



U.S. Department
of Transportation

Transportation Management Area Planning Certification Review

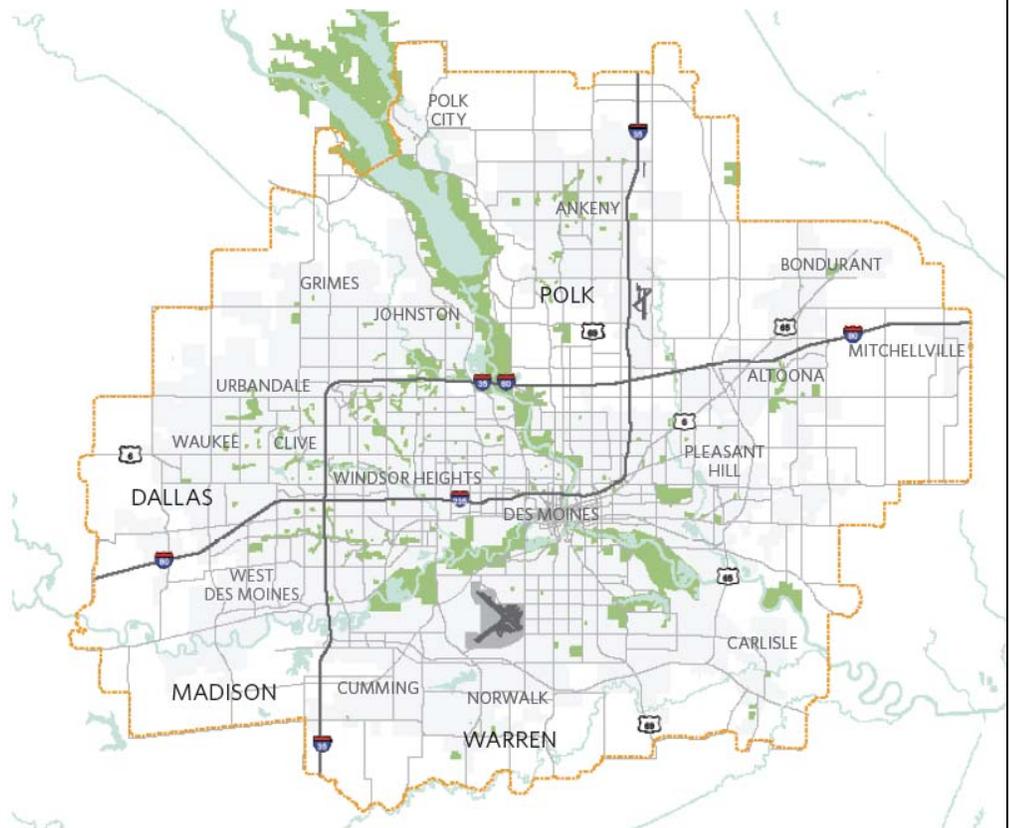
Federal Highway
Administration

Federal Transit
Administration

Des Moines Area Metropolitan Planning Organization (DMAMPO)

Transportation Management Area

GREATER DES MOINES
Des Moines Area MPO Planning Area



July 11, 2017

Summary Report



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1.0 EXECUTIVE SUMMARY

On April 18 - 20, 2017, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) conducted the certification review of the transportation planning process for the Des Moines urbanized area. FHWA and FTA are required to jointly review and evaluate the transportation planning process for each urbanized area over 200,000 in population at least every four years to determine if the process meets the Federal planning requirements.

The Des Moines Area Metropolitan Planning Organization (Des Moines Area MPO) is the designated Metropolitan Planning Organization for the Des Moines metropolitan area and works with the Iowa Department of Transportation (Iowa DOT) as well as the metropolitan public transit operator, Des Moines Area Regional Transit (DART) to implement the federally required planning process.

The scope of the federal certification review of the Des Moines metropolitan planning process was comprehensive, covering the transportation planning process for the entire area and all the agencies involved. The federal review team's work consisted of reviewing the products of the planning process, reviewing the ongoing oversight activities conducted by the FHWA and the FTA, and an on-site review conducted April 18 - 20, 2017 at the Des Moines MPO offices.

1.1 Previous Findings and Disposition

The previous Certification Review findings and their disposition are summarized as follows.

Finding	Action	Corrective Actions/ Recommendations	Disposition
The Des Moines Area MPO does not have an approved Congestion Management Process (CMP) that meets the requirements of 23 CFR 450.320	Corrective Action	The Des Moines Area MPO needs to adopt a CMP that adheres to the eight step CMP approach. Action Plan: A compliant CMP shall be approved by January 1, 2014.	The MPO's CMP was adopted on August 15, 2013 and updated in January 21, 2017.
Organizational Framework	Recommendation	It is recommended that the MPO the Iowa DOT, and local public agencies continue to increase cooperation and coordination, the clear delineation of roles in the areas of project planning and development, sharing of data, and assuring there is a common long-range vision for the region.	Cooperation with regards to planning services, data sharing, and regional planning continues to evolve.

