



MAINTENANCE AND SECURITY

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III. MAINTENANCE AND SECURITY

MINNESOTA STATEWIDE POLICY PLAN

- I. Maintenance and Security
 - A. Maintain and operate the statewide transportation system in an efficient, cost-effective, and secure manner
 - 1. Bridge Inspection, Follow-up & Preventative Maintenance
 - a. Review and modify bridge inspection processes and follow-up procedures, and implement bridge preventive maintenance strategies that ensure public safety and extend overall bridge life.
 - i. Review and enhance, where appropriate, the state’s bridge inspection programs to ensure personnel are well-trained and have the proper equipment. Complete all scheduled inspections annually and report conditions for all state highway bridges.
 - ii. Establish processes to identify and prioritize bridge maintenance needs from bridge inspection reports. Improve linkages between bridge work repairs and condition reporting programs (e.g., potential link between WMS and PONTIS). Also investigate enhancements to bridge management systems to link different investment strategies to life-cycle cost elements.
 - iii. Give priority to bridge preventive maintenance activities as outlined by HSOP (e.g., joint repairs, deck flushing, crack sealing, deck and rail sealing, and spot painting) to extend bridge life and lower long-term ownership costs.
 - iv. Prioritize and complete other bridge maintenance activities as needed to maintain structural integrity and safety (e.g., structural damage, pavement spalling, bearing adjustments, section loss).
 - v. Provide greater access to bridge condition and bridge system performance information, and provide regular status reports to legislature on bridge maintenance and replacement programs.
 - 2. Level of Highway Maintenance
 - a. Staff and fund maintenance and operations to address high-priority areas including snow and ice removal, pavement patching, drainage, safety, and traffic operations needs.
 - i. Placing a high priority on maintenance activities that directly affect the user and user safety, including snow and ice removal, pavement patching, guardrail replacement, enhancements to pavement markings and signing, and

- ii. increased signal and lighting maintenance. Maintenance levels will also be increased in rest areas or other areas that receive a high level of public use.
 - iii. Expanding capability to monitor maintenance performance, assess maintenance needs, and manage maintenance costs consistent with direction set by the HSOP. This would include completion of the drainage database, Hydrinfra, as well as ways to track and report the condition and maintenance of signs, guardrails, rest areas, signals, and lighting.
 - iv. Evaluating staffing needs with careful consideration of staffing needed to meet performance targets, resulting impacts on program delivery, and the level of use of temporary employees.
3. Efficiencies Across all Jurisdictions
- a. Work to advance efficiencies in maintenance operations through innovation, partnering, and cost-sharing.
 - i. Pursue innovation in technology and best practices, including:
 - Use of automatic vehicle location, maintenance decision support systems, Tow Plow (an innovative plow configuration), pavement temperature sensors, and spreader calibration in snow and ice removal.
 - Explore use of fuel purchase hedging to achieve greater cost stability.
 - Continue to investigate new, cost-effective materials and methods that improve functionality and reduce maintenance operation costs. Examples include pavement markings with improved visibility, especially at night and in wet weather conditions, and better overhead lamps that use less electricity and reduce the frequency of re-lamping.
 - Continue to consider maintenance costs when developing new designs or material standards such as those for the cable median barriers.
 - Evaluate potential for greater equipment sharing with strong consideration toward meeting performance targets.
 - Continue to encourage Mn/DOT's Best Practices program that identifies cost-effective processes and practices for implementation statewide.
 - ii. Develop or strengthen partnerships and cost-sharing arrangements. Examples include:
 - Explore opportunities with cities and counties to increase maintenance efficiencies through shared facilities, equipment, and routes.
 - Take steps to increase restitution recovery for guardrails (i.e., increase the frequency of "yellow tags" by working more closely with local law enforcement and using technology to identify who is responsible for damage).
 - Continue to group maintenance activities into large group contracts to maximize efficiency and minimize staff. Examples include electrical and re-lamping work.
 - Expand maintenance activities to include preventive maintenance work; consider pooling preventive maintenance work with cities and counties.
 - Optimize work between Mn/DOT crews and contract maintenance; expand use of safety rest area contractors where possible.
4. Maintenance of Other Modes
- a. Other public and private transportation partners should maintain their respective transportation infrastructure.
 - i. Mn/DOT will work with rail companies to address maintenance at railroad grade crossings including traffic safety signals and signage and to better define inspection and maintenance responsibilities for the 60 Mn/DOT-owned railroad bridges over state highways.

