

Long Range Transportation Plan (LRTP) 101 Workshop – for TMAs

Date: March 28th, 2014

Time: 9:00-3:30pm

Location: MDOT Aeronautics Auditorium, Lansing MI

Handout List

- Handout A.** Selected Federal Regulations Regarding Metropolitan Transportation Planning and Programming
- Handout B.** Selected Federal Laws (Under MAP-21) Regarding Metropolitan Transportation Planning and Programming
- Handout C.** Summary of Required LRTP Elements/Actions for TMAs
- Handout D.** LRTP Development Steps/Actions for TMAs
- Handout E.** Sample Outline of LRTP Document
- Handout F.** Transportation Planning Acronyms
- Handout G.** Data and Agency Resources Websites
- Handout H.** MDOT Statewide Planning Section (SPS), Statewide and Urban Travel Analysis Section (SUTA), and Other MDOT Staff Contact Information

Handout A

Selected Federal Regulations Regarding Metropolitan Transportation Planning and Programming¹

UNITED STATES CODE OF FEDERAL REGULATIONS

TITLE 23: Highways

CHAPTER I – FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

SUBCHAPTER E – PLANNING AND RESEARCH

PART 450 – PLANNING ASSISTANCE AND STANDARDS

Subpart C – METROPOLITAN TRANSPORTATION PLANNING AND PROGRAMMING

§450.300 Purpose.

The purposes of this subpart are to implement the provisions of 23 U.S.C. 134 and 49 U.S.C. 5303, as amended, which:

(a) Sets forth the national policy that the MPO designated for each urbanized area is to carry out a continuing, cooperative, and comprehensive multimodal transportation planning process, including the development of a metropolitan transportation plan and a transportation improvement program (TIP), that encourages and promotes the safe and efficient development, management, and operation of surface transportation systems to serve the mobility needs of people and freight (including accessible pedestrian walkways and bicycle transportation facilities) and foster economic growth and development, while minimizing transportation-related fuel consumption and air pollution; and

(b) Encourages continued development and improvement of metropolitan transportation planning processes guided by the planning factors set forth in 23 U.S.C. 134(h) and 49 U.S.C. 5303(h).

§450.306 Scope of the metropolitan transportation planning process.

(a) 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 following factors:

(1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;

¹ Current as of February 14, 2014, the original regulations are located at: <http://www.ecfr.gov/cgi-bin/text-idx?SID=26a1d69009f2ef24070fc2a60ea1a993&node=23:1.0.1.5.11.3&rgn=div6>.

(2) Increase the safety of the transportation system for motorized and non-motorized users;

(3) Increase the security of the transportation system for motorized and non-motorized users;

(4) Increase accessibility and mobility of people and freight;

(5) 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;

(6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;

(7) Promote efficient system management and operation; and

(8) Emphasize the preservation of the existing transportation system.

(b) Consideration of the planning factors in paragraph (a) of this section shall be reflected, as appropriate, in the metropolitan transportation planning process. The degree of consideration and analysis of the factors should be based on the scale and complexity of many issues, including transportation system development, land use, employment, economic development, human and natural environment, and housing and community development.

(c) The failure to consider any factor specified in paragraph (a) of this section shall not be reviewable by any court under title 23 U.S.C., 49 U.S.C. Chapter 53, subchapter II of title 5, U.S.C. Chapter 5, or title 5 U.S.C. Chapter 7 in any matter affecting a metropolitan transportation plan, TIP, a project or strategy, or the certification of a metropolitan transportation planning process.

(d) The metropolitan transportation planning process shall be carried out in coordination with the Statewide transportation planning process required by 23 U.S.C. 135 and 49 U.S.C. 5304.

(e) In carrying out the metropolitan transportation planning process, MPOs, States, and public transportation operators may apply asset management principles and techniques in establishing 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 security of all motorized and non-motorized users.

§450.316 Interested parties, participation, and consultation.

(a) The MPO shall develop and use a documented participation plan that defines a process for providing citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of

pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.

(1) 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:

(i) Providing adequate public notice of public participation activities and time for public review and comment at key decision points, including but not limited to a reasonable opportunity to comment on the proposed metropolitan transportation plan and the TIP;

(ii) Providing timely notice and reasonable access to information about transportation issues and processes;

(iii) Employing visualization techniques to describe metropolitan transportation plans and TIPs;

(iv) Making public information (technical information and meeting notices) available in electronically accessible formats and means, such as the World Wide Web;

(v) Holding any public meetings at convenient and accessible locations and times;

(vi) Demonstrating explicit consideration and response to public input received during the development of the metropolitan transportation plan and the TIP;

(vii) Seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services;

(viii) Providing an additional opportunity for public comment, if the final metropolitan transportation plan or TIP differs significantly from the version that was made available for public comment by the MPO and raises new material issues which interested parties could not reasonably have foreseen from the public involvement efforts;

(ix) Coordinating with the Statewide transportation planning public involvement and consultation processes under subpart B of this part; and

(x) Periodically reviewing the effectiveness of the procedures and strategies contained in the participation plan to ensure a full and open participation process.

(2) When significant written and oral comments are received on the draft metropolitan transportation plan and TIP (including the financial plans) as a result of the participation process in this section or the interagency consultation process required under the EPA transportation conformity regulations (40 CFR part 93), a summary, analysis, and report on the disposition of comments shall be made as part of the final metropolitan transportation plan and TIP.

(3) A minimum public comment period of 45 calendar days shall be provided before the initial or revised participation plan is adopted by the MPO. Copies of the approved participation plan shall be provided to the FHWA and the FTA for informational purposes and shall be posted on the World Wide Web, to the maximum extent practicable.

(b) In developing metropolitan transportation plans and TIPs, the MPO should consult with agencies and officials responsible for other planning activities within the MPA that are affected by transportation (including State and local planned growth, economic development, environmental protection, airport operations, or freight movements) or coordinate its planning process (to the maximum extent practicable) with such planning activities. In addition, metropolitan transportation plans and TIPs shall be developed with due consideration of other related planning activities within the metropolitan area, and the process shall provide for the design and delivery of transportation services within the area that are provided by:

(1) Recipients of assistance under title 49 U.S.C. Chapter 53;

(2) Governmental agencies and non-profit organizations (including representatives of the agencies and organizations) that receive Federal assistance from a source other than the U.S. Department of Transportation to provide non-emergency transportation services; and

(3) Recipients of assistance under 23 U.S.C. 204.

(c) When the MPA includes Indian Tribal lands, the MPO shall appropriately involve the Indian Tribal government(s) in the development of the metropolitan transportation plan and the TIP.

(d) 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.

(e) MPOs shall, to the extent practicable, develop a documented process(es) that outlines roles, responsibilities, and key decision points for consulting with other governments and agencies, as defined in paragraphs (b), (c), and (d) of this section, which may be included in the agreement(s) developed under §450.314.

§450.320 Congestion management process in transportation management areas.

(a) 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 eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53 through the use of travel demand reduction and operational management strategies.

(b) 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. The level of system performance deemed acceptable by State and local transportation officials may vary by type of transportation facility, geographic location (metropolitan area or subarea), and/or time of day. In addition, consideration should be given to strategies that manage demand, reduce single occupant vehicle (SOV) travel, and improve transportation system management and operations. Where the addition of general purpose lanes is determined to be an appropriate congestion management strategy, explicit consideration is to be given to the incorporation of appropriate features into the SOV project to facilitate future demand management strategies and operational improvements that will maintain the functional integrity and safety of those lanes.

