

## Chapter 2: SAFETEA-LU: Eight Areas of Planning Emphasis

Section 134 (h) of Title 23 U.S.C. of Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA) section 5303 (h) of Title 49 U.S.C. lists eight planning factors that must be considered as part of the transportation planning process for all metropolitan areas. At a minimum, these factors shall be explicitly considered, analyzed as appropriated, and reflected in the production of planning documents. These factors, as listed below, are considered in prioritizing projects for inclusion in the Long Range Transportation Plan.

### Eight Planning Factors

**Factor 1.** *Support the economic vitality of the United States, the States, metropolitan areas, and non-metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency.*

**Factor 2.** *Increase the safety of the transportation system for motorized and non-motorized users.*

**Factor 3.** *Increase the security of the transportation system for motorized and non-motorized users.*

**Factor 4.** *Increase accessibility and mobility of people and freight.*

**Factor 5.** *Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvement and State and local planned growth and economic development patterns.*

**Factor 6.** *Enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight.*

**Factor 7.** *Promote efficient system management and operation.*

**Factor 8.** *Emphasize the preservation of the existing transportation system.*

Keeping in mind Code of Federal Regulations (CFR), Title 23, Part 450, Subpart B, Article 306, “the metropolitan transportation planning process shall be continuous, cooperative, and comprehensive, and provide for consideration and implementation of projects, strategies, and services that will address the planning factors:”, the Hidalgo County MPO incorporates the eight planning factors in the transportation planning of the metropolitan area. The following information provides explicit examples of how the Hidalgo County

MPO addresses the eight planning factors in the metropolitan transportation planning, and lists the Articles that apply to each planning factor.

### **SAFETEA-LU Planning Factor #1**

In reference to Title 23, PART 450, Subpart B, articles 306, 308, 312, 314, 316, 318, 320, 322 and 324 support our compliance with the first planning factor in SAFETEA-LU - “Support the economic vitality of the United States, the States, metropolitan areas, and non-metropolitan areas, specially by enabling global competitiveness, productivity, and efficiency”.

In accordance with Article 306 (listed on page 110), the following items are addressed:

- ✓ The metropolitan transportation planning process encourages competitiveness, productivity and efficiency since its continuous, cooperative and comprehensive. The HCMPO has the Texas Department of Transportation (TxDOT) as an active member of its Technical Advisory Committee (TAC) and its Transportation Policy Committee (TPC) which enables the coordination between the HCMPO planning process and the statewide transportation planning process.
- ✓ The transportation planning process is consistent with the regional intelligent transportation systems architectures.
- ✓ LRGVDC Transit is an active member of the HCMPO’s Technical Advisory Committee and Technical Policy Committee which enables the public transit-human services transportation plan to be in coordination with the metropolitan transportation planning process.

In accordance with Article 308, the following items are addressed:

- ✓ The development of a UPWP in coordination with TxDOT, local and federal governments, transit operators, and citizens via the public participation plan, secures that the metropolitan transportation planning process is productive and efficient by preventing the use of outdated information or duplication of work efforts.

- ✓ The HCMPO is currently working under the FY2008-2009 UPWP.
- ✓ The HCMPO's UPWP addresses compliance of the 8 planning factors under SAFETEA-LU.
- ✓ The UPWP explains in detail the planning activities taking place under the five (5) planning tasks including administration, data development and maintenance, short range planning, metropolitan transportation plan, and management systems or studies.
- ✓ The UPWP includes a detailed illustration of the federal, state and local funding levels available to develop the metropolitan planning activities and the funding distribution between the different tasks making the UPWP fiscally constrained.
- ✓ In general the UPWP complies with federal regulations and will be further explained in Appendix.

As it applies in Article 312, the following was addressed:

- ✓ The designation of a metropolitan planning area encourages efficiency and productivity by not duplicating planning areas amongst MPOs.
- ✓ The HCMPO as a Metropolitan Planning Area agreement developed between the HCMPO and the Governor of the State of Texas.
- ✓ In general the HCMPO complies with federal regulations.

In accordance with Article 314, the following was addressed:

- ✓ A metropolitan planning agreement prevents duplication of efforts between the parties involved and encourages the efficiency of the transportation planning process.
- ✓ In general the HCMPO complies with federal regulations.

In accordance with Article 316, the following items were addressed:

- ✓ The consultation with other agencies and interested parties, and the Public Participation Plan (PPP) aid in making the metropolitan planning process productive and efficient by sharing the same information throughout the system and encouraging the participation of all interested parties in the process.

- ✓ The HCMPO has an existing Public Participation Plan (PPP) that involves all interested parties and entities from the beginning of its development up to the adoption of the document.
- ✓ The HCMPO will be implementing visualization techniques as required by SAFETEA-LU in FY2009 as a tool to provide citizens with a better understanding of what a future project will look like and the impact it will have in the community.
- ✓ The Public Participation Plan has been available at the HCMPO's website since 2007. Before, that it was available at the Lower Rio Grande Valley Development Council's website starting in 2005.
- ✓ The HCMPO's public meetings take place in Weslaco, located in the middle of Hidalgo County. They take place in the evening after working hours, since it is the best time for citizens and interested parties to participate.
- ✓ The HCMPO's PPP was under public participation for 60 days before it was adopted in June 21<sup>st</sup> of 2007. Due to comments from the public and other stakeholders, it was revised in April 17<sup>th</sup> of 2008.
- ✓ The HCMPO reaches out to the underserved, low income, and minority populations thru the collaboration of organizations such as Avance and Arise, who provide information to low income, minority and underserved populations. The HCMPO also advertises in Hispanic television channels thru Time Warner Cable. The HCMPO thru LRGVDC Transit has initiated the use of wraps in Rio Metro and Rio Transit buses to reach out to the underserved, minority and low income populations who utilize public transportation as their main source of transportation, and for people who use the roadways and driving behind a transit bus.
- ✓ The HCMPO has representatives from the US Fish and Wildlife as active participants in the metropolitan transportation planning process, and a continued cooperative effort will be followed throughout the planning process.
- ✓ In general, the HCMPO's PPP complies with all federal regulations and will be further explained in Chapter Three (Public Participation Plan) and Chapter Four (Environmental Justice).
- ✓