- ii. U.S. Army Corps of Engineers should continue to maintain the Mississippi River channel including yearly dredging and keeping the locks and dams in good working order. It should also continue to work with the Port of Duluth to stabilize and maintain Port of Duluth dock structures.
- iii. Local road authorities should work with Mn/DOT to improve maintenance and signage on designated highway freight routes and port connectors.
- iv. Transportation agencies should ensure that bicycle and pedestrian facilities are maintained year round, including summer maintenance, and snow and ice removal where appropriate.
- v. Local municipalities will continue to be responsible for maintaining and operating publicly owned airports. Mn/DOT will assist through the administration of the Airport Maintenance and Operations Grant program and through administration of the statewide airport re-striping contract.
- vi. Transit operators should continue to do preventive maintenance work to extend equipment life cycles.
- vii. Mn/DOT and the Metropolitan Council will continue to work together to address maintenance of light rail transit (LRT) systems.

5. Security

- a. Maintain the security of the state's roads, rail, waterway, and air service systems.
 - i. Mn/DOT will review and update security plans and procedures to protect and maintain the state's critical infrastructure.

MINNESOTA AVIATION SYSTEM PLAN

I. Safety & Security

- A. Increase the safety and security of transportation systems and their users

ITS ARCHITECTURE PLAN

I. Crash Frequency

- A. Improve the Safety of the State's Transportation System by reducing crash frequency.
 - 1. Safeguard the motoring public from homeland security and/or Hazmat incidents.
 - a. O-19 Reduce security risks to transit passengers and transit vehicle operators.
 - b. O-20 Reduce security risks to motorists and travelers.
 - c. O-21 Reduce security risks to transportation infrastructure.
 - d. O-22 Reduce exposure due to Hazmat & homeland security incidents.
 - e. O-23 Enhance tracking and monitoring of sensitive Hazmat shipments.

II. Mobility, Security, Convenience & Comfort

- A. Enhance Mobility, Security, Convenience and Comfort for the Transportation System.
 - 1. Enhance traveler security.
 - a. O-19 Reduce security risks to transit passengers and transit vehicle operators.

- b. O-20 Reduce security risks to motorists and travelers.
- c. O-21 Reduce security risks to transportation infrastructure.

III. Economic Productivity

- A. Enhance the Present and Future Economic Productivity of Individuals, and Organizations and the Economy as a Whole.
 - 1. Safeguard existing infrastructure.
 - a. O-21 Reduce security risks to transportation infrastructure.

GREATER MINNESOTA TRANSIT PLAN

I. Maintenance and Expansion

- A. Maintain and expand the statewide public transit network
 - i. Maintain existing transit systems through the allocation of operating and financial assistance first to existing public transit service that meets performance targets.
 - ii. Provide resources to start new transit services in areas without public transit when new financial resources are available to fund service.
 - iii. Provide resources to expand core service frequencies and weekday or weekend service hours of existing providers when all geographic areas seeking public transit services have services and new financial resources are available.

II. Safety & Reliability

- A. Provide a safe and reliable transit environment
 - i. Work with transit providers to develop safety and security plans.
 - ii. Make available safety and security training for transit staff.

III. Access

- A. Prioritize infrastructure investments to increase access to services
 - i. Invest in transit maintenance and storage facilities and passenger facilities that meet program guidelines and are consistent with local plans as funds are available.
 - ii. Work with transit providers to replace or rehabilitate transit fleets following industry standards for vehicle replacement cycles.