Metropolitan Transportation Plan	Recommendation	It is recommended that the MPO consider making the next MTP more user-friendly and readable for the general public. A summary document, poster, or other such handout could be used to convey the highlights of the plan.	Staff took several steps to make the LRTP more user-friendly.
Public Involvement	Recommendation	It is recommended that the MPO's Public Participation Plan be updated to reflect the new address of MPO Office and any changes to the public involvement process that have taken place since the current Public Participation Plan was adopted in 2010.	The Public Participation Plan has been updated twice since the last certification review.
Title VI, Environmental Justice, Limited English Proficiency	Recommendation	•It is recommended that the MPO collect data to assist in determining that the public involvement process is non-discriminatory, and that a nondiscrimination policy statement and Title VI information is made available.	MPO updated its Public Participation Plan in 2015 to reference new activities related to its Title VI procedures, Environmental Justice, Language Assistance Plan, and complaint procedures.
	Recommendation	•It is recommended that the MPO ensure that their public participation process includes methods for outreach to and services offered to the LEP population and a method to document services and evaluate.	
	Recommendation	•It is recommended that the MPO document a complaint disposition process for Title VI/Nondiscrimination complaints. It is also recommended that the Title VI Coordinator contact information, along with their complaint procedures, be made readily available to the public.	
Travel Forecasting	Recommendation	•It is recommended that the Des Moines Area MPO retain the ability to perform modeling work.	The MPO has staff capable of running the MPO travel demand model, has incorporated transit into its model, and has addressed

	Recommendation	<ul style="list-style-type: none"> It is recommended to further analyze the level of transit analysis required by the MPO, and then either build that functionality into the model or find a surrogate methodology to fill that need. 	other technical recommendations made at the 2013 review.
	Recommendation	<ul style="list-style-type: none"> Additional technical recommendations are included in the Travel Forecasting section of this document. 	
Congestion Management and Operations	Recommendation	It is recommended that the MPO establishes a maintenance plan for their ITS architecture.	The current regional ITS architecture was completed in 2009 and covers the timeframe up to 2019

1.2 Summary of Current Findings

The current review found that the metropolitan transportation planning process conducted in the Des Moines urbanized area meets Federal planning requirements.

As a result of this review, FHWA and FTA are certifying the transportation planning process conducted by the Iowa Department of Transportation (IA DOT), Des Moines Metropolitan Planning Organization (DMAMPO) and Des Moines Area Regional Transit Authority (DART). There are also recommendations in this report that warrant close attention and follow-up, as well as areas that DMAMPO is performing very well in that are to be commended.

Review Area	Action	Corrective Actions/ Recommendations/ Commendations	Resolution Due Date
MPO Structure and Agreements 23 U.S.C. 134(d) 23 CFR 450.314(a)	Commendation	1. MPO Staff - The Review Team noticeably highlights the DMAMPO staff as being highly professional, skilled, and demonstrating a high technical ability in developing and preparing transportation planning documents.	N/A
	Recommendation	1. Coordination – The Review Team recommends that Des Moines MPO and Iowa DOT improve their cooperation and coordination and develop an action plan to address the following specific coordination and cooperation deficiencies: a. Coordination on Project Design and Standards; b. Coordination and Transparency for Iowa DOT Sponsored Projects.	N/A

	Recommendation	2. MOU – The Review Team recommends that the Des Moines MPO and DART update their Planning Memorandum of Understanding to address Federal performance based planning as described by Iowa DOT guidance.	N/A
	Recommendation	3. Financial Planning - The MPO, DART and the Iowa DOT, in keeping with a cooperative, comprehensive, and continuing transportation planning process, should work together to develop the financial projections for the MTP and TIP in order to demonstrate fiscal constraint for all projects.	N/A
Unified Planning Work Program 23 CFR 450.308	Commendation	1. Funds Carryover - The Review Team commends the Des Moines MPO for having very low FHWA-FTA Planning Balance Carryover. The MPO uses allocated planning funds in a timely manner that prevents funds from lapsing.	N/A
Metropolitan Transportation Plan 23 U.S.C. 134(c),(h)&(i) 23 CFR 450.324	Commendation	1. Performance Measures - The Federal Review team commends the MPO for proactively developing performance measures in Mobilizing Tomorrow and subsequent performance reports to better evaluate and communicate the performance of the transportation network in the region.	N/A
Transit Planning 49 U.S.C. 5303 23 U.S.C. 134 23 CFR 450.314	Commendation	1. MPO Support of Transit - The MPO is assisting DART in the process of updating the DART Forward 2035 Plan.	N/A
Transportation Improvement Program 23 U.S.C. 134(c)(h)& (j) 23 CFR 450.326	Recommendation	1. Project Delivery - The Review Team recommends that the MPO staff continue to work closely with Iowa DOT, project sponsors, and other partners in the process to continue to ensure the timely delivery of projects from the planning stage through to construction.	N/A
Public Participation 23 U.S.C. 134(i)(6) 23 CFR 450.316 & 450.326(b)	Commendation	1. Visualization Techniques - The Federal Team commends the MPO for its use of visualization techniques and reader-friendly graphics and maps in its planning products such as its MTP, performance reports and MPO website.	N/A
	Commendation	2. Public Participation - The Federal Review Team was impressed with the level of enthusiasm and innovative techniques the MPO is employing in its day-to-day implementation of its planning responsibilities.	N/A