In accordance to Article 318, the following items were addressed:

- ✓ The HCMPO has carried on several studies during the last 5 years to help evaluate its metropolitan transportation system, encouraging competitiveness, productivity and efficiency.
- ✓ A Public Transportation Regional Coordination Plan was developed in 2006 by KFH Group to evaluate the connectivity and coordination between public and private transportation providers in the Lower Rio Grande Valley. The study identified several areas of opportunity such as administrative and operational coordination activities between the several entities in order to provide a faster and seamless riding experience to its users. This transit plan will be further explained in Chapter Eighteen.
- ✓ A multimodal study was developed by Wilbur Smith and Associates in 2006-2007 to evaluate the connectivity between different modes of transportation such as highways, pedestrian and bicycle lanes, public transit routes, school routes, and amongst others. The study identified areas of opportunity to increase connectivity within the system. The multimodal study will be further discussed in Chapter Thirteen (Multi-Modal Coordination and Planning).
- ✓ In FY2006 the HCMPO considered it beneficial to develop a non radioactive hazmat routes in coordination with local authorities. The HCMPO hosted a series of meetings that included local municipalities as well as each cities fire department and hazmat teams, TxDOT, and the LRGVDC. Interest in developing and adopting such a route was very high. Upon completion of several meetings the group was able to identify the need of hiring an outside contractor who was experienced in developing such routes to ease the approval process with TxDOT and local municipalities. Upon identifying the need to contract an outside organization to complete the study, the HCMPO and LRGVDC in partnership coordinated efforts to ask local municipalities to contribute to the funding of such a study. Hidalgo County and many of its cities contributed nearly \$100,000 to be applied to a hazmat study which would be contracted through the LRGVDC. Attempts to include Cameron County and its cities in the study were also attempted but interest was minimal at best. The Hidalgo County HazMat study was performed by Chemical Response & Remediation Contractors, Inc.

(CRRC) in 2006. CRRC held a series of public meetings identifying the least impactful routes to the public as well as presented findings to the HCMPO Policy Committee and LRGVDC Board. The study was completed in 2007 and submitted to TxDOT for their approval. The LRGVDC and HCMPO are still awaiting additional feedback from TxDOT on the approval process. A copy of the final report is Chapter Fourteen.

- ✓ The HCMPO initiated an Incident Management Program in 2005 to identify the “hot spots” in Hidalgo County and to find strategies to address them. In order to develop this study, the HCMPO determined that it would require the assistance of the police departments in Hidalgo County. Accident reports were requested for the years of 2003, 2004, 2005, 2006, and 2007 from the police departments of the cities in Hidalgo County. The first results were obtained after processing the years 2003, 2004, and 2005. “Hot spots” were identified in a county wide map and were incorporated into the HCMPO’s website to be accessible to the public. This study has proven to be a great tool for the police departments as they have been able to identify where most of the accidents in their cities take place. The records for the year 2006 have also been processed, and the results have been incorporated into the HCMPO’s website. The year 2007 will be processed in calendar year 2009. This program will be on-going and it will be further explained in Chapter Fourteen (Safety Considerations in the Transportation Planning Process).
- ✓ Due to a request from the governor of the State of Texas to every Transportation Management Area (TMA) in the State, the HCMPO developed a Texas Metropolitan Mobility Plan (TMMP) in 2004 and a TMMP update in 2006 to identify the additional mobility needs Hidalgo County would have if the transportation projects in the 2005-2030 MTP were all implemented. Since it is well understood that the projects identified in the MTP do not fully address the level of service that is acceptable for Hidalgo County, the State didn’t have a clear figure of the additional funding required in order to reach the level of service “E”, determined to be the acceptable level of service needed to considerably improve mobility in Hidalgo County during the next 25 years. The development of the HCMPO’s 2006 TMMP resulted in additional funding needs

equivalent to \$1.4 billion dollars for the next 25 years. The TMMP will be further explained in Chapter Ten (Fiscal Constraint).

In accordance with Article 320, the following items were addressed:

- ✓ The Congestion Management Process (CMP), known under TEA-21 as the Congestion Management System (CMS), promotes efficiency and productivity by studying congestion levels and implementing strategies to improve them, which aids the HCMPO in addressing the mobility of the system.
- ✓ The HCMPO has developed a yearly CMS/CMP study since 1995.
- ✓ The HCMPO divided this study into 2 phases in 2005 -Tier I, and Tier II. Tier I has the purpose of analyzing and recording the congestion levels and the types of congestion in Hidalgo County utilizing the existing criteria and providing recommendations on how to address the problem areas. Tier II focuses on a specific number of corridors as determined by the HCMPO's TAC and Policy committees to make an in depth congestion analysis of these corridors and provide specific recommendations such as the use of Intelligent Transportation Systems (ITS), synchronization, road widening, replacement or upgrade of traffic controls, amongst others, with an implementation timeline, and possible funding options to exercise these recommendations.
- ✓ In general, the HCMPO's CMP complies with federal regulations and will be further explained in Chapter Twelve - Congestion Management Process and Chapter Nine - Travel Demand Forecasting Model).