ST. CLOUD APO 2035 TRANSPORTATION PLAN

I. Safety

- A. Improve the Safety of All Transportation Modes and Users
 - a. Increase system safety & **security**.

METROPOLITAN COUNCIL 2030 TRANSPORTATION PLAN

I. Transportation System Investment

- A. Ensure adequate resources for transportation system investments

1. The Metropolitan Council will identify and pursue an adequate level of resources for regional transportation investments. The first priority is to ensure that adequate resources are available to preserve, **operate and maintain** the existing systems and the second is to seek resources to address identified but unmet needs and demands.
 - a. Resources Available and Needed
 - i. The Metropolitan Council will identify (1) transportation resources currently available and reasonably expected to be available in the future, (2) the level of resources needed for transportation investments in preservation, operations and maintenance of existing systems and (3) resources required to meet unmet needs and demands.
 - b. Adequate Resources
 - i. The Metropolitan Council, working with the Governor, Legislature, local governments and others will pursue an adequate level of transportation resources to **preserve, operate and maintain** existing systems and to meet identified unmet needs.
- B. Prioritizing for regional transportation investments
 1. The priorities for regional transportation investments are to adequately preserve, **operate and maintain** existing transportation systems and to make additional transportation investments on the basis of need and demand consistent with the policies, strategies and priorities of this policy plan and the Regional Development Framework.
 - a. System Preservation
 - i. The first priority for transportation investments for all modes is the preservation, **operation and maintenance** of existing systems and facilities.

II. Highway System

- A. Preserve, Operate and Maintain the Metropolitan Highway System
 1. A high priority for the region is to continue focusing highway investments toward the safe operation, preservation and maintenance of the Metropolitan Highway System.
 - a. Budget for Preservation
 - i. Mn/DOT should regularly budget adequate resources for existing facilities preservation, **operations and maintenance** to fully utilize the design life and minimize the investment required over the life-cycle of facilities.
 - b. Integrate Preservation with Congestion Mitigation and Safety
 - i. Mn/DOT should regularly review planned preservation and maintenance projects to determine if there are opportunities to include lower-cost congestion mitigation and safety improvements.
- B. Highway System Management and Improvements
 1. The Metropolitan Highway System and "A" minor arterial system will be managed and improved to provide for maximum person throughput, safety and mobility using existing facility capacity, pavement and right-of-way where feasible.
 - a. Investments in Managing the Highway System
 - i. After preservation, operations and maintenance, investments to manage and optimize performance of the highway system and improve safety are the region's next highest priority.
 - b. Embracing Technology

- i. The Council and Mn/DOT will use and implement cost-effective technology solutions to manage and optimize the performance of the existing highway system as measured by person throughput.
- c. Optimize Highway System Performance
 - i. Mn/DOT and the Council will implement techniques to optimize performance of metropolitan highway facilities as measured by person throughput. These optimization projects will maximize use of existing facility capacity, pavement and right-of-way and may include, but are not limited to, implementation of HOV and HOT lanes, priced dynamic shoulders and other roadway pricing initiatives, freeway ramp meters with HOV bypasses, and bus-only shoulders.

III. Aviation

A. Air and Surface Access to Region's Airports

- 1. Provision of adequate local access by air service providers and system users to the region's airports is essential to realizing the advantages of air transportation to the region's businesses and citizens.
 - a. Use of Technology
 - i. Airport sponsors should provide facilities that are safe and secure, affordable and technologically current for all facets of the aviation industry.

B. Consistency with Federal and State Plans/Programs

- 2. The planning, development, operation, maintenance and implementation of the regional aviation system should be consistent with applicable Federal and State aviation plans and programs.
 - a. Responding to National Initiatives
 - i. Project sponsors need to include the following in their planning and operational activities; Environmental sustainability efforts. Security needs as identified by National Homeland Security through the Transportation Security Administration.

C. Adequate Aviation Resources

- 3. Public investments in air transportation facilities should respond to forecast needs and to the region's ability to support the investments over time.
 - a. Maximize Existing Investments
 - i. Airport sponsors should maintain and enhance existing facilities to their maximum capability, consistent with the Development Framework, prior to investing in new facilities.