Civil Rights Title VI Civil Rights Act, 23 U.S.C. 324, Age Discrimination Act, Sec. 504 Rehabilitation Act, Americans with Disabilities Act	Recommendation	1. Training - The Review Team recommends that the Des Moines MPO document its overall Civil Rights Training including Title VI, Environmental Justice and Limited English Proficiency.	N/A
	Recommendation	2. Outreach - The Review Team recommends that the MPO sustain its current practices, but extend its outreach efforts based on a more inclusive data profile and contact list, to include groups and organizations serving all persons considered under the Title VI/Nondiscrimination Program.	N/A
Freight 23 U.S.C. 134(h) 23 CFR 450.306	Commendation	1. Freight Planning - The Federal Review Team commends the DMAMPO on its continued emphasis and integration of freight into the planning process.	N/A
Nonmotorized Planning/Livability 23 U.S.C. 134(h) 23 U.S.C. 217(g) 23 CFR 450.306 23 CFR 450.3224f)(2)	Commendation	1. Bicycle and Pedestrian Planning - The DMAMPO is commended for their enthusiastic approach to the Complete Street's Model Policy and the Mini-Grant Program with the Wellmark Foundation.	N/A
	Commendation	2. Livability and Public Health Initiatives – The Review Team commends DMAMPO for livability and public health initiatives such as The Greater Des Moines Water Trails and Greenways Master Plan, watershed management planning, and incorporating health into the transportation planning process.	N/A
Integration of Land Use and Transportation 23 U.S.C. 134(g)(3) 23 U.S.C. 134 (h)(1)(E) 23 CFR 450.306(a)(5)	Commendation	1. Scenario Planning - The Review Team commends the MPO on the land-use scenarios created as part of the Tomorrow Plan as well as the speaker series that was established as a result of the plan.	N/A
Travel Demand Forecasting 23 CFR 450.324(f)(1)	Recommendation	1. TDM Documentation - DMAMPO should update current documentation files with additional information that demonstrates sufficient validation of model up-stream model components and to develop a process to support the review of contracted deliverables.	N/A
	Recommendation	2. TDM Agreement - The Review Team recommends that the MPO and Iowa DOT should develop a cooperative agreement to specify roles, responsibilities, and reasonable timelines for the development of updates to the Transportation Demand Model (TDM).	N/A

Details of the certification findings for each of the above items are contained in this report.

2.0 INTRODUCTION

2.1 Background

Pursuant to 23 U.S.C. 134(k) and 49 U.S.C. 5303(k), the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) must jointly certify the metropolitan transportation planning process in Transportation Management Areas (TMAs) at least every four years. A TMA is an urbanized area, as defined by the U.S. Census Bureau, with a population of over 200,000. After the 2010 Census, the Secretary of Transportation designated 183 TMAs – 179 urbanized areas over 200,000 in population plus four urbanized areas that received special designation. In general, the reviews consist of three primary activities: a site visit, a review of planning products (in advance of and during the site visit), and preparation of a Certification Review Report that summarizes the review and offers findings. The reviews focus on compliance with Federal regulations, challenges, successes, and experiences of the cooperative relationship between the MPO(s), the State DOT(s), and public transportation operator(s) in the conduct of the metropolitan transportation planning process. Joint FTA/FHWA Certification Review guidelines provide agency field reviewers with latitude and flexibility to tailor the review to reflect regional issues and needs. As a consequence, the scope and depth of the Certification Review reports will vary significantly.

The Certification Review process is only one of several methods used to assess the quality of a regional metropolitan transportation planning process, compliance with applicable statutes and regulations, and the level and type of technical assistance needed to enhance the effectiveness of the planning process. Other activities provide opportunities for this type of review and comment, including Unified Planning Work Program (UPWP) approval, the MTP, metropolitan and statewide Transportation Improvement Program (TIP) findings, air-quality (AQ) conformity determinations (in nonattainment and maintenance areas), as well as a range of other formal and less formal contact provide both FHWA/FTA an opportunity to comment on the planning process. The results of these other processes are considered in the Certification Review process.

While the Certification Review report itself may not fully document those many intermediate and ongoing checkpoints, the “findings” of Certification Review are, in fact, based upon the cumulative findings of the entire review effort.

The review process is individually tailored to focus on topics of significance in each metropolitan planning area. Federal reviewers prepare Certification Reports to document the results of the review process. The reports and final actions are the joint responsibility of the appropriate FHWA and FTA field offices, and their content will vary to reflect the planning process reviewed, whether or not they relate explicitly to formal “findings” of the review.

To encourage public understanding and input, FHWA/FTA will continue to improve the clarity of the Certification Review reports.

2.2 Purpose and Objective

Since the enactment of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the FHWA and FTA, are required to jointly review and evaluate the transportation planning process in all urbanized areas over 200,000 population to determine if the process meets the Federal planning requirements in 23 U.S.C. 134, 40 U.S.C. 5303, and 23 CFR 450. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), extended the minimum allowable frequency of certification reviews to at least every four years.

Certification of the planning process is a prerequisite to the approval of Federal funding for transportation projects in such areas. The certification review is also an opportunity to provide assistance on new programs and to enhance the ability of the metropolitan transportation planning process to provide decision makers with the knowledge they need to make well-informed capital and operating investment decisions.

The Des Moines Area Metropolitan Planning Organization (DMAMPO) is the designated MPO for the Des Moines urbanized area. The Iowa Department of Transportation is the responsible State agency and the Des Moines Area Regional Transit Authority (DART) is the responsible public transportation operator. Current membership of the DMAMPO consists of elected officials and citizens from the political jurisdictions in the Des Moines area.

3.0 SCOPE AND METHODOLOGY

3.1 Review Process

This report details the 2017 review, which consisted of a formal site visit and a public involvement opportunity, conducted April 18-20, 2017.

