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16. Abstract <p>This research examines the issues surrounding ISTEA legislation, particularly the legislation centered around Metropolitan Planning Organizations (MPO's). ISTEA mandates that Metropolitan Planning Organizations conduct comprehensive long range plans within the financial constraints of the individual region. ISTEA legislation also requires MPOs to address a number of categories in their analysis of potential transportation projects. These categories will be reviewed to determine how they are used in the selection of projects to receive funding. The review and examination of planning documents from MPOs throughout the United States will indicate which factors they emphasize in determining policy criteria of project selection.</p> <p>The 1962 Federal Highway Act first legislated cooperation between state departments of transportation (DOTs) and local communities in urban areas. Metropolitan Planning Organizations (MPOs) have existed since the mid 1960's to facilitate planning on a regional level. MPOs throughout the country receive a proportionate share of the federal money to prepare long range plans and three year capital investment programs known as Transportation Improvements Programs (TIPs). The 1991 Intermodal Surface Transportation Efficiency Act (ITEA) mandated that all MPOs developed Regional Transportation Plans (RTPs), to be updated every three years, which should have 20 year time lines, and address relevant air quality and congestion management issues.</p>					
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**AN EXAMINATION OF POLICY IMPLICATIONS OF CRITERIA
THAT DETERMINE REGIONAL TRANSPORTATION PRIORITIES**

by

Carol A. Lewis
and
Graduate Student,
Ruben Howard

Research Report SWUTC/99/472840-00042-1

Southwest Region University Transportation Center
Center for Transportation Training and Research
Texas Southern University
3100 Cleburne
Houston, TX 77004

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ABSTRACT

This research examines the issues surrounding ISTEA legislation, particularly the legislation centered around Metropolitan Planning Organizations (MPOs). ISTEA mandates that Metropolitan Planning Organizations conduct comprehensive long range plans within the financial constraints of the individual region. ISTEA legislation also requires MPOs to address a number of categories in their analysis of potential transportation projects. These categories will be reviewed to determine how they are used in the selection of projects to receive funding. The review and examination of planning documents from MPOs throughout the United States will indicate which factors they emphasized in determining policy criteria of project selection.

The 1962 Federal Highway Act first legislated cooperation between state departments of transportation (DOTs) and local communities in urban areas. Metropolitan Planning Organizations (MPOs) have existed since the mid 1960's to facilitate planning on a regional level. MPOs throughout the country receive a proportionate share of the federal money to prepare long range plans and three year capital investment programs known as Transportation Improvements Programs (TIPs). The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) mandated that all MPOs develop Regional Transportation Plans (RTPs), to be updated every three years, which should have 20 year time lines, and address relevant air quality and congestion management issues.

EXECUTIVE SUMMARY

The original ISTEA bill authorized \$151 billion in federal transportation spending over a six year period, fiscal years 1992 to 1997. ISTEA was the first major transportation spending bill since the near completion of the national interstate highway system, which began in 1956. This legislation was the result of the new shift in the mission of the U.S. Department of Transportation (USDOT) requiring transportation planning to be more user friendly, include multimodal capabilities, more intermodal, and shift from building new capacity to managing existing capacity.

Metropolitan planning organizations (MPOs) have existed since the early 1960s, following passage of the Federal Highway Act (1962). Their function was to provide a link between state DOTs and the local urban communities. MPOs had little direct influence on how transportation funds were spent or allocated as this power rested with the state DOTs and other local entities. However, with ISTEA "...MPOs now have authority to allocated federal funds coming into their regions through the Surface Transportation Program and the Congestion Mitigation and Air Quality Program (CMAQ)." Section 134(F) of the ISTEA legislation lists 15 factors that MPOs must now consider before the transportation planning process can begin.

This research identified several MPOs nationwide, of similar size and demographic composition, and reviewed the process and criteria of project selection for inclusion in their Metropolitan Transportation Plan. The primary data sources were the Metropolitan Transportation Plans and the Transportation Improvement Program document for each identified MPO. The MPO designations determined which criteria and projects benefited transit, air quality or congestion reduction goals and the relative importance of these goals to other projects under consideration.

The authors requested information from 122 MPOs nationwide and received 18 completed responses. The plans were reviewed for attention to multimodal detail and compliance with federal mandates. Some of the findings from the review of the different plans indicated the following:

- Sixty-seven (67) percent of the plans addressed all 15 planning factors as stated in ISTEA,
- Seventy-eight (78) percent of all plans discussed freight movements,
- Eighty-three (83) percent addressed railroads and aviation,

- Ninety-four (94) percent included plans for the construction or improvements to bike and pedestrian facilities, and
- Multimodal and marine facilities were included in only thirty-three (33) percent and thirty-nine (39) percent of the plans, respectively.

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INTRODUCTION

The 1962 Federal Highway Act first legislated cooperation between state departments of transportation (DOTs) and local communities in urban areas. Metropolitan Planning Organizations (MPOs) have existed since the mid 1960's primarily to facilitate transportation planning on a regional level. Populations within MPO jurisdictions may range from more than ten million to as little as 50,000. MPOs throughout the country received a proportionate share of the federal money to prepare long range plans and three year capital investment programs known as Transportation Improvements Programs (TIPs). With new legislation, MPOs now have expanded authority and responsibility to distribute federal funds coming into their region including the Surface Transportation Program and Congestion Mitigation and Air Quality (CMAQ Program).

The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) mandated that all MPOs develop Regional Transportation Plans (RTPs), to be updated every three years, which should have 20 year time lines, and address relevant air quality and congestion management issues. MPOs must monitor the areas to insure compliance with laws such as the Clean Air Act Amendments and the Americans with Disabilities Acts.¹ Before the passage of ISTEA in 1991, MPOs were classified into two distinct categories: those with a population up to 200,000 (small MPOs) and those MPOs with a population that exceeded 200,000 (large MPOs). ISTEA created four classes of MPOs by giving the larger MPOs additional powers and placing special provisions on MPOs in air quality non-attainment areas, regardless of their size. ISTEA created new roles for MPOs by broadening the content of transportation planning.

The larger MPOs, those with populations of 200,000 or more, take the lead in submitting new projects for federal funding, as well as receiving preference in the

¹ Prendergast, John, "MPOs Become VIPs," Civil Engineering, April 1994, p.40.

distribution of planning funds. The large MPOs that are also considered as non-attainment areas for air quality are eligible to compete for special congestion mitigation and air quality improvement funds. The smaller MPOs in good air quality regions do not receive any of these special considerations. However, small MPOs that are in non-attainment areas receive all special consideration except for the allocation of block funds. They are also eligible to compete for some of the flexible grant funds allocated by the state.²

The metropolitan planning process must consider and analyze 15 factors that reflect sound planning principles. These factors are to be incorporated in the planning process at an early stage. Consideration and analysis of the 15 factors is considered evidence of good planning and should be reflected in the plan itself. Integration of the 15 factors into all stages of the planning process will shape the decisions made on projects and programs included in the plan and TIP.

PURPOSE

This research focuses on the issues surrounding ISTEA legislation that require Metropolitan Planning Organizations to conduct comprehensive long range plans within the financial constraints of the individual region. ISTEA legislation requires MPOs to address a number of categories in their analysis of potential transportation projects. These categories will be reviewed to determine how they are used in the selection of projects to receive funding. The review and examination of planning documents from MPOs throughout the United States indicated which factors they considered in determining policy criteria of project selection.

² Cage, Robert W.; McDowell Bruce D., "ISTEA and the Role of MPOs in the New Transportation Environment: A Midterm Assessment," Publius: The Journal of Federalism, Volume 25 Number 3.

SCOPE

This research identified several MPOs nationwide, of similar size, demographics, and other characteristics, and reviewed the process and criteria of project selection for inclusion in their Metropolitan Transportation Plan (Long-Range Plan). The primary data sources will be the Long-Range Plan and the Transportation Improvement Programs document for each identified MPO. The MPO designations determined which criteria and projects benefited transit, air quality, or congestion reduction goals and the relative importance of these goals to other projects under consideration.

METHODOLOGY

In the Spring of 1996, the Center for Transportation Training and Research mailed letters to 122 MPOs representing Transportation Management Areas (TMAs) above 200,000 populations. The CTTR requested a copy of both their Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP). Of the 122 MPOs, there were a total of 22 MPOs that responded to request; however, only 18 of those agencies surveyed returned all of the information that was requested (see Table 1). Additionally, the CTTR received several documents from MPOs that were not on initial mailing lists.

Each plan was reviewed with special attention on multimodal details and compliance with overall federal planning requirements. A synopsis of each plan is provided in the following sections of this document. Each of the metropolitan plans should include the following 15 planning factors which is mandated by ISTEA:

1. Preservation of existing transportation facilities and, where practical, ways to meet transportation needs by using existing transportation facilities more efficiently.
2. The consistency of transportation planning with applicable federal, State, and local energy conservation programs, goals, and objectives.

3. The need to relieve congestion and prevent congestion from occurring where it does not yet occur.
4. The likely effect of transportation policy decisions on land use and development and the consistency of transportation plans and programs with the provisions of all applicable short and long-term land use and development plans.
5. The programming of expenditures on transportation enhancement activities as required in section 133.
6. The effects of all transportation projects to be undertaken in the metropolitan area, without the regard to whether such projects are publicly funded.
7. International border crossing and access to ports, airports, intermodal transportation facilities, major freight distribution routes, national parks, recreation areas, monuments, historic sites, and military installations.
8. The need of connectivity of roads within the metropolitan area with roads outside the metropolitan area.
9. The importance of using management systems.
10. Preservation of rights-of-way for construction of future transportation projects, including identification of unused rights-of-way, which may be, needed for future transportation corridors and identification of those needed for future transportation corridors and identification of those corridors for which action is most needed to prevent destruction or loss.
11. Methods to enhance the efficient movement of freight.
12. The use of life cycle costs in the design and engineering of bridges, tunnels, or pavement.
13. The overall social, economic, energy, and environmental effects of transportation decisions.
14. Methods to expand and enhance transit services and to increase the use of such services.
15. Capital investments that would result in increased security in transit systems.

