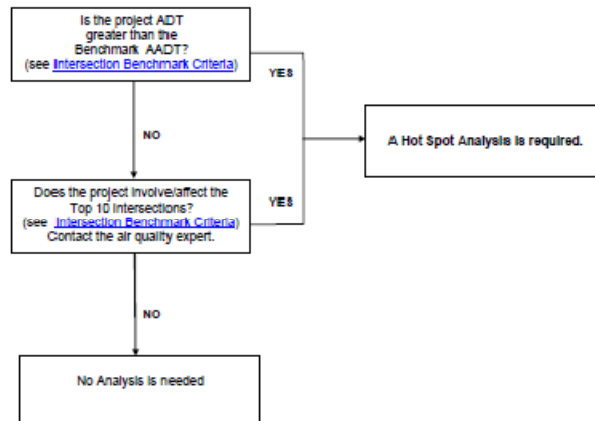
### **Exempt and Non-Exempt Project Types**

APO projects are categorized by short- mid- and long-range fiscal timeframes (2014-2020, 2021-2028 or 2029-2035) and are described in enough detail for an initial conformity analysis. Table A-3 and Figure A-2 provide a project list and map of the constrained Plan projects. Transportation projects described in Table A-4, as specified in Section 179(b) (1) of the Clean Air Act, are exempt from the Conformity Determination requirement. Such projects may proceed toward

implementation even in the absence of a conforming transportation plan. A particular action of the type listed is not exempt if the APO, in consultation with EPA, FHWA, and FTA, concur that it has potentially adverse emission impacts for any reason. States and MPOs must assure that exempt projects do not interfere with TCM implementation. However, highway and transit projects that may require a hot spot analysis prior to receiving a Federal Conformity Determination are described in Table A-4.

**Figure A-1  
Hot Spot Screening Method Flow Chart**

A hot spot analysis is a project level air quality impact assessment required for projects that reconstruct or reconfigure streets or intersections, along with certain types of development projects that could significantly affect traffic patterns. A hot spot analysis would need to be conducted if a



project is expected to operate at a Level Of Service (LOS) D or worse and has a forecasted intersection Average Daily Traffic (ADT) greater than 79,400. The APO, in partnership with the MPCA, will review the existing criteria for determining a project level hot spot analysis prior to the next planning cycle. Figure A-1 and Table A-2 illustrate how to determine whether a hot spot analysis will need to be completed on a project.

**Table A-2  
Hot Spot Screening Intersection Benchmark Criteria**

ID	DESCRIPTION	2007 AADT*
<b>Top 7 Intersections</b>		
1	TH 169 at CSAH 81	79,400
2	TH 7 at CSAH 101	66,600
3	TH 252 at 85 <sup>th</sup> Avenue	66,600
4	University Avenue at Snelling Avenue	59,700
5	TH 252 at Brookdale Drive	61,300
6	Cedar Avenue at County Road 42	75,100
7	TH 7 at Williston Road	54,900
<b>3 MPCA Monitored Locations</b>		
8	University Avenue at Lexington Avenue	59,700
9	TH 252 at 66 <sup>th</sup> Avenue	72,500
10	Hennepin Avenue at Lake Street	37,000

\* Most current AADT data available.  
Highest traffic volumes, worst LOS.

**Benchmark AADT: 79,400**

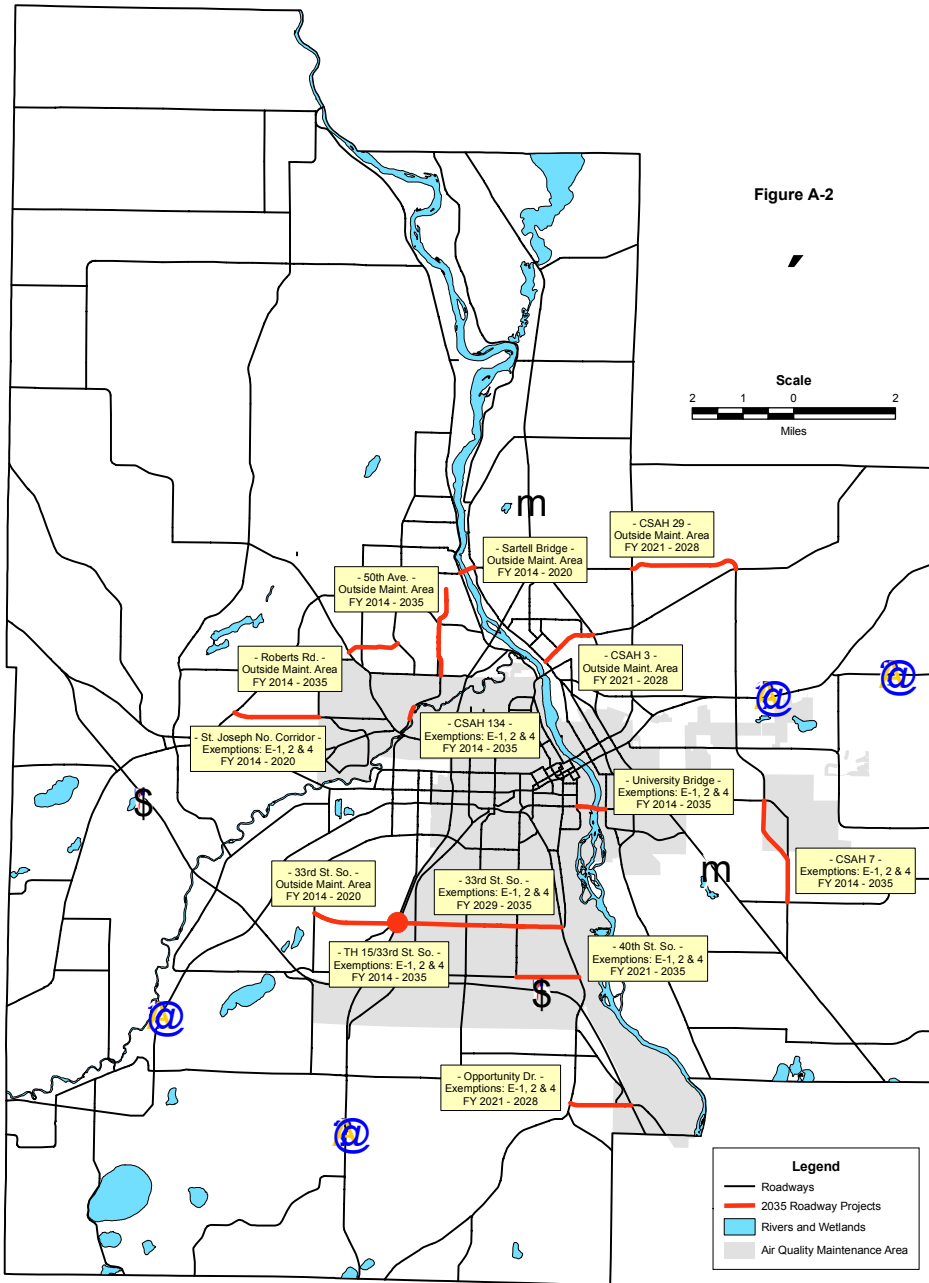
In the future, should a certain project(s) not clearly meet the exempt or nonexempt criteria, it will be identified as "Not Classified" and be subject to review through various interagency consultations. Categorization and descriptions for projects in the 2035 Transportation Plan can be found in Table A-5: Potential Hot Spot Analysis Project Categories.