In accordance with Article 322, the following items were addressed:

- ✓ The Metropolitan Transportation Plan (MTP) is the heart of transportation planning for MPO's. It's where, thru a collaboration process and public participation, the MPO, city, state and federal governments, tribal governments, environmental entities, transportation providers, citizens, and other stakeholders, get together to decide which transportation projects will be considered for construction, maintenance, rehabilitation, or for other

improvements such as ITS, within the next 25 years. It is this collaborative process which focuses on competitiveness, productivity and efficiency that directly addresses SAFETEA-LU requirements.

- ✓ The HCMPO is currently working under a 2005-2030 MTP based on a 1999 base year model.
- ✓ The next MTP is the 2010-2035 MTP based on a 2004 model.
- ✓ The HCMPO's 2005-2030 MTP was under public involvement for 45 days
- ✓ The 2010-2035 MTP will address the safety element more comprehensively than the 2005-2030 MTP, focusing on the priorities, goals, and countermeasures addressed in the State Highway Safety Plan (SHSP). This topic will be further explained in Chapter Eight.
- ✓ Utilizing the results from the HCMPO's Incident Management Program, the existing safety condition of each corridor will be incorporated as an additional element of the project selection criteria for the ranking of projects.
- ✓ In general the MTP complies with federal regulations and will be further explained in Chapter Eight (Transportation Plan) and Chapter Eleven (TIP Development).

In accordance with Article 324, the following items were addressed:

- ✓ The Transportation Improvement Program (TIP) is an essential part of the transportation planning for MPO's. It's where, thru a collaboration process and public participation, the MPO, city, state and federal governments, tribal governments, environmental entities, transportation companies or entities, citizens, and other stakeholders, get together to decide which transportation projects will be considered for construction, maintenance, rehabilitation, or for other improvements within the next 4 years, utilizing criteria such as cost effectiveness, safety, congestion, and access management. It is this collaborative process which focuses on competitiveness, productivity and efficiency that directly addresses SAFETEA-LU requirements.
- ✓ The HCMPO's current TIP is the FY 2008-2011 TIP
- ✓ The HCMPO's 2008-2011 TIP was under public involvement for 30 days

- ✓ The HCMPO's TIP is fiscally constraint
- ✓ In general the HCMPO's TIP complies with federal regulations and will be further explained in Chapter Eight - Transportation Plan and Chapter Eleven - TIP Development.

### **SAFETEA-LU Planning Factor #2**

In reference to Title 23, PART 450, Subpart B, the following articles support our compliance with the second planning factor in SAFETEA-LU - "Increase the safety of the transportation system for motorized and non-motorized users".

In accordance with Article 306, the following items were addressed:

- ✓ The HCMPO initiated the Incident Management Program in 2005 to address safety in Hidalgo County. It has dedicated the last 4 years to processing accident reports from cities in Hidalgo County for the years of 2003, 2004, 2005, 2006, and is currently working on 2007, in an effort to give insight to the cities of the locations where most of the accidents or "hot spots" are taking place.
- ✓ Through the IMP, the HCMPO has achieved consistency with the SHSP as follows:
  - The HCMPO's IMP identifies and analyzes highway safety problems and opportunities.
  - The HCMPO's IMP is based on accurate and timely safety data provided directly by the police departments in Hidalgo County.
  - The HCMPO's IMP is a continuous program which enables the study of existing "hot spots" and the identification of new ones, analyzing the behavior and progression of "hot spots".
  - The results from the IMP are incorporated into the HCMPO's website, giving insight to the cities about their accident problem areas, giving them an opportunity to address them.

- The HCMPO's IMP results will be a key element of the project selection criteria utilized for project ranking in the 2010-2035 MTP update, making safety a factor in the transportation planning process.
- By incorporating the IMP results into the project selection criteria of the 2010-2035 MTP update, the HCMPO will also be incorporating safety as a factor in the TIP.
- ✓ Because the Rio Grande Valley offers a year round tropical climate, residents enjoy cycling as an outdoor activity and utilize the roadways for cycling purposes, so there is a need for cycling routes to provide safety to cyclists. The MPO was awarded honors for the innovation in the regional development of safe bicycle alternatives to the transportation infrastructure.

### **SAFETEA-LU Planning Factor #3**

In reference to Title 23, PART 450, Subpart B, the following articles support our compliance with the third planning factor in SAFETEA-LU - "Increase the security of the transportation system for motorized and non-motorized users".

The terrorist events of September 11<sup>th</sup>, 2001, emphasized that effective coordination and communication among the many different operating agencies in a region is absolutely essential. Such coordination is needed to allow enforcement, security, and safety responses to occur in an expeditious manner, while at the same time permitting the transportation system to handle the overwhelming public response to the incident. The public needs to have clear and concise information about the situation and what actions need to be taken.

Although the immediate organizational response to security incidents and disasters will be the responsibility of security and public safety agencies, there is an important role that MPOs can play in promoting coordinated planning in anticipation of unexpected events or natural disasters. The MPO can also provide a centralized location of information on transportation system conditions as well as local and national responses that might be useful in an emergency. Hurricane and disaster evacuation plans are a good starting point and may be sufficient for the types of incidents anticipated.

Most studies of sudden disruptions to the transportation network, either from natural or man-made causes, have concluded that the surroundings of a metropolitan area's transportation system provides a rerouting capability that allows the flow of people and vehicles around disrupted network links.

The most effective response strategy is for State, local, and national authorities to develop flexible strategies that can be adjusted quickly and appropriately to the type of incident that actually occurs. This type of strategy requires management coordination, compatible communication systems, and real time information feedback to decision makers that permits near immediate changes in the strategy when required. This approach also requires mechanisms for disseminating information to the general public that provides the most up-to-date guidance on the best transportation options for avoiding bottlenecks in the transportation system.