(c) 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:

(1) Methods to monitor and evaluate the performance of the multimodal transportation system, identify the causes of recurring and non-recurring congestion, identify and evaluate alternative strategies, provide information supporting the implementation of actions, and evaluate the effectiveness of implemented actions;

(2) 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. Since levels of acceptable system performance may vary among local communities, performance measures should be tailored to the specific needs of the area and established cooperatively by the State(s), affected MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area;

(3) 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. To the extent possible, this data collection program should be coordinated with existing data sources (including archived operational/ITS data) and coordinated with operations managers in the metropolitan area;

(4) 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 of existing and future transportation systems based on the established performance measures. The following categories of strategies, or combinations of strategies, are some examples of what should be appropriately considered for each area:

(i) Demand management measures, including growth management and congestion pricing;

(ii) Traffic operational improvements;

(iii) Public transportation improvements;

(iv) ITS technologies as related to the regional ITS architecture; and

(v) Where necessary, additional system capacity;

(5) Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation; and

(6) Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures. The results of this evaluation shall be provided to decisionmakers and the public to provide guidance on selection of effective strategies for future implementation.

(d) In a TMA designated as nonattainment area for ozone or carbon monoxide pursuant to the Clean Air Act, Federal funds may not be programmed for any project that will result in a significant increase in the carrying capacity for SOVs (*i.e.*, a new general purpose highway on a new location or adding general purpose lanes, with the exception of safety improvements or the elimination of bottlenecks), unless the project is addressed through a congestion management process meeting the requirements of this section.

(e) In TMAs designated as nonattainment for ozone or carbon monoxide, the congestion management process shall provide an appropriate analysis of reasonable (including multimodal) travel demand reduction and operational management strategies for the corridor in which a project that will result in a significant increase in capacity for SOVs (as described in paragraph (d) of this section) is proposed to be advanced with Federal funds. If the analysis demonstrates that travel demand reduction and operational management strategies cannot fully satisfy the need for additional capacity in the corridor and additional SOV capacity is warranted, then the congestion management process shall identify all reasonable strategies to manage the SOV facility safely and effectively (or to facilitate its management in the future). Other travel demand reduction and operational management strategies appropriate for the corridor, but not appropriate for incorporation into the SOV facility itself, shall also be identified through the congestion management process. All identified reasonable travel demand reduction and operational management strategies shall be incorporated into the SOV project or committed to by the State and MPO for implementation.

(f) State laws, rules, or regulations pertaining to congestion management systems or programs may constitute the congestion management process, if the FHWA and the FTA find that the State laws, rules, or regulations are consistent with, and fulfill the intent of, the purposes of 23 U.S.C. 134 and 49 U.S.C. 5303.

§450.322 Development and content of the metropolitan transportation plan.

(a) 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. In nonattainment and maintenance areas, the effective date of the transportation plan shall be the date of a conformity determination issued by the FHWA and the FTA. In attainment areas, the effective date of the transportation plan shall be its date of adoption by the MPO.

(b) 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.

(c) The MPO shall review and update the transportation plan at least every four years in air quality nonattainment and maintenance areas and 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. In addition, the MPO may revise the transportation plan at any time using the procedures in this section without a requirement to extend the horizon year. The transportation plan (and any revisions) shall be approved by the MPO and submitted for information purposes to the Governor. Copies of any updated or revised transportation plans must be provided to the FHWA and the FTA.

(d) In metropolitan areas that are in nonattainment for ozone or carbon monoxide, the MPO shall coordinate the development of the metropolitan transportation plan with the process for developing transportation control measures (TCMs) in a State Implementation Plan (SIP).

(e) The MPO, the State(s), and the public transportation operator(s) 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 base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. The MPO shall approve transportation plan contents and supporting analyses produced by a transportation plan update.

(f) The metropolitan transportation plan shall, at a minimum, include:

(1) The projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan;

(2) Existing and proposed transportation facilities (including major roadways, transit, multimodal and intermodal facilities, pedestrian walkways and bicycle facilities, and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan. In addition, the locally preferred alternative selected from an Alternatives Analysis under the FTA's Capital Investment Grant program (49 U.S.C. 5309 and 49 CFR part 611) needs to be adopted as part of the metropolitan transportation plan as a condition for funding under 49 U.S.C. 5309;

(3) Operational 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;

(4) Consideration of the results of the congestion management process in TMAs that meet the requirements of this subpart, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide;

(5) 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. The metropolitan transportation plan may consider projects and strategies that address areas or corridors where current or projected congestion threatens the efficient functioning of key elements of the metropolitan area's transportation system;

(6) Design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source, in nonattainment and maintenance areas for conformity determinations under the EPA's transportation conformity rule (40 CFR part 93). In all areas (regardless of air quality designation), all proposed improvements shall be described in sufficient detail to develop cost estimates;

(7) A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The discussion shall be developed in consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation;

(8) Pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g);

(9) Transportation and transit enhancement activities, as appropriate; and

(10) A financial plan that demonstrates how the adopted transportation plan can be implemented.

(i) For purposes of transportation system operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways (as defined by 23 U.S.C. 101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53).

(ii) For the purpose of developing the metropolitan transportation plan, the MPO, public transportation operator(s), and State shall cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under §450.314(a). All necessary financial resources from public and private sources that are

reasonably expected to be made available to carry out the transportation plan shall be identified.

(iii) The financial plan shall include recommendations on any additional financing strategies to fund projects and programs included in the metropolitan transportation plan. In the case of new funding sources, strategies for ensuring their availability shall be identified.

(iv) In developing the financial plan, the MPO shall take into account all projects and strategies proposed for funding under title 23 U.S.C., title 49 U.S.C. Chapter 53 or with other Federal funds; State assistance; local sources; and private participation. Starting December 11, 2007, revenue and cost estimates that support the metropolitan transportation plan must use an inflation rate(s) to reflect "year of expenditure dollars," based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s).

(v) For the outer years of the metropolitan transportation plan (*i.e.*, beyond the first 10 years), the financial plan may reflect aggregate cost ranges/cost bands, as long as the future funding source(s) is reasonably expected to be available to support the projected cost ranges/cost bands.

(vi) For nonattainment and maintenance areas, the financial plan shall address the specific financial strategies required to ensure the implementation of TCMs in the applicable SIP.

(vii) For illustrative purposes, the financial plan may (but is not required to) include additional projects that would be included in the adopted transportation plan if additional resources beyond those identified in the financial plan were to become available.

(viii) In cases that the FHWA and the FTA find a metropolitan transportation plan to be fiscally constrained and a revenue source is subsequently removed or substantially reduced (*i.e.*, by legislative or administrative actions), the FHWA and the FTA will not withdraw the original determination of fiscal constraint; however, in such cases, the FHWA and the FTA will not act on an updated or amended metropolitan transportation plan that does not reflect the changed revenue situation.

(g) 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 consultation shall involve, as appropriate:

(1) Comparison of transportation plans with State conservation plans or maps, if available;
or

(2) Comparison of transportation plans to inventories of natural or historic resources, if available.