**Table A-3  
2035 Project Air Quality Conformity Analysis**

Project ID#	Involved Agencies	Facility	Project Description	2035 Plan Cost	2035 Running Cost	NEPA Project Development Status	Exempt from Air Quality Conformity?	Investment Time Frame
<b>Constrained Projects</b>								
1	Stearns County, City of St. Cloud, City of Waite Park	33rd Street So.	Construction to add capacity from Granite View Road in Waite Park to Cooper Avenue in St. Cloud	\$9,084,375	\$9,084,375	EA Completed in 2009	No; E-1, 2 & 4	2014-2020
2	City of St. Joseph, City of St. Cloud	St. Joseph No. Corridor	Construction of new alignment from Westwood Parkway in St. Cloud to Stearns CR 133 in St. Joseph	\$5,578,125	\$14,662,500	EA Completed in 2009	No; E-1, 2 & 4	
3	City of Sartell	Sartell Bridge	Restripe bridge to 4 lanes	\$0	\$14,662,500	Not Scheduled at this Time	Not Subject to Conformity, Outside Maint. Area	
4	St. Cloud Metro Area	Flexible Pot	Road/Bridge maintenance & operations, safety, bike/pedestrian, transit capital	\$14,662,500	\$29,325,000	Not Scheduled at this Time	16, & 18-19, T-6 & 10, AQ-2, O-1 & 2	2021-2028
5	Benton County, City of Sauk Rapids	Benton CSAH 3	Construction to add capacity and remove parking from 3rd Avenue to TH 10	\$4,125,000	\$33,450,000	Not Scheduled at this Time	Not Subject to Conformity, Outside Maint. Area	
6	Benton County	Benton CSAH 29	Construction for new alignment from CSAH 1 to CSAH 8	\$6,703,085	\$40,153,085	EA Completed in 2008	Not Subject to Conformity, Outside Maint. Area	
7	City of St. Joseph, City of St. Cloud	St. Joseph No. Corridor	Right-of-way for new alignment from Westwood Parkway in St. Cloud to Stearns CR 133 in St. Joseph	\$4,331,250	\$44,484,335	EA Completed in 2009	No; E-1, 2 & 4	2029-2035
8	City of St. Cloud	40th Street So.	Right-of-way for new roadway alignment from Cooper Avenue to Stearns CSAH 75	\$1,608,750	\$46,093,085	EA Completed in 2009	No; E-1, 2 & 4	
9	St. Cloud Metro Area	Flexible Pot	Road/Bridge maintenance & operations, safety, bike/pedestrian, transit capital	\$16,768,085	\$62,861,170	Not Scheduled at this Time	16, & 18-19, T-6 & 10, AQ-2, O-1 & 2	
10	Stearns County, City of St. Augusta, City of St. Cloud	Opportunity Drive	Construction of new alignment from I-94 to Stearns CSAH 7	\$3,331,250	\$66,192,420	EA Scheduled in 2010	Not Subject to Conformity, Outside Maint. Area	2014-2035
11	Stearns County, City of St. Cloud	33rd Street So.	Right-of-way & construction to add capacity from Cooper Avenue to Stearns CSAH 75	\$7,405,625	\$73,598,045	EA Completed in 2009	No; E-1, 2 & 4	
12	City of Sartell	Roberts Road	Right-of-way for new alignment from Pinecone Rd to Stearns CSAH 4 at 322nd Street	\$3,627,504	\$77,225,549	EA Completed in 2009	Not Subject to Conformity, Outside Maint. Area	
13	St. Cloud Metro Area	Flexible Pot	Road/Bridge maintenance & operations, safety, bike/pedestrian, transit capital	\$14,364,379	\$91,589,928	Not Scheduled at this Time	Yes; S-1, 3-7, 9-11, 13-14, 16, & 18-19, T-6 & 10, AQ-	
<b>Constrained Illustrative Projects</b>								
14	Benton County, City of Sauk Rapids	Benton CSAH 3	Right-of-way for capacity expansion from 3rd Avenue to TH 10	\$2,250,000	\$93,839,928	Not Scheduled at this Time	Not Subject to Conformity, Outside Maint. Area	2014-2035
15	City of St. Cloud	University Bridge	Construction to expand bridge and approaches to 4 lanes	\$13,050,000	\$104,639,928	EA Underway	No; E-1, 2 & 4	
16	Stearns County, City of St. Cloud, City of Waite Park	TH 15/33rd Street So.	Right-of-way & construction for TH 15/33rd Street South Interchange	\$15,750,000	\$120,389,928	EA Completed in 2009	No; E-1, 2 & 4	
17	Benton County	Benton CSAH 29	Right-of-way for new alignment from CSAH 1 to CSAH 8	\$7,312,458	\$127,702,386	EA Completed in 2006	Not Subject to Conformity, Outside Maint. Area	
18	Stearns County, City of St. Cloud, City of Waite Park	33rd Street So.	Right-of-way from Granite View Road in Waite Park to Cooper Avenue in St. Cloud	\$5,568,750	\$133,271,136	EA Completed in 2009	No; E-1, 2 & 4	
19	Stearns County, City of Waite Park	33rd Street So. (SW Beltway)	Right-of-way for new alignment from Granite View Road to CR 137	\$4,500,000	\$137,771,136	EIS Scoping Underway, EIS Scheduled in 2010	Not Subject to Conformity, Outside Maint. Area	
20	City of Sartell	50th Avenue	Right-of-way & construction for new alignment from Heritage Drive to south of 2nd Street South and resign 50th Avenue north of Stearns CSAH 120 in Sartell	\$6,000,000	\$143,771,136	EA Completed in 2009	Not Subject to Conformity, Outside Maint. Area	
21	Stearns County, City of St. Augusta, City of St. Cloud	Opportunity Drive	Right-of-way for new alignment from I-94 to Stearns CSAH 7	\$2,925,000	\$146,696,136	EA Scheduled in 2010	Not Subject to Conformity, Outside Maint. Area	
22	Sherburne County, City of St. Cloud	Sherburne CSAH 7	Construction of realignment west of airport from Del Tone Road to Sherburne CSAH 3	\$3,750,000	\$150,446,136	EA Underway	No; E-1, 2 & 4	
23	City of Sartell	Roberts Road	Construction for new alignment from Pinecone Rd to Stearns CSAH 4 at 322nd Street	\$4,495,017	\$154,941,153	EA Completed in 2009	Not Subject to Conformity, Outside Maint. Area	
24	City of St. Cloud	Stearns CSAH 134	Right-of-way & construction for new 4 lane divided urban section along Stearns CR 134 from Pinecone Road/Stearns CR 134 to West Oakes Drive	\$2,100,000	\$157,041,153	EA Completed in 2008	No; E-1, 2 & 4	