Participants in the review included representatives of FHWA, FTA, Iowa DOT, DART, and DMAMPO staff. A full list of participants is included in Appendix A. During the onsite review, the Des Moines Area MPO provided topical PowerPoint slides for each discussion point provided in the agenda and is included as Appendix H. The MPO also provided a tour of local projects for the review team.

A desk audit of current documents and correspondence was completed prior to the site visit. In addition to the formal review, routine oversight mechanisms provide a major source of information upon which to base the certification findings.

The certification review covers the transportation planning process conducted cooperatively by the MPO, State, and public transportation operators. Background information, current status, key findings, and recommendations are summarized in the body of the report for the following subject areas selected by FHWA and FTA staff for on-site review:

- MPO Structure and Agreements
- Unified Planning Work Program
- Metropolitan Transportation Plan (MTP)
- Transit Planning
- Transportation Improvement Program (TIP) and List of Obligated Projects
- Public Participation
- Civil Rights (Title VI, EJ, LEP, ADA)
- Consultation and Coordination
- Freight Planning
- Transportation Safety
- Nonmotorized Planning/Livability
- Integration of Land Use and Transportation
- Travel Demand Forecasting
- Congestion Management Process / Management and Operations

3.2 Documents Reviewed

The following MPO documents were evaluated as part of this planning process review:

- MPO Master Agreement: 28E Agreement, Sixth Amended, 2011
- MOU Between DMAMPO and DART, 2013
- 2017 Planning Joint Participation Agreement to Implement Metropolitan Intermodal Planning between DMAMPO and Iowa DOT and 2017 Planning Joint Participation Agreement Part II
- Amended and Substituted Bylaws of the Des Moines Area Metropolitan Planning Organization, July 2005
- FY 2017 and Draft FY 2018 Unified Planning Work Program for DMAMPO
- Mobilizing Tomorrow, a Transportation Plan for a Greener Greater Des Moines, November 2014
- Year 1 Mobilizing Tomorrow Performance Measures Progress Report, October 2015
- Mobilizing Tomorrow Appendix E: Project Selection Methodology + Project List
- The Tomorrow Plan, November 2013
- MPO Public Participation Plan
- DMAMPO FY-2017-2020 TIP and Self-Certification
- Biking Central Iowa Trail Counter Report, May 2015
- Trail Counts 2015 Report, May 2016

- On Street Bikeway Feasibility Study, August 2014
- Water Trails Executive Summary
- Environment Justice 2015 Report, September 2015
- Congestion Management Process, July 2013
- Commuting in the Metro Report, July 2016
- Many the Miles VMT Report, December 2015
- Freight Barriers Report, August 2015
- Des Moines Rail Transload Feasibility Study, June 2014
- Des Moines Rail Transload Identification of Transportation Impediments, August 2014
- Safety of Our Streets Crash Report, June 2015 and June 2016
- Along for the Ride Transit Report, January 2016
- Quality of our Bridges Report, February 2016
- Travel Demand Model Documentation
- 2017 Des Moines Area MPO TMA Certification Review Topics

3.3 Key Definitions for Certification Review Findings

Corrective Actions – Corrective Actions are compliance issues and indicate a serious situation that fails to meet one or more requirements of the transportation planning statute and regulations, thus seriously impacting the outcome of the overall process. The expected outcome is a change that brings the metropolitan planning process into compliance with a planning statute or regulation; failure to respond will likely result in a more restrictive certification.

Recommendations – Recommendations address technical improvements to processes and procedures, that while somewhat less substantial and not regulatory, are still significant enough that FHWA and FTA are hopeful that State and local officials will take action. The expected outcome is change that would improve the process, though there is no Federal mandate.

Commendations – Commendations are processes or practices that demonstrate innovative, highly effective, well-thought out procedures for implementing the planning requirements. Elements addressing items that have frequently posed problems nationwide could be cited as commendations. Also, significant improvements and/or resolution of past findings may warrant a commendation.

4.0 PROGRAM REVIEW

4.1 MPO Structure and Agreements

4.1.1 Regulatory Basis

23 U.S.C. 134(d) and 23 CFR 450.314(a) state the MPO, the State, and the public transportation operator 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 operator serving the MPA.

4.1.2 Current Status

It was observed that for the most part good planning relationships and cooperation exist between the Des Moines MPO, Iowa DOT, and DART. The MPO commended the coordination effort of the Iowa DOT in the development of the 2017 statewide long range plan. However, there have been planning and project-level decisions that have not been fully communicated and coordinated, particularly between the Des Moines MPO and the Iowa DOT. The Iowa DOT has an ongoing effort to increase transparency into the project prioritization process.

The Iowa DOT provided an agreement (Performance Management Agreement Between the Des Moines Area MPO and the Iowa Department of Transportation) that was included in the FY 2018 UPWP. This makes Iowa a leading state in implementing new federal requirements for the cooperative development and sharing of performance data. The Iowa DOT stated that an additional agreement will be documented through DART's consolidated funding application.

The MPO stated that they are beginning efforts for an agency strategic plan that will explore expanding the executive committee and modifying committee voting structures. FHWA and FTA look forward to seeing the results of the plan.

4.1.3 Findings

The Des Moines Area MPO's organizational framework is compliant with the federal planning regulations.