(h) 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 required under 23 U.S.C. 148, as well as (as appropriate) emergency relief and disaster preparedness plans and strategies and policies that support homeland security (as appropriate) and safeguard the personal security of all motorized and non-motorized users.

(i) The MPO shall provide citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan using the participation plan developed under §450.316(a).

(j) The metropolitan transportation plan shall be published or otherwise made readily available by the MPO for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web.

(k) A State or MPO shall not be required to select any project from the illustrative list of additional projects included in the financial plan under paragraph (f)(10) of this section.

(l) In nonattainment and maintenance areas for transportation-related pollutants, the MPO, as well as the FHWA and the FTA, must make a conformity determination on any updated or amended transportation plan in accordance with the Clean Air Act and the EPA transportation conformity regulations (40 CFR part 93). During a conformity lapse, MPOs can prepare an interim metropolitan transportation plan as a basis for advancing projects that are eligible to proceed under a conformity lapse. An interim metropolitan transportation plan consisting of eligible projects from, or consistent with, the most recent conforming transportation plan and TIP may proceed immediately without revisiting the requirements of this section, subject to interagency consultation defined in 40 CFR part 93. An interim metropolitan transportation plan containing eligible projects that are not from, or consistent with, the most recent conforming transportation plan and TIP must meet all the requirements of this section.

§450.334 Self-certifications and Federal certifications.

(a) For all MPAs, concurrent with the submittal of the entire proposed TIP to the FHWA and the FTA as part of the STIP approval, the State and the MPO shall certify at least every four years that the metropolitan transportation planning process is being carried out in accordance with all applicable requirements including:

(1) 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart;

(2) In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;

(3) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;

(4) 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;

(5) Section 1101(b) of the MAP-21 (Pub. L. 112-141) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;

(6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;

(7) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) and 49 CFR parts 27, 37, and 38;

(8) The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;

(9) Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and

(10) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.

(b) In TMAs, the FHWA and the FTA jointly shall review and evaluate the transportation planning process for each TMA no less than once every four years to determine if the process meets the requirements of applicable provisions of Federal law and this subpart.

(1) After review and evaluation of the TMA planning process, the FHWA and FTA shall take one of the following actions:

(i) If the process meets the requirements of this part and a TIP has been approved by the MPO and the Governor, jointly certify the transportation planning process;

(ii) If the process substantially meets the requirements of this part and a TIP has been approved by the MPO and the Governor, jointly certify the transportation planning process subject to certain specified corrective actions being taken; or

(iii) If the process does not meet the requirements of this part, jointly certify the planning process as the basis for approval of only those categories of programs or projects that the FHWA and the FTA jointly determine, subject to certain specified corrective actions being taken.

(2) If, upon the review and evaluation conducted under paragraph (b)(1)(iii) of this section, the FHWA and the FTA do not certify the transportation planning process in a TMA, the Secretary may withhold up to 20 percent of the funds attributable to the metropolitan planning area of the MPO for projects funded under title 23 U.S.C. and title 49 U.S.C. Chapter 53 in addition to corrective actions and funding restrictions. The withheld funds shall be restored to

the MPA when the metropolitan transportation planning process is certified by the FHWA and FTA, unless the funds have lapsed.

(3) A certification of the TMA planning process will remain in effect for four years unless a new certification determination is made sooner by the FHWA and the FTA or a shorter term is specified in the certification report.

(4) In conducting a certification review, the FHWA and the FTA shall provide opportunities for public involvement within the metropolitan planning area under review. The FHWA and the FTA shall consider the public input received in arriving at a decision on a certification action.

(5) The MPO(s), the State(s), and public transportation operator(s) shall be notified of the actions taken under paragraphs (b)(1) and (b)(2) of this section. The FHWA and the FTA will update the certification status of the TMA when evidence of satisfactory completion of a corrective action(s) is provided to the FHWA and the FTA.

Handout B

Selected Federal Laws (Under MAP-21) Regarding Metropolitan Transportation Planning and Programming¹

UNITED STATES CODE

TITLE 23: Highways

CHAPTER I – FEDERAL-AID HIGHWAYS

Sec. 134. Metropolitan transportation planning

(a) Policy. - It is in the national interest -

(1) to encourage and promote the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight and foster economic growth and development within and between States and urbanized areas, while minimizing transportation-related fuel consumption and air pollution through metropolitan and Statewide transportation planning processes identified in this chapter; and

(2) to encourage the continued improvement and evolution of the metropolitan and Statewide transportation planning processes by metropolitan planning organizations, State departments of transportation, and public transit operators as guided by the planning factors identified in subsection (h) and section 135(d).

(c) General Requirements. -

(1) Development of long-range plans and tips. - To accomplish the objectives in subsection (a), metropolitan planning organizations designated under subsection (d), in cooperation with the State and public transportation operators, shall develop long-range transportation plans and transportation improvement programs through a performance-driven, outcome-based approach to planning for metropolitan areas of the State.

(2) Contents. - The plans and TIPs for each metropolitan area shall provide for the development and integrated management and operation of transportation systems and facilities (including accessible pedestrian walkways and bicycle transportation facilities) that will function as an intermodal transportation system for the metropolitan planning area and as an integral part of an intermodal transportation system for the State and the United States.

¹ Current as of October 19, 2012, the original laws are located at:
<http://www.fhwa.dot.gov/map21/legislation.cfm>.

(3) Process of development. - The process for developing the plans and TIPs shall provide for consideration of all modes of transportation and shall be continuing, cooperative, and comprehensive to the degree appropriate, based on the complexity of the transportation problems to be addressed.

(g) MPO Consultation in Plan and TIP Coordination. -

(1) Nonattainment areas. - If more than 1 metropolitan planning organization has authority within a metropolitan area or an area which is designated as a nonattainment area for ozone or carbon monoxide under the Clean Air Act (42 U.S.C. 7401 et seq.), each metropolitan planning organization shall consult with the other metropolitan planning organizations designated for such area and the State in the coordination of plans and TIPs required by this section.

(2) Transportation improvements located in multiple mpos. - If a transportation improvement, funded from the Highway Trust Fund or authorized under chapter 53 of title 49, is located within the boundaries of more than 1 metropolitan planning area, the metropolitan planning organizations shall coordinate plans and TIPs regarding the transportation improvement.

(3) Relationship with other planning officials. -

(A) In general. - The Secretary shall encourage each metropolitan planning organization to consult with officials responsible for other types of planning activities that are affected by transportation in the area (including State and local planned growth, economic development, environmental protection, airport operations, and freight movements) or to coordinate its planning process, to the maximum extent practicable, with such planning activities.

(B) Requirements. - Under the metropolitan planning process, transportation plans and TIPs shall be developed with due consideration of other related planning activities within the metropolitan area, and the process shall provide for the design and delivery of transportation services within the metropolitan area that are provided by -

(i) recipients of assistance under chapter 53 of title 49;

(ii) governmental agencies and nonprofit organizations (including representatives of the agencies and organizations) that receive Federal assistance from a source other than the Department of Transportation to provide nonemergency transportation services; and

(iii) recipients of assistance under section 204.