Note: Cost estimates do not include final design or contingencies. 35% local match assumed for short, medium and long range investments; 50% local match assumed for illustrative projects.

# Air Quality Conformity



**Table A-4  
Exempt Project Categories**

<b>SAFETY PROJECTS</b>	
Railroad/Highway Crossing	S-1
Hazard Elimination Program	S-2
Safer Non-Federal-Aid System Roads	S-3
Shoulder Improvements	S-4
Increasing Sight Distance	S-5
Safety Improvement Program	S-6
Traffic Control Devices and Operating Assistance <ul style="list-style-type: none"> <li>Other Than Signalization Projects</li> </ul>	S-7
Railroad/Highway Crossing Warning Devices	S-8
Guardrails, Median Barriers and/or Crash Cushions	S-9
Pavement Resurfacing or Rehabilitation	S-10
Pavement Marking Demonstration	S-11
Emergency Relief (23 U.S.C. 125)	S-12
Fencing	S-13
Skid Treatments	S-14
Safety Roadside Rest Areas	S-15
Adding Medians	S-16
Truck Climbing Lanes Outside the Urbanized Area	S-17
Lighting Improvements	S-18
Widening Narrow Pavements or Reconstructing Bridges <ul style="list-style-type: none"> <li>With no additional travel lanes</li> </ul>	S-19
Emergency Truck Pullovers	S-20
<b>MASS TRANSIT PROJECTS</b>	
Operating Assistance to Transit Agencies	T-1
Purchase of Support Vehicles	T-2
Rehabilitation of Transit Vehicles	T-3
Purchase of Office, Shop, and Operating Equipment for Existing Facilities	T-4
Purchase of Operating Equipment for Vehicles <ul style="list-style-type: none"> <li>Such as radios, fareboxes, lifts, etc.</li> </ul>	T-5
Construction of Small Passenger Shelters and Information Kiosks	T-6
Construction or Renovation of Power, Signal, and Communications Systems	T-7
Reconstruction or Renovation of Transit Buildings and Structures <ul style="list-style-type: none"> <li>Rail or bus buildings</li> <li>Storage and maintenance facilities</li> <li>Stations, terminals, and/or ancillary structures</li> </ul>	T-8
Rehabilitation or Reconstruction of Tracks Structures, Track, and Trackbed in Existing Right-Of-Way	T-9
Purchase of New Buses and Rail Cars to Replace Existing Vehicles or for Minor Expansions of the Fleet	T-10
Construction of New Bus or Rail Storage/Maintenance Facilities Categorically Excluded in 23 CRF Part 771	T-11
<b>AIR QUALITY PROJECTS</b>	
Continuation of Ride-Sharing and Van-Pooling Promotion Activities at Current Levels	AQ-1
Bicycle and Pedestrian Facilities	AQ-2

<b>OTHER PROJECTS</b>	
Specific Activities Which Do Not Involve or Lead Directly to Construction, Such As: <ul style="list-style-type: none"> <li>• Planning and Technical Studies</li> <li>• Grants for Training and Research Programs</li> <li>• Planning Activities Conducted Pursuant to Titles 23 and 49</li> <li>• U.S.C.</li> <li>• Federal-Aid Systems Revisions</li> </ul>	O-1
Engineering to Assess Social, Economic and Environmental Effects of the Proposed Action or Alternatives to that Action	O-2
Noise Attenuation	O-3
Advance Land Acquisitions (23 CFR Part 712 or 23 CFR Part 771)	O-4
Acquisition of Scenic Easements	O-5
Plantings, Landscaping, etc.	O-6
Sign Removal	O-7
Directional and Information Signs	O-8
Transportation Enhancement Activities <ul style="list-style-type: none"> <li>• Except rehabilitation and operation of historic transportation buildings, structures, or facilities</li> </ul>	O-9
Repair of Damage Caused by Natural Disasters, Civil Unrest, or Terrorist Acts. <ul style="list-style-type: none"> <li>• Except Projects Involving Substantial Functional, Locational, or Capacity Changes</li> </ul>	O-10

**Table A-5  
Potential Hot Spot Analysis Project Categories**

Intersection Channelization Projects	E-1
Intersection Signalization Projects at Individual Intersections	E-2
Interchange Reconfiguration Projects	E-3
Changes in Vertical or Horizontal Alignment	E-4
Truck Size and Weight Inspection Stations	E-5
Bus Terminals and Transfer Points	E-6

## **Public Consultation Procedures**

MPOs making Conformity Determinations on transportation plans, programs, and projects shall establish and continuously implement a proactive public participation process. This process must provide an opportunity for public review and comment by providing reasonable public access to technical and policy information considered by the MPO at the beginning of the public comment period. This must occur prior to taking formal action on a Conformity Determination for all transportation plans, consistent with requirements of 23 CFR Part 450.