Commendation:

1. MPO Staff - The Review Team noticeably highlights the DMAMPO staff as being highly professional, skilled, and demonstrating a high technical ability in developing and preparing transportation planning documents. The MPO has been diligent in its efforts to provide training for staff to deepen their skills in the technical areas of transportation planning and has produced

imaginative planning initiatives that take full advantage of a wide range of technical tools for analysis and visualization, to portray studies graphically to stakeholders and the public. Throughout the certification review process, the MPO staff was open to suggestions, willing to share ideas, and discuss challenges or issues. The Federal Review Team also commends the MPO for dedicating a staff position to community outreach.

Recommendations:

1. Coordination – The Review Team recommends that Des Moines MPO and Iowa DOT improve their cooperation and coordination and develop an action plan to address the following specific coordination and cooperation deficiencies:
 - a. Coordination on Project Design and Standards - The local project sponsors, Iowa DOT and the MPO should increase coordination on project design and design standards and define where and when in the process it would be beneficial to engage local stakeholders for improved coordination.
 - b. Coordination and Transparency for Iowa DOT Sponsored Projects - The Iowa DOT should increase efforts to communicate transparency in the project prioritization process conducted to select projects within the Des Moines TMA. The Iowa DOT and DMAMPO should develop an improved timeline for incorporating DOT projects in the Des Moines MPO project selection process for the annual TIP. It is also recommended that early coordination occur between the Iowa DOT, DMAMPO and DART as needed for Interchange Justification Studies, Planning and Environmental Linkages (PEL), and other initiatives of the Iowa DOT regarding state highway system and intermodal transportation.
2. MOU – The Review Team recommends that the Des Moines MPO and DART update their Planning Memorandum of Understanding to address Federal performance based planning as described by Iowa DOT guidance.
3. Financial Planning - The MPO, DART and the Iowa DOT, in keeping with a cooperative, comprehensive, and continuing transportation planning process, should work together to develop the financial projections for the MTP and TIP in order to demonstrate fiscal constraint for all projects. Collectively, the documents should present the revenues, costs and comprehensive system-level estimates of operation and maintenance for the region, including the regional share of the statewide system. The written agreement and/or guidance should be updated to more clearly define and articulate the roles, responsibilities, and expectations of the various parties, as well as document methods and assumptions for determining revenues and costs in their financial plans.

4.2 Unified Planning Work Program

4.2.1 Regulatory Basis

23 CFR 450.308 sets the requirement that planning activities performed under Titles 23 and 49 U.S.C. be documented in a Unified Planning Work Program (UPWP). The MPO, in cooperation with the State and public transportation operator, shall develop a UPWP that includes a discussion of the planning priorities facing the MPA and the work proposed for the next one- or two-year period by major activity and task in sufficient detail to indicate the agency that will perform the work, the schedule for completing the work, the resulting products, the proposed funding, and sources of funds.

4.2.2 Current Status

The FY 2018 UPWP Includes a broad discussion of regional planning issues including: The Tomorrow Plan and Mobilizing Tomorrow, system optimization, multimodal opportunities, freight system enhancement, environmental health, data collection, analysis and modeling; as well as a listing of major corridor studies and projects. The UPWP exceeds basic requirements by including a table linking planning factors and goals with work program tasks. It demonstrates a best practice regarding listed work activities. In addition, it was noted that the carryover balance is very low which is also a best practice for MPOs in FTA Region 7. By starting the process in January, the MPO provides plenty of time for solicitation of tasks and review by the MPOs committees. During the site visit, the Iowa DOT requested that the MPO provide more detail on direct cost breakouts. This request has been completed.

The Des Moines MPO coordinates well with member jurisdictions to develop and report UPWP activities and accomplishments. This coordination, coupled with transparency, fosters increased understanding and participation amount the MPOs partners and interested parties.

4.2.3 Findings

The Des Moines Area UPWP meets all the requirements listed under 23 CFR 450.308.

Commendation:

1. Funds Carryover - The Review Team commends the Des Moines MPO for having very low FHWA-FTA Planning Balance Carryover. The MPO uses allocated planning funds in a timely manner that prevents funds from lapsing.

4.3 Metropolitan Transportation Plan

4.3.1 Regulatory Basis

23 U.S.C. 134(c), (h) & (i) and 23 CFR 450.324 set forth requirements for the development and content of the Metropolitan Transportation Plan (MTP). Among the requirements are that the MTP address at least a 20-year planning horizon and that it includes both long and short range strategies that lead to the development of an integrated and multi-modal system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

The MTP is required to provide a continuing, cooperative, and comprehensive multimodal transportation planning process. The plan needs to consider all applicable issues related to the transportation systems development, land use, employment, economic development, natural environment, and housing and community development.

23 CFR 450.324(c) requires the MPO to review and update the MTP at least every four years in air quality nonattainment and maintenance areas and at least every 5 years in attainment areas to reflect current and forecasted transportation, population, land use, employment, congestion, and economic conditions and trends.

Under 23 CFR 450.324(f), the MTP is required, at a minimum, to consider the following:

- Projected transportation demand
- Existing and proposed transportation facilities
- Operational and management strategies
- Congestion management process
- Capital investment and strategies to preserve transportation infrastructure and provide for multimodal capacity
- Design concept and design scope descriptions of proposed transportation facilities
- Potential environmental mitigation activities
- Pedestrian walkway and bicycle transportation facilities
- Transportation and transit enhancements
- A financial plan

4.3.2 Current Status

Mobilizing Tomorrow, the current MTP was finalized in November of 2015, has a horizon year of 2050 and expires in November 2019. The development of this plan depended heavily on the insight and data collected during the development of The Tomorrow Plan, which provides a vision for how the metro area can grow sustainably through the year 2050. Mobilizing Tomorrow is the first MTP for the Des Moines area takes a performance-based approach to

planning, emphasizing funding towards projects and strategies that help achieve the plans goals and performance targets. The MPO has developed monthly performance reports that focus more in depth on a category of performance data. The plan document was made more user friendly than the previous plan.