(h) Scope of Planning Process. -

(1) In general. - The metropolitan planning process for a metropolitan planning area under this section shall provide for consideration of projects and strategies that will

(A) support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;

- (B) increase the safety of the transportation system for motorized and nonmotorized users;
- (C) increase the security of the transportation system for motorized and nonmotorized users;
- (D) increase the accessibility and mobility of people and for freight;
- (E) 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;
- (F) enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- (G) promote efficient system management and operation; and
- (H) emphasize the preservation of the existing transportation system.

(2) Performance-based approach. -

(A) In general. - The metropolitan transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decision-making to support the national goals described in section 150(b) of this title and in section 5301(c) of title 49.

(B) Performance targets. -

(i) Surface transportation performance targets. -

(I) In general. - Each metropolitan planning organization shall establish performance targets that address the performance measures described in section 150(c), where applicable, to use in tracking progress towards attainment of critical outcomes for the region of the metropolitan planning organization.

(II) Coordination. - Selection of performance targets by a metropolitan planning organization shall be coordinated with the relevant State to ensure consistency, to the maximum extent practicable.

(ii) Public transportation performance targets. - Selection of performance targets by a metropolitan planning organization shall be coordinated, to the maximum extent practicable, with providers of public transportation to ensure consistency with sections 5326(c) and 5329(d) of title 49.

(C) Timing. - Each metropolitan planning organization shall establish the performance targets under subparagraph (B) not later than 180 days after the date on which the relevant State or provider of public transportation establishes the performance targets.

(D) Integration of other performance-based plans. - A metropolitan planning organization shall integrate in the metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures, and targets described in other State transportation plans and transportation processes, as well as any plans developed under chapter 53 of title 49 by providers of public transportation, required as part of a performance-based program.

(3) Failure to consider factors. - The failure to consider any factor specified in paragraphs (1) and (2) shall not be reviewable by any court under this title or chapter 53 of title 49, subchapter II of chapter 5 of title 5, or chapter 7 of title 5 in any matter affecting a transportation plan, a TIP, a project or strategy, or the certification of a planning process.

(i) Development of Transportation Plan. -

(1) Requirements. -

(A) In general. - Each metropolitan planning organization shall prepare and update a transportation plan for its metropolitan planning area in accordance with the requirements of this subsection.

(B) Frequency. -

(i) In general. - The metropolitan planning organization shall prepare and update such plan every 4 years (or more frequently, if the metropolitan planning organization elects to update more frequently) in the case of each of the following:

(I) Any area designated as nonattainment, as defined in section 107(d) of the Clean Air Act (42 U.S.C. 7407(d)).

(II) Any area that was nonattainment and subsequently designated to attainment in accordance with section 107(d)(3) of that Act (42 U.S.C. 7407(d)(3)) and that is subject to a maintenance plan under section 175A of that Act (42 U.S.C. 7505a).

(ii) Other areas. - In the case of any other area required to have a transportation plan in accordance with the requirements of this subsection, the metropolitan planning organization shall prepare and update such plan every 5 years unless the metropolitan planning organization elects to update more frequently.

(2) Transportation plan. - A transportation plan under this section shall be in a form that the Secretary determines to be appropriate and shall contain, at a minimum, the following:

(A) Identification of transportation facilities. -

(i) In general. - An identification of transportation facilities (including major roadways, transit, multimodal and intermodal facilities,

nonmotorized transportation facilities, and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions.

(ii) Factors. - In formulating the transportation plan, the metropolitan planning organization shall consider factors described in subsection (h) as the factors relate to a 20- year forecast period.

(B) Performance measures and targets. - A description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with subsection (h)(2).

(C) System performance report. - A system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in subsection (h)(2), including -

(i) progress achieved by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports; and

(ii) for metropolitan planning organizations that voluntarily elect to develop multiple scenarios, an analysis of how the preferred scenario has improved the conditions and performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified performance targets.

(D) Mitigation activities. -

(i) In general. - A long-range transportation plan shall include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan.

(ii) Consultation. - The discussion shall be developed in consultation with Federal, State, and tribal wildlife, land management, and regulatory agencies.

(E) Financial plan. -

(i) In general. - A financial plan that -

(I) demonstrates how the adopted transportation plan can be implemented;

(II) indicates resources from public and private sources that are reasonably expected to be made available to carry out the plan; and

(III) recommends any additional financing strategies for needed projects and programs.

(ii) Inclusions. - The financial plan may include, for illustrative purposes, additional projects that would be included in the adopted transportation plan if reasonable additional resources beyond those identified in the financial plan were available.

(iii) Cooperative development. - For the purpose of developing the transportation plan, the metropolitan planning organization, transit operator, and State shall cooperatively develop estimates of funds that will be available to support plan implementation.

(F) Operational and management strategies. - Operational 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.

(G) Capital investment and other strategies. - 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.

(H) Transportation and transit enhancement activities. - Proposed transportation and transit enhancement activities.

(3) Coordination with clean air act agencies. - In metropolitan areas that are in nonattainment for ozone or carbon monoxide under the Clean Air Act (42 U.S.C. 7401 et seq.), the metropolitan planning organization shall coordinate the development of a transportation plan with the process for development of the transportation control measures of the State implementation plan required by that Act.

(4) Optional scenario development. -

(A) In general. - A metropolitan planning organization may, while fitting the needs and complexity of its community, voluntarily elect to develop multiple scenarios for consideration as part of the development of the metropolitan transportation plan, in accordance with subparagraph (B).

(B) Recommended components. - A metropolitan planning organization that chooses to develop multiple scenarios under subparagraph (A) shall be encouraged to consider -

(i) potential regional investment strategies for the planning horizon;

(ii) assumed distribution of population and employment;

(iii) a scenario that, to the maximum extent practicable, maintains baseline conditions for the performance measures identified in subsection (h)(2);

(iv) a scenario that improves the baseline conditions for as many of the performance measures identified in subsection (h)(2) as possible;

(v) revenue constrained scenarios based on the total revenues expected to be available over the forecast period of the plan; and

(vi) estimated costs and potential revenues available to support each scenario.

(C) Metrics. - In addition to the performance measures identified in section 150(c), metropolitan planning organizations may evaluate scenarios developed under this paragraph using locally-developed measures.

(5) Consultation. -

(A) In general. - In each metropolitan area, the metropolitan planning organization 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 a long-range transportation plan.

(B) Issues. - The consultation shall involve, as appropriate -

(i) comparison of transportation plans with State conservation plans or maps, if available; or

(ii) comparison of transportation plans to inventories of natural or historic resources, if available.

(6) Participation by interested parties. -

(A) In general. - Each metropolitan planning organization shall provide citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan.

(B) Contents of participation plan. - A participation plan -

(i) shall be developed in consultation with all interested parties; and

(ii) shall provide that all interested parties have reasonable opportunities to comment on the contents of the transportation plan.

(C) Methods. - In carrying out subparagraph (A), the metropolitan planning organization shall, to the maximum extent practicable -

(i) hold any public meetings at convenient and accessible locations and times;

- (ii) employ visualization techniques to describe plans; and
- (iii) make public information available in electronically accessible format and means, such as the World Wide Web, as appropriate to afford reasonable opportunity for consideration of public information under subparagraph (A).

(7) Publication. - A transportation plan involving Federal participation shall be published or otherwise made readily available by the metropolitan planning organization for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web, approved by the metropolitan planning organization and submitted for information purposes to the Governor at such times and in such manner as the Secretary shall establish.