The opportunity for public involvement shall include access to information, emission data, analysis and assumptions used to perform a Conformity Determination, and the obligation to consider and respond to significant comments. No MPO may find that their transportation plan, or their revisions conform, and no applicant may find a project conforms unless the determination of conformity has been subject to a public involvement process. Additional information regarding opportunities for public involvement can be found in Chapter 2: Community Engagement and Appendix B: Public Participation Process & Materials.

The APO held individual public meetings on specific Plan elements and chapters throughout the development of the Plan. More recently in January 2010 the APO Policy Board initiated release of the entire Plan for a public review and comment period of which the draft Conformity Determination was presented as a component of the Plan. An announcement of this meeting for review and comment was published in the St. Cloud Times newspaper and on the APO website. A media notice was also sent out to more than two dozen media contacts in the St. Cloud Metropolitan Area. No members of the public chose to comment on the draft Conformity Determination.

## **Interagency Consultation**

The Federal Highway Administration (FHWA), Minnesota Department of Transportation (Mn/DOT), St. Cloud Metro Bus, and the MPCA have reviewed the draft Conformity Determination as outlined and suggested modifications to the draft Conformity Determination language were incorporated. FHWA and FTA are ultimately responsible for final certification of the Conformity Determination.

## **Plan Conformity Determination (Conclusion)**

The 2035 Plan is not expected to result in any increase in the frequency or severity of the existing emissions of CO, which are within the maintenance requirements of the NAAQS. In fact, as projects proposed in the Plan are implemented, existing emissions of CO are expected to reduce due to more efficient travel patterns and improved mobility. This Plan is consistent with the assumptions for transportation improvements in the documentation provided for a Request for Redesignation and Removal from Draft SIP Call submitted to and approved by the U.S. EPA in 1989.

A resolution affirming conformance of the 2035 Plan with the CAAA 1990, Environmental Protection Agency Conformity Regulations and the draft SIP Revision can be found in the front of this Document.

Highway and transit projects listed in the following table may need a hot spot analysis performed by the applicant prior to Federal agencies making a conformity determination.

# ENVIRONMENTAL JUSTICE

In 1994, President Clinton signed Executive Order 12898: "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The Executive Order required that each Federal agency, to the greatest extent allowed by law, administer and implement its programs, policies, and activities that affect human health or the environment so as to identify and avoid "disproportionately high and adverse" effects on minority and low-income populations.

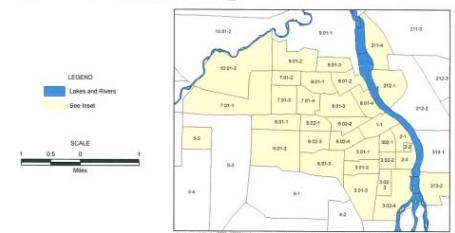
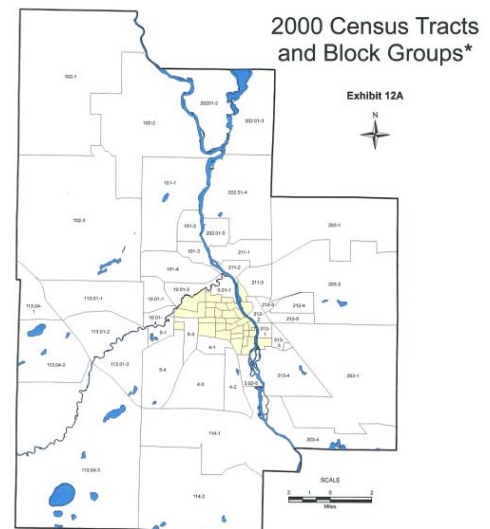
In order to clarify and expand upon Executive Order 12898 for purposes of federally funded transportation activities, the United States Department of Transportation (USDOT) issued an *Order to Address Environmental Justice in Minority Populations and Low-Income Populations*. The USDOT addressed persons belonging to any of the following groups: Black, Hispanic, Asian American, American Indian and Alaskan Native, Native Hawaiian or other Pacific Islander, and Low-Income.<sup>1</sup>

This section analyzes proposed project impacts on minority and low-income populations and identifies any disproportionately high and adverse impacts on those populations. This section follows the guidance of the USDOT 1997 Final Order (revised in 2000).

## Methodology

In order to identify concentrations of low-income and minority populations, data on race/ethnicity, median household income, and poverty were examined for census block groups within the study area.<sup>2</sup> This data was compared with data on race/ethnicity, median household income, and poverty for the entire study area. For purposes of this analysis, the study area was defined as the aggregate of the census blocks identified within or partially within the study area. Following the USDOT 2000 clarifications, minority and low-income populations were assessed separately.

The first step to determine areas of potential impact, involved creating thresholds equal to the percentages of each variable for the whole planning area. The image to the right illustrates the planning area and the block groups analyzed. The planning area is equal to the sum of the block groups identified within, or partially within, the study area. The



<sup>1</sup> US Department of Transportation: *An Overview of Transportation and Environmental Justice*

- Black – a person having origins in any of the black racial groups of Africa.
- Hispanic – a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
- Asian – a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent.
- American Indian and Alaskan Native – a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition.
- Native Hawaiian or Other Pacific Islander – a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- Low-Income – a person whose household income (or in the case of a community or group, whose median household income) is at or below the US Department of Health and Human Services poverty guidelines.

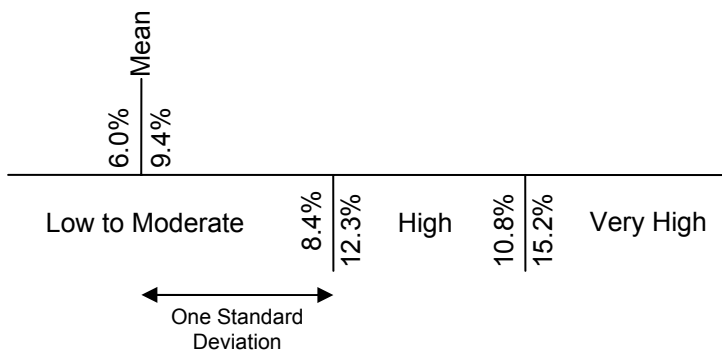
<sup>2</sup> Census Tract 314 was not analyzed for minority AND low-income populations due to incomplete data.

thresholds would then equal the total number exhibiting the characteristic of concern divided by the total.