DIRECTIONS 2035 DULUTH-SUPERIOR LONG RANGE TRANSPORTATION PLAN

I. Economic Vitality

- A. Develop and maintain the transportation system in ways that support economic productivity, efficiency and competitiveness
 - 1. Increase freight activity
 - a. Increase freight activity in the Twin Ports across all modes of transportation (truck, rail, air and water).

- i. Promote recommendations from previous studies; revisit & update (Freight Study, Port Land Use Plan, Metro Rail Plan, & Airport Land Use Study).
 - ii. Assist jurisdictions in finding ways to incentivize new freight business ventures.
 - iii. Advocate for harmonization of national and state regulations (e.g., weight limits, ballast water regulations, etc.)
 - iv. Work with local entities to identify promising innovations for local freight industries.
 - 2. Increase passenger trips
 - a. Increase the number of passenger trips to and from Duluth-Superior metro area.
 - i. Support the local airports in efforts to improve operations and incentives for passengers.
 - ii. Engage regional transit agencies in coordinating efforts to improve ridership.
 - iii. Advocate for passenger rail service to/from the Twin Cities.
 - iv. Assist jurisdictions in planning for rail connections.
 - 3. Increase transit to employment centers
 - a. Increase transit options to and from employment centers in the Duluth-Superior metro
 - i. Identify and inventory areas suitable for Park & Ride lots.
 - ii. Identify emerging employment centers and assess adjacent transit routes.
 - iii. Inform businesses of Commuter Choice and similar programs.
 - iv. Survey businesses and transit riders to determine unmet needs.
 - 4. Improve tourist movement
 - a. Improve tourist movement between tourist districts and local business districts
 - i. Promote recommendations of Downtown Duluth Modal Connections study.
 - ii. Advocate for further implementation of the Duluth-Superior Wayfinding Plan.
 - iii. Maintain updated sidewalk inventories; recommend improvements.
 - iv. Maintain bike route sign inventories; recommend improvements.

II. Transportation Security

- A. Improve and increase the security of the Duluth-Superior transportation system; ensure preparedness for system operations during natural or man-made emergencies
 - 1. Ensure the security of highways and bridges
 - a. Assist jurisdictions in ensuring the security of highways and bridges.
 - i. Work with jurisdictions to identify and address potential security issues for the Duluth-Superior transportation system.
 - ii. Promote highway projects that would improve the security of metro roads and bridges.
 - iii. Advocate and promote further development of bi-state surveillance cameras linked to the Duluth Transportation Operation and Communication Center.
 - 2. Ensure security of non-highway transportation facilities
 - a. Assist local transportation authorities in ensuring the security of port, airport, railroad and transit facilities.

- i. Work with local transportation authorities to identify and address potential security issues for the Duluth-Superior transportation system.
 - ii. Work with jurisdictions to ensure compliance with Homeland Security regulations.
 - iii. Promote transportation projects that would improve the security of the transportation facilities.
 - 3. Ensure effective emergency response
 - a. Assist in ensuring effective, coordinated emergency response to incidents
 - i. Conduct a multi-modal assessment of emergency-response readiness for the metropolitan transportation system.
 - ii. Update and maintain a contact list of security liaisons for area port, airport and rail agencies.
 - iii. Work with local transportation agencies and emergency responders to ensure coordination among incident management plans.
 - iv. Promote expansion of local Intelligent Transportation Systems facilities in the Duluth-Superior metro.
- III. Efficient operations & management
 - A. Ensure the efficient operation and maintenance of the transportation system to optimize the movement of people and goods throughout the metro area
- IV. System Preservation
 - A. Preserve existing infrastructure, ensure transportation facilities are used optimally, and limited financial resources are applied most effectively
 - 1. Ensure longevity of infrastructure
 - a. Increase the functional lifespan of existing infrastructure and ensure new infrastructure is built and maintained to provide the longest functional lifespan.