The MPO role in security can be divided into 5 areas which are briefly discussed below:

- a) Prevention.- It has several components ranging from stopping an attack to providing improved facility designs that prevent large scale destructions. Surveillance, monitoring, and sensing technologies will play an important role in the prevention phase of an incident.
- b) Mitigation.- Reducing the harmful impact of an attack as it occurs and in the immediate aftermath. It entails identifying the most effective routes for emergency vehicles as well as for the evacuation of large numbers of people.
- c) Monitoring.- Recognizing that an incident is underway, characterizing it, and monitoring its development.
- d) Recovery.- Facilitating rapid reconstruction of services after an incident.
- e) Investigation.- Determining what happened in an attack, how it happened, and who is responsible.
- f) Institutional Learning.- Conducting a self-assessment of organizational actions before, during, and after an incident.

One of the more interesting and perhaps critical roles that the MPO can play is in the institutional learning phase of a security or disaster incident. The MPO can collect

relevant information on the manner in which the region responded to the incident, not only the official response in terms of the movement of emergency and public safety vehicles, but also how the public reacted and the strategies adopted by travelers in responding to any disruption. With this data, the MPO and other agencies can analyze the recent incident response in order to develop improved strategies for handling the next incident. The MPO is in a unique position to adopt a lead role in the institutional learning phase of a security or disaster incident.

Before identifying what possible actions might be taken by MPOs in connection with the security or disaster areas mentioned above, it is first important to identify the possible roles an MPO may play in transportation system operations. The Federal Highway Administration (FHWA) and many other groups have been looking closely at institutional strategies for providing metropolitan-level coordination of transportation system operations. The following are possible roles the MPO can play in security or disaster planning:

- *Traditional.*- The MPO incorporates system management and operations (M&O). The focus is on projects that arise as part of the transportation planning process.
- *Convener.*- The MPO acts as a forum where security or disaster operations plans can be discussed and coordinated with other plans in the region, but the MPO is not responsible for developing a regional security or disaster operations plan.
- *Champion.*- The MPO works aggressively to develop a regional consensus on security or disaster operations planning. The MPO takes the lead in developing regional agreements on coordinated security or disaster operations.
- *Developer.*- The MPO develops a regional security or disaster operations plan in addition to incorporating security or disaster operations strategies into the transportation plan.
- *Operator.*- The MPO is responsible for implementing security or disaster operations strategies which are developed as part of the MPO planning process.

**Given the MPO's strengths in technical analysis and transportation planning, the actions most appropriate for the MPO in security or disaster planning are:**

- ✓ Conducting vulnerability analyses on regional transportation facilities and services
- ✓ Analyzing the transportation network and searching for routing alternatives for moving large numbers of people, and strategies for dealing with bottlenecks.
- ✓ Analyzing the transportation network for emergency route planning/strategic gaps in the network.

**Given the MPO's responsibilities for funding strategies and projects that will improve the performance of the transportation system, the actions most appropriate for the MPO in security or disaster planning are:**

- ✓ Funding new strategies, technologies, and projects that can help prevent events
- ✓ Funding and perhaps coordinating a regional transportation surveillance system that can identify potential dangers prior to them occurring
- ✓ Funding communications systems and other technology to speed the response to an incident
- ✓ Funding recovery strategies

**Given the MPO's role as a forum for cooperative decision-making, the actions most appropriate for the MPO in security or disaster planning are:**

- ✓ Providing a forum for security and safety agencies to coordinate surveillance and prevention strategies
- ✓ Coordinating drills and exercises among transportation providers to practice emergency plans
- ✓ Coordinating with security officials in development of prevention strategies
- ✓ Providing a forum for discussions on coordinating emergency response
- ✓ Coordinating public information dissemination strategies
- ✓ Acting as a forum for developing appropriate recovery strategies
- ✓ Coordinating the stockpiling of strategic road and bridge components for rapid reconstruction

- ✓ Coordinating changes to multi-agency actions that will improve future responses

### **Future Security Planning Efforts by the HCMPO**

The HCMPO is excited about becoming involved in the security of Hidalgo County. Even though the HCMPO has not initiated any strategies involving security in the transportation planning process in the past, it is in the future.

The HCMPO is interested in becoming a *convener* in security and disaster planning by acting as a forum where security and disaster operations plans can be discussed and coordinated along with other plans in the region. Security and disaster planning strategies will be incorporated into the HCMPO's TAC and TPC agendas every month, giving opportunity for the desired agencies and stakeholders to get involved in the process. Up to this point, it has not been very clear what the MPOs responsibility is regarding security planning, but now it is very clear that even the minor security planning efforts can have a great impact in the mobility and security of the area. When we talk about security or disaster planning, it is important to remember that the role of an MPO is optimized when it becomes a forum for all agencies to coordinate on what the future strategies as a result of a terrorist attack or a natural disaster should be. Simple actions such as identifying the most vulnerable corridors in an imminent hurricane, or finding alternative routes to resume mobility in the region after an incident are critical steps toward achieving normalcy in the region. For this reason it is the primary objective of the HCMPO to involve key agencies such as the Lower Rio Grande Valley Development Council's (LRGVDC) 911 and Home Land Security Departments to become part of the security planning process.

Planning strategies regarding security or disaster incidents will open an opportunity to learn about other agencies, and it will also emphasize that Hidalgo County is not as vulnerable to a large magnitude incident as it is assumed when contingency plans have been put in place, and when each agency involved knows exactly what to do, placing great emphasis in keeping the public informed about an incident's development, and what the strategies to follow will be in order to avoid adding more chaos to the aftermath. It is also for this reason that the HCMPO wants to become involved in the Institutional Learning aspect of a security or disaster incident, by keeping records of the incident's development, human behavior patterns, alternative routes taken, amongst others.