(8) Selection of projects from illustrative list. - Notwithstanding paragraph (2)(C), a State or metropolitan planning organization shall not be required to select any project from the illustrative list of additional projects included in the financial plan under paragraph (2)(C).

(j) Transportation Management Areas. -

(1) Identification and designation. -

(A) Required identification. - The Secretary shall identify as a transportation management area each urbanized area (as defined by the Bureau of the Census) with a population of over 200,000 individuals.

(B) Designations on request. - The Secretary shall designate any additional area as a transportation management area on the request of the Governor and the metropolitan planning organization designated for the area.

(2) Transportation plans. - In a transportation management area, transportation plans shall be based on a continuing and comprehensive transportation planning process carried out by the metropolitan planning organization in cooperation with the State and public transportation operators.

(3) Congestion management process. -

(A) In general. - Within a metropolitan planning area serving a transportation management area, the transportation planning process under this section shall address congestion management through a process that provides for effective management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding under this title and chapter 53 of title 49 through the use of travel demand reduction and operational management strategies.

(B) Schedule. - The Secretary shall establish an appropriate phase-in schedule for compliance with the requirements of this section but no sooner than 1 year after the identification of a transportation management area.

(4) Selection of projects. -

(A) In general. - All Federally funded projects carried out within the boundaries of a metropolitan planning area serving a transportation management area under this title (excluding projects carried out on the National Highway System) or under chapter 53 of title 49 shall be selected for implementation from the approved TIP by the metropolitan planning organization designated for the area in consultation with the State and any affected public transportation operator.

(B) National highway system projects. - Projects carried out within the boundaries of a metropolitan planning area serving a transportation management area on the National Highway System shall be selected for implementation from the approved TIP by the State in cooperation with the metropolitan planning organization designated for the area.

(5) Certification. -

(A) In general. - The Secretary shall -

(i) ensure that the metropolitan planning process of a metropolitan planning organization serving a transportation management area is being carried out in accordance with applicable provisions of Federal law; and

(ii) subject to subparagraph (B), certify, not less often than once every 4 years, that the requirements of this paragraph are met with respect to the metropolitan planning process.

(B) Requirements for certification. - The Secretary may make the certification under subparagraph (A) if -

(i) the transportation planning process complies with the requirements of this section and other applicable requirements of Federal law; and

(ii) there is a TIP for the metropolitan planning area that has been approved by the metropolitan planning organization and the Governor.

(C) Effect of failure to certify. -

(i) Withholding of project funds. - If a metropolitan planning process of a metropolitan planning organization serving a transportation management area is not certified, the Secretary may withhold up to 20 percent of the funds attributable to the metropolitan planning area of the metropolitan planning organization for projects funded under this title and chapter 53 of title 49.

(ii) Restoration of withheld funds. - The withheld funds shall be restored to the metropolitan planning area at such time as the metropolitan planning process is certified by the Secretary.

(D) Review of certification. - In making certification determinations under this paragraph, the Secretary shall provide for public involvement appropriate to the metropolitan area under review.

(l) Report on Performance-based Planning Processes. -

(1) In general. - The Secretary shall submit to Congress a report on the effectiveness of the performance-based planning processes of metropolitan planning organizations under this section, taking into consideration the requirements of this subsection

(2) Report. - Not later than 5 years after the date of enactment of the MAP-21, the Secretary shall submit to Congress a report evaluating -

(A) the overall effectiveness of performance-based planning as a tool for guiding transportation investments;

(B) the effectiveness of the performance-based planning process of each metropolitan planning organization under this section;

(C) the extent to which metropolitan planning organizations have achieved, or are currently making substantial progress toward achieving, the performance targets specified under this section and whether metropolitan planning organizations are developing meaningful performance targets; and

(D) the technical capacity of metropolitan planning organizations that operate within a metropolitan planning area of less than 200,000 and their ability to carry out the requirements of this section.

(3) Publication. - The report under paragraph (2) shall be published or otherwise made available in electronically accessible formats and means, including on the Internet.

(m) Abbreviated Plans for Certain Areas. -

(1) In general. - Subject to paragraph (2), in the case of a metropolitan area not designated as a transportation management area under this section, the Secretary may provide for the development of an abbreviated transportation plan and TIP for the metropolitan planning area that the Secretary determines is appropriate to achieve the purposes of this section, taking into account the complexity of transportation problems in the area.

(2) Nonattainment areas. - The Secretary may not permit abbreviated plans or TIPs for a metropolitan area that is in nonattainment for ozone or carbon monoxide under the Clean Air Act (42 U.S.C. 7401 et seq.).

(n) Additional Requirements for Certain Nonattainment Areas. -

(1) In general. - Notwithstanding any other provisions of this title or chapter 53 of title, for transportation management areas classified as nonattainment for ozone or carbon monoxide pursuant to the Clean Air Act (42 U.S.C. 7401 et seq.), Federal funds may not be advanced in such area for any highway project that will result in a significant increase in the carrying capacity for single-occupant vehicles unless the project is addressed through a congestion management process.

(2) Applicability. - This subsection applies to a nonattainment area within the metropolitan planning area boundaries determined under subsection (e).

Handout C

Summary of Required LRTP Elements/Actions for TMAs

Federal requirements of **MAP-21** [23 USC §134(i)] and the **U.S. Code of Federal Regulations** [23 CFR Part 450.322] describe specific elements/actions to be included in a long-range transportation plan. This handout attempts to summarize these elements to assist an MPO that serves as a TMA with identifying and developing each element for their LRTP.

1. Identification of Transportation Facilities

- ✓ TMA must include an inventory of existing and proposed transportation facilities (including major roadways, transit, multimodal and intermodal facilities, pedestrian walkways and bicycle facilities, and intermodal connectors).
- ✓ Emphasis must be given to those facilities that serve important national and regional transportation functions over the 20-year horizon of the plan.
- ✓ For metropolitan areas in nonattainment or maintenance areas, TMA must provide design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source, for conformity determinations under the EPA's transportation conformity rule (40 CFR Part 93).

2. Performance Measures and Targets

- ✓ TMA must include a description of the performance measures and performance targets used in assessing the performance of the transportation system.
- ✓ Considers how LRTPs might use performance measures to connect strategic goals, including those in a vision plan, to protect screening or selection criteria in programming for the TIP, and in transparent monitoring of results.
- ✓ Allows the LRTP to demonstrate aspects of a "performance based" planning process, including consideration of "outcome based" measures.

3. System Performance Report

- ✓ TMA must demonstrate progress toward the condition and performance of the transportation system with respect to performance targets based on the system performance recorded in the previous LRTP document.
- ✓ Requires the TMA that voluntarily elected to develop multiple scenarios to demonstrate how the preferred scenario has improved the condition and performance of the transportation system, and how changes in local policies and investments have impacted the costs necessary to achieve the identified performance targets.

4. Mitigation Activities

- ✓ TMA must include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities.
- ✓ Includes activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan.
- ✓ The discussion may focus on policies, programs, or strategies, rather than at the project level.
- ✓ The TMA must consult with federal, State, and tribal wildlife, land management, and regulatory agencies when deliberating mitigation activities.