- Population within or partially within the planning area who are a race/ethnicity other than “white alone” (7,143) divided by the total population of the planning area (119,200)<sup>3</sup> equals 6.0 percent.
- Population within the planning area living below poverty (10,540) divided by the total population (111,610)<sup>4</sup> equals 9.4 percent.

The next and final steps involved in creating categories for very high impact, high impact, and low to moderate impact. The process included:

1. Calculating the standard deviation for each variable to create a low to moderate category equal to one standard deviation greater than the mean. The deviations from the means for minority (values to the left of bars) and low-income (values to the right of bars) populations are:



2. Querying for census block groups that experienced percentages less than or equal to the upper bound of the moderate range (8.4 percent for minority and 12.3 percent for low-income) and categorized them as low to moderate impact.
3. Repeating step 2 for high and very high impacts regarding minority and low-income populations. Table A-6 details the process.

**Table A-6**  
**Identification Process for Minority and Low Income Populations**

	Very Low to Moderate	High	Very High
Minority	Less than or equal to 8.4%	Greater than 8.4% and less than or equal to 10.8%	Greater than 10.8%
Low-Income	Less than or equal to 12.3%	Greater than 12.3% and less or equal to 15.2%	Greater than 15.2%

<sup>3</sup> Census 2000 – Summary File 1 (100-Percent Data)

<sup>4</sup> Census 2000 – Summary File 3 (Sample Data)

## Minority Populations

As shown in Table A-7 the study area is predominately white. Asians appear to be the largest minority.

**Table A-7**  
**Minority Populations by County**

	Total	White	Black	Indian	Asian	Hawaiian	Hispanic	Other <sup>5</sup>
<b>Benton</b>	25,662	24,259	171	123	447	10	262	390
<b>Sherburne</b>	8,765	7,905	355	108	138	0	132	127
<b>Stearns</b>	84,773	79,893	794	311	1,691	9	987	1,088
<b>Total</b>	119,200	112,057	1,320	542	2,276	19	1,381	1,605

Figure A-3 on the next page illustrates minority concentrations within the study area. Census Tract 313, Block Group 3 contains a very high number of minorities. This area contains several multi-family units including University Village and Oakwood Apartments. The St. Cloud State University (SCSU) area also has a high concentration of minorities. Table A-8 displays enrollment information for St. Cloud State University.<sup>6</sup>

**Table A-8**  
**St. Cloud State University Students of Color - Fall Enrollment**

	2005	2006	2007	2008	2009
<b>American Indian or Alaskan Native</b>	123	120	143	149	135
<b>Asian</b>	319	359	367	432	508
<b>Black or African American</b>	303	385	451	548	685
<b>Hispanic or Latino</b>	101	121	160	189	212
<b>Native Hawaiian/Other Pacific Islander</b>	10	19	23	16	20
<b>Total</b>	856	1,004	1,144	1,334	1,560

Catholic Charities, a non-profit, human service agency also manages various housing developments. These developments were built to meet the needs of low and middle income people, especially families, senior citizens and persons with disabilities. Three of these communities, Key Row, La Cruz, and La Paz are located near SCSU.

It should also be noted that there are various mobile home parks within the Metro Area. Two of these parks, Bel Clare Estates and Sherwood Manor, are located in very high minority areas.

## Poverty Populations

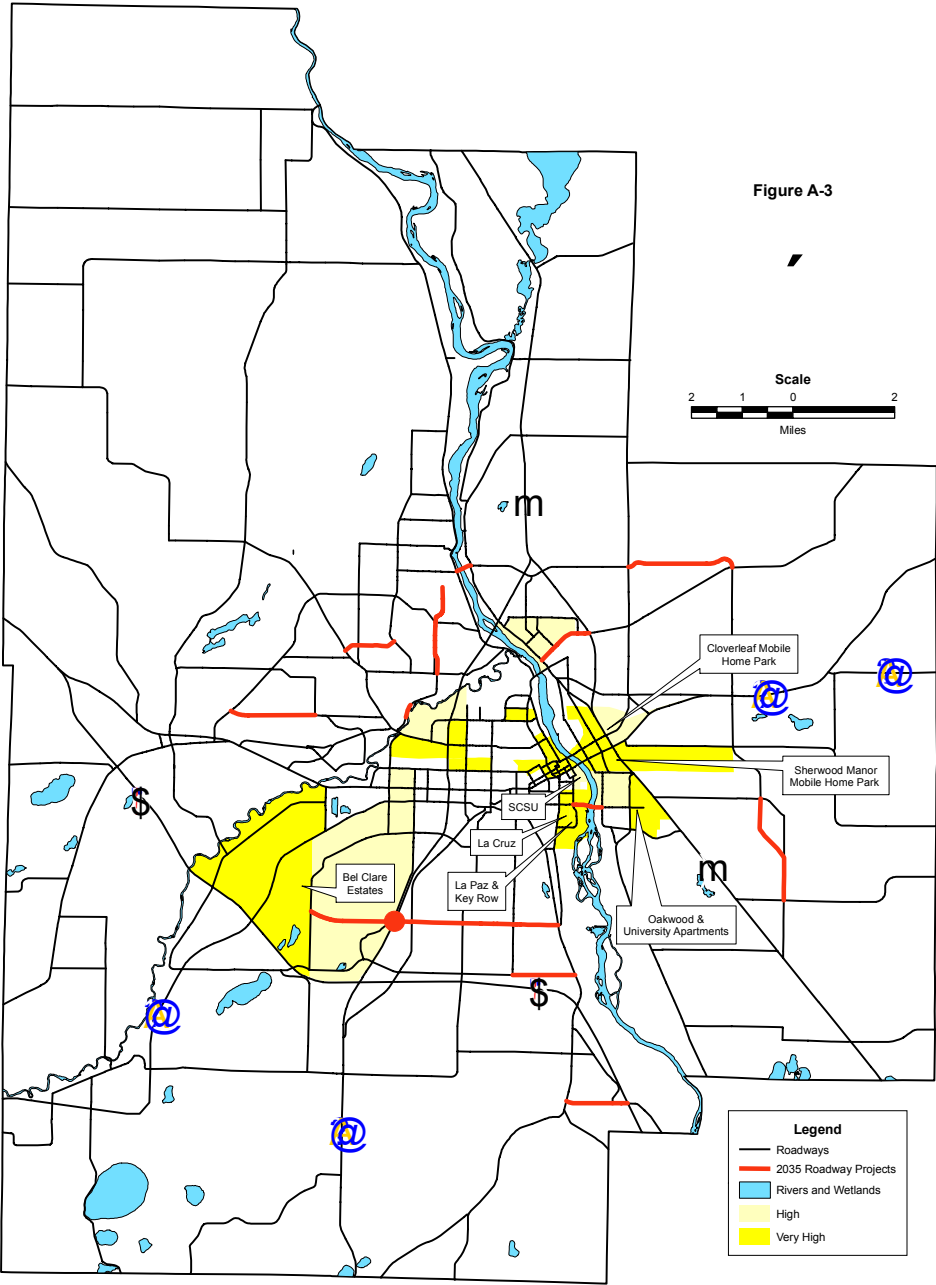
The official poverty measure has two components, poverty thresholds and the family income that is compared with these thresholds. Poverty status was determined for everyone except those in institutions, military group quarters, or college dormitories, and unrelated individuals under 15 years old. Table A-9 summarizes those above and below the poverty threshold.