Compiling and analyzing patterns of behavior by the general public and by first response agencies will create an invaluable blue print for future mitigation strategies that could be used in a future security or disaster incident, giving peace of mind to the public by restoring normalcy to the area.

The HCMPO will make a great effort to initiate this new endeavor and to create a solid milestone between all agencies involved in the process to establish clear and effective security and disaster planning strategies that will benefit all in Hidalgo County.

#### **SAFETEA-LU Planning Factor #4**

In reference to Title 23, PART 450, Subpart B, the following articles support our compliance with the fourth planning factor in SAFETEA-LU - “Increase accessibility and mobility of people and freight”.

In accordance with Article 306, the following items were addressed:

- ✓ Being that the metropolitan transportation planning process is continuous, cooperative and comprehensive, it aids in increasing the accessibility and mobility of people by considering comments from different populations such as minorities, the underserved, the elderly, the disabled, and other key stakeholders in order to improve public transportation thru the use of programs such as JARC and New Freedom. Participation by private and public transportation operators, state, local, and federal agencies, and other key stakeholders in the metropolitan transportation planning process, makes it possible to improve the accessibility and mobility of freight by addressing factors such as congestion, air quality, and safety, amongst others.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 316, the following items were addressed:

- ✓ The metropolitan transportation planning process requires the participation of citizens, state, local and federal agencies, public and private transportation operators, the private sector, and other stakeholders, it is possible to identify the

- mobility needs for populations such as minorities, the underserved, the elderly, and the disabled amongst others, in order to provide them with more accessible, affordable, and efficient public transportation thru programs such as JARC and New Freedom. It is also possible to determine the needs for the mobility of goods by addressing factors such as congestion, air quality, and safety, amongst others.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 318, the following items were addressed:

- ✓ Special transportation studies and projects such as a multimodal study, a regional transit plan, a hazmat study, a congestion management study, an incident management program, and the Texas Metropolitan Mobility Plan, help the HCMPO find areas of opportunity to increase the accessibility and mobility of people and freight by evaluating the connectivity within the transit system and with other modes of transportation such as bicycle and pedestrian lanes, detecting population areas that are underserved, and also by evaluating the road quality and congestion of the roadway system in order to increase the mobility of people and freight.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 322, the following items were addressed:

- ✓ Since the Metropolitan Transportation Plan has to consider a 20 year horizon; has to be validated by all interested parties; has to include long and short range strategies, since it has to be updated every 5 years; and requires public participation and comments; and has to facilitate the safe and efficient movement of people and goods, the MTP compiles the information required in order to identify projects that will aid in increasing the accessibility and mobility of people and freight by analyzing transit needs and service areas, as well as the quality and capacity of the network for the movement of freight.

- ✓ The implementation of the bicycle plan in 1996 aids in increasing the accessibility and mobility of people by providing an alternative to the use of the roadway network.
- ✓ The improvement of the transit system also aids in increasing the accessibility and mobility of people by adding another alternative to the use of the roadway system.
- ✓ Right of Way preservation in the Thoroughfare plan increases the accessibility and mobility of freight by securing expansion potential when future additional lanes or the widening of existing ones is necessary in a roadway to accommodate a considerable increase in freight movement.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 324, the following items were addressed:

- ✓ Since the TIP is derived from the MTP, it identifies in the short term critical projects that will aid in increasing the accessibility of people and freight by implementing JARC and New Freedom projects, as well as implementing projects that will alleviate the congested corridors allowing freight to move more efficiently.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

#### **SAFETEA-LU Planning Factor #5**

In reference to Title 23, PART 450, Subpart B, the following articles support our compliance with the fifth planning factor in SAFETEA-LU - “Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns”.

In accordance with Article 306, the following items were addressed:

- ✓ The HCMPO has developed a potential project environmental impact analysis on environmentally sensitive areas for the projects included in the FY 2008-2011 TIP to make sure that these projects don't impact federal lands, historical markers, or natural preserves.
- ✓ Being that the metropolitan transportation planning process is continuous, cooperative and comprehensive, and since it requires the participation of all stakeholders, it promotes consistency between all parties. Since environmental agencies are a part of the transportation planning process they help in the protection of the environment by sharing information on sensitive areas. The metropolitan transportation planning process promotes energy conservation and improves the quality of life thru the effort by all stakeholders to give priority to the most critical projects in the community.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 316, the following items were addressed:

- ✓ Because the metropolitan transportation planning process is developed in consultation with other agencies and interested parties utilizing the public participation plan, it is possible to help enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements, since stakeholders establish priorities thru a collaborative effort taking into consideration the vulnerable aspects and needs of: the sensitive environmental areas; colonias; populations such as minorities, the underserved, the elderly, and the disabled; federal lands, historical markers and natural preserves; public transportation; congestion, and economic development, amongst others.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 318, the following items were addressed:

- ✓ Special transportation studies and projects such as a multimodal study, a regional transit plan, a hazmat study, a congestion management study, an incident management program, the TMMP, help find areas of opportunity to improve the environment by reducing congestion and moving hazardous cargo thru better routes, promote energy conservation by increasing bicycle and pedestrian lanes and by increasing the use of the transit system, improve the quality of life and encourage economic development by increasing the mobility of people and freight.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 322, the following items were addressed:

- ✓ The implementation of the Multi Modal Plan in 2004 aids in promoting energy conservation and improving the quality of life by utilizing an alternative mode to the highway system and by promoting a healthier mode of transportation in the community.
- ✓ The CMP aids in promoting energy conservation, improving the quality of life, and encouraging economic growth by reducing idle vehicles and at the same time reducing emissions from less idle vehicles, and by relieving congestion, increasing the mobility of people and goods.
- ✓ The improvement of the transit system enhances the environment, promotes energy conservation, and improves the quality of life by reducing the number of vehicles in the highway system and at the same time by reducing the emission of contaminants as a direct result from having less vehicles on the roads.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 324, the following items were addressed:

- ✓ Since the TIP is derived from the MTP, it identifies critical projects that will aid in enhancing the environment, promoting energy conservation, improving the quality of life, and encouraging economic development.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

### **SAFETEA-LU Planning Factor #6**

In reference to Title 23, PART 450, Subpart B, the following articles support our compliance with the sixth planning factor in SAFETEA-LU - “Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight”.