4.3.3 Findings

The Des Moines Area MTP meets all the requirements listed under 23 CFR 450.324.

Commendation:

1. Performance Measures - The Federal Review team commends the MPO for proactively developing performance measures in Mobilizing Tomorrow and subsequent performance reports to better evaluate and communicate the performance of the transportation network in the region. The Team also commends the commitment of Des Moines MPO to utilize sustainability planning as basis for the Mobilizing Tomorrow.

4.4 Transit Planning

4.4.1 Regulatory Basis

49 U.S.C. 5303 and 23 U.S.C. 134 require the transportation planning process in metropolitan areas to consider all modes of travel in the development of their plans and programs. Federal regulations cited in 23 CFR 450.314 state that the MPO in cooperation with the State and operators of publicly owned transit services shall be responsible for carrying out the transportation planning process.

4.4.2 Current Status

The MPO emphasizes the importance of transportation options throughout all the MPO's plans, policies, and actions. The MPO is a cooperative partner of DART and HIRTA to ensure transit options for all communities. The MPO periodically updates its regional Passenger Transportation Plan, which helps coordinate these agencies with the needs of various communities and health and human services providers. The MPO routinely participates in transit planning activities through both transit agencies and assists with specific projects and data analysis.

4.4.3 Findings

The Des Moines Area meets all the requirements listed under 23 CFR 450.314.

Commendation:

1. MPO Support of Transit - The MPO is assisting DART in the process of updating the DART Forward 2035 Plan which includes five (5) Bus Rapid Transit study corridors. The planning agreement between DART and the Des Moines MPO is a best practice regarding its delineation of short term (DART) and longer term (MPO) planning work activities included in the Unified Planning Work Program.

4.5 Transportation Improvement Program and List of Obligated Projects

4.5.1 Regulatory Basis

23 U.S.C. 134(c),(h) & (j) set forth requirements for the MPO to cooperatively develop a Transportation Improvement Program (TIP). Under 23 CFR 450.326, the TIP must meet the following requirements:

- Must cover at least a four-year horizon and be updated at least every four years.
- Surface transportation projects funded under Title 23 U.S.C. or Title 49 U.S.C., except as noted in the regulations, are required to be included in the TIP.
- List project description, cost, funding source, and identification of the agency responsible for carrying out each project.
- Projects need to be consistent with the adopted MTP.
- Must be fiscally constrained.
- The MPO must provide all interested parties with a reasonable opportunity to comment on the proposed TIP.

23 U.S.C. 134(j)(7) and 23 CFR 450.334 requires that the State, the MPO, and public transportation operators cooperatively develop a listing of projects for which Federal funds under 23 U.S.C. or 49 U.S. C. Chapter 53 have been obligated in the previous year. The listing must include all federally funded projects authorized or revised to increase obligations in the preceding program year and, at a minimum, the following for each project:

- The amount of funds requested in the TIP
- Federal funding obligated during the preceding year
- Federal funding remaining and available for subsequent years
- Sufficient description to identify the project
- Identification of the agencies responsible for carrying out the project

4.5.2 Current Status

The Des Moines area TIP is updated annually on the schedule provided through Iowa DOT guidance. The MPO recently implemented an online application form for STBG project applications and has seen the process become more streamlined as a result. They also make an effort to program projects in the year in which they will be ready for construction. It was recommended by the review team that project readiness be included as a selection criterion. The MPO recently modified their STBG selection criteria to increase funding for bridges and has seen an increase in critical bridge projects getting funded. They have also seen an increase in reconstruction projects instead of expansion and more non-motorized project components.

The allocation of FHWA STBG funds for transit projects continues to be noteworthy. Of the annual (~\$12-13 million) STBG attributable allocation to the Des Moines MPO, a minimum of 10% is to be allocated to transit capital projects. DART has used this transfer to acquire buses which consequently has improve the average useful life of its bus fleet. The MPO's continuing support of transit with such sizable transfers for transit vehicles and the policy change of 10% maximum to 10% minimum for transit are best practices and have illustrated that the choice to do this is based on regional planning priorities.

The annual listing is included in the TIP and the project status is solicited from members to complete the report. The MPO has also begun publishing an interactive map of selected projects before they are approved and has seen a large increase in public comments earlier in the process than what they received before. It was suggested by the Review Team that the transit projects be added to the map as well.

4.5.3 Findings

The Des Moines Area meets all the requirements listed under 23 CFR 450.326 and 23 CFR 450.334.

Recommendations:

1. Project Delivery - The Review Team recommends that the MPO staff continue to work closely with Iowa DOT, project sponsors, and other partners in the process to continue to ensure the timely delivery of projects from the planning stage through to construction. This effort directly supports the FHWA initiative Every Day Counts which promotes a variety of efforts intended to expedite project delivery. It is also recommended that the MPO develop a tracking process to ensure that multimodal components of MPO selected projects are maintained throughout the construction process.