FARGO-MOORHEAD METROPOLITAN TRANSPORTATION PLAN

- 1. Reduce the number and severity of transportation system crashes
 - a. Improve intersection safety.
 - i. Provide timely winter maintenance such as snow plowing, and ice and slush removal as appropriate.
- 2. Maintain and improve the region's economic competitiveness
 - a. Rehabilitate/rebuild critical bridges as appropriate
 - i. Continue to monitor bridge conditions and schedule rehab/repair work accordingly
- 3. Manage and operate roadways efficiently
 - a. Manage congestion to improve traffic flow and conserve energy
 - i. Ensure region-wide coordination among traffic, emergency, and maintenance agencies.
 - b. Ensure that the transportation system will operate in times of manmade or natural disasters
 - i. Create redundancy for critical system elements, including CCTV, sensors, and fiber optics.
 - ii. Identify Regionally Significant Transportation Infrastructure and establish protocol for tracking changes and modifications to RSTI.

- iii. Develop contingency plans for critical network links with pre-identified emergency detour routes.
 - iv. Support the development of a centralized information gathering center that will operate in times of emergencies.
 - v. Support Metro COG's participation in groups such as Emergency Services Management and other opportunities for regional coordination and collaboration on issues of transportation security and incident response.
4. Provide an improved, safe and efficient public transit service
 - a. Make transit more accessible.
 - i. Improve shelter maintenance and snow clearance around shelters.
 5. Improve bicycle route connectivity
 - a. Establish an evaluation and rehabilitation program for bicycle and pedestrian facilities throughout the metro area
 - i. Consider neighborhood "adoption" of bike routes and shared-use paths for maintenance and periodic evaluation.
 - ii. Establish one phone number for the reporting of maintenance issues by the public; post the number on the back side of Metro Trails signs.
 - iii. Roadway segments of the Principal Bikeway Network should be held to a pavement quality standard that specifically recognizes the needs of bicyclists.

GRAND FORKS-EAST GRAND FORKS MPO TRANSPORTATION PLAN

1. Provide a safe transportation system
 - a. Preserve and maintain the existing transportation facilities
 - i. Pavement, signal system, signage, striping and other features of the transportation infrastructure which influence traffic movement should be maintained to a level which permits safe traffic operation.
 - ii. Review and update maintenance goals and objectives.
 - b. Preserve, maintain and improve identified safe routes to school routes.
 - i. Annually identify and remove hazards to bicycle and pedestrian travel as part of maintenance program.
2. Provide an efficient transportation system
 - a. Define a proper mix of local, collector, and arterial streets according to land use and network continuity.
 - i. Establish a network function hierarchy that reflects state guidelines for mileage by classification and that reflects the regional definition established as part of the planning process.
 - b. Preserve and maintain the street and highway system.
 - i. Reduce the system mileage that falls below the NDDOT and MnDOT minimum thresholds for ride quality/condition.
 - c. Establish a hierarchy of the bicycle network
 - i. Adopt a bicycle facility management system.
 - ii. Adopt a level of importance of bicycle maintenance into the cities' maintenance program.
 - iii. Fund maintenance of selected facilities that contribute to safe, year-round bicycle transportation.
 - iv. Annually update bikeway maintenance and construction map.
 - v. Create an adopt-a-bikeway program.

3. Finance the transportation system
 - a. Increase the flexibility in funding for both construction and **maintenance** of transportation facilities in the annual transportation budget
 - i. Effect administrative procedures to obtain increased funding flexibility.
 - b. Find ways to capitalize funding for both construction and **maintenance** of transit facilities
 - i. Follow administrative procedures to ensure funding flexibility.
 - c. Develop a life cycle cost analysis of pavement types for all projects
 - i. Require a cost analysis of all bicycle projects by pavement type.
 - d. Increase funding for both construction and **maintenance** of bicycle facilities in the annual transportation budget
 - i. Develop a bicycle plan which is based on the cost-effectiveness of recommended improvements in each of the three stages - short, middle and long term.
 - ii. Involve bicycle facilities in transportation budgetary decisions.
4. Provide a secure transportation system
 - a. Coordinate transportation plan with flood control operations during flood events
 - i. Compatibility with current flood control operations planning.
 - b. Identify and incorporate state and regional emergency, evacuation, and security plans into the plan update
 - i. Improvement projects should enhance/compliment existing emergency, evacuation and security plans.
 - ii. Review and update external operating procedures with local emergency agencies.
 - c. Provide a secure transit system
 - i. Review and update internal safety and security manual and training.
 - ii. Ensure 1% of federal funds are spent for transit security projects.