In accordance with Article 306, the following items were addressed:

- ✓ Being that the metropolitan transportation planning process is continuous, cooperative, and comprehensive; and since it requires the coordination with the transit transportation plan, it promotes the integration and connectivity of the transportation system across and between modes for people and freight.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 316, the following items were addressed:

- ✓ Because the metropolitan transportation planning process is developed in consultation with key stakeholders including public and private transit providers, it promotes the integration and connectivity of the transportation system across and between modes for people by improving the transit service to populations such as minorities, the underserved, the elderly and the disabled and by improving mobility in Hidalgo County.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 318, the following items were addressed:

- ✓ Special transportation studies and projects such as a multimodal study helps promote the integration and connectivity of the transportation system across and between modes for people and freight by evaluating and improving the connectivity between different modes of transportation such as the transit system, bicycle and pedestrian lanes, resulting in an increase in the use of transit services reducing vehicles on the roadway system, and at the same time reducing congestion and increasing the mobility of freight.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 322, the following items were addressed:

- ✓ Since the MTP has to consider a 20 year horizon; has to be validated by all interested parties; has to be updated every 5 years; and has to include short and long term strategies; since it requires public participation and comments; since it has to facilitate the safe and efficient movement of people and goods, the MTP compiles the information needed in order to identify projects that will aid in promoting the integration and connectivity of the transportation system across and between modes for people and freight.
- ✓ The improvement of the transit system promotes the integration and connectivity of the transportation system between modes for people and freight by extending and relocating transit routes to have more connectivity with bicycle and pedestrian lanes, by increasing the use of the transit system reducing vehicles in the highway system, alleviating congestion and increasing the mobility of freight.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 324, the following items were addressed:

- ✓ Since the TIP is derived from the MTP, it identifies critical projects that will promote the integration and connectivity of the transportation system between modes for people and freight.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

### **SAFETEA-LU Planning Factor #7**

In reference to Title 23, PART 450, Subpart B, the following articles support our compliance with the seventh planning factor in SAFETEA-LU - “Promote efficient system management and operation”.

In accordance with Article 306, the following items were addressed:

- ✓ Being that the metropolitan transportation planning process has to be continuous, cooperative, and comprehensive; and it has to be carried out in coordination with the statewide transportation planning process; this makes the system’s management and operation more efficient.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 308, the following items were addressed:

- ✓ The development of a UPWP in coordination with the Texas Department of Transportation, local and federal governments, transit operators, and citizens thru the public participation plan, promotes efficient system management and operation by setting clear goals for the present and the future of the MPA, and by evaluating the completion of previous goals, determining how efficient the program has been and by determining which areas of the program need to be improved.

- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 312, the following items were addressed:

- ✓ The designation of a metropolitan planning area makes the system management and operation more efficient by avoiding duplication of the metropolitan planning areas.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 314, the following items were addressed:

- ✓ A metropolitan planning agreement sets clear goals and responsibilities for all the parties involved making the transportation system management and operation more efficient.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 316, the following items were addressed:

- ✓ The participation of the public and the involvement and consultation with other entities aid in making the transportation system management and operation more efficient.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 322, the following items were addressed:

- ✓ Since the MTP has to consider a 20 year horizon; has to be validated by all interested parties; has to include short and long term strategies; since it has to be updated every 5 years; and since it requires public participation and

comments; since it has to be developed in consultation with other State and local agencies, the MTP aids in making the transportation system management and operation more efficient.

- ✓ The transit system also aids in making the transportation system's operation and management more efficient by increasing the use of public transit, this means less cars on the roadways, making rehabilitation and maintenance easier for implementation, and by increasing the mobility of the system.
- ✓ The thoroughfare plan also aids in improving the management and operation of the transportation system by having an accurate description of a roadway's future intended functional classification.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 324, the following items were addressed:

- ✓ Since the TIP is derived from the MTP, it also aids in making the transportation system management and operation more efficient.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

### **SAFETEA-LU Planning Factor #8**

In reference to Title 23, PART 450, Subpart B, the following articles support our compliance with the eighth planning factor in SAFETEA-LU - "Emphasize the preservation of the existing transportation system".

In accordance with Article 306, the following items were addressed:

- ✓ Being that the metropolitan transportation planning process is continuous, cooperative and comprehensive; since it has to be carried out in coordination with the statewide transportation planning process; since the MPOs, States and public transportation operators establish planning goals, define TIP priorities,

and assess transportation investment decisions, it is possible to pay special attention to maintenance and rehabilitation, since without them the transportation system would collapse.

- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 318, the following items were addressed:

- ✓ Special transportation studies such as a pavement roughness index incorporated in the congestion management process study, or a TMMP, aid in identifying the needs and funding levels required for rehabilitation and maintenance, making the preservation of the transportation system a priority.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 322, the following items were addressed:

- ✓ Since the MTP has to consider a 20 year horizon; has to include long and short term strategies; has to be reviewed every 5 years; and since it has to be validated by all interested parties, special emphasis is placed on maintenance and rehabilitation in order to preserve the existing transportation system.
- ✓ The implementation of the Multi Modal Plan in 2004 aids in the preservation of the existing transportation system by incorporating additional bicycle lanes, reducing the impact on the existing roadway system.
- ✓ Right of Way preservation via the Thoroughfare plan also preserves the existing transportation system by securing expansion potential for future additional lanes, or when widening of the existing ones becomes necessary in order to accommodate a considerable increase in vehicles.
- ✓ An increase in the use of the transit system aids in the preservation of the existing transportation system by having less vehicles on the roads.
- ✓ The pavement management system also aids in the preservation of the existing transportation system by determining the age of the existing roads, placing

emphasis on roadways older than 20 years, which become a priority in the rehabilitation category for funding, thus preserving the existing system.

- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

In accordance with Article 324, the following items were addressed:

- ✓ Since the Transportation Improvement Program is derived from the MTP, it also emphasizes the preservation of the existing transportation system.
- ✓ Compliance with this article was discussed under the first planning factor in this chapter.

## **Supportive Articles**

The following Articles support the HCMPO's compliance with the eight planning factors in SAFETEA-LU.

### **Article 306.- Scope of the metropolitan transportation planning process**

- *The metropolitan transportation planning process shall be continuous, cooperative, and comprehensive, and provide for consideration and implementation of projects, strategies, and services that will address the 8 planning factors in SAFETEA-LU.*
- *The metropolitan transportation planning process shall be carried out in coordination with the statewide transportation planning process.*
- *In carrying out the metropolitan transportation planning process, MPOs, States, and public transportation operators may establish planning goals, defining TIP priorities, and assessing transportation investment decisions, including transportation system safety, operations, preservation and maintenance, as well as strategies and policies to support homeland security and to safeguard the personal safety of all motorized and non-motorized users.*
- *Preparation of the coordinated public transit-human services transportation plan should be coordinated and consistent with the metropolitan transportation planning process.*

- *The metropolitan transportation planning process should be consistent with the SHSP and other transit safety and security planning and review processes, plans, and programs.*

**Article 308.- Funding for transportation planning and unified planning work programs**

- *Metropolitan transportation planning activities performed with funds provided under title 23 USC and title 49 USC shall be documented in a unified planning work program (UPWP) or simplified statement of work.*
- *Each MPO in cooperation with the State and public transportation operators shall develop a UPWP that includes a discussion of the planning priorities facing the MPA. The UPWP shall identify work proposed for the next one or two-year period by major activity and task in sufficient detail to indicate who will perform the work, the schedule for completing the work, the resulting products, the proposed funding by activity/task, and a summary of the total amounts and sources of Federal and matching funds.*

**Article 312.- Metropolitan planning area boundaries**

- *The boundaries of a metropolitan planning area (MPA) shall be determined by agreement between the MPO and the Governor. At a minimum the MPA boundaries shall encompass the entire existing urbanized area as defined by the Bureau of the Census plus the contiguous area expected to become urbanized within a 20-year forecast period for the metropolitan transportation plan.*

**Article 314.- Metropolitan planning agreements**

- *The MPO, the State, and the public transportation operators shall cooperatively determine their mutual responsibilities in carrying out the metropolitan transportation planning process. These responsibilities shall be clearly identified in written agreements among the MPO, the State and the public transportation operators serving the MPA. To the extent possible, a single agreement between all responsible parties should be developed. The written agreements shall include*

*specific provisions for cooperatively developing and sharing information related to the development of financial plans that support the metropolitan transportation plan and the metropolitan TIP and development of the annual listing of obligated projects.*

**Article 316.- Interested parties, participation, and consultation**

- *The MPO shall develop and use a documented participation plan that defines the following:*
- *A process for providing citizens, affective public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, users of public transportation, users of pedestrian walkways and bicycle transportation facilities, disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process*
  - *The participation plan shall be developed by the MPO in consultation with all interested parties and shall at a minimum describe explicit procedures, strategies and desired outcomes for providing adequate public notice of public participation activities and time for public review and comment at key decision points, providing timely notice and reasonable access to information about transportation issues and processes*
  - *Employ visualization techniques to describe metropolitan transportation plans and TIP's*
  - *Make public information available electronically with accessible formats and means such as the web*
  - *Hold public meetings at convenient and accessible locations and times*
  - *Demonstrate explicit consideration and response to public input received during the development of the metropolitan transportation plan and the TIP*
  - *Seek out and consider the needs of those traditionally underserved by existing transportation systems, such as low income and minority households*
  - *Provide an additional opportunity for public comment*
  - *Coordinate with the statewide transportation planning public involvement*
  - *Periodically review the effectiveness of the procedures and strategies contained in the participation plan to ensure a full and open participation process*

- *A minimum public comment period of 45 calendar days shall be provided before the initial or revised participation plan is adopted by the MPO*
- *In developing metropolitan transportation plans and TIP's, the MPO should consult with agencies and officials responsible for other planning activities within the MPA that are affected by transportation, or coordinate its planning process with such planning activities. Metropolitan transportation plans and TIPs shall be developed with due consideration of other related planning activities within the metropolitan area.*
- *When the MPA includes federal public lands the MPO shall appropriately involve the federal land management agencies in the development of the metropolitan transportation plan and the TIP.*
- *The MPOs shall develop a documented process that outlines roles, responsibilities, and key decision points for consulting with other governments and agencies.*

**Article 318.- Transportation planning studies and project development**

- *An MPO, State, or public transportation operator may undertake a multimodal systems-level corridor or subarea planning study as part of the metropolitan transportation planning process.*

**Article 320.- Congestion management process in transportation management areas (TMAs)**

- *The transportation planning process in a TMA shall address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities through the use of travel demand reduction and operational management strategies.*
- *The development of a congestion management process should result in multimodal system performance measures and strategies that can be reflected in the metropolitan transportation plan and the TIP. Consideration should be given to strategies that*