Table 1. METROPOLITAN PLANNING ORGANIZATIONS (MPOs) LOCATIONS

MPO	LOCATION	SIZE	POPULATION
CAPITAL REGION	CONNECTICUT: Hartford	29 Counties	-----
ROCKFORD	ILLINOIS: Winnebago and Boone	2 Counties	283,719
REGIONAL TRANSPORTATION	CALIFORNIA: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, San Clara, Solano, and Sonoma	9 Counties	6,020,147
NEW ORLEANS	LOUISIANA: Jefferson, Orleans, Plaquemine, St. Bernard, and St. Tammany	5 Parishes	1,181,958
METROPOLITAN WASHINGTON REGION	DISTRICT OF COLUMBIA: Arlington, Fairfax, Loudoun, Prince Williams, Fredrick & Stafford in VA, Montgomery & Prince George in MD	8 Counties	2,883,865
METRO-DADE	FLORIDA: Dade County	1 County	1,937,194
MARICOPA	ARIZONA: Maricopa County	1 County	2,122,101
LEXINGTON	Kentucky: Fayette, Jessamine	2 Counties	255,874
FRESNO COUNTY GOVERNMENTS	CALIFORNIA: San Joaquin Valley	8 Counties	667,490
DENVER REGION	COLORADO: Adams, Denver, Jefferson, Boulder, Arapaho, Clear Creek, Gilpin, and Douglas	8 Counties	1,859,008
MIDSTATE PLANNING REGION	CONNECTICUT: Middletown	8 Municipalities	143,196
EVANSVILLE	KENTUCKY: Vanderburgh, Warrick, and Henderson	3 Counties	253,022
SANTA BARBARA REGION	CALIFORNIA: Santa Barbara	1 County	369,608
MONTGOMERY URBAN AREA	ALABAMA: Montgomery, Elmore, and Autauga	3 Counties	292,517
SACRAMENTO	CALIFORNIA: Sutter, Yolo, Yuba, and Sacramento	4 Counties	1,304,954
PIMA	ARIZONA: Pima County	1 County	6,669,567
STANISLAUS AREA ASSOC. AND JOAQUIN COUNTY	CALIFORNIA: Stanislaus	1 County	370,522
ATLANTA	GEORGIA: Fulton, Dekalb, Gwinnett, Rockdale, Fayette, Cherokee, Clayton, Douglas, and Henry	10 Counties	2,514,066

SYNOPSIS OF CAPITAL REGION MPO: CONNECTICUT

The following analysis focuses specifically on the Capital Region MPO of Connecticut and the distinct characteristics of the highlighted counties found therein. The Capital Region MPO consists of 29 counties in the state of Connecticut.³ The major divisions of this transportation plan included transit and ridesharing systems, freeway systems, arterial systems, special programs and policies, and financing and scheduling improvements.

A. Bus & Paratransit System

The existing bus and paratransit systems play an important role in meeting the mobility needs of the region's transit dependent population. The council is committed to maintaining the existing levels of service provided by the bus and paratransit systems and to improving those services where appropriate. Recommendations include maintaining existing levels of service and conducting a comprehensive study of bus service needs.

The dominant transit modes in the region are regular fixed route and express bus services, both of which operate in mixed traffic. Transit way services are being considered in locations where there is an existing or former railroad right-of-way that could accommodate an exclusive track or roadway for transit vehicles. Currently there are two High Occupancy Vehicle (HOV) lanes in the region. The council is recommending the extension of one and the possibility of creating new HOVs in the region's major transportation corridors.

³ The counties represented in this region are Andover, Avon, Bloomfield, Bolton, Canton, East Granby, East Hartford, East Windsor, Ellington, Enfield, Farmington, Glastonbury, Granby, Hartford, Hebron, Manchester, Marlborough, Newington, Rocky Hill, Simsbury, Somers, South Windsor, Suffield, Tolland, Vernon, West Hartford, Wethersfield, Windsor Locks.

B. Freeway Systems

The proposed freeway improvement program has three major components: incident management, operational improvements, and capacity expansion. Recommendations for the incident management system include implementing an incident management program, and an incident response plan, and a detection and verification system.

The objective of the operational improvement program is the removal of substandard conditions so that the roadway can operate at maximum efficiency. Recommendations include conducting a study to determine the need for operational improvements and the evaluation of such improvements at identified sites throughout the region.

C. Arterial System

The arterial improvement program has four elements: capacity improvements, operational improvements, traffic signal systems, and access management. Widening the road must be considered in those locations where congestion is most severe. Recommendations for capacity improvements include widening programs and project planning requirements. The operational improvement section includes the operation improvement program for the arterial road system.

The computer controlled traffic signal system includes recommendations for system installations at specific locations to fully address existing needs. The access management's objective is to preserve the capacity of existing roads so that they minimize the need for widening or operational improvements. Other recommendations are also included in the access management program.

D. Special Programs & Policies

The six policies and programs are land use, air quality, demand management, intelligent vehicle-highway system, Bradley Airport Study, and bicycle & multi-use trail policy. Recommendations for land use include four basic areas: regional transportation planning process, regional land use planning process regional land use study, and regional assistance to local planning programs.

The capital region has responded to air quality issues by conducting a full review of air quality transportation issues and developing a regional air quality policy that enhances the state air quality program. The recommendations include continuing to implement the regional air quality policy. The council is committed to integrating demand management in their transportation planning and improvement programs. There is a special effort taken in developing a workable program for the region.

A key goal for the capital region is to structure a process for assuring the integration of ITS into their transportation system as ITS evolve. Bradley international Airport is a major economic resource for the Capital Region and the state of Connecticut. Recommendations include conducting a study to identify the potential economic development impacts of the airport. The region will be preparing a separate regional plan for bicycle travel and multi-use trails. Recommendations include programs for commuters, bike lanes, and multi-use trails. Maintenance cost have been accounted for by the Connecticut Department of Transportation in the financial guidelines that were issued to regional planning agencies.

SYNOPSIS OF ROCKFORD AREA TRANSPORTATION: ILLINOIS

The following analysis focuses specifically on the Rockford area of Illinois and the distinct characteristics of the highlighted counties therein. Rockford Area Transportation planning area consists of two counties in Illinois, Winnebago and Boone, with a total regional population of 283,719.⁴ The Rockford Area Transportation Study (RATS) addresses the preservation, improvement, and utilization of existing facilities in three aspects: programming sufficient maintenance projects in the 3-year TIP, emphasizing maintenance in the Financial Planning section, and participating in the development and utilization of Management Systems. Engineers and planners maintain that the existing facilities are being adequately maintained.

The Rockford area uses the RATS Traffic Simulation Model to forecast the transportation demand in the Rockford area. This model uses forecasts of land uses to project future travel demand and to allocate this travel over the existing and proposed roadway network in the urban area. Congestion in the Rockford area is currently limited to a small number of intersections and links of the area's most heavily traveled roadways. The RATS staff and technical committee use the system to evaluate the traffic congestion on all major roadways and serve to facilitate congestion management strategies including public transportation, pedestrian and bicycle facilities, and better truck routing throughout the region.

Land use planning is extensive throughout the Rockford Metro Area. Special efforts are being made in this plan to coordinate and develop a multimodal transportation system that is in concert with the land use plans being promoted by the area's jurisdictions and

⁴ Population figures are current as of the 1996 publication date of the Rockford Area Transportation Study.

private developers. The RATS Public Involvement Process report gives greater discussion about this subject.

This plan urges the continued planning and implementation of enhancement activities that will reduce the adverse environmental and societal impacts of our transportation systems. Efforts have been made to encourage transportation improvements by addressing the need for the reduction of noise and improving the visual impacts of major roadways.⁵ Also, efforts have been made for planning and aligning transportation facilities in ways that will minimize impact on special community attributes or resources. These include realigning roadways around major parklands, and efforts to reduce traffic through residential neighborhoods.

There are numerous private and public facilities that exist in the Metro area that have high priority for special transportation access. Access to these facilities should be multimodal. Efforts should also be continued to provide nonmotorized access to significant facilities.

A longstanding priority of RATS is better road connectivity. There are several projects underway that show the importance of road connectivity. These are road crossover projects and offset intersection elimination. These projects will provide smoother transitions between major parallel arterials. This plan continues to promote connectivity and encourage improvements that enhance the connectivity to the routes that have been designated on the National Highway System. There is also cooperation between the Rockford Mass Transit District and the Loves Park Transit System.

The plan recognizes the value of the management system and encourages further work toward implementing these systems in accordance with federal guidelines. The RATS will develop six management systems. These systems include Pavement Management,

⁵ The RATS suggests the visual aspects of highways could be improved by the use of more aesthetic building materials, beams, landscaping and vegetation.

Bridge Management, Safety Management, Congestion Management, Intermodal Management, and a Public Transit Management System. The Rockford Area will follow the lead of the State of Illinois in the development of these various management strategies.

Preservation of rights-of-way has been an ongoing activity for many years in the Rockford area. More planning and work are needed in land subdivision/development processes. Major efforts have been aimed at preserving abandoned railroad rights-of-ways for future use as pedestrian paths and bikeways.

The safe, efficient movement of freight is essential to the commerce and prosperity of the community. Part of the FY96 Unified Work Program was to review designated truck routes, hazardous cargo routes, and seasonally posted roads. There will be greater efforts directed toward improving access to truck and rail terminals.

This plan recognizes the value of life cycle costs in the design of transportation structures and systems. Work is still needed in the plan to ensure safety and locate unpredicted problems. Life cycle costing is encouraged by this plan, as projects are proposed, pre-engineered and compared.

The RATS Public Involvement Process and Rockford's "Blueprint" process has helped this plan to recognize the overall effects of transportation decisions. The plan promises to hold area agencies responsible for preservation, development and restoration of housing. These agencies will also be responsible for historical, environmental and cultural resources. The plan will attempt to minimize or reduce air pollution throughout the Metro Area and include measures to ensure compliance with the Federal Clean Air Act.

This plan has promoted transit for many years, however, further work is needed and will include experimentation with various types of expanded service. There are recent conjunctions with the ADA legislation that will allow new fixed-route buses to acquire and be fitted with wheel-chair lifts within the next two years. An extensive paratransit network

of services currently exists in this region based on paratransit comprehensive plan that is updated annually. Extensive efforts are being made area-wide to provide better pedestrian facilities so that persons with disabilities will have better mobility to and from bus routes via adequate sidewalks. Curb cuts are being designed for wheelchair users in the vicinity of bus routes with the overall goal of improving the accessibility of the entire area.

Maintaining transit security has not been a problem in the Rockford area. The RMTD Transfer Center has alleviated many of the problems at the main downtown transfer. Located across the street from the Public Safety Building (police headquarters), the Transit Center, and the entire area, is fully lighted at all times. The development of a consumer training program designed to give instruction on reading route and schedule information will further assure patrons that the transit system is a safe and secure environment. The installation of bus shelters throughout the transit service area provides additional protection from climatic changes and the increased dedication of bus drivers to adhere to published schedules are other measures used to instill confidence in the transit system.

SYNOPSIS OF REGIONAL TRANSPORTATION PLAN: CALIFORNIA

The following analysis focuses specifically one regional transportation plan of California and the distinct characteristics of the highlighted counties found therein. The Regional Transportation Plan consists of nine counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma. The total population for the region is 6,020,147 as of the 1990 census.

Preservation of existing facilities is discussed in the RTP track number one. Projects in the Metropolitan Transportation System include street/road rehabilitation, transit services and upgrades, the funding of new traffic signals, and a translink facility for traffic operations.

The 1992/93 California Energy plan emphasizes the need to increase transportation system efficiency. The RTP improves system efficiency by investing in strategies to reduce traffic delays, increase carpooling and upgrade/expand the existing transit network. Other measures designed to relieve congestion include transit system expansion, operational improvements, and the promotion of non-motorized transportation in some areas. The plan addresses this issue by investing in these projects. However, there is limited funding available for capital and operating strategies after maintenance needs have been accommodated.