4.6 Public Participation

4.6.1 Regulatory Basis

Sections 134(i)(5), 134(j)(1)(B) of Title 23 and Section 5303(i)(5) and 5303(j)(1)(B) of Title 49, require a Metropolitan Planning Organization (MPO) to provide adequate opportunity for the public to participate in and comment on the products and planning processes of the MPO. The requirements for public involvement are detailed in 23 CFR 450.316(a) and (b), which require the MPO to develop and use a documented participation plan that includes explicit procedures and strategies to include the public and other interested parties in the transportation planning process.

Specific requirements include giving adequate and timely notice of opportunities to participate in or comment on transportation issues and processes, employing visualization techniques to describe metropolitan transportation plans and TIPs, making public information readily available in electronically accessible formats and means such as the world wide web, holding public meetings at convenient and accessible locations and times, demonstrating explicit consideration and response to public input, and a periodically reviewing of the effectiveness of the participation plan.

4.6.2 Current Status

The Des Moines Area MPO recently added a new staff position for managing communications and a communications plan. This has greatly increased the capacity of the MPO to engage with regional stakeholders. The MPO has established new contacts with media outlets started producing more interesting press releases that get play in radio, TV and print. The MPO has established themselves to the media as the go to staff for regional transportation information. They also provide monthly performance update reports, timed to what's relevant to media cycle.

For the development of Mobilizing Tomorrow, the 2050 MTP, the MPO used a variety of outreach tools, such as surveys and piggy-backing on other events to solicit feedback. They conducted outreach at events in the communities, worked with non-profit groups, and used media contact lists to maximize public involvement.

4.6.3 Findings

The Des Moines Area meets all the requirements listed under 23 CFR 450.316.

Commendation:

1. Visualization Techniques - The Federal Team commends the MPO for its use of visualization techniques and reader-friendly graphics and maps in its planning products such as its MTP, performance reports and MPO website. The team believes that these efforts have resulted in better products that generate greater public interest and are easier to understand. Despite having a small staff, it is clear that the DMAMPO makes public engagement a priority.
2. Public Participation - The Federal Review Team was impressed with the level of enthusiasm and innovative techniques the MPO is employing in its day-to-day implementation of its planning responsibilities. The Mobilizing Tomorrow and Tomorrow Plans, development of monthly performance reports, and the use of current social media and technology to educate and engage its members and partners are a few examples of the MPO's work in this area. The MPO Board, Committees and Staff are always seeking innovative ways to create more ownership of the MPO process with the public and its partners.

4.7 Civil Rights (Title VI, EJ, LEP, ADA)

4.7.1 Regulatory Basis

Title VI of the Civil Rights Act of 1964, prohibits discrimination based upon race, color, and national origin. Specifically, 42 U.S.C. 2000d states that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” In addition to Title VI, there are other Nondiscrimination statutes that afford legal protection. These statutes include the following: Section 162 (a) of the Federal-Aid Highway Act of 1973 (23 U.S.C. 324), Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973/Americans with Disabilities Act (ADA) of 1990. ADA specifies that programs and activities funded with Federal dollars are prohibited from discrimination based on disability.

Executive Order #12898 (Environmental Justice) directs federal agencies to develop strategies to address disproportionately high and adverse human health or environmental effects of their programs on minority and low-income populations. In compliance with this Executive Order, USDOT and FHWA issued orders to establish policies and procedures for addressing environmental justice in minority and low-income populations. The planning regulations, at 23 CFR 450.316(a)(1)(vii), require that the needs of those “traditionally underserved” by existing transportation systems, such as low-income and/or minority households, be sought out and considered.

Executive Order # 13166 (Limited-English-Proficiency) requires agencies to ensure that limited English proficiency persons are able to meaningfully access the services provided consistent with and without unduly burdening the fundamental mission of each federal agency.

4.7.2 Current Status

The DMAMPO's practices are "model" for best practices. Diverse approaches are used to prevent discrimination and assure compliance. No complaints for the area were filed. Based on recommendations at the last certification review, the MPO updated its Public Participation Plan in 2015 to reference new activities related to its Title VI procedures, Environmental Justice, Language Assistance Plan, and complaint procedures.

4.7.3 Findings

The Des Moines Area meets all the civil rights requirements.

Recommendations:

1. Training - The Review Team recommends that the Des Moines MPO document its overall Civil Rights Training including Title VI, Environmental Justice and Limited English Proficiency.
2. Outreach - The Review Team recommends that the MPO sustain its current practices, but extend its outreach efforts based on a more inclusive data profile and contact list, to include groups and organizations serving all persons considered under the Title VI/Nondiscrimination Program. It is recommended that the Des Moines MPO, on a voluntary basis, as part of their public participation process collect demographic information from the public both at meetings/events and electronic public outreach.

4.8 Consultation and Coordination

4.8.1 Regulatory Basis

23 U.S.C. 134(g) & (i)(5)-(6) and 23 CFR 450.316(b-e) set forth requirements for consultation in developing the MTP and TIP. Consultation is also addressed specifically in connection with the MTP in 23 CFR 450.324(g)(1-2) and in 23 CFR 450.324(f)(10) related to environmental mitigation.