<sup>5</sup> Includes those of some other race alone AND two or more races.

<sup>6</sup> St. Cloud State University: Institutional Research  
St. Cloud Metropolitan Area  
2035 Transportation Plan

The poverty threshold is 1.00, therefore, anything to the left (highlighted) of column six (1.00 to 1.24) is below the poverty level. Column three (Under .50) lists households whose income is fifty percent or less of the poverty level. The columns to the right of 1.00 represent households above the poverty threshold.

# Environmental Justice - Minority -



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**Table A-9**  
**Low Income Populations by County**

1	2	3	4	5	6	7	8	9	10	11
	Total	Under .50	.50 to .74	.75 to .99	1.00 to 1.24	1.25 to 1.49	1.50 to 1.74	1.75 to 1.84	1.84 to 1.99	2.00 and over
Benton	25,201	622	514	647	994	1,195	1,137	570	705	18,817
Sherburne	7,733	363	390	237	294	266	233	103	167	5,680
Stearns	78,676	3,612	1,929	2,226	2,787	3,120	3,079	1,269	1,742	28,912
Study Area	111,610	4,597	2,833	3,110	4,075	4,581	4,449	1,942	2,614	83,409

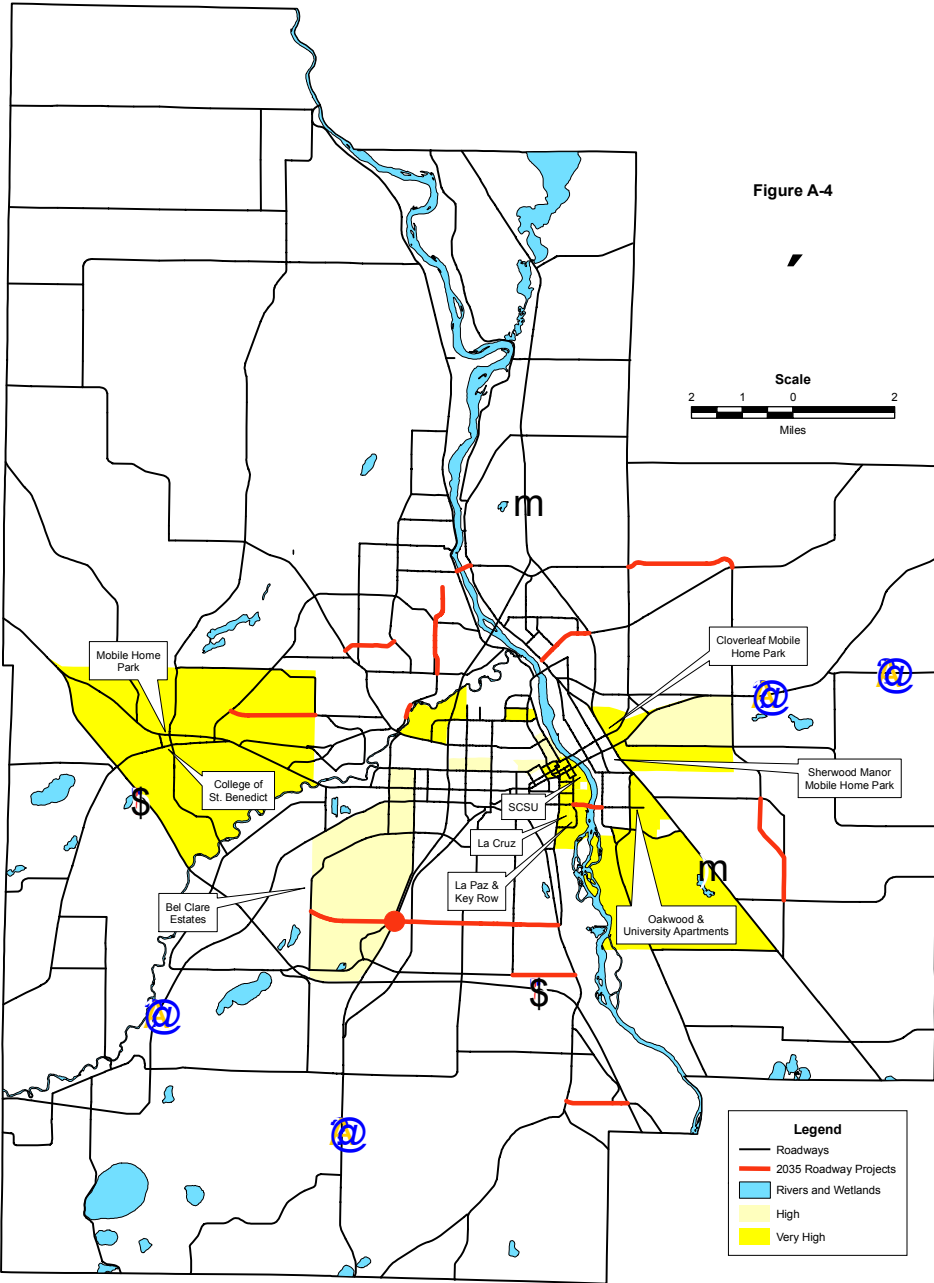
Figure A-4 illustrates the low-income populations with the study area. As with minorities, low-income populations reside within the SCSU area. The St. Joseph Area was also noted as having very high concentrations of poverty. This may be due to the College of St. Benedict, mobile home park, or the St. Joseph Apartments (Catholic Charities development). The St. Cloud Housing and Redevelopment Authority also owns and manages apartment units within the downtown St. Cloud area.