The RTP travel analysis is based on demographic projections, which reflect local policies for land use in the region and the future distribution of jobs and housing in the region. This assessment is based on the RTP's effects on regional accessibility in certain land use allocation models. The RTP Baseline includes two rounds of transportation enhancements. The first round secured over \$14 million, and the second over \$17 million for enhancements. This is largely because of MTC's selection criteria and the quality of projects that have emerged.

Transportation and air quality analyses for the RTP take into account all significant projects in the region, without regard to sources of funding. Airport and seaport access issues are addressed in greater detail in the Seaport and Regional System Plans. The MTS considers access to intermodal facilities, major recreation areas and other regionally significant activity centers.

Connectivity of highways is considered by MTS as the critical criterion linking the Bay Area with surrounding communities. MTC cooperates with state officials to define the Bay Area component of the National Highway System that focuses on interregional connectivity.

The management systems are addressed by the RTP through MTC's existing Pavement Management System and Transit Capital Replacement Model. Improvements and expansion will be a basis for development of ISTEA required management systems for pavement and public transit capital assets.

The Congestion, Intermodal and Safety Management Systems are under development, while bridge seismic retrofit needs are being examined by Caltrans. Various road improvements may require right-of-way protection, and the RTP includes funding toward right-of-way needs for the Bay Area. A number of railroad rights-of-way are being considered for extensions of mass transit systems.

There are many methods to enhance the efficient movement of freight. These methods include intermodal access improvements at the ports, a truck bypass lane, and truck weigh in motion facilities. MTC's Transit Capital Replacement Model considers life cycle costs to estimate asset replacement schedules and was used to estimate long-range capital replacement needs in the RTP. The MTC's Pavement Management System determines rehabilitation cycles and improvement needs to minimize long term maintenance cost.

The Environmental Impact Report for the RTP complies with the California Environmental Quality Act. This document provides a comprehensive assessment of the overall social, economic, energy, and environmental, and other RTP effects.

The RTP places a priority on maintaining existing transit systems. Existing funding sources is the most important constraint to expanding and enhancing transit system. Investments in light rail and commuter rail systems will improve existing transit services. The RTP includes funding for a universal fare collection system to simplify transfers between transit operators. The Short Range Transit Plans address funding for existing transit services and security issues.

SYNOPSIS OF NEW ORLEANS MPO: LOUISIANA

The following analysis focuses specifically on New Orleans, Louisiana and the distinct characteristics of the highlighted counties therein. The New Orleans MPO region is made up of five parishes, Jefferson, Orleans, Plaquemine, St. Bernard, and St. Tammany, comprising a total population for this region of 1,181,958 individuals. The New Orleans MPO plan addresses preservation and use of existing facilities in many ways, such as the maintenance of an effective and consistent traffic surveillance program on the region's major arterials. RPC maintains a close watch on traffic patterns and volumes within the region. The plan also developed a Highway Functional Classification System and corresponding map(s), and a method of identifying roadways and roadway segments to be proposed for inclusion in the National Highway System.

The RPC area still retains its designation of "nonattainment transitional." RPC has the necessary technological capacity in the Mobile 5.0A model to continue tracking regional air quality in accordance with currently evolving federal and state requirements. Reduction of vehicle miles traveled (VMT) and congestion are two important regional objectives that RPC is emphasizing in its on-going program. Improvements in these areas will also contribute to the reduction of regional energy consumption.

RPC is developing a Congestion Management Plan for the New Orleans Transportation Management Area. RPC has developed a statewide transportation demand management program encouraging the use of van pooling and other alternative commuting modes. This program, known as the Louisiana Commuter Network, establishes standards and guidelines for the state and its MPOs to follow when implementing TDM strategies. Grants from the FHWA have helped the region to study the applications of intelligent transportation systems (ITS) technology to the interstate and primary highway systems in the New Orleans Metropolitan Area.

RPC has worked with the Jefferson Parish Geographic Information System Department to accomplish the following: define an airport to downtown air-rail corridor, calculate the land uses within the corridor, and to display and analyze relevant data obtained from multiple sources. More utilization of GIS for these purposes help planners take into account the effects of transportation policy decisions on land use.

Several projects have been developed for transportation enhancement activities in the RPC area. A New Orleans Metropolitan Area Bikeway Master Plan and a bikeway plan for the City of Mandeville are just two of the many projects the RPC is developing. Landscape buffering and beautification projects are also being developed in the area to help make New Orleans more attractive.

The RPC has included in its TIP all significant state and locally funded projects. There continues to be regionally significant private land use decisions that have been considered in the transportation planning process. There have not been any significant private sector projects identified. RPC has been working with the New Orleans Port Authority, New Orleans Public Belt Railroads, various trucking lines, and other governmental and business organizations to improve access and circulation between port, truck, and rail facilities. This effort has begun projects such as the reconstruction of streets and port access roads in the area, and access improvements for the Port of St. Bernard and Alomonaster Bridge. There has also been dialogues with the New Orleans Aviation Board for developing strategies that will improve access to the New Orleans Airport.

The plan has redrawn its metropolitan area map to include the urbanized area of eastern St. Charles Parish within its projected twenty-year future growth area boundaries. These changes have made it possible to plan for and improve the connectivity of roadways between the urbanized areas of the region as well as those lying outside the metropolitan area.

Each state is responsible for the creation of the six management systems that ISTEA requires. New Orleans' urbanized areas are primarily responsible for producing their own congestion management systems. The New Orleans Plan will not only address congestion management, but also the data requirements and procedures necessary for the development of the intermodal management.

RPC is vitally concerned with the preservation, utilization, and enhancements of former rail corridors for various transportation and recreational purposes. The initial efforts are focused on identifying rail corridors. There are many projects that are prime candidates for preservation in the area. There will be future studies concerning demand analysis, major investment analysis and environmental analysis.

RPC is committed to the development of methods to improve the intermodal goods movement transportation network. RPC is also working with various public and private organizations to improve access and circulation between port, truck, and rail facilities. The Federal Aviation Administration (FAA) has awarded RPC a grant to undertake the automation of the regional airport system planning process by establishing and maintaining computer databases for eleven Louisiana regional airports. The project will greatly facilitate the development of a more efficient transportation system for the entire region.

Development of the plan included the Social Cost Benefit Analysis as an evaluation approach, which calls for multi-criteria analysis using life cycle cost techniques. In addition the work plans developed for the various management systems call for project evaluation and selection using lifecycle cost factors.

RPC recognizes that perhaps the best way to improve the consideration of social and economic systems, energy usage and conservation is to raise the level of relevant information available to decision-makers. RPC has developed a summary report featuring detailed data delineating social, labor force, commuting habits, income, poverty, and housing

characteristics. The plan also has greatly improved its population forecasting techniques with the development of a computer system which effectively automates the time-consuming burden of manually allocating building permit data to each of the regions 454 traffic zones.

The plan has worked with local parishes, transit operators, the State Department of Transportation and Development (DOTD), the Federal Transit Administration (FTA), Louisiana Public Transportation Association (LPTA), and the Southwest Transit Association (SWTA) to bolster the increasingly crucial role that public transportation must play in providing solutions to our transportation problems. RPC has also assisted area transit systems in meeting requirements of the Americans with Disabilities Act (ADA) and the Disadvantaged Business Enterprise program (DBE). The plan is working to identify and develop projects for inclusion in the region's Transportation Improvement Program which support and increase transit safety and security.

SYNOPSIS OF METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS

The following analysis focuses specifically on the Metropolitan Washington Council of Governments and the distinct characteristics of the highlighted counties therein. The Washington region consists of 8 counties: Arlington, Fairfax, Loudoun, Prince William, Fredrick and Stafford Counties in Virginia, and in Maryland the counties of Montgomery and Prince George. The region has a total population of 2,883,865.

The Washington area plan does include the 15 factors that deal with ISTEA. ISTEA legislation is first mentioned in the methodology segment of this report which details the Transportation Planning process.

Local officials recognize the importance of ensuring that the region's transportation planning is consistent with federal, state and local energy conservation programs, goals and objectives. The plan is consistent with the National Strategy of the U.S. Department of Energy. They recommend the promotion of mass transit, HOV lanes and telecommuting. The plan is also consistent with Maryland's and Virginia's strategic energy plans. Both plans recommend the improvement of access and availability of public transportation systems and promote efforts to develop urban bikepaths and walkways.

Transportation policy decisions and the region's land use and development has been considered as two separate activities. The assessment of the feedback effects of transportation condition on expected future land development is the first one. COG staff used the 1993 long-range plan and an updated set of land use forecasts to predict the air quality and congestion impacts. The second activity was that state and local governments are responsible for ensuring the transportation plan's consistency with local land use and development plans.

The TIP indicates that processes have been implemented to identify transportation enhancement funds under ISTEA. In the District of Columbia, these include wheelchair and

bicycle ramps and facilities, pedestrian bridges, a retaining wall on the historic C&O canal, and renovations on the Taft Bridge. In Virginia, enhancements currently programmed include train restoration, bicycle and pedestrian plaza in the town of Clifton, as well as roadside landscaping and lighting projects.

The long range planning process includes all projects of regional significance without regard for whether they are publicly funded. Airport access is addressed in the Airport System Plan. No special access has been identified from reviewing national park access, however, plan updates will examine the need for improvements to the region's intermodal facilities, freight routes, recreation areas and other major facilities.

The Washington metropolitan area has well developed highway connections with numerous roads outside the metropolitan area. There are two projects that have the potential to greatly improve connectivity with the roads to the west and south of the area.

The state's management systems are currently under development and are expected to provide data on pavement and bridge conditions to help inform future plans. The results of the intermodal management systems will be considered when updating the plan.

The state and local areas both consider right-of-way preservation issues and the potential for development along those corridors. Some of these rights-of-way are being considered for transit development. Others have been identified for potential use as bicycle trails.

The plan expects to provide a slight mitigation in traffic congestion that will provide limited benefits to freight movements. Air improvements and the airport access improvements are also expected to benefit air and freight transportation. In the future improvements that will help trucking and delivery operations will be suggested through the Congestion Management System. Truck transportation issues are under consideration as part of several ongoing major studies. A regional air cargo study, currently in the planning

stages, may help pinpoint other measures that could enhance the region's freight transportation efficiency.

Operating and maintenance costs are considered in analyzing major transportation alternatives in the region. Life cycle costs are also considered in the design and engineering of bridges, tunnels, and pavements.

There are many new investments that will enhance transit services. Planned rail projects include a light rail line, a Metrorail extension, a new Metrorail station and service expansion. Expanding rail or bus services in the transit area will require significant capital and operating funding. Road pricing or widespread parking surcharges will be considered in the vision planning process.

The Washington Area Council of Governments has programmed funds for improving operating and communications systems that will enhance safety and security. All new Metrorail stations will have closed-circuit television monitoring and passenger emergency reporting systems, similar to those in existing stations.