ROCHESTER COUNCIL OF GOVERNMENTS TRANSPORTATION PLAN

I. Funding

A. Establish adequate and stable funding for transportation

- a. Provide adequate funding to support timely preservation and capital replacement of the transportation system
 - i. Provide annual funding for capital replacement at a level sufficient to lower the Average Replacement Cycle (ARC) to a level equal to the Anticipated Design Life (ADL) of all system components.
 - ii. Provide adequate funding to eliminate the backlog of transportation system needs.
 - iii. Provide adequate funding to support life cycle maintenance activities for all transportation system components.
 - iv. Provide adequate funding to support annual operations and maintenance (O&M) needs associated with the transportation system.
- b. Maintain funding for alternative modes of personal travel at or above historical levels
 - i. Maintain or increase the level of funding devoted to the construction and **maintenance** of alternative modes of personal travel.

II. Management

- A. Manage transportation systems to maximize effectiveness while minimizing impacts to the fiscal, economic, social, natural and built environments
 - a. Manage short and long term investment to minimize costs consistent with social, economic and environmental goals
 - i. Minimize long term costs to users of the transportation system.
 - ii. Minimize the public costs of providing facilities and services.
 - iii. Continue to incorporate revenue and expenditure forecasting and life cycle management into annual budgeting processes.
 - b. Provide for timely annual maintenance of the transportation system
 - i. Provide cost-effective operations supporting safety and environmental goals.
 - ii. Life cycle pavement maintenance activities on highways and bridges should be completed in a timely manner.
 - c. Utilize where appropriate low cost maintenance strategies on a permanent or temporary basis
 - i. Develop decision support parameters for determining the appropriate maintenance treatments on facilities where deferred maintenance exists.

III. Alternative Modes

- A. Encourage individuals to travel the share of trips made using alternative modes of travel
 - a. Increase the level of amenity associated with alternative modes of travel
 - i. Provide safe and **secure** facilities for pedestrians and bicyclists.

IV. Technology

- A. Stimulate the application of new technology to the solution of transportation problems
 - a. Provide strategic direction for the application of new technologies to the solution of transportation needs
 - i. Educate citizens and officials about sustainable transportation technologies and intelligent transportation systems (ITS) highlighting Minnesota-based initiatives
 - ii. Complete and periodically update a strategic plan for ITS deployment focused on technologies that will improve the efficiency, safety or effectiveness of transportation service in the region

V. Security

- a. Work with the Olmsted County Emergency Management Officials and other agencies and organizations involved in emergency management and homeland security
 - i. Assist in development of key evacuation routes from important activity areas, and include an assessment of improvement needs in future Long-Range Plan updates
 - ii. Assist in preparation of alternate route/detour planning to facilitate response to closing major transportation arteries
 - iii. Assist in preparation of demographic profile information and a geographic inventory of transportation-disadvantaged populations that may need assistance during a disaster to facilitate evacuation and determine if current deployable assets will be available and adequate
- b. Continue to support Homeland Security/Emergency Management functions