### Conclusion

Environmental justice and Title VI are not new concerns. Today, because of the greater evolution of the transportation planning process, they are receiving greater emphasis. The APO develops transportation programs and plans to meet the needs of the St. Cloud Metro Area. Staffs need to identify minority, low-income populations so needs can be addressed, and the burdens of transportation investments can be fairly distributed.

The 2035 transportation projects as proposed, would cause short-term impacts, however, these impacts would be no greater than those experienced by non-low income and non-minority members of the general population. Given the needs for the area, the implementation of the proposed projects would not represent a significant change and thus not significantly affect minority and low-income populations.

# Environmental Justice - Low-Income -



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# ENVIRONMENTAL MITIGATION

## Purpose

The purpose of this element is to document potential environmental impacts of proposed projects early during the planning process, more specifically during the planning horizon of the 20-year Transportation Plan. Activities described in this section were based on results of a comprehensive evaluation of available conservation plans, maps and inventories in consultation with federal, state, and other land management and regulatory agencies.

A discussion of these activities has been included for compliance with SAFETEA-LU provisions and Federal Highway Administration (FHWA) statutes and regulations [23 USC 134/49; USC 5303(i)(2)(B) and 23 USC 135/49; USC 5304(f)(4)]. It is critical to involve local, state and federal environmental agencies and stakeholders early in the planning process to document potential environmental impacts of proposed transportation improvements before projects are carried through the federal environmental documentation process (National Environmental Policy Act – NEPA).

## Interagency Consultation

Interagency consultation occurs throughout development of the Plan between representatives of Mn/DOT, MPCA, St. Cloud Metro Bus, FTA, FHWA and other agencies. Projects are developed through ad hoc committees with specific recommendations forwarded to implementing agencies, the APO Technical Advisory Committee (TAC) and APO Policy Board.

The APO TAC is comprised of engineers and planners from member jurisdictions, including St. Cloud Metro Bus and Mn/DOT D3 staff. The APO Policy Board includes St. Cloud Metro Bus representation. Ad hoc committees include a cross section of policy and technical staff with an interest in the respective project.

As part of the Planning process, the APO's Public Participation Plan (PPP) guides public involvement activities to coincide with project environmental mitigation activities. The PPP procedures state:

“Identify, review, incorporate, and coordinate environmental issues and concerns from other local, state and federal agency Plans to develop a specific public participation program that takes into account and addresses (possible) environmental mitigation activities and incorporates the level of participation needed for planning related activities.”

When performing planning activities such as updating and developing the Plan, the Transportation Improvement Program (TIP), Transportation System Management (TSM) Plan, corridor and other planning studies, APO will consult early with a variety of agencies on environmental mitigation activities.

Beyond the currently consulted agencies mentioned above, the APO consults with the following additional agencies on environmental mitigation activities:

- Environmental Quality Board

- Minnesota Department of Agriculture
- Minnesota Department of Natural Resources
- Minnesota Department of Health
- Minnesota Pollution Control Agency
- Sauk River Watershed District
- Soils Conservation Districts (Board of Water & Soil Resources)
- U.S. Fish and Wildlife Service
- U.S. Army Corp. of Engineers
- U.S. Environmental Protection Agency
- U.S. National Park Service (currently does not apply)

### Comparison of Conservation Plans, Maps and Inventories

One of the seven APO 2035 Plan planning criteria used during project selection is "Energy & Environment". The APO's methodology for this criteria is to "minimize environmental impacts and energy consumption by promoting optimum system performance and providing transportation enhancements." To help minimize environmental impacts, the APO maintains a computerized Geographic Information System (GIS) inventory of all environmentally sensitive areas in the Metropolitan Area. This data was used when Plan alternatives are developed and evaluated. The data was reviewed and collected from State conservation plans, maps and inventories. These features are included on Figure A-5: Environmental Considerations.

Inventoried (GIS) data includes:

- Areas/Points of Botanical Interest
- Areas/Points of Ecological Interest
- Areas/Points of Zoological Interest
- Contaminated Groundwater Sites and Soils Locations
  - Federal & State Superfund Locations
  - Leaking Underground Storage Tanks (LUSTs)
  - Minnesota Landfill Cleanup Program Sites
  - Resource Conservation & Recovery Act (RCRA) Locations
- FEMA Floodplains (Q3)
- Minnesota County Biological Survey (MCBS) Native Plant Communities
  - Fen, Marsh or Swamp Areas
  - Forest or Woodlands
  - Meadowlands
  - Prairie Areas
- Historic Districts
- Hydrology
- NWI Wetlands
- Prairie Areas
- Rock Outcroppings
- MCBS Sites of Biodiversity Significance
  - High Quality Native Plant Communities
  - Rare Plants
  - Rare Animals
  - Animal Aggregations
- St. Cloud Environmental Ordinance
- Wild & Scenic River Boundary

All of the data sets, except the St. Cloud Environmental Ordinance, were collected from the Minnesota Department of Natural Resources

(Mn/DNR). The Mn/DNR, as the State's environmental managing agency, collects, oversees and regulates inventoried GIS data from other local, state and federal agencies including the Army Corp. of Engineers, Environmental Protection Agency (EPA), Federal Emergency Management Agency (FEMA), Minnesota Pollution Control Agency (MPCA), Minnesota Historical Society (SHPO), Fish and Wildlife Service (FWS), etc.

Some of this data is available for download from an interactive, web based GIS platform (ArcIMS) at <http://deli.dnr.state.mn.us/>. Each downloadable data set has accompanying metadata that explains detailed identification information such as: publication date, title, description, purpose, cross reference information, etc.