SYNOPSIS OF METRO-DADE TRANSPORTATION PLAN: FLORIDA

The following analysis focuses specifically on the Metro-Dade, Florida transportation plan. This region consists of one county, Dade County in the state of Florida. The total population of this region is 1,937,194. The Metro-Dade Transportation plan does list the 15 factors of ISTEA. However, they are not clearly identified or addressed. The plan does state the goals and objectives established for Dade County, and there are five main areas that the goals are designed to address. They involve multimodal transportation system development, traffic flow, mobility, social, environmental, and economic. These goals should provide a safe, efficient, economical, attractive, and integrated multimodal transportation system. One that offers convenience, accessibility, affordability, and mobility to enhance the movement of people and goods, while conserving energy, and protecting the environment.

A. Multimodal Transportation System Development

- Plan for the provision of transportation services and facilities to serve the needs of the population in the metropolitan areas, in accord with federal and state transportation planning process requirements.
- Develop an integrated multimodal transportation system that emphasizes people movement by facilitating the transfer between modes and the connectivity of the transportation network within and outside the metropolitan area.
- Preserve the rights-of-way in corridors anticipated to be heavily traveled in the future.
- Consider the effects of transportation policies on land use development for both the short and longer range.

B. Traffic Flow/Mobility

- Preserve the existing highway and transit facilities by improving efficiency and safety.
- Achieve the operating level-of-service standards adopted in the Comprehensive Development Master plan and in the Florida Intrastate Highway System Plan.
- Plan for maximum utilization of existing transportation capacity.

C. Social

- Plan and develop a transportation system that preserves the social integrity of urban communities that is sensitive to the needs of all the area's population.

D. Environmental

- Plan for a transportation system that gives due consideration to air quality and environmentally sensitive areas, and conserves energy and natural resources and that is consistent with applicable federal, state, and local energy conservation program goals and objectives.
- Plan for transportation projects that enhance the quality of the environment.
- Apply aesthetic principles to planning of transportation projects, by utilizing a multidisciplinary collaborative team approach, which humanizes these projects through the design process, and helps instill a sense of place and community pride.

E. Economic

- Define a sound funding base utilizing public and private sources that will assure operation and maintenance of existing facilities and services and timely implementation of new projects and services.
- Provide for and enhance the efficient movement of freight.

SYNOPSIS OF MARICOPA TRANSPORTATION PLAN: ARIZONA

The following analysis focuses specifically on Maricopa County Arizona and the distinct MPO characteristic found in this particular region. This region is made up of only Maricopa County in Arizona, an area with a total population of 2,122,101. The Maricopa Long-Range Transportation Plan discusses the 15 factors of ISTEA. Preservation and efficient use of existing facilities is discussed thoroughly. This long-range plan discusses improvements to existing freeways and streets also the addition of high occupancy vehicle facilities on major freeways. Existing freeways are also targeted for electronic freeway management systems. There are several new projects that will improve signal coordination.

Included in the 1993 plan update are measures designed to address several environmental and energy considerations for the region. This plan further details applicable objectives, agency responsibilities, and energy conservation programs. There are many current programs that relate to energy conservation and rigorous air quality vehicle testing programs in the Maricopa region, and should help maintain the anticipated environmental improvements.

The central theme in all modal elements of the Maricopa long range transportation plan is the minimizing of roadway congestion and its resulting delays. There is a congestion management system that incorporates current and future congestion levels, land use planning considerations, and support for multimodal projects. Maricopa has obtained federal funds for the purpose of supporting local efforts to enhance traffic signals and freeway management systems.

The Maricopa socioeconomic projections are based on a computerized modeling system known as the DRAM/EMPAL model. This model process starts with the county control totals for population and employment. Local land use plans also incorporate projections for environmental projection, growth management and land use activities. A

technical report entitled “Demographic, Economic and Land Use Considerations” give more detail on the process that ensures consistency between land use and transportation planning.

The Arizona Department of Transportation (ADOT) administers all ISTEA enhancement funds in Arizona, including project selection. Maricopa has established an Enhancement Funds Working Group to recommend projects for funding in the region of which six have been selected by ADOT for ISTEA enhancement funding.

The principal function of the Maricopa’s planning process is analyzing the effectiveness of the transportation system performance. The financing of transportation investments are closely addressed in the long range transportation plan by developing funding plans of each mode of transportation. Airports, and airport access, are specifically addressed in the Regional Aviation System Plan, while the Intermodal Management System Working Group addresses intermodal issues. Connectivity between roads in the Maricopa area and roads in surrounding areas is not a significant issue. The grid road system used in the area successfully improves accessibility via roadways between regions. Even though the only paved routes into and out of Maricopa county are state routes, the area connectivity issues do not demand much attention. The corridors that have been identified for future transportation improvements include those where extra rights-of-way are available.

The Maricopa Intermodal Management System Working group addresses intermodal issues including a survey of freight terminal operators to determine access terminal needs. Maricopa will coordinate with ADOT in developing a statewide Intermodal Management System that will focus on intermodal corridors throughout the region.

Operating, maintenance and capital costs are considered in developing the funding plans for the long range transportation plan. The Transit, Bridge, and Pavement Management Systems directly address life cycle costs. Buses are purchased on a life cycle basis.

In order to increase transit ridership, new funding must be obtained. Most of these expenses will be for operating costs, and plans are underway for major transit expansions. The transit element of the long range transportation plan called for doubling bus service and tripling dial-a-ride service in 1995. Alternate funding options will continue to be explored.

Transit security is addressed in the *Supplemental Transit Considerations*. This document describes the current transit security system and overall system goals. A number of additional purchases have been identified to better define capital investments related to transit system security.

SYNOPSIS OF LEXINGTON TRANSPORTATION PLAN: KENTUCKY

The following analysis focuses specifically on the transportation plan of Lexington, Kentucky and the distinct characteristics of the highlighted counties therein. The Lexington planning area consists of two counties: Fayette and Jessamine. The total population of the region is 255,874. Maintaining the existing transportation system and using it more efficiently is the top priority in this plan. The main sections in this plan are existing transportation system, socioeconomic data, management systems, plan development, plan recommendations, and air quality.

In order to maximize the efficiency of the highway system, Lexington-Fayette Urban County has one of the most sophisticated and efficient computerized traffic signal systems in the country. The region also has cameras and vehicle detector loops that make up a complex traffic surveillance system. There are also ridesharing and vanpooling programs coordinated by the Transit Authority and the ridesharing program. There is coordination between aviation providers and the Lexington MPO. The planning area has two of the nations busiest railroads: CSX Transportation and Norfolk Southern Corporation.

The plan discusses the seven management systems required by ISTEA. These seven systems are:

- Pavement of Federal-Aid Highway
- Bridges On and Off Federal Aid Highways
- Highway Safety Management Systems
- Congestion Management System
- Public Transportation Facilities & Equipment
- Intermodal Transportation Facilities & Systems
- Traffic Monitoring System

One goal of this plan is to provide a balanced and coordinated multimodal transportation system. This plan strives to encourage the use of all viable modes of urban transportation and decrease dependency on single occupant vehicle (SOV) travel. Currently there are thirty-four projects proposed at this point to relieve the identified highway deficiencies.

The MPO staff ensured that some type of bicycle and pedestrian considerations were reflected in the *2015 Transportation Plan* and in both the Jessamine County and Nicholasville Comprehensive Plans and planning documents. There is also interest in re-establishing passenger rail service in central Kentucky. The public participation process allows the MPO to strengthen the 2015 Plan by considering not only technical analysis but also community and cultural concerns. The recommendations for the 2015 Plan include:

- State Six Year Highway Plan FY 1995-2000
- Adopted Highway Element (Scenario #5)
- Adopted Transit Element (Alternative #1, Status Quo)
- Proposed Nicholasville/Lexington Express Bus Route
- Bicycle/Pedestrian Plan

In response to air quality concerns, the plan conducted an air quality conformity determination analysis. The conformity analysis involved two major elements: 1) the use of the MINUTP travel demand simulation/forecasting model software to determine vehicle miles of travel (VMT) on the highway network in the study area; and 2) the running of MOBIL5A emissions factor model to determine CO, HC, and N_{ox} emissions.

SYNOPSIS OF COUNCIL OF FRESNO COUNTY GOVERNMENTS: CALIFORNIA

The following analysis focuses specifically on the transportation plan of the Fresno County Council of Governments in California and the distinct characteristics of the highlighted counties found therein. The Fresno Council of Governments (COFCG) consists of eight counties in the San Joaquin Valley. Each county in this region has their own council of governments. The total population of Fresno County is 667,490.

The Fresno Council of Governments addresses the fifteen factors of ISTEA. The policy element of the plan highlights preservation of the existing facilities. Local agencies in the Fresno area have maintenance projects and reconstruction of projects in progress. They also are preserving existing streets, highways, bridges, bikeway facilities, airport facilities, and rail. Fresno shows a strong commitment to maintaining their transportation system.

With the strong commitment to their transportation system, Fresno's policy element is directed toward energy conservation. The short-range improvement plan is intended to provide actions that will reduce air emissions by the end of this century. Fresno County maintains a rideshare program to help increase ridership, decrease vehicle use, and reduce fuel consumption. Successful implementation of Transportation Control Measures (TCMs) will be very important in conserving nonrenewable energy sources.

The *Needs Assessment* and the *Action Elements* are the main sections of the regional transportation plan (RTP) that relate closely to congestion relief and congestion prevention. The main points of focus are the highways, streets, and roads sections. COFCG uses a traffic assignment model for Fresno as an early warning system of potential congestion problems. The primary role of the model is to facilitate local street improvements programs designed to correct congestion problems.

Transportation system design and planning are needed in order to make decisions on land use and development. Certain systems are needed to serve population growth. These

systems will be reviewed by COFCG, also for regional involvement and priority funding. Under this system Caltrans will coordinate a *Major Metropolitan Transportation Investment Study*.

The Policy and Action Elements of the RTP are proof that the COFCG is committed to the expenditure on transportation enhancement activities. Both of these programs meet the requirements of section 133 of the United States Code. Several projects have received federal approval within Fresno County, including freeway landscaping, river bluffs trail along the Friant Expressway, median landscaping, and gateway enhancement.

In the *Multimodal Transportation* section, freight distribution, access to airports, national parks and recreation areas are discussed. However, Fresno county does not have border crossings, military installations or intermodal transportation facilities at this time. There are six state highways, a regional airport, and a regional bus service which allow access to facilities throughout California and the continent.

Connectivity of roads within the metropolitan area with roads outside the metropolitan area is listed in the *Highway, Streets, and Roads Element*. Discussed in the *Multimodal Element*, are agricultural operations and the development of the economic sector on commodity movement along rural streets and highways. A Major Metropolitan Transportation Study of a new corridor connecting Fresno and Madera county is being authorized by Caltrans. Also included in the model are the urban and rural networks. These are given consideration in management of the transportation system.