5. Financial Resources Plan

- ✓ TMA must demonstrate how the adopted LRTP can be implemented by indicating resources from public and private sources that are reasonably expected to be made available to carry out the plan.
- ✓ Revenues and cost estimates that support the LRTP must use an inflation rate(s) to reflect “year of expenditure dollars,” based on reasonable financial principles and information, developed cooperatively by the TMA State, and public transportation providers(s).
- ✓ Recommends any additional financing strategies for needed projects and programs.
- ✓ The TMA, transit operator(s), and State must cooperatively develop estimates of funds that will be available to support plan implementation.
- ✓ For outer years of the LRTP (beyond the first 10 years), the financial resources plan may reflect combined ranges/cost bands, as long as the future funding source(s) is reasonably expected to be available to support the projected cost ranges/cost bands.

6. Congestion Management Process

- ✓ TMA must address congestion through a process that provides for safe and effective integrated management and operation of the multimodal transportation system of new and existing transportation facilities eligible for funding under 23 USC and 49 USC §53 through the use of travel demand reduction and operational management strategies.
- ✓ CMP should result in multimodal system performance measures and strategies that can be reflected in the LRTP and TIP; consideration given to strategies that manage demand, reduce single occupant vehicle (SOV) travel, and improve transportation system management and operations.
- ✓ CMP must 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 alternative 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 of existing and future transportation systems based on the established performance measures. The following categories of strategies, or combinations of strategies, are some examples of what should be appropriately considered for each area:
 - Demand management measures, including growth management and congestion pricing;
 - Traffic operational improvements;
 - Public transportation improvements;
 - ITS technologies as related to the regional ITS architecture; and
 - Where necessary, additional system capacity;
 - Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation; and
 - Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures.
- ✓ For TMAs designated as nonattainment for ozone or carbon monoxide: (1) federal funds may not be programmed for any project that will result in a significant increase in the carrying capacity for SOVs unless the project is addressed through a CMP; and (2) the CMP shall provide an appropriate analysis of reasonable (including multimodal) travel demand reduction and operational management strategies for the corridor in which a project that will result in a significant increase in capacity for SOVs is proposed to be advanced with Federal funds.

7. Operational and Management Strategies

- ✓ Requires the development of operational 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.
- ✓ Places a strong emphasis on the maintenance of existing transportation infrastructure.

8. Capital Investment and Other Strategies

- ✓ Requires the development of capital investment and other strategies to preserve the existing system, forecast future metropolitan transportation infrastructure needs, and provide for multimodal capacity increases based on regional priorities.
- ✓ The plan may consider projects and strategies that address areas or corridors where current or projected congestion threatens the efficient functioning of key features of the metropolitan area's transportation system.

9. Transportation and Transit Enhancement Activities

- ✓ Requires a discussion on proposed transportation and transit enhancement activities.

10. Public Involvement and Title VI/Environmental Justice

- ✓ TMA must provide citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the LRTP document.
- ✓ The TMA must employ a diversity of means to solicit and consider public input at multiple points in the planning process, including but not limited to, holding public meetings at convenient and accessible locations and times; employing visualization techniques to describe the plan; and making public information available in electronically accessible format and means, such as the World Wide Web, as appropriate.
- ✓ Reflects successful participation and support of transportation agencies, the business community, the general public, environmental justice communities, and other stakeholders.
- ✓ Measures the distribution of impacts to different socioeconomic and ethnic minorities and addresses inequalities.
- ✓ Incorporates steps to ensure access of the LRTP document and planning process to Limited English Proficiency populations.
- ✓ Demonstrates how public input is incorporated within the goals, objectives, and implementation of the plan.

11. Consultation

- ✓ TMA must consult, as appropriate, with Federal, State, Tribal, and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the LRTP.

- ✓ The consultation must involve, as appropriate, comparison of transportation plans with State conservation plans or maps, or with inventories of natural or historic resources, if available.
- ✓ In metropolitan areas that are in nonattainment for ozone or carbon monoxide, the MPO must coordinate development of the plan with the process for developing transportation control measures in the State implementation plan (SIP).

12. Safety and Security

- ✓ The TMA should include a safety element in the LRTP that incorporates or summarizes the priorities, goals, countermeasures, or projects for the metropolitan planning area contained in the Strategic Highway Safety Plan required under 23 USC §148.
- ✓ May incorporate emergency relief and disaster preparedness plans and strategies and policies that support homeland security, as appropriate, and safeguard the personal security of all motorized and non-motorized users.

13. Optional Scenario Development

- ✓ A TMA may elect to develop multiple scenarios for consideration as part of the development of the LRTP, including but not limited to:
 - Potential regional investment strategies for the 20-year planning horizon,
 - Assumed distribution of population and employment,
 - Maintenance of baseline conditions for the performance measures and targets,
 - Improvement of baseline conditions for as many of the performance measures and targets as possible,
 - Revenue constrained scenarios based on the total revenues expected to be available over the 20-year forecast period of the plan, and
 - Estimated costs and potential revenues available to support each scenario.

Handout D

LRTP Development Steps/Actions for TMAs

Development Step or Action	Lead Agency(s) ¹	Avg. Time to Complete
SCOPING		4 MONTHS
Hold Team Scoping Meeting with Planning Partners	TMA/SPS	1 Day
Update Vision, Goals, and Objectives	TMA/SPS	2-3 Months
Update Public Involvement Plan (PIP)	TMA/SPS	2-3 Months
Develop Draft LRTP Outline	TMA/SPS	1 Month
Determine Data and Inventory Needs	TMA/SPS	2 Months
Determine Base Year, Interim Years, and Horizon Year	TMA/SUTA	2-3 Months
Develop Performance Measures	TMA/SPS/SUTA	2 Months
Develop/Update Congestion Management Process (CMP)	TMA/SUTA	3 Months
Develop Estimated Revenue Projections	TMA/SPS	2 Months
Develop Project Selection Criteria	TMA/SPS	2 Months
Develop Tools for Analysis and Evaluation	TMA/SPS	2 Months
Begin Drafting LRTP Chapters	TMA	Ongoing
ANALYZE TRANSPORTATION SYSTEM CONDITIONS		18 MONTHS
Evaluate Existing System Conditions (Pavement, Bridge, Safety, Security, etc.)	TMA/SPS	6-9 Months
Perform Transit On-Board Surveys for Model Parameters	TMA/SUTA/ Transit Agency	4 Months
Develop Travel Demand Model Road Network for Base Year	TMA/SUTA/MCT	3 Months
Develop Travel Demand Model TAZ for Base Year	TMA/SUTA/MCT	1-2 Months
Develop Travel Demand Model Transit Network for Base Year	TMA/SUTA/MCT	2 Months
Gather State and Local Traffic Counts	TMA/SUTA/MCT	5-6 Months
Develop Base Year External-to-External Cordon Trip Tables	TMA/SUTA/MCT	1 Month
Develop Base Year Socioeconomic Data and Special Generators	TMA/SUTA/MCT	3 Months
Model Calibration/Validation for Base Year	TMA/SUTA/MCT	8 Months
Determine Future Growth Scenarios	TMA/SUTA/MCT	1 Month
Develop Future Years Socioeconomic Data and Special Generators	TMA/SUTA/MCT	3 Months
Develop Future Years External-to-External Cordon Trip Tables	TMA/SUTA/MCT	1 Month
Create Future Networks with TIP Projects	TMA/SUTA/MCT	3 Months
Create Future Years Trip Table and Assign Base and Existing and Committed (E + C) Network – Run TDM for Different Analysis Years	TMA/SUTA/MCT	2 Months
PERFORM NEEDS ANALYSIS		3 MONTHS
Determine Gaps Between Existing vs. Optimal System Conditions	TMA/SPS	3 Months
Identify Capacity Deficiencies from Travel Demand Model (Base and Future Years)	TMA/SUTA/MCT	3 Months
Evaluate Deficiencies	TMA/SUTA/MCT	1-3 Months
Prioritize/Analyze Preliminary List of Deficiencies (Using Travel Demand Model)	TMA/SUTA/MCT	1-2 Months
IDENTIFY SOLUTIONS		3 MONTHS
Review Need Analysis Results	TMA/Region	1 Month
Select and Prepare a Preliminary Project List	TMA/Region	1-2 Months
Test Potential Network Solutions	TMA/SUTA/MCT	1-3 Months
Evaluate Alternatives	TMA/Region	1 Month
Review Preliminary Project List	TMA/Region	1-2 Months
Apply Environmental Justice (EJ) Thresholds	TMA/SPS	1 Month
Environmental Mitigation	TMA/SPS	1-3 Months
Consultation	TMA/SPS	1-3 Months
Select and Prepare a Recommended Project List	TMA/Region	1-2 Months
ESTABLISH FINANCIAL RESOURCES PLAN		2 MONTHS
Develop Financial Resources Plan Showing Constraint	TMA/SPS	2 Months
Develop TIP and Long-Term Investment Strategies	TMA/SPS	1 Month
DEVELOP AND APPROVE THE PLAN		4 MONTHS
Assemble and Approve Draft LRTP Document	TMA	2-3 Months
Conduct Public Meetings	TMA	1 Month
Assemble and Approve Final LRTP Document	TMA	1 Month
TRANSMITTAL OF PLAN TO MDOT/FEDERAL AGENCIES		3 MONTHS
Send Copies of Final LRTP Document to MDOT	TMA	1 Day
MDOT Compliance Review of Final LRTP Document	SPS	1 Month
MDOT Sends Copies of Final LRTP to FHWA/FTA for Concurrence	SPS	1 Day
FHWA/FTA Concurs with Final LRTP Document ²	FHWA/FTA/EPA	1-2 Months

