

Chapter 2 - Metropolitan Transportation Plan Development

The Metropolitan Transportation Plan Development Process

The purpose of the Metropolitan Transportation Plan (MTP) is to produce a coherent, integrated guide for the development of an effective, efficient, multi-modal transportation system that meets the needs of a geographic region and the people that live within that region, while linking that region to the larger transportation system.

Developing this plan is a cooperative process that includes planning, technical, and engineering staffs of CAMPO member counties and cities, the Missouri Department of Transportation, natural resource agencies, local elected officials, non-profit organizations, private agencies, citizen committees, and neighborhood residents.

Public participation in the development or update of plans and informational sessions is a priority for CAMPO. Open meetings and opportunities to address the Technical Committee and Board of Directors occur at every meeting. Participation in focus groups and ad hoc committees occur on an “as needed” basis, with information access provided by personal visits to offices of staff and CAMPO members, online documents and information, documentation made available at public offices and libraries, and availability of formal policy documents such as the Public Participation Plan.

For existing transportation plans, the plan must be updated at least every five years (at a minimum) and must have at least a twenty-year planning horizon, meaning that the plan tries to anticipate the needs and required resources 20 years into the future. The planning horizon that CAMPO is using for this MTP is 2030.

For CAMPO, the metropolitan transportation plan development process began with an inventory of the current transportation system as an inter-related, multi-modal system, followed by street and roadway traffic counts for average annual daily traffic (AADT) counts, and intersection turning movements.

From there, the current population from the 2000 census was used as a base population and an estimate of future population growth was forecast out to 2030. A simple linear growth rate based on the 1990-2000 growth rates was used for the forecast. CAMPO staff also inventoried the current land uses within the Metropolitan Planning Area (MPA) of CAMPO in preparation for forecasting land uses for the MTP planning horizon out to 2030 through the use of parcel data from Cole and Callaway Counties.

The next step, based on population growth forecasts, was to develop an estimate of future development and housing growth for the CAMPO area. Housing was evaluated through 2000 census data and building permits, to help determine a level of existing housing stock, and then using an average household size to estimate the number of additional housing units needed, staff used subdivided but undeveloped parcels to identify potential residential building sites. Undeveloped parcels suitable for residential development were allocated the remaining estimated unmet housing needs to meet total number of housing units required for 2030.

Known and probable future commercial development locations were identified and allocated throughout the CAMPO area. For this, studies of development plans, existing land use and transportation plans for the region were used, in addition to consultation with city, county and state professional staff. Public input was sought through two transportation planning workshops and two open houses held in May and July of 2007.

Using estimates of future land use needs allows the modeling of estimated future travel demand. To accomplish this, CAMPO hired a travel demand modeling consultant to develop transportation analysis zones (also called traffic analysis zones) and to develop a model forecasting future travel demand.

Determining the future demand for travel and the strategies for accommodating this demand, allows determination of a general level and type of infrastructure investment that will be necessary over the next 20 years, and planning estimates of the cost of new transportation system infrastructure. Additional information on this subject is contained in Chapter 7.

The Relationship of the Transportation Plan to Other Plans

The Metropolitan Transportation Plan takes into consideration, the local comprehensive and special purpose plans such as zoning and land use, transit and roadway plans, airport and aviation plans, water and rail transport, air quality and congestion plans if available.

Transportation plans must consider previous or existing local plans, and there have been several transportation and transportation/development related studies for areas within the CAMPO transportation planning area that are taken into consideration.

In addition to this, the Metropolitan Transportation Plan strives to be consistent with local growth and economic development plans.