As required by ISTEA, local agencies use six management systems in their ongoing work programs for systems and services. The systems are highway pavement, bridge, highway safety, traffic congestion, public transportation facilities and equipment, intermodal transportation facilities and equipment, and are discussed in the *Needs Assessment and Action Element* under Mass Transportation.

The *Policy Element* contains a specific goal dealing with the preservation of rights-of-way. This is discussed in detail in the highways, streets, and road section. In order to change rail abandonment, legislative help is needed. Three land use agencies have been involved in corridor preservation efforts in relation to railroad rights-of-way.

Several planning efforts are underway to enhance the efficient movement of freight and more effectively use existing transportation facilities. This is discussed in the Multimodal section, the Highway, Streets and Roads section, and Rail section of the *Action Element*. Policies that support this outcome are included in the *Policy Element*.

Project development is most considered at the design, engineering and programming stages. Local public works departments are encouraged the use of life cycle costs in the design and implementation of capital improvement projects.

Fresno documents and discusses social , economic, energy, and environmental effects of transportation decisions in the Environmental Impact Report. This report is prepared in conjunction with the RTP.

The City of Fresno, the City of Clovis, the rural Consolidated Transportation Service Agency, and the Fresno County Rural Transit Agency all use methods to expand and enhance transit service in their region. The Mass Transit section of the *Action Element* provides a detailed description of these methods. There is also an implementation of a security system that involves the purchase of surveillance cameras and the use of police officers to provide security on buses and at bus stops throughout the fixed-route systems.

SYNOPSIS OF DENVER REGIONAL COUNCIL OF GOVERNMENTS: COLORADO

The following analysis focuses specifically on the Denver Regional Council of Governments and the distinct characteristics of the highlighted counties found therein. The Denver Regional plan consists of eight counties: Adams, Denver, Jefferson, Boulder, Arapaho, Clear Creek, Gilpin, and Douglas, whose total population equals 1,859,008. This plan addresses the 15 factors of ISTEA and how they affect these particular areas.

The first Regional Strategy for Project Selection as adopted by the Denver Regional Council of Government (DRCOG) Board is to maintain and improve the Integrated Metropolitan Transportation system. Maintaining the existing transportation system is given top priority in this plan. The plan in the Denver region to increase the efficiency of the existing transportation system includes the DRCOG traffic signal coordination program, RTD efforts to improve transit service through upgrading the existing bus system, and traffic engineering improvements made by Colorado Department of Transportation (CDOT) and local governments to the freeway and arterial network.

The reduction of delays and conservation of fuels are at the top of the list for improvements. This plan was developed understanding the importance of energy conservation. The plan's emphasis on HOV facilities and transit improvements is a clear statement of consistency with national, state, and local energy conservation programs.

The 2015 plan addresses traffic congestion. This plan identifies the congested travel corridors. Minimizing the amount and extent of congestion as a primary factor in the definition of the MTS and in the evaluation measures used in this plan. Integrating planning for transportation, air equality, and regional development is one of the three primary goals of the 2015 Interim RTP. In analyzing the air pollution impact of the program and plans, the effect of changing transportation investments on land use development patterns were considered.

The TIP emphasizes bicycle and pedestrian facility improvements in the allocation of enhancement funding because of air quality problems. The plan calls for better integration of the transportation system with the community through cost effective enhancement projects.

The TIP roadway and transit networks are composed of both public and privately funded roadways, which are in place or will be in place by the year 2000. The state has chosen to include only state funded projects in the TIP. DRCOG considers local government roadway plans in developing the 2015 interim plan.

Projects are included in the TIP to improve highway and transit access to this facility. The RTP provides support for freight and passenger intermodal connections. An important consideration in defining improvements to the thoroughfare system was to connect the region's roadway system to the remainder of the state.

The RTP commits, in Policy C-4, to the development of management systems and considers their recommendations in the TIP. The RTP identifies needed facilities that locate rights-of-way which need to be preserved for future facilities. RTP has land-banked significant rights-of-way to implement the 2015 plan.

RTP has been working with freight operators as a part of the 2020 Vision to identify actions which could be taken to improve freight movement and access to freight terminals in the Denver region. The TIP allocates funds towards solving existing congestion problems, which impede freight movements.

The use of life cycle cost will become a part of the regional planning process when the Pavement and Bridge Management systems are implemented. The RTP's stated goal is to "Enhance the quality of life and minimize adverse impact on the natural environment." The TIP strongly supports the transportation controls measures contained in the approved State Implementation Plans (SIP) for air quality.

The 1995-2000 TIP identifies transit and HOV improvements to be constructed. The TIP funds three major corridor studies, which may result in recommended rapid transit improvements. Projects in the TIP include funding for improved security. This includes state-of-the-art communication systems and concerns.

SYNOPSIS OF MIDSTATE PLANNING REGION: CONNECTICUT

The following analysis focuses specifically on the Midstate Planning Region of Connecticut and the distinct characteristics of the highlighted county found therein. This region is contained solely within the boundaries of Middletown County in Connecticut with a total population of 143, 196. The major divisions in this plan include topics covering the regional transportation system, transportation system management, and planning for the future. The key elements involving transportation systems are the highway systems, accident reports, roadway capacity, transit system, bicycle transportation and rail transportation. Under transportation system management the key points are safety programs, state and local bridge programs, bus and rail programs, and transportation control measures. Under planning for the future, the key points are unsupported regional needs and financial constraints.

A. Regional Transportation System

The transportation system in the Midstate region provides the public with a variety of modes for safe commuting, and the movement of goods and services. This system is geared toward highway and roadway travel by way of personal automobiles or public transportation. There is also limited rail freight transportation.

The Connecticut Department of Transportation maintains accident records for all State and Federal interstate highways in Connecticut. Roadway capacity is a set of procedures used to estimate the traffic carrying ability of facilities over a range of defined operational conditions. It provides tools for the analysis and improvement of existing facilities and for the planning and design of future facilities. Currently, there are large segments of highways within the region that are approaching or over capacity.

There are seven commuter parking lots located throughout the Midstate Planning Region. These facilities are an essential component of carpooling, improving of air quality, reducing petroleum consumption, decreasing costs associated with traffic congestion, and the lowering of traffic volumes. Midstate RPA staff conducts commuter-parking lot surveys to analyze how the lots are being used. Many of the lots are not used efficiently, and there is a need for more residents in the Region to employ more ride sharing techniques.

Commuters' Register is a free matching and information service for commuters whose objective is to increase ride sharing through the provision of information to commuters and employers. The register provides free listings of commuter services available in Connecticut to support ride sharing, and has a listing of public transportation services. These services include bus services, train transportation, shuttle service and out-of-state ride sharing services to the Boston area, Providence and other Rhode Island cities, and to the lower Hudson Valley Region.

B. Transit Systems

There are a variety of transportation services that are available in the Midstate Planning Region. These services range from local bus services to rail freight service. The Middletown Area Transit (MAT) service operates seven passenger buses on five routes, six days per week, at forty minute intervals. The bus service operates mainly within Middletown, but offers limited service to Cromwell.

The rural route service operates two 22-passenger buses on two routes, five days per week. One route provides transit services to Durham, while the other links Portland and East Hampton. The Middlesex County Chapter of the American Red Cross coordinates and provides transportation for the elderly and disabled within six of the municipalities. The

service operates six 9-passenger buses five days per week on a demand responsive basis, and provides trips for any person who is elderly and or disabled.

There are transit services provided by two transit agencies in the Region. Peter Pan Bus Lines Inc. has a terminal located in Middletown. It serves the Northeast with scheduled trips to New York City, Hartford, Boston, Newhaven and Worcester, with connections to nationwide destinations. Connecticut Transit offers hourly scheduled trips between Middletown and Hartford on weekdays. Augmenting this transit service is one cab company and one limousine company.

C. Bicycle and Rail Transportation

The bicycle plan for the Midstate-planning region has been completed. Bicycle facilities can be developed from bicycle routes, problems and concerns associated with bicycling. Improvements to the overall bicycle network are being proposed.

Connecticut Central and Providence & Worcester Railroads provide local freight service. Rail passenger service and freight rail services are needed but infrastructure deficiencies may restrict expanded service. The region has potential for tourism along the rail but improvements have to be made. The Connecticut Central Rail yard also needs improvements.

D. Transportation System Management

There are many different programs designed to upgrade and enhance the state's transportation system. The Safety program has three projects established by the Connecticut Department of Transportation. STC signal design and construction, high hazard signal design and construction and spot safety design and construction are the categorical programs. Other potential safety problems are identified by ConnDots design and safety staff and as a

result of inquiries from elected officials, regional representatives, the business community and the public.

Part of transportation System management is establishment of other programs also. These include the programs of state and local bridges, road resurfacing, buses, rail, and transportation control measures.

Transportation Enhancement Activities (TEA) funding is available if projects enhance the transportation network. There are two current TEA projects underway in the region: the enhancement of major thoroughfares in Middletown and Westlake Aetna Bicycle and a project titled "Pedestrian Way".

E. Planning for the Future

Regional needs help maintain and improve the current transportation network in the Midstate Planning region. Because of financial constraints, there are some unfunded regional needs. These projects are:

- Swing Bridge Rehabilitation
- Preservation of Rail Right-of-Way for Future Rail Use
- Expanded Rail Transportation through Region
- Regional Transportation Center
- Riverfront Access
- Interconnected Bicycle Paths, Bikeways, Pedestrian Paths and facilities
- Removal of Two Lights in Middletown along Route 9
- Designation of Scenic Highways
- Route 66 Improvements
- Expansion of Bus Service in Cromwell

SYNOPSIS OF EVANSVILLE TRANSPORTATION PLAN: KENTUCKY

The following analysis focuses specifically on the Evansville, Kentucky transportation plan and the distinct characteristics of the highlighted counties found therein. The Evansville plan is made up of 3 counties in Kentucky, Vanderburgh, Warrick, and Henderson, with a combined population of 253,022. The major divisions of this plan are intermodal transportation, systems analysis, evaluation measures, and recommended transportation plan, and financing. The key points to this plan are air, land, highway, bicycle and pedestrian, and water.

A. Air & Rail

The Evansville Regional Airport, Skylane Airport, and Henderson Airport serve the Evansville Area. The largest of the three is Evansville, which has only one airline offering DC-9 commercial jet service.

Five railroad companies serve the city of Evansville and Vanderburgh and Warrick Counties. These are CSX Transportation, Wabash and Ohio, Northfolk, Indiana Southern Railroad, and Yankeetown Dock Corporation. CSX is the number one rail carrier operating within the study area, operating thirty to thirty-five trains per day. The other four railroads operate one mainline each in the study area. There is no passenger rail service available in the service area. AMTRAK was discontinued in 1971; however, they are studying two options for the initiation of passenger service from Chicago to Florida.