SPS = MDOT Statewide Planning Section
 STPD = MDOT Statewide Transportation Planning Division
 FHWA = Federal Highway Administration
 EPA = U.S. Environmental Protection Agency

SUTA = MDOT Statewide and Urban Travel Analysis Section
 Region = MDOT Region
 FTA = Federal Transit Administration
 MCT = Model Coordination Team

¹ Lead agency(s) is responsible for completing the specified step; however, the MPO is responsible for coordinating all steps of the development process with identified planning partners (stakeholders, appointed and elected officials, transit providers, State and federal agencies).

² For MPOs in nonattainment areas, the EPA must provide a Conformity Determination before final approval of the Plan.

Handout E

Sample Outline of LRTP Document¹

The following outlines possible elements or chapters to include within a metropolitan long-range transportation plan. The list is not exhaustive nor is it necessary to include each one of these elements in order to develop a successful plan. The following section is merely a recommendation to facilitate ideas regarding elements/chapters can be useful and productive to include in a plan.

Executive Summary

1) Introduction

- a) Overview of Plan
- b) Description of the MPO
- c) Summary of Planning Process
 - i) Eight Federal Planning Factors
 - ii) Brief Description of Public and Stakeholder Involvement

2) Regional Overview

- a) Brief History of Region
- b) Transportation History of the Region
- c) Geography of Region
 - i) Map of MPO Planning Area
 - ii) Map of Political Jurisdictions of the Region
 - iii) Map of Physical Features of the Region

3) Regional Vision, Goals, and Objectives

- a) Desired Overall Direction for the Region
- b) Plans Reviewed During LRTP Development
 - i) State
 - ii) Regional
 - iii) County
 - iv) Local
 - (1) Modal Plans
 - (2) Land Use Plans
 - (3) Parks and Recreation Plans
 - (4) Zoning Ordinances
 - (5) Corridor Studies
 - (6) Economic Development Plans

¹ Parts of this outline were sampled from PennDOT's *Developing Regional Long-Range Plans* (2006) publication located at: <http://www.pamobilityplan.com/pubs/FinalLRTPGuide.pdf>.

- (7) Utility Plans
- (8) Energy/Climate Change Plans
- (9) Employment Forecasts

4) Performance Measures

- a) National Performance Measures
- b) State Performance Measures and Targets
- c) MPO Performance Measures and Targets

5) Progress Since Last Plan

- a) List and Status of Targets
- b) List of Projects Completed Since Last Plan
- c) List of Projects in Progress Since Last Plan

6) Public Involvement

- a) Public Involvement Activities During Plan Development
- b) Public Notices
- c) Public Open Houses
- d) Public Hearings
- e) Solicitation and Responses to Comments

7) Inventory of Existing Transportation System (Current Conditions and Performance)

- a) Highways
 - i) Travel Corridors
 - ii) General Travel
 - iii) Truck Traffic
 - iv) Road Quality
 - v) Bridge Ratings Quality
 - vi) Safety
 - vii) Intelligent Transportation Systems (ITS)
 - (1) Descriptions of System and Equipment Employed
 - viii) Ridesharing and Carpool/Vanpool
 - ix) Travel Demand Management
- b) Public Transit
- c) Non-Motorized Facilities
- d) Passenger Rail Service
- e) Passenger Air Service
- f) Private Carriers
 - i) Regional Bus Service
 - ii) Charter Bus Services
 - iii) Taxi Services
- g) Freight
- h) Truck Freight
- i) Rail Freight

- j) Ports and Waterways
- k) Air Cargo Facilities
- l) Security
 - i) Describe Current Security Plans (without any sensitive details)

8) Trends and Projections

- a) Population
- b) Economic
- c) Employment
- d) Travel Patterns
- e) Land Use
 - i) Development Patterns
 - ii) Open Space
 - iii) Transit-Oriented Development
 - iv) Land Use Scenarios

9) Regional Issues

- a) Analysis of Background Research
- b) System Condition
- c) System Operations
- d) Trends Affecting Regional Transportation

10) Travel Demand Model Process¹

- a) Network Development
- b) Socioeconomic Data
 - i) Population and Age
 - ii) Households
 - iii) Employment
- c) Trip Generation
- d) Trip Distribution
- e) Modal Choice
- f) Trip Assignment
- g) Model Calibration/Validation
- h) Applications of the Calibrated/Validated Model
- i) System Analysis

11) Transportation Deficiencies, Issues, and Projects²

- a) Transportation Deficiencies, Issues, and Projects
- b) Deficiency Ratings by Agency in the Region
 - i) MDOT
 - ii) County Road Commission
 - iii) City
 - iv) Village
- c) Transit Projects

- d) Roadway Projects
- e) Non-motorized Projects
- f) Environmental Mitigation

12) Air Quality Conformity

- a) Changes to Federal Clean Air Act
- b) Impact to State and MPO Planning Area

13) Financial Resources Analysis³

- a) Current Issues That May Affect Funding
- b) Anticipated Funding Sources
 - i) Federal
 - ii) State
 - iii) Local
- c) Alternative Funding Sources
- d) Revenue Forecast Methodology and Constraint

14) Consultation Efforts

- a) List of Contacts
- b) Consultation Efforts
- c) Solicitation and Response to Comments

15) Plan Monitoring

- a) System Performance Monitoring
- b) Action Items

16) Appendices

- a) Glossary
- b) List of Acronyms/Terms
- c) Supporting Maps
 - i) Travel Demand Deficiencies and Issues
 - ii) Title VI/Environmental Justice Populations
 - iii) Road Projects
 - iv) Transit Projects
 - v) Environmental Resources
- d) Fiscal Constraint Demonstration Tables
- e) Summary of Public Involvement Activities
- f) MPO Committees/Memberships
- g) MPO Approval Letter of LRTP

¹ For Small MPOs, this chapter is developed and written by MDOT SUTA staff in consultation with the MPO.