*manage demand, reduce single occupant vehicle (SOV) travel, and improve transportation system management and operations.*

➤ *The congestion management process shall be developed, established, and implemented as part of the metropolitan transportation planning process that includes coordination with transportation system management and operations activities. The congestion management process shall include:*

- *Methods to monitor and evaluate the performance of the multimodal transportation system*
- *Identify the causes of recurring and non-recurring congestion*
- *Identify and evaluate strategies*
- *Provide information supporting the implementation of actions, and evaluate the effectiveness of implemented actions*
- *Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods*
- *Establishment of a coordinated program for data collection and system performance monitoring to define the extent and duration of congestion, to contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented actions*
- *Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies that will contribute to the more effective use and improved safety and existing and future transportation systems based on the established performance measures*
- *Identification of an implementation schedule, implementation responsibilities and possible funding sources for each strategy proposed for implementation*
- *Implementation of a process for periodic assessment of the effectiveness of implemented strategies*

### **Article 322.- Development and content of the metropolitan transportation plan**

- *The metropolitan transportation planning process shall include the development of a transportation plan addressing no less than a 20 year planning horizon as of the effective date.*
- *The transportation plan shall include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.*
- *The MPO shall review and update the transportation plan at least every five years in attainment areas to confirm the transportation plan's validity and consistency with current and forecasted transportation and land use conditions and trends and to extend the forecast period to at least a 20 year planning horizon.*
- *The MPO, the State, and the public transportation operator shall validate data utilized in preparing other existing modal plans for providing input to the transportation plan. In updating the transportation plan, the MPO shall use the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity.*
- *The metropolitan transportation plan shall include at the minimum:*
  - *Projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan*
  - *Existing and proposed transportation facilities that should function as an integrated metropolitan transportation system*
  - *Operation and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods*
  - *Consideration of the results of the congestion management process in TMA's*
  - *Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure and provide for multimodal capacity increases based on regional priorities and needs*
  - *Design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail regardless of funding source*

- *A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, the discussion may focus on policies, programs, or strategies rather than at the project level*
  - *Pedestrian walkways and bicycle transportation facilities*
  - *Transportation and transit enhancement activities*
  - *A financial plan that demonstrates how the adopted transportation plan can be implemented*
- *The MPO shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the transportation plan.*
  - *The metropolitan transportation plan should include a safety element that incorporates or summarizes the priorities, goals, countermeasures, or projects for the MPA contained in the Strategic Highway Safety Plan, as well as emergency relief and disaster preparedness plans and strategies and policies that support homeland security and safeguard the personal security of all motorized and non-motorized users.*
  - *The MPO shall provide citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, users of public transportation, pedestrian walkways and bicycle transportation facilities, disabled, and other interested parties with a reasonable opportunity to comment on the transportation.*
  - *The metropolitan transportation plan shall be published or otherwise made readily available by the MPO for public review, including in electronically accessible formats and means such as the internet.*

**Article 324.- Development and content of the transportation improvement program (TIP)**

- *The MPO in cooperation with the State and any affected public transportation operators, shall develop a TIP for the metropolitan planning area. The TIP shall cover a period of no less than four years, be updated at least every four years, and be approved by the MPO and Governor.*

- *The MPO shall provide all interested parties with a reasonable opportunity to comment on the proposed TIP.*
- *The TIP shall include a capital and non capital surface transportation projects or phases of projects within the boundaries of the metropolitan planning area.*
- *The TIP shall contain all regionally significant projects requiring an action by FHWA and FTA whether or not the projects are to be funded under title 23 USC or title 49 USC. For public information and conformity purposes, the TIP shall include all regionally significant projects proposed to be funded with Federal funds other than those administered by FHWA or FTA, as well as all regionally significant projects to be funded with non-Federal funds.*
- *The TIP shall include for each project or phase the following:*
  - *Sufficient descriptive material to identify the project or phase*
  - *Estimated total project cost, which may extend beyond the four years of the TIP*
  - *The amount of Federal funds proposed to be obligated during each program year for funds and sources of non-federal funds, for the second, third and fourth years, this includes the likely category or possible categories of Federal funds and sources of non-federal funds*
  - *Identification of the agencies responsible for carrying out the project or phase*
  - *In areas with Americans with disabilities Act required paratransit and key station plans, identification of those projects that will implement these plans.*
- *Each project or project phase included in the TIP shall be consistent with the approved metropolitan transportation plan.*
- *The TIP shall include a financial plan that demonstrates how the approved TIP can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the TIP, and recommends any additional financing strategies for needed projects and programs. For illustrative purposes, the financial plan may include additional projects that would be included in the TIP if reasonable additional resources beyond those identified in the financial plan were to become available.*
- *Financial constraint shall be demonstrated and maintained by year and shall include sufficient financial information to demonstrate which projects are to be implemented using current and/or reasonably available revenues. In the case of*

*proposed funding sources, strategies for ensuring their availability shall be identified in the financial plan.*

- *For the purpose of including projects funded under 49 USC 5309 in a TIP, the following approach shall be followed: the total federal share of projects included in the first year of the TIP shall not exceed levels of funding committed to the MPA; the total federal share of projects included in the second, third, fourth and subsequent years of the TIP may not exceed levels of funding committed or reasonably expected to be available to the MPA.*
- *As a management tool for monitoring progress in implementing the transportation plan, the TIP should identify the criteria and process for prioritizing implementation of transportation plan elements for inclusion in the TIP and any changes in priorities from previous TIP's, list major projects from the previous TIP that were implemented and identify any significant delays in the planned implementation of major projects.*