B. Highway, Bicycle, and Pedestrian

The major single mode of freight transportation is trucking. Several major trucking terminals are located in the Evansville area. There are approximately fifty trucking firms and or private haulers located in the Evansville area. Two of the local long-haul trucking companies are: Consolidated Freight, and Road and Yellow. Two of the primary short-haul trucking firms are Holland and Conway.

Two bikeways exist in the city of Evansville. These are primarily used for recreational use because of their location. The Evansville Bikeway Master Plan proposed a system of bikeways throughout the city. The Evansville Greenway Passage Master plan is proposing a pedestrian and bicycle corridor encompassing the urbanized core of Evansville.

E. Water

The use of water as a transportation corridor for freight traffic is the least expensive method to transport goods. There are two riverfronts within the study area, the Port of Evansville and the Henderson County Riverport. The remainder of the plan does not go into specific details about the remaining planning factors as directed by ISTEA legislation.

**SYNOPSIS OF SANTA BARBARA COUNTY
ASSOCIATION OF GOVERNMENTS: CALIFORNIA**

The following analysis focuses specifically on Santa Barbara, California Association of Governments and the distinct characteristics of the highlighted region found therein. The Santa Barbara region is made up of one county, Santa Barbara, with a total population of 369,608. The project committee is responsible for the preparation of this plan. The staff consists of an executive director, a deputy director, and three transportation planners. The regional transportation plan impacts seven counties in California. The major divisions in this agency are the transportation needs and assessment, the action element, and the financial element. Under these major divisions the key points of emphasis are roadway systems, system management, passenger transport, materials transport, bikeways, and transit.

A. Roadway System

The needs section of the roadway system discusses the needs of the South Coast, Santa Maria, Santa Ynez and Lomac Regions. There are several major transportation issues facing the South Coast area. Officials have identified them and plan to address each over the next few years. There is a need to reduce the levels of county residents that commute in SOVs to jobs on the South Coast, as well as reducing the heavy volumes of commuter and weekend travel causing congestion in this region. There is an inadequacy of some highway interchanges to accommodate current traffic, and a lack of continuity on parallel alternate routes. The high volumes of hazardous materials being transported through the area has become a safety concern, while transit usage has not kept pace with overall growth in travel.

The action plan of the roadway system discusses which state and local projects have been completed. State projects include addition of turn lanes, safety improvements, right-of-way acquisition, interchange improvements, and environmental changes. Local street and

road projects include installation of traffic signals, new lighting, asphalt overlay, repair of curbs, gutters and sidewalks, drainage improvements, tree trimming, and signalization projects.

The financing section of the roadway system discusses the cost of the local and state projects in the short-term period. The financial report also talks about the maintenance and repair cost for the local roads. Some of the park and ride lots have also been funded under various programs in individual jurisdictions. These funded projects have been shifted from the state system list to the individual jurisdiction's roadway project list. The financial capability analysis does not include cost for hazardous waste projects. The next update of the Regional Transportation Plan will need to include cost estimates for these projects.

B. Systems Management

The transportation needs of system management requires more effective management of our current and future transportation network and transportation resources. ISTEA requires six new interrelated management and monitoring systems to be developed and implemented: Pavement Management System (PMS), Bridge Management System (BMS), Highway Safety Management System, Traffic Congestion Management System (CMS), Public Transit Facilities and Equipment Management System (PTMS), Intermodal Management System (IMS).

In addition to these six systems, ISTEA requires a Traffic Monitoring System of Highways (TMS/H). The ISTEA management system requirement is to enhance the current traffic monitoring practices to support the other six management systems. The management systems are intended to improve the overall planning process as well the performance of the transportation network and to evaluate and prioritize alternative strategies, actions, and solutions.

The action plans discuss system management to include both Traffic System Management (TSM) and Transportation Demand Management (TDM) techniques. These techniques include short and long range low cost projects aimed at increasing the existing system's "people carrying" capacity. Traffic signal synchronization and traffic flow improvements fall into the TSM category. Other programs classified as TSMs include ridesharing programs, bicycle and pedestrian facility improvements, transit improvements, and employer-based trip reduction strategies.

C. Passenger Transport

The needs of passenger transport are discussed in the passenger rail transportation in Santa Barbara County. AMTRAK is the only passenger terminal in the county. Passenger service is presently provided on Amtrak's Coast Starlight and San Diegan trains, operated by AMTRAK under an agreement with the state. Round trip service between Santa Barbara and San Diego has started and has expanded to three round trips daily. Now, there is a fourth passenger train operating on weekends and holidays between Los Angeles and Santa Barbara. California Department of Transportation's (Caltrans) division of Rail identified the need for additional rail stops and stations in the area. Caltrans has also established an extensive network of dedicated bus links to increase the accessibility of the state supported train service. Schedule reliability on the connecting buses has also become a major problem.

The action section of passenger transport discusses improvements to intercity rail service. These improvements include expansion that would result in more daily train service, a new station and service facility. Improvements to existing facilities were discussed, along with extension of Amtrak services. Such improvements as the installation of motorized turnouts would allow faster operation onto and off of the double track portion through the city of Santa Barbara.

The financial section of passenger transport notes the cost to complete projects included in the state's Intercity Rail Program. A total of five projects were included in these updates.

D. Materials Transport

The needs section of materials transport begins with freight movement. ISTEPA requires an analysis of methods to enhance the efficient movement of freight, as well as the establishment of a Congestion Management System, which must address on-road freight movement. The dominant freight mode in Santa Barbara County is trucking. There are five truck route classifications, identified by Caltrans, on which defined trucks can operate and where they are operational restrictions.

Hazardous waste and materials transport are the focus of this section. The transportation of hazardous materials has greatly increased in Santa Barbara County. Hazardous materials that are transported into the county include hypergolic fuel, anhydrous ammonia, gasoline and aviation fuel. Propane and butane are produced in the county and transported by truck to Los Angeles and the Bay Area. Hazardous wastes in both solid and liquid form are currently transported by truck out of the county to treatment and recycling facilities. The 1988 Santa Barbara County Hazardous Waste Management Plan (HWMP) serves as the principle planning document for hazardous waste management for the cities and the county. Hazardous waste transporters must comply with the State Motor Vehicle Code and are additionally required to be registered by the state Department of Health Services. Certain routes have been designated for the transport of hazardous materials and are prohibited on some roads. Route improvements are needed along with improvements to speed enforcement.

Rail freight is also a key factor of this section. The Southern Pacific Transportation Company conducts rail freight operations. Present freight service in the county is light, including three trains traveling in each direction, and ten regular local freights. Products transported by rail include minerals, agricultural, chemicals, scrap, food, and paper. Lumber and possibly imported cement are anticipated markets for rail growth. Because of the need for efficient management of building materials into the region, rail goods movement will grow for inbound and outbound freight.

E. Bikeways

The needs section of bikeways stressed the importance of developing and maintaining bikeways in Santa Barbara County. There are three levels of government responsible for this. Caltrans is responsible for bikeway facilities on state highways, while the public works department of the county and each city is responsible for roads or streets within its jurisdiction. However, colleges are responsible for developing and maintaining bicycle facilities on their campus. Some of the issues of concern are inadequate facilities and safety, education and safety programs, signage, and bikeway maintenance.

The action section of the bikeways centers on the construction of bicycle facilities. The projects will include widening of current bikeways and roadways to accommodate bikeways. Installation of bikelanes and bikelane couplets are also being considered.

The financial section of bikeways addresses associated costs including roadway maintenance. The State Bicycle Account has a statewide budget; the money saved over several years are used to fund bikeway projects. Annually, Caltrans offers four to five statewide grants for eligible bicycle facility projects. These projects must be approved by Caltrans, in addition to being a component of a Bikeway Master Plan for the jurisdiction.

F. Transit

The pivotal needs of area transit highlights of the transit section of the plan. The county's public transit service consists of the Santa Barbara Metropolitan Transit District (SBMTD), Santa Maria Area Transit (SMAT), Lompoc Transit, and Santa Ynez Valley Transit. The private transit services for the county are Santa Barbara Transportation Inc., service to the U. S. Penitentiary, limousine, and Yellow Cab. The needs of the county were met.

Transit services are also discussed in the plan's action section. The improvements for transit services are developed in conjunction with the local transit agencies for the long-term period. SBMTD projects include plans to refurbish the buses in the fleet, construction of new dispatch, maintenance, and administration facilities. Also, SBMTD discusses the purchase of bus stop equipment, fixed facility improvements, administrative office improvements, business equipment purchases, and non-revenue vehicle replacements.

G. Aviation

The county has five functional airports. The airports are the Santa Barbara Municipal Airport, Santa Maria Public Airport, Santa Ynez Valley Airport, Vandenberg Air Force Base (VAFB), and New Cuyama Airport. The needs of this section are various construction projects at the airports, the expansion of terminal facilities, replacement of bridges to airports, construct new runways, new helicopter pads, and the construction of new entrance runways.

The action section discusses a 10-year program of aviation projects. The action plan's goal of legislation is to encourage the development of strategies to improve ground access to airports. The improvements include and extension of mass transit systems, and widening or extending of major arterials or highways.

Funding for the airport improvement projects comes from various sources including the Airport Improvement Program (AIP), proceeds from property taxes, the California Aid to Airports Program (CAAP), the CAAP Acquisition and Development Grant Fund, and local match moneys derived from various airport user fees. Taxes are collected from a variety of sources including airline fares, airfreight, and aviation fuels. To be eligible for the AIP an airport must be included in the National Plan of Integrated Airport System. Funding is also available for airports from the CAAP Annual Grant Fund.

H. Marine

The needs section discusses the Santa Barbara Harbor Breakwater. There has been sand serration, which were caused by storms resulting in the harbor being closed during severe weather conditions. This led to lost revenues to fisherman and merchants that use the area. The city of Santa Barbara has developed a ten-year master plan for the Harbor. The physical improvements recommended in the plan call for a redesigned Harbor Way; the addition of more parking spaces, improvements to public access throughout the area, addition of slips within the harbor, bicycle and emergency access to the wharf, and improvements to the Rock Groin.

The action section discusses how the Army Corps of Engineers has helped with dredging operations to keep the Santa Barbara harbor open for vessel traffic. Thousands of yards of sand are removed yearly. The Waterfront Department of the city of Santa Barbara has completed a master plan for the Harbor/Wharf complex.

SYNOPSIS OF MONTGOMERY URBAN AREA: ALABAMA

The following analysis focuses specifically on the Montgomery, Alabama urban area and the distinct characteristics of the highlighted counties found therein. The Montgomery county plan consists of Montgomery, Elmore, and Autauga counties in Alabama. The total combined population of these counties is 292,517. The major divisions of this plan are transportation facilities, management systems, long range transportation needs, and financial improvements. Under these divisions, the key points are public transportation, air, water, commercial bus, passenger rail, freight rail, congestion and safety, travel demand and forecasting, and financing.

A. Public Transportation

The city of Montgomery has a system of 17 fixed routes serviced with a fleet of 37 forty-passenger buses. There are three Chance trolley coaches available for public transit. A new Montgomery Area Transit Service (MATS) transfer center has recently been completed. The Montgomery Area Paratransit service provides curb to curb service for disabled persons.