Studies and source documents used for identifying information and items to be included in the Metropolitan Transportation Plan have been identified, and include, but are not limited to these documents:

- Capital Improvement Programs and Annual Budgets for Jefferson City, St. Martins, Holts Summit, Callaway County, and Cole County
- Transportation and Major Street Plans for the Jefferson City, and the counties of Cole and Callaway
- Callaway County, Missouri Natural Hazard Mitigation Plan –2005
- City of Jefferson Transit Development Program Plan - 2005
- City of Jefferson Comprehensive Plan –1996
- City of Jefferson Parking Planning Study –1999
- City of Jefferson Wastewater Collection System –2000
- Cole County - Jefferson City Natural Hazard Mitigation Plan
- Cole County – Jefferson City Whitton Expressway Problem Definition Study - 2006
- Cole County and Jefferson City County-wide Transportation Study for - 2003
- Jefferson City Beautification Plan - 2001

- Jefferson City East Side Neighborhood Plan - 2007
- Jefferson City Greenways master plan - 2007
- Missouri Highway Safety Plan & Performance Plan - 2008
- Missouri State Penitentiary Redevelopment Plan (as of 2008)
- Missouri's Blueprint for Safer Roadways – 2004
- MO 179, US 50, and Missouri Boulevard Interchange Improvement Study – 2005
- MODOT 2008-2012 Statewide Transportation Improvement Program
- MODOT Long Range Transportation Plan - 2007

One plan and one study are in progress as this plan is being prepared, 1) the Jefferson City Memorial Airport Layout Master Plan and 2) the Whitton Expressway Environmental Impact Study.

Factors and Requirements Considered in the Metropolitan Transportation Plan

Federal legislation identifies several factors that must be considered to fulfill the SAFETEA-LU planning process requirements. The following section describes what CAMPO considers in the development of the Metropolitan Transportation Plan.

The Scope of the Planning Process: SAFETEA-LU Planning Factors

SAFETEA_LU requires the consideration of eight planning factors in the metropolitan transportation planning process.

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Increase the safety of the transportation system for motorized and non-motorized users.
- Increase the security of the transportation system for motorized and non-motorized users.
- Increase the accessibility and mobility options available to people and for freight.
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- Promote efficient system management and operation.
- Emphasize the preservation of the existing transportation system.

Also included in 23 CFR Part 450.306(b), Federal requirements continue, stating that “Consideration of the planning factors in Paragraph (a) of this section shall be reflected, as appropriate, in the metropolitan transportation planning process. The degree of consideration and analysis of the factors should be based on the scale and complexity of many issues, including transportation system development, land use, employment, economic development,

human and natural environment, and housing and community development.”

In addition to the eight SAFETEA-LU planning factors, public participation, non-discrimination, environmental justice, and consultation with other officials and organizations are other aspects and processes considered in the metropolitan transportation planning process.

Public Participation

CAMPO has a responsibility to coordinate the regional transportation planning process. Having this responsibility requires that CAMPO actively involve all affected parties in an open, cooperative, and collaborative process, and provide meaningful opportunities to influence transportation decisions.

FHWA and FTA have identified several performance standards for effective public participation, and these standards are supported by CAMPO.³ These standards include:

- Early and continuous involvement
- Reasonable public availability of technical and other information
- Collaborative input on alternatives, evaluation criteria, and mitigation needs
- Open public meetings where matters related to transportation policies, programs, and projects are being considered, and
- Open access to the decision making process prior to closure

The Metropolitan Planning Organization has a Public Participation Plan in place. It is available online at www.jeffcitymo.org/cd/CAMPO/publicparticipation.html.

Environmental Justice and Non-Discrimination in Transportation Services

Unhealthy environmental conditions and undesirable development in many areas historically tended to be disproportionately located in low income and minority communities. In the 1990s, investigations showed that “racial minority and low-income populations bear a higher environmental risk burden than the general population”.⁴

On February 11, 1994, Executive Order 12898 initiated Federal Actions to Address Environmental Justice in Minority and Low-Income Populations. The Executive Order requires that each Federal agency shall, 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. According to Federal guidelines, Environmental Justice has the intent of:

³The Metropolitan Transportation Planning Process: Key Issues. A Publication of the Metropolitan Capacity Building Program - <http://www.planning.dot.gov/documents/BriefingBook/BBook.htm>

⁴<http://www.epa.gov/compliance/basics/ej.html>

- Avoiding, minimizing, or mitigating disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low income populations.
- Ensuring the full and fair participation in the transportation decision-making process by all potentially affected communities.
- Preventing the denial of, reduction in, or significant delay in the receipt of benefits by minority and low income populations.