² See note above.

³ A new standardized Financial Resources chapter is being developed by the Financial Working Group subcommittee of MTPA.

Handout F

Transportation Planning Acronyms

5YTP	Five-Year Transportation Program
ACS	American Community Survey (Bureau of the Census)
CAA	Clean Air Act
CFR	Code of Federal Regulations
CMP	Congestion Management Process
DOT	Department of Transportation (U.S.)
E+C	Existing plus (+) Committed
EJ	Environmental Justice
EPA	Environmental Protection Agency (U.S.)
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	Fiscal Year
GIS	Geographic Information Systems
HPMS	Highway Performance Monitoring System
ITS	Intelligent Transportation Systems
LOS	Level of Service
L RTP	Long-Range Transportation Plan
MAP-21	Moving Ahead for Progress in the 21 st Century Act
MCT	Model Coordination Team
MDC	Model Development Committee
MDOT	Michigan Department of Transportation
MPA	Metropolitan Planning Area
MPO	Metropolitan Planning Organization
NAA	Nonattainment Area
PASER	Pavement Surface Evaluation Rating
PIP	Public Involvement Plan
RFP	Request for Proposal
SE	Socio-Economic
SIP	State Implementation Plan
SPS	Statewide Planning Section (MDOT)
STIP	Statewide Transportation Improvement Program
STPD	Statewide Transportation Planning Division (MDOT)
SUTA	Statewide and Urban Travel Analysis Section (MDOT)
TAC	MPO Technical Advisory Committee
TAZ	Traffic Analysis Zone
TDM	Transportation Demand Model
TIP	Transportation Improvement Program
TMA	Transportation Management Area

TMIS	Traffic Monitoring Information System
TSC	MDOT Transportation Service Center
USC	United States Code
V/C	Volume to Capacity
VHT	Vehicle Hours Traveled
VMT	Vehicle Miles Traveled

Handout G

Data and Agency Resource Websites

Federal

- Bureau of the Census – Socioeconomic Data: <http://www.census.gov/>.
- Bureau of Economic Analysis – Regional Economic Analysis: <http://www.bea.gov/regional/>.
- Bureau of Labor Statistics – State and Metro Area Employment, Hours, and Earnings: <http://www.bls.gov/sae/>.
- Bureau of Labor Statistics – State and County Employment, Hours, and Earnings: <http://www.bls.gov/cew/>.
- Bureau of Transportation Statistics – State Facts: <http://gis.rita.dot.gov/StateFacts/>.
- Census Transportation Planning Products: <http://www.trbcensus.com/>.
- Environmental Protection Agency (EPA) – Air Pollution Data: <http://www.epa.gov/air/airpolldata.html#aq>.
- EPA – Emission Inventories: <http://www.epa.gov/ttn/chief/eiinformation.html>.
- EPA – The Green Book Nonattainment Areas for Criteria Pollutants: <http://www.epa.gov/oaqps001/greenbk/index.html>.
- Federal Highway Administration (FHWA) – Best Planning Practices: Metropolitan Transportation Plans: http://www.planning.dot.gov/documents/BestPlanningPractices_MTP.pdf.
- FHWA – Congestion Management Process Guidebook: https://www.fhwa.dot.gov/planning/congestion_management_process/cmp_guidebook/.
- FHWA – Freight Analysis Framework: http://ops.fhwa.dot.gov/freight/freight_analysis/faf/index.htm.
- FHWA – Guidance on Financial Planning and Fiscal Constraint for Transportation Plans and Programs: <http://www.fhwa.dot.gov/planning/guidfinconstr.cfm>.
- FHWA – MAP-21 Information: <http://www.fhwa.dot.gov/map21/>.
- FHWA – Metropolitan Planning: <http://www.fhwa.dot.gov/planning/processes/metropolitan/>.
- FHWA – Performance Based Planning: http://www.fhwa.dot.gov/planning/performance_based_planning/.
- FHWA – Performance Based Planning and Programming Guidebook: http://www.fhwa.dot.gov/planning/performance_based_planning/pbpp_guidebook/index.cfm.
- FHWA – Public Involvement: http://www.fhwa.dot.gov/planning/public_involvement/.
- FHWA – Scenario Planning and Visualization in Transportation: http://www.fhwa.dot.gov/planning/scenario_and_visualization/.

- FHWA – Visualization for Transportation Planning: http://www.fhwa.dot.gov/planning/scenario_and_visualization/visualization_in_planning/visplanning.cfm.
- FHWA/FTA – The Transportation Planning Process: Key Issues – A Briefing Book for Transportation Decisionmakers, Officials, and Staff: <http://www.planning.dot.gov/documents/BriefingBook/BBook.htm>.
- Federal Transit Administration – Metropolitan Transportation Planning: <http://www.fta.dot.gov/15579.html>.
- FHWA/FTA – Transportation Planning Capacity Building: http://planning.dot.gov/focus_metropolitan.asp.
- National Transit Database: <http://www.ntdprogram.gov/ntdprogram/>.

State

- Michigan Department of Environmental Quality – Current Air Quality Planning Activities: <http://www.michigan.gov/deg/0,4561,7-135-3310-111480--,00.html>.
- Michigan Department of Transportation – Transportation Technical Committee: http://www.michigan.gov/mdot/0,1607,7-151-9623_10741_48648---,00.html.
- Michigan Geographic Data Library – GIS files: <http://www.mcgi.State.mi.us/mgdl/>.
- Michigan Transportation Planning Association: <http://www.mtpa-mi.org/resources.asp>.

Other

- Center for Land Use Education – Crafting an Effective Plan for Public Participation: <ftp://ftp.dot.state.pa.us/public/Bureaus/Cpdm/LRTP/CraftingEffectivePlanPublicParticipation.pdf>.
- Colorado Department of Transportation – 2035 Regional and Statewide Transportation Plan Guidebook: <http://www.coloradodot.info/programs/Statewide-planning/documents/2035%20Transportation%20Plan%20Guidebook.pdf>.
- Florida Department of Transportation – Long Range Transportation Plan Citizen-Friendly Best Practices: <http://www.dot.state.fl.us/planning/policy/metrosupport/LRTPReport.pdf>.
- Pennsylvania Department of Transportation – Developing Regional Long Range Plans: <ftp://ftp.dot.State.pa.us/public/Bureaus/Cpdm/FinalLRTPGuide.pdf>.

Handout H

MDOT Statewide Planning Section (SPS), Statewide and Urban Travel Analysis Section (SUTA), and Other MDOT Staff Contact Information

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