B. Air

The only airport serving Montgomery County is the Dannelly Field Municipal Airport. The airport is located in the city of Montgomery. Projects currently under construction at the airport include a new air traffic control tower, and a new remote transmitter site. Several projects are underway to install new underground cables and transformers to runway and taxiway lighting. The Alabama Army National Guard is building an armory and an aviation support facility on the south side of the airport, as well as facilities for fueling, crash rescue, and ammunitions storage. These facilities will be located at the western boundary of the airport.

C. Water

Three rivers run through Montgomery County. They are the Alabama, Coosa, and Tallapoosa Rivers. The Alabama River is used to transport grain, with occasional shipments of steel and wood products. The Montgomery Inland Dock features a grain elevator, Seaboard Systems Railroad services, a truck scale and scale house, and above ground tanks for liquid storage.

D. Passenger Transport

Greyhound Bus Lines operates the only commercial bus system in Montgomery County. Greyhound offers 32 scheduled departures a day from Montgomery, while Amtrak train service also offers daily train departures/arrivals in Montgomery County.

E. Materials Transport

There are two Class I rail lines operating in the tri-county area. Norfolk Southern Corporation provides transportation to and from the union Camp Facility in Autauga County. CSX Transportation, Inc. also operates in the tri-county area. CSX Transportation has direct lines and two feeder lines in excellent condition. They also have two switching yards in Montgomery.

F. Congestion & Safety

The Congestion and Safety Management (CSM) Committee was created by the Montgomery MPO to create work plans for the safety and congestion management systems. The CSM Committee will identify specific congested areas, implement strategies to decrease congestion, and install a monitoring system.

G. Transportation Enhancement Projects

Bicycle and pedestrian trails were completed as part of the enhancement projects through annual grants by ALDOT. The City of Pratville received funds to landscape medians and place new plants.

H. Travel Demand Forecasting

Six steps were involved in the computer modeling process of forecasting future traffic and its impacts on area roadways. The six steps were network development and trip generation, trip distribution, traffic assignment, calibration, future traffic assignment, and alternates testing.

SYNOPSIS OF SACRAMENTO AREA OF GOVERNMENTS: CALIFORNIA

The following analysis focuses specifically on the Sacramento, California Area of Governments and the distinct characteristics of the highlighted counties found therein. Sacramento Area of Governments consists of four counties, Sutter, Yolo, Yuba, and Sacramento. The total population is 1,304,954. The Metropolitan Transportation plan includes the fifteen factors of ISTEA. Preservation of existing facilities in the plan is discussed under System Preservation Goals, Objectives, and Policies. Also in this section, using existing facilities more efficiently. The Action chapter talks about numerous demand and system management control measures aimed at efficiency. The Congestion Management system is another section that discusses efficiency.

This council of government's goal on the environment is to provide for transportation services, facilities, and vehicles that cause the least amount of environmental benefits wherever feasible. This is in more detail under Environmental Goals. The subject discussed even greater in the Supplemental Environmental Impact report, which is published separately.

Many sections throughout this plan discuss congestion. This is one of the key issues that this plan deals with. Congestion is referred to in the Summary, Objectives and Policies, Actions, Policy Analysis, Technical Analysis, and the Financial Plan. These sections will give you a more detail discussion about congestion. Promotion of efficient land use forms is discussed in the Land Use/Mobility Goal section. SACOG is developing a computer model to forecast long-term land use changes. This model can be used to determine the long-range land use impacts of a major transportation change. The model is called "DRAM/EMPAL," which stands for "disaggregated residential allocation model / employment allocation." Land use projections in this plan from the Sacramento County Draft General Plan are included in this plan.

A funding allocation process for Transportation Enhancement Activities was proposed by member jurisdictions and planning agencies. This process was recently completed by SACOG. Information about the programming is available from SACOG upon request.

All transportation projects regardless of funding sources have major impacts. The Policy Analysis and Technical Analysis chapters goes into detail about these projects. Access to ports, airports, intermodal transportation facilities, recreation areas, monuments, and military installations are all discussed in the Metropolitan Transportation System. The SACOG region has no international border crossings or national parks. Interstate highways and public transit serve two historic parks. Some of the less known historic sites in this region need improved access. These will be developed in future planning cycles if resources and time permit.

All roads that connect the SACOG area with other areas are nearly all interstate highways or state highways. Inter-area connectivity does not appear to be a problem. There is no need for additional connectivity of this type. The management systems required by ISTEA are not discussed in detail. However, there is a Congestion Management section in this plan. These systems are not discussed in detail because more direction is needed for the development, implementation, and operation of these management systems.

The Environmental Goal section and the Land/Use Mobility section contain information about the preservation of rights-of-way. This is also discussed in Supplementary Policies. Methods to enhance the efficient movement of freight are addressed under Ports and airports. Economic goal section also gives some insight on the movement of freight.

Life cycle costing was used for the design and engineering of bridges, tunnels, or pavement. The estimates are included in the Financial Plan chapter. Overall social, economic, energy, and environmental effects of transportation decisions are addressed and

analyzed. These results are published separately in the Supplemental Environmental Impact Report.

An important issue discussed throughout this plan is the expansion of public transit service and ridership. Most of the subject is discussed in the Summary, Objectives and Policies, and the Actions chapters. Increased security in transit systems is a result of capital investments. This is discussed more in the Safety goals and Safety category of this plan. SACOG has not analyzed any particular strategies or projects specifically oriented for tourists.

SYNOPSIS OF PIMA AREA OF GOVERNMENTS: ARIZONA

The following analysis focuses specifically on the Pima, Arizona Area of Governments and the distinct characteristics of the highlighted county found therein. The plan consists of one county, Pima County in Arizona. The total population of this county is 666,957. The major divisions of this plan are existing regional transportation facilities, public transit, air quality,

A. Roadway System

The Tucson metropolitan area roadway system consists of over 7,000 lane miles of freeway, arterials, collectors, and local streets. All of these roadways are maintained and operated by the State and local jurisdictions.

B. Public Transit

Sun Transit bus service provides fixed route service within the City of Tucson with limited service into Pima County, the City of South Tucson, and the Town of Oro Valley. The City of Tucson operates two transit centers. The Roy Laos Transit Center and the Ronstadt Transit Center. A third transit Center is currently under construction in the area. Park and Ride lots assist travelers in making connections to transit or carpools. The city of Tucson owns three park and ride lots.

C. Paratransit & Trolley

The City of Tucson operates Van Tran and Pima County operates Pima Transit, door to door paratransit services for people with disabilities who are unable to use the fixed route transit system. Old Pueblo Trolley, Inc. operates Tucson's trolley system. The service

operates on weekends and is available for group excursions and charter trips. There are two electric trolleys, one of which serves as a back-up vehicle.

D. Bicycle

There are approximately 270 miles in the PAG region of the bicycle network. A Regional Bike Map has been developed showing the routes. The bikeway system includes three types of facilities: bike routes utilizing local and minor collector streets, bike lanes on major collector and arterial streets, and separate bike paths in linear parks and other locations. A Tucson Bicycle Commuter Handbook has also been developed and is available to the public.

E. Aviation

The airports within the PAG region include Ajo Municipal, Avra Valley, Ryan field, Sells, and Tucson International. There is one privately owned airport in the region and two other airports included in the PAG planning process. They are Pinal Airpark and Davis Manthan Air Force Base.

F. Railroad System

Both passenger rail and freight rail service make up the Tucson region. Passenger service is provided through Amtrak, which runs the Sunset Limited. The Sunset Limited operates three days a week. The Tucson division of the Southern Pacific Transportation Company provides freight rail service to many rail users in the state. Most of the goods generated are from mining and agricultural products.

G. Pedestrian

Sidewalks are provided in downtown Tucson and in other areas in the PAG region. Sidewalk improvements are included in street improvement projects. There are pedestrian overpasses and underpasses located in high volume pedestrian areas. A Trail System Plan for Eastern Pima County identifies trails for recreational walkers and hikers.

H. Safety Management System

Within this section of the plan are discussed in this section were Congestion Management (CMS) Intermodal Management System (IMS).

I. Energy Conservation

Currently, Tucson/Pima County Metropolitan Energy Commission is working on an energy plan. This plan will eventually include recommendations to reduce energy consumption through more fuel-efficient transportation and use of alternate modes. The Arizona Department of Commerce maintains and energy emergency plan for the state.

**SYNOPSIS OF STANISLAUS AREA ASSOCIATION AND SAN JOAQUIN COUNTY
COUNCIL OF GOVERNMENTS: CALIFORNIA**

The following analysis focuses specifically on the Stanislaus and San Joaquin, California Council of Governments and the distinct characteristics of the highlighted counties found therein. The Stanislaus Association of Governments is made up of one county Stanislaus. The total population of this county is 370,522. The San Joaquin County Council of Governments is made up of San Joaquin county. The total population of this county is 480,628. However both counties are part of an eight county area called the San Joaquin Valley. Both plans follow the same overview when constructing their regional transportation plan.

The Policy Element of the RTP contains specific goal, objective and policy statements, which reflect SAAG's commitment to preserving and enhancing existing transportation facilities. The Action element lists existing facilities that have been identified by SAAG that need improvement. Many of RTP's investments are for transit operations and maintenance of the system. Some percentages of the funds are for transportation demand management and traffic systems management projects.

Strategies, which improve system efficiency by reducing traffic delays, increase carpooling, and upgrade/expand transit, are discussed in the Policy element. The Stanislaus County Congestion Management Program (CMP) is also designated to relieve congestion, improve air quality and implement efficiency strategies.

Relieving congestion and preventing congestion is discussed in the Action element, the CMP, and the Policy element. Level of service is measured annually on the CMP system and demographic and land use modifications are monitored for trip generation's increases. However due to lack of funds, congestion will increase over the life of the RTP.

The RTP analyses demographic projections, which reflect land use policies. An assessment of need identifies and documents existing and future systems needs and issues. The SAAG Transportation Model details future socio-economic conditions through 2016.

Currently there are two local bikeway projects and one rail station project that are programmed into the first two cycles of the TEA program. The Policy and Action elements of the RTP both contain statements that reflect SAAG's commitment to program expenditures on transportation enhancement activities.

Projects that are publicly funded are taken into account in the RTP and air quality analyses with out regard to funding source. Access to ports, airports, and intermodal transportation facilities, are all addressed in the assessment of needs of the regional network and in the action plan of the RTP. Considerations have been given where connections to airports, intermodal transfer facilities, freight distribution routes, national parks, monuments and historic sites, and military installations have also been considered.

The highway, streets, and roads, and the goods movement sections of the RTP address connectivity of roads within the metropolitan area to roads outside the area. The RTP transportation system will be improved through the management systems required by ISTEA. The SAAG has developed the Congestion Management System. SAAG has been monitoring and participating in the state's efforts to develop the Bridge, Highway Pavement, Highway Safety, Traffic Congestion, Public Transportation, and Intermodal Transportation Systems.