Environmental Justice is the fair treatment⁵ and meaningful involvement of all people without regard to race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. And,

Meaningful involvement means that:

- Potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health;
- The public’s contribution can influence the regulatory agency’s decision;
- The concerns of all participants involved will be considered in the decision making process; and,
- Decision makers seek out and facilitate the involvement of those potentially affected.

When transportation projects and investments are considered, one of the concerns of CAMPO is that Environmental Justice requirements and principles are integrated into the processes and plans. CAMPO must take into consideration positive and negative impacts of projects and programs on areas of high minority and/or low income populations to determine that disproportionate negative impacts are not placed on the populations of these areas.

Title VI Nondiscrimination Policies

CAMPO also certifies that no person will be discriminated against under Title VI and related nondiscrimination statutes. Specifically, no person is excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving Federal financial assistance on the basis of race, color, or national origin under Title VI. To certify compliance and address environmental justice, CAMPO strives to incorporate the following activities into the planning processes, (MPO requirements as identified by the Federal Highway Administration), and works to achieve the following:

- Decision Enhance analytical capabilities to ensure that the long-range transportation plan and the transportation improvement program (TIP) comply with Title VI.
- Identify residential, employment, and transportation patterns of low-income and minority populations so that their needs can be identified and addressed, and the benefits and burdens of transportation investments can be fairly distributed.

⁵Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.

- Evaluate, and where necessary, improve public involvement processes to eliminate participation barriers and engage minority and low-income populations in transportation decision-making.

Consultation with Other Officials and Organizations

Metropolitan Planning Organizations are encouraged “to consult with officials responsible for other types of planning activities that are affected by transportation in the area (including State and local planned growth, economic development, environmental protection, airport operations, and freight movements) or to coordinate its planning process, to the maximum extent practicable, with such planning activities.”⁶

CAMPO consults with each municipality and county within the Metropolitan Planning Area, the State of Missouri Department of Transportation, the Federal Transit Administration, and the Federal Highway Administration on a regular basis.

In the development of plans by CAMPO, other agencies have been consulted, such as human service agencies, human service transportation providers, environmental, natural resource and conservation agencies, freight interests, and tribal interests.

Social and Economic Measures of the CAMPO Planning Region

The Metropolitan Planning Organization uses population, land use, socio-economic data, traffic data, accident data, and other information that may affect the transportation system in an effort to plan not just for five to ten years out, but also for long range planning, extending out to at least 20 years into the future.

⁶ H.R.3 - Section 5303. Metropolitan transportation planning

MTP Goals, Objectives and Strategies

Several methods, processes and tools were used for gathering input into the development of goals, objectives and strategies for this long range plan including :

- Four public planning workshops, two in Holts Summit and two in Jefferson City.
- Two open houses, one in Holts Summit and one in Jefferson City.
- Outreach activities at senior centers.
- Interview/questionnaires with local specialized transportation providers.
- Online questionnaires for the public.

Specialized topic focus group activities with bicycle/pedestrian, law enforcement/first responders, environmental/historic, and freight providers were conducted, including meetings with county and city government staff, and review of related previous plans, goals, and objectives.

The following Goals and Objectives have specific operational and management strategies identified which are intended improve the performance of existing transportation facilities to relieve traffic congestion and maximize the safety and mobility of people and goods.

Goal 1: Support Economic Vitality: Promote Efficient Transportation Corridors Within and Through the Area to Connect People to Jobs and Get Materials and Goods to Markets

Objective 1: Identify locations exhibiting congestion and evaluate potential future congestion

Strategies:

- A. Implement traffic count and traffic data program.
- B. Expand and improve traffic modeling capabilities.
- C. Preserve capacity on existing streets and highways.

Objective 2: Manage congestion on streets and highways

Strategies:

- A. Work closely with cities, counties and the state on access management policies.
- B. Support efforts by transit agencies and local governments to site and design transit centers close to economic centers and neighborhoods, including park and ride facilities.