- i. Continued maintenance of geographic information system (GIS) electronic basement for use by dispatchers and emergency management personnel
- ii. Continue assistance in preparing workshop materials for training exercises and continue to participate in emergency management workshops
- iii. Continued assistance to agencies such as the Rochester Fire Department and Gold Cross Ambulance in facility siting and other studies of emergency management needs as needed
- c. Identify and collaborate with other state and local agency efforts and/or private sector efforts to enhance security planning for the transportation system
- d. Work to provide safe and secure facilities and transportation infrastructure for residents, visitors and commerce in the ROCOG planning area through efforts to reduce injuries, fatalities and property damage for all modes of transportation, and to minimize security risks at airports, rail stations, rest areas, on roadways and bikeways, and public transportation facilities
- e. Work with partners in emergency management and homeland security and with FHWA, FTA and MNDOT on funding for new strategies, technologies and projects that can help to prevent transportation related incidents

VI. System Management and Operations

1. Access management

- i. Preserve the integrity of the major street system with an effective program for managing the frequency of connections and signals along major street corridors to maximize the capacity of the existing street system and improve safety. Plan new higher volume connections to existing arterials at locations where the spacing of traffic signals will preserve two-way traffic progression.
- ii. ROCOG should work with local jurisdictions to adopt Access Management guidelines for major streets corridors to manage the number and location of driveways and local street connections to major roadways. Promote the integration of Access Management guidelines into municipal subdivision and zoning processes at the local level to support roadway management goals, and apply connection and signal spacing guidelines when reviewing development plans.
- iii. Include connection and spacing recommendations as part of the all Corridor Management or Congestion Mitigation Plans.
- iv. In rural areas, connection and spacing guidelines should balance land use objectives with the primary function of major roads as important regional travel corridors.
- v. When purchasing right of way for future major street construction, roadway authorities should acquire access control rights consistent with the connection and spacing guidelines of this plan.

2. Level of service

- i. A primary traffic management goal for roadway authorities in the ROCOG planning area should be to manage the major road system to maintain an acceptable level of service during peak and off-peak periods of demand.
- ii. When reviewing land use amendments, zone changes, master plans, conditional uses and other significant development requests, jurisdictions should take into consideration the impact of the project on roadway Level of

Service. Jurisdictional land use policy with regards to the traffic impact of proposed development should support the level of service standards in this plan and the policies to achieve these standards.

- iii. Level of Service impacts should be considered and improvements to maintain or improve level of service should be considered in all planning and project development studies involving the preparation of corridor or traffic management plans or road improvement plans.
3. Capacity preservation through safety and operations
 - i. ROCOG and its partner agencies should conduct traffic engineering studies on roadway segments or at key intersections where there are identified congestion or capacity problems, giving priority to locations where elevated congestion levels are combined with a high incidence of accidents.
 - ii. In areas where multiple jurisdictions are involved in the management of land adjacent to the corridors, efforts should be made to develop and implement corridor management intergovernmental agreements.
 - iii. Make access rights purchases where feasible.
 4. Other management strategies
 - i. ROCOG and its partners should consider development of an RCTO to collaboratively guide regional operations through establishment of a shared regional framework or vision for transportation operations.
 - ii. Consideration should be given to establishing a coordinated Congestion and Crash Monitoring and Mitigation program to provide for a region-wide, inter-jurisdictional assessment of needs related to safety and traffic mobility.
 - iii. Consider an update to the 1998 ITS Scoping Study.

VII. Bicycle and Pedestrian Travel

1. Pathway Maintenance
 - i. Jurisdictions should establish a timely and regular maintenance and repair program for all bicycle and pedestrian facilities, which may include enforcement of the responsibility for path and sidewalk maintenance by adjacent property owners and/or the city assuming the responsibility for sidewalk maintenance. The level of maintenance should be documented in terms of a maintenance policy. Ongoing maintenance should be routinely considered when preparing budgets and capital improvement programs, and reflects growth in the system as it occurs.
2. Bikeway Plan Coordination
 - i. The Inter-Agency Bicycle Planning Committee should continue to meet on an annual basis to coordinate facility construction and **maintenance**.
3. Bikeway Maintenance
 - i. Roadways designated as bicycle routes or which have bike lanes should be given priority in year round maintenance in order to enhance the safety of these routes for bicycle users.