The objectives to preserve and enhance identified regional corridors and expressways, is discussed in the Policy element. The federal and states efforts in right-of-way preservation have been provided to Caltrans on an ongoing basis.

The issues to enhance freight movement in Stanislaus County are the responsibility of the SAAG's freight Advisory Committee. Their statements are addressed in the Policy element.

Consideration of life cycle cost is a key component of this plan. Each jurisdiction utilizes its pavement management system to determine the optimum network rehabilitation and improvement needs. SAAG's adopted programming policy for each fund determines the project's priority on a regular basis.

The EIR on the RTP analyzes overall social, economic, energy, and environmental effects of the moderate multimodal alternative selected in developing the RTP.

The maintenance of existing transit services is the number one priority for the RTP. There is adequate funding in that enhance current services with capital improvements. There is a lack of funding sources, and shortfalls that continue to exist in this region.

The short-range transit plans of operator's list alternative funding and capital investments that will result in increased security in transit systems. Recreational travel and tourism is considered in the action plan of the RTP.

SYNOPSIS OF ATLANTA REGIONAL TRANSPORTATION PLAN

The following analysis focuses specifically on the Atlanta Regional Transportation Plan and the distinct characteristics of the highlighted counties found therein. The Atlanta plan is made up of 10 counties Cobb, Fulton, DeKalb, Gwinnett, Rockdale, Fayette, Cherokee, Clayton, Douglas, and Henry. The total population of the area is 2,514,066. The Transportation plan does address the 15 factors or ISTEA. The discussion of the fifteen factors was done by giving suggestions.

Preserving of existing transportation facilities and where practical ways to meet transportation needs by using existing transportation facilities more efficiently is the first factor. This was discussed by maintaining current design specifications such as enhancing traffic patterns and use. Enhancing safety and bridges is a big concern. And the need to define preservation each project/facilities/mode.

The consistency of transportation planning with applicable Federal, State, and local energy conservation programs, goals, and objectives. This is discussed by having traffic efficiency. Traffic efficiency leads to less emission by signal systems, public transit, alternative fuel vehicles, Intersection improvements, need to define goals/mandates.

The need to relieve congestion and prevent congestion from occurring where it does not yet occur is discussed by the time frame of congestion, also mentioned was to compare all proposed projects with possible non-construction alternatives. Vanpool sharing is also very important in this section.

The plan addresses the need for periodic review of the RTP to insure project compatibility with local land use and regional transportation plans. Land use plans must be transportation efficient and adhered to. Enforcement is needed to prevent further speculation, which increases sprawl, VMT, and emissions, as well as eating up transportation funds.

Programming of expenditure on transportation enhancement activities is discussed by forming a statewide advisory committee. One of the major emphasis of ISTEA is factor 7. The plan address this issue by coming up with transportation projects that need to emphasize multimodal connectivity through engineering and design enhancements. Projects should minimize disruption of park, recreation areas, and historic sites. Preserving existing airport access and freight movement systems is a big concern. Freight movement routing should be connected to ATMS and congestion management systems.

Five issues address the need for connectivity of roads within the metropolitan area with roads outside the metropolitan area. Connecting rural areas to main urban corridors, roadway design in transition areas, connecting transit, communication with counties, and speculative development.

The management systems will be addressed in the near future as management systems are developed. Factor 10 is discussed by identifying transportation corridors through the planning process. Also mentioned in this factor is securing ROW and better funding for ROW purchasing.

Methods to expand and enhance the efficient movement of freight are discussed by finding the best locations for freight intensive facilities- particular in light of existing/future transportation network. Identifying major truck routes and evaluate projects on the basis whether they improve, have no effect, or impede freight movement are some of these methods. Considering cost for design, engineering, consultants, construction, maintenance in the planning process is considered in the use of life cycle costs.

Local jurisdictions and GDOT need to be able to identify issues and gather a minimum amount of data relating to SEEE effects either alone or in conjunction with ARC staff before a project is to be included in the TIP/RTP. This is needed for the overall social, economic, energy, and environmental effects of transportation decisions. Local jurisdictions

can encourage transit expansion and increased use through the land use and development process. ARC can serve as a liaison and spokesman for these relationships.

Encouraging public and private support for transit issues is done through commuter efficiency. In order to increase security in transit facilities better-trained and efficient police are needed. Educating the public and encouraging design of facilities will help better the facilities.

SUMMARY

Table 2. is a list of summary findings. Almost all of the plans discussed the areas of freight, railroads, aviation, and bikes and pedestrians. Many of the plans may not have addressed the marine issue because of their geographic locations. Intermodal facilities were discussed in every plan, but few talked about financing multi-modal facilities. The discussion of the 15 factors was included in almost all of the plans.

Table 2.

SUMMARY OF PLAN FINDINGS *

MPO LONG RANGE PLAN	FREIGHT (TRUCKING)	RAILROAD	AVIATION	MARINE	BIKES & PEDESTRIAN	MUTIMODAL FACILITIES	15 PLANNING FACTORS
Capital Region		X	X	X	X		
Rockford	X	X	X		X	X	X
Regional Transportation	X	X	X	X	X		X
New Orleans	X	X			X	X	X
Metropolitan Washington Region	X	X			X	X	
Metro-Dade		X	X		X		
Maricopa	X	X	X		X		X
Lexington	X		X		X	X	X
Fresno COG	X	X	X	X	X	X	X
Denver Region	X	X	X		X		X
Midstate Region		X			X		X
Evansville	X	X	X	X	X		
Santa Barbara	X	X	X	X	X		
Montgomery	X	X	X	X	X		X
Sacramento	X	X	X		X	X	X
Pima	X	X	X	X	X		X
Stanislaus / Joaquin	X		X				X
Atlanta			X		X		

* Reflects modes and references easily noted in the planning documents.

BIBLIOGRAPHY

Cage, Robert W.; McDowell Bruce D., "ISTEA and the Role of MPOs in the New Transportation Environment: A Midterm Assessment," Publius: The Journal of Federalism, Volume 25 Number 3.

Prendergast, John, "MPOs Become VIPs," Civil Engineering, April 1994, p.40.

FOR CASE STUDIES

Atlanta

"Atlanta Regional Transportation Plan: 2010," Atlanta Regional Commission, Atlanta, GA (1990) 112 pp.

"Atlanta Regional Transportation Improvement Program FY 1996-FY 2001," Atlanta Regional Commission, Atlanta, GA (1995) 63 pp.

Capital

"Capital Regional Transportation Plan," Capital Region Council of Governments, Hartford, CT (1994) 25 pp.

"Transportation Improvement Program," Capital Regional Council of Governments, Hartford, CT (1996) 20 pp.

Fresno

"Regional Transportation Plan," Council of Fresno County Governments, Fresno, CA (1994) 226 pp.

"Federal Transportation Improvement Program," Council of Fresno County Governments, Fresno, CA (1994) 53 pp.

Denver

"2015 Interim Regional Transportation Plan," Denver Regional Council of Governments, Denver, CO (1993) 83 pp.

"1995-2000 Transportation Improvement Program Technical Appendices," Denver Regional Council of Governments, Denver, CO (1995) 102 pp.

Evansville

“2015 Recommended Transportation Plan,” Evansville Urban Transportation Study, Evansville, IN (1994) 111 pp.

“ Transportation Improvement Program: 1996-2000,” Evansville Urban Transportation Study, Evansville, IN (1995) 240 pp.

Lexington

“Year 2015 Transportation Plan,” Lexington Area Metropolitan Planning Organization, Lexington, KY (1995) 250 pp.

“ Transportation Improvement Program,” Lexington Area Metropolitan Planning Organization, Lexington, KY (1996-1998) 80 pp.

Maricopa

“ Maricopa Long-Range Transportation Plan Summary and 1995 Update,” Maricopa Association of Governments, Phoenix, AZ (1996) 70 pp.

“ MAG Transportation Management Systems Report: FY 1996 Update,” Maricopa Association of Governments, Phoenix, AZ (1995) 75 pp.

“ 1996-2000 MAG Transportation Improvement Program,” Maricopa Association of Governments, Phoenix, AZ (1996) 100 pp.

Metro-Dade

“ 2015 Metro-Dade Transportation Plan Long Range Element,” Metropolitan Planning Organization, Miami, FL (1995) 75 pp.

“ Transportation Improvement Plan,” Metropolitan Planning Organization, Miami, FL (1997) 200 pp.

Metropolitan

“Long Range Transportation Plan for the National Capital Region,” National Capital Region Transportation Planning Board, Washington, DC (1994) 200 pp.

“ Transportation Improvement Program for the Metropolitan Washington Area, Washington, DC (1995) 250 pp.

Midstate

“Midstate Planning Region Regional Transportation Plan,” Midstate Regional Planning Agency, Middletown, CT (1994) 50 pp.

Montgomery

“2010 Transportation Plan,” Montgomery Metropolitan Planning Organization, Montgomery, AL (1994) 50 pp.

New Orleans

“Transportation Plan for Year 2015,” Regional Planning Commission, New Orleans, LA (1994) 100 pp.

“ Meeting The Challenge implementing ISTEAs in the New Orleans Region FY 94-95 Annual Transportation Report,” Regional Planning Commission, New Orleans, LA, 30 pp.

“Transportation Improvement Program New Orleans Metropolitan Planning Area Fiscal Years 95-96, 96-97, 97-98,” Regional Planning Commission, New Orleans, LA, (1995) 31 pp.

Pima

“Metropolitan Transportation Plan,” Pima Association of Governments, Pima, AZ (1994) 50 pp.

“1995-1999 Regional Transportation Improvement Program,” Pima Association of Governments, Tucson, AZ (1994) 90 pp.

Regional

“1994 Regional Transportation Plan for the San Francisco Bay Area,” Metropolitan Transportation Commission, Oakland, CA, (1994) 100 pp.

“1994 Final Environmental Impact Report,” Metropolitan Transportation Commission, Oakland, CA, (1994) 95 pp.

Rockford

“Long-Range Transportation Plan,” Rockford Area Transportation Study, Rockford, IL, (1996) 75 pp.

“FY 96 Transportation Improvement Program,” Rockford Area Transportation Study, Rockford, IL (1995) 30 pp.

Sacramento

“1996 Draft Metropolitan Transportation Plan,” Sacramento Area Council of Governments, Sacramento, CA (1996) 80 pp.

San Joaquin

Santa Barbara

“1995 Regional Transportation Plan,” Santa Barbara County Association of Governments, Santa Barbara, CA (1995) 200 pp.

“ Federal Transportation Improvement Program for Santa Barbara County,” Santa Barbara, CA (1995) 107 pp.

Stanislaus

“Regional Transportation Plan,” Stanislaus Area Association of Governments, Modesto, CA (1996) 250 pp.

“Federal Transportation Improvement Program,” Stanislaus Area Association of Governments, Modesto, CA (1996) 80 pp.