Objective 3: Preserve right of way corridors

Strategies:

- A. Identify major corridors for major investments studies.
- B. Encourage cities and counties to adopt codes for right-of-way preservation.

Objective 4: Support regional efforts to upgrade highway corridors of national significance

Strategies:

- A. Support and participate in regional efforts to upgrade US Highways 50, 54 and 63.
- B. Support efforts to designate an interstate route through the Jefferson City metropolitan area.

Goal 2: Support Improvement of Access, Increase of Services and Mobility for All Transportation Users

Objective 1: Promote and encourage walkable communities that connect residential areas to essential services and other transportation options.

Strategies:

- A. Increase investments in pedestrian and bicycle facilities, and explore the concept of “complete streets” with city, county and state governments.
- B. Support Safe Routes to School and similar programs that promote alternative transportation, improve access to public facilities and promote transportation safety.
- C. Encourage a system of interconnected streets, sidewalks, greenways and bikeways that eliminate circulation barriers and connect neighborhoods with transit stops, schools, and other activity centers.

Objective 2: Support development of pedestrian and bicycle plans

Strategies:

- A. Inventory crosswalks, walkways and bikeways for use by local governments.
- B. Develop MPO guidelines for bicycle and sidewalk planning.
- C. Encourage local government to adopt requirements to include sidewalks with new development & redevelopment.
- D. Encourage public agencies (state, county, municipal, schools and academic, etc.) to include sidewalks in facility plans.
- E. Promote bicycle routes that connect local jurisdictions together in a comprehensive manner.

Objective 3: Increase access to transit service

Strategies:

- A. Support implementation of the JEFFTRAN Transit Development Plan recommendations.
- B. Support Coordinated Public Transit Human Services Transportation Plan activities to improve job and community access for individuals who are transit dependent.
- C. Encourage expansion of public transportation throughout the urbanized areas and to intermodal facilities (airport, train station, commuter lots, etc.).
- D. Encourage expansion of service hours transportation options for job access to accommodate the increasing number of non-traditional shift workers and meet other transportation needs.
- E. Identify dedicated funding sources for transit.
- F. Encourage federal, state, and local officials to make increased transit funding a priority.

- G. Encourage the use of public transportation through land use policies, education and marketing.
- H. Support development of intermodal facilities.

Objective 4: Integrate freight planning in overall metropolitan transportation planning

Strategies:

- A. Identify freight information and acquire freight related transportation data.
- B. Improve freight participation in committees, participation and consultations.
- C. Identify improvements needed to transportation infrastructure and services to support freight movement.
- D. Support development of truck-related facilities including fuel, maintenance and truck stops.
- E. Identify areas with design deficiencies that impede freight movement.
- F. Identify areas where signage improvements would promote more efficient traffic movement.
- G. Explore the feasibility of an intermodal terminal.
- H. Improve the identification/designation of truck routes.
- I. Promote highway and street design to accommodate trucks.
- J. Promote local government adoption of site design standards that accommodate large trucks.

Objective 5: Integrate Jefferson City Memorial Airport into overall metropolitan transportation planning

Strategies:

- A. Identify and acquire airport related transportation data related to freight movement and other functions of the airport.
- B. Identify improvements needed to airport infrastructure through the Airport Layout Plan and Master Plan.
- C. Explore the feasibility of an intermodal terminal.

Objective 6: Integrate rail into overall metropolitan transportation planning

Strategies:

- A. Identify and acquire rail related transportation data.
- B. Improve consultations with or participation of railroad representatives.
- C. Identify improvements needed to infrastructure and services to support freight movement and other rail functions.
- D. Support development of rail facilities.
- E. Identify areas with design deficiencies that impede rail operations.
- F. Identify areas of rail/vehicular conflict.
- G. Explore feasibility of an intermodal terminal.

Goal 3: Support Good Stewardship of the Environment/ Design A Transportation System to Support Sustainable Growth Patterns

Objective 1: Encourage the protection and enhancement of natural resources in transportation planning

Strategies:

- A. Encourage early consultation with environmental agencies by project sponsors in regard to mitigation of environmental impacts.