### **Potential Mitigation Activities**

Projects are continually refined through the planning and project development process to minimize environmental impacts. That process starts with the development of the 2035 Plan and projects selected through Plan analysis. The APO identifies and solicits all potential stakeholders for public participation, including those that have a vested environmental interest in planning activities. Environmental stakeholders are identified at the beginning of the planning process so their input can be included as part of the decision-making process.

Involving local, state, regional, and federal environmental stakeholders early allows for the sharing of key information and initiates the avoiding, minimizing and mitigating process.

The APO utilizes a Geographic Information Systems (GIS) as a valuable data analysis and data sharing tool to improve transportation analyses of environmental impacts. In future Plan updates, the APO will explore additional resources for improving the decision-making process where planning activities have the potential to affect the environment.

Resources, as recommended by FHWA, include:

- Eco-logical
- Green Infrastructure
- Planning and Environmental Linkages (PEL)

Eco-Logical is a document agreed on by eight federal agencies that encourages ecosystem-based planning and greater flexibility in the regulatory processes. It is essentially a "permission document," providing a framework for doing business in a new way.

Green Infrastructure is an approach to planning and implementing interconnected "green-space" systems (such as protected lands, parks, and trails) with existing and planned "gray" infrastructure (such as roads and buildings). Green Infrastructure can provide geographic resource information and conservation priorities that can be used as input in the transportation planning process.

The PEL is an approach to transportation decision-making that considers environmental, community, and economic goals early in the planning stage and carries them through project development, design, and construction. The PEL website includes implementation resources, information on Linking

Planning and NEPA Workshops, and links to related integration resources (FHWA, 2007).

### **NEPA (Project Development) Documentation Focus**

Once approved, environmental studies for all projects included in this Plan must be conducted consistent with State and federal regulatory requirements. During these processes, project purpose and need must be verified and all reasonable alternatives must be considered, including a no-build alternative.

Depending upon project scope, social, economic, environmental and transportation aspects of proposed projects must be evaluated within the context of an Environmental Impact Statement (EIS), an Environmental Assessment (EA), or a Categorical Exclusion (CE)/Project Memorandum (PM). Air Quality and Environmental Justice, discussed earlier in this Appendix, must also be evaluated during these processes. Opportunities for public input must be afforded throughout the State and federal project development process for all projects proposed in this Plan.

Documentation is an essential component of the National Environmental Policy Act (NEPA) project development process, which supports and complements public involvement and interagency coordination. NEPA requires that Federal agencies disclose the results of their analysis and the effects of project implementation on the environment and solicit comments on the proposals from interested and affected parties.

The purpose of documenting the NEPA process provides for complete disclosure to the public; allows others an opportunity to provide input and comment on proposals, alternatives, and environmental impacts; and provides the appropriate information for the decision maker to make an informed choice among alternatives. The process, as described from NEPA in Section 102(2) is summarized below:

Agencies of the Federal Government shall:

- Utilize a systematic, interdisciplinary approach in planning and in decision making which may have an impact on man's environment.
- Include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on:
  - Environmental impact of the proposed action.
  - Adverse, unavoidable environmental effects.
  - Alternatives to the proposed action.
  - Relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity.
  - Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.
- Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise.
- Make them available to the public.

Transportation projects vary in type, size and complexity, and potential to affect the environment. Transportation project effects can vary from very minor to significant impacts on the human environment. To account for the variability of project impacts, three basic "classes of action" are

allowed and determine how compliance with NEPA is carried out and documented:

- An EIS is prepared for projects where it is known that the action will have a significant effect on the environment.
- An EA is prepared for actions in which the significance of the environmental impact is not clearly established. Should environmental analysis and interagency review during the EA process find a project to have no significant impacts on the quality of the environment, a Finding of No Significant Impact (FONSI) is issued.
- A CE/PM is issued for actions that do not individually or cumulatively have a significant effect on the environment.

### Environmental Impact Statement

NEPA requires Federal agencies to prepare EISs for major Federal actions that significantly affect the quality of the human environment. An EIS is a full disclosure document that details the process through which a transportation project was developed, includes consideration of a range of reasonable alternatives, analyzes the potential impacts resulting from the alternatives, and demonstrates compliance with other applicable environmental laws and executive orders. The EIS process is completed in the following ordered steps: Notice of Intent (NOI), draft EIS, final EIS, and record of decision (ROD). The following are the major EIS sections.

- Purpose and Need
- Alternatives
  - Alternatives should meet the need for the project and avoid or minimized environmental harm.
- Affected Environment
  - The affected environment should discuss, commensurate with the importance of the potential impacts, the existing social, economic, and environmental settings surrounding the project. It should also identify environmentally sensitive features in the project corridor.
- Environmental Consequences
  - This section should describe in detail both the impacts of the proposed action and the potential measures that could be taken to mitigate these impacts. Mitigation must be considered for all impacts, regardless of their significance. Environmental impacts should be discussed in terms of their context and intensity.
- Comments and Coordination
- List of Preparers
- Record Of Decision (ROD)

### Environmental Assessment

When the significance of impacts of a transportation project proposal are uncertain, or it does not meet specified thresholds for an EIS, an EA is prepared to assist in making this determination. If it is found that significant impacts will result, an EIS needs to be completed. FHWA must approve an EA before it is made available to the public. EAs must be made available to the public through notices of availability in local, state, or regional clearinghouses, newspapers and other means. After

public comments are received and considered, a determination of the significance of the impacts is made.

### **Categorical Exclusions/Project Memorandum**

CE/PM means a category of actions which do not individually or cumulatively have a significant affect on the human environment, so neither an EA nor EIS is required. CEs/PMs are actions which meet the definition contained in 40 CFR 1508.4 and do not involve significant environmental impacts. They are actions that do not induce significant impacts to planned growth or land use for the area, do not require the relocation of significant numbers of people; do not have a significant impact on any natural, cultural, recreational, historic or other resource; do not involve significant air, noise, or water quality impacts; do not have significant impacts on travel patterns; and do not otherwise, either individually or cumulatively, have any significant environmental impacts, therefore, there are no associated mitigation activities.

# St. Cloud Metropolitan Area Environmental Considerations