Objective 2: Promote the wise use and conservation of energy

Strategies:

- A. Encourage use of fuel efficient and alternative fuel vehicles.
- B. Encourage use of new roadway design that reduces stop and go traffic patterns, e.g., roundabouts, smart intersections (vehicle detection).

Objective 3: Design a transportation system to support good growth patterns that support a full range of transportation options

Strategies:

- A. Support context sensitive and well-planned redevelopment in central neighborhoods.
- B. Encourage coordinated and well-developed land use/zoning policies.

Goal 4: Maintain Operation of Current Services and Keep Existing Facilities in Good Repair

Objective 1: Emphasize the preservation of the existing transportation system and facilities

Strategies:

- A. Develop a sustainable financial plan, providing adequate resources to preserve and improve the transportation system.
- B. Implement measures of effectiveness for planning.
- C. Promote efficient transportation system management and operation, including the use of asset management techniques.
- D. Encourage local, state and federal governments to budget adequately for preserving the existing transportation system.
- E. Document the existing system and maintenance efforts
 - 1. Collect data/document the condition of existing systems, including pavement, bridges, transit vehicles and facilities, airport facilities, pedestrian and bicycle infrastructure.
 - 2. Document and quantify system maintenance programs within the CAMPO planning area.

Goal 5: Improve The Safety Of All Transportation Users.

Objective 1: Incorporate emergency, disaster and safety plans into metropolitan transportation planning

Strategies:

- A. Acquire and evaluate accident data for vehicle and non-vehicle traffic accidents.
- B. Support state and local accident reduction policies.
- C. Review emergency and disaster preparedness plans and identify roles for CAMPO.
- D. Support development of evacuation routes and alternatives.
- E. Incorporate State Highway Safety Plans into MPO safety planning.
- F. Explore use of emergency response signal preemption activities to share with local jurisdictions.
- G. Encourage collaboration between freight haulers, local safety officials and planners.
- H. Review policies regarding transportation of hazardous materials through the area.

Objective 2: Support the inclusion of safety features in transportation planning.

Strategies:

- A. Incorporate pedestrian, bicycle, ADA and other sensitive design into roadway plans.
- B. Promote well lit, designed and located bus stops.
- C. Encourage law enforcement to include bus stops on patrol routes.

Goal 6: Improve the Security of Infrastructure and Transportation Users

Objective 1: Improve transportation security response planning

Strategies:

- A. Review emergency operations plans.
- B. Participate in local homeland security activities.
- C. Initiate development of evacuation routes.
- D. Initiate review of hazardous materials transport.

Objective 2: Initiate/Explore development of regional Intelligent Transportation System (ITS) technology to promote coordination between entities

Strategies:

- A. Identify components of a regional ITS policy, including technical requirements, coordination issues and funding options.
- B. Encourage technical and operational improvements for emergency vehicles communications.

Goal 7: Improve Coordination and Participation in Metropolitan Transportation Planning

Objective 1: Develop MPO policies and programs to encourage cooperative, coordinated and comprehensive collaboration with and between local jurisdictions and transportation users.

Strategies:

- A. Expand coordination and participation among local governments in land use and transportation planning through technical assistance and communication.
- B. Establish advisory committees by mode or issue, to meet at least annually.
- C. Meet at least annually with representatives of local jurisdictions and local economic development agencies to discuss development trends and infrastructure needs.
- D. Establish data sharing/consultation program with local governments regarding demographics, land use, long range planning, etc.
- E. Provide assistance with transportation grant applications to local governments and other eligible grant recipients.
- F. Expand coordination, participation and consultation with economic development organizations.

Objective 2: Partner with State and Federal agencies and private transportation interests in transportation planning

Strategies:

- A. Participate as a Planning Partner with Missouri Department of Transportation.
- B. Partner with the Federal Highway Administration and Federal Transit Administration.
- C. Consult with private transportation interests and providers, including trucking companies and operators of freight and passenger rail services, and developers of projects with major transportation components, including TDDs, and innovative financing methods.