In developing the MTP and TIP, the MPO shall, to the extent practicable, develop a documented process that outlines roles, responsibilities, and key decision points for consulting with other governments and agencies as described below:

- Agencies and officials responsible for other planning activities (State, local, economic development, environmental protection, airport operations, or freight)
- Other providers of transportation services
- Indian Tribal Government(s)
- Federal land management agencies

4.8.2 Current Status

The DMAMPO has an extensive network for conducting public outreach that includes planning roundtables and close coordination and consultation with non-traditional transportation planning groups such as the AARP and municipal water and sewer stakeholders, Bureau of Refugee Services, public health groups, and the Greater Des Moines Partnership.

The Federal Review Team encourages the Des Moines MPO to continue to seek ways to better engage agencies and officials responsible for other planning activities in the region to improve consultation with Tribal, Federal, State and local agencies responsible for land use management, natural resources, environmental protection, conservation and historic preservation.

4.8.3 Findings

The Des Moines Area meets all the consultation requirements.

4.9 Freight Planning

4.9.1 Regulatory Basis

The MAP-21 established in 23 U.S.C. 167 a policy to improve the condition and performance of the national freight network and achieve goals related to economic competitiveness and efficiency; congestion; productivity; safety, security, and resilience of freight movement; infrastructure condition; use of advanced technology; performance, innovation, competition, and accountability, while reducing environmental impacts.

In addition, 23 U.S.C. 134 and 23 CFR 450.306 specifically identify the need to address freight movement as part of the metropolitan transportation planning process.

4.9.2 Current Status

The DMAMPO has an active Freight Roundtable that currently meets every other month. It was created in 2004 and consists of public and private sector members. They have created the following mission statement “To assist in the efficient movement of freight in the Greater Des Moines Region”. The MPO has been actively engaged with two significant freight projects in the region. A regional Transload Facility and the development of a container tracking website.

4.9.3 Findings

The Des Moines Area meets all the freight requirements listed under 23 CFR 450.306.

Commendation:

1. Freight Planning - The Federal Review Team commends the DMAMPO on its continued emphasis and integration of freight into the planning process. The MPO has developed a strong partnership with the region's freight stakeholders and provides and is a pivotal player in positioning the region into a transportation hub. As a result, the MPO has moved forward the Transload Facility by completing the 2014 Des Moines Rail Transload Feasibility Study.

4.10 Transportation Safety

4.10.1 Regulatory Basis

23 U.S.C. 134(h)(1)(B) requires MPOs to consider safety as one of ten planning factors. As stated in 23 CFR 450.306(a)(2), the planning process needs to consider and implement projects, strategies, and services that will increase the safety of the transportation system for motorized and non-motorized users.

In addition, SAFETEA-LU established a core safety program called the Highway Safety Improvement Program (HSIP) (23 U.S.C. 148), which introduced a mandate for states to have Strategic Highway Safety Plans (SHSPs). 23 CFR 450.306 (d) requires the metropolitan transportation planning process should be consistent with the SHSP, and other transit safety and security planning.

4.10.2 Current Status

The MPO has safety goals in their MTP and in the past, there was some outreach regarding safety goals for a previous version of the SHSP. The STBG scoring criteria does include consideration of high crash locations and projects that address known safety issues. The MPO is working with Drake University to determine if there is a correlation between roadway characteristics and crash frequency. The types of relationships that the MPO has created and continues to foster with Drake University should be continued since the university can act as an extension of the MPO staff and fill in gaps in expertise.

The MPO staff should continue to collaborate and work with their partners at the Iowa DOT's Offices of Systems Planning and Traffic & Safety. Coordination should continue to occur regarding safety performance measures and data should be monitored to maintain awareness of safety related issues within the boundaries of the MPO.

4.10.3 Findings

The Des Moines Area meets all the requirements listed under 23 CFR 450.306 for the safety planning factor and coordination with other safety plans.

4.11 Nonmotorized Planning/Livability

4.11.1 Regulatory Basis

23 U.S.C. 217(g) states that bicyclists and pedestrians shall be given due consideration in the comprehensive transportation plans developed by each MPO under 23 U.S.C. 134. Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities.

23 CFR 450.306 sets forth the requirement that the scope of the metropolitan planning process "will increase the safety for motorized and non-motorized users; increase the security of the transportation system for motorized and non-motorized users; and protect and enhance the environment, promote energy conservation, improve the quality of life.

4.11.2 Current Status

DMAMPO is very active in the promotion of the bicycle and pedestrian modes for transportation. The MPO has included performance metrics for bicycle and pedestrian conditions in the region's MTP. This has set the stage for an active public involvement process with regards to the bicycle and pedestrian community, which meets regularly with the MPO to provide input on transportation alternatives, livability and sustainability solutions. The MPO has established a trail usage counting program, conducted a street bicycle feasibility study, walkability plans and regularly holds related workshops and roundtables with regional partners. The MPO has also been instrumental in creating a regional complete streets policy that has been implemented by nine local communities. DMAMPO benefits from an active bike pedestrian community that has demonstrated to city leaders the benefits to the area in the form of economic development, livability and improved quality of life to residents.

The MPO also has a very active livability program and has put significant effort into forwarding public health initiatives. Over the last few years, the MPO has developed partnerships with public health organizations and has worked to educate the MPO member communities and other stakeholders around issues of active transportation, complete streets, health impact assessments, and other topics. These agencies include Iowa Department of Public Health, Polk and Dallas County Health Departments, Iowa Healthiest State Initiative, and the Wellmark Foundation. This coordination supports several ongoing regional committees including Active

Living Iowa, Health and Wellness Committee, and the Wellness Capital of Capital Crossroads and projects.

In addition, the MPO has performed significant planning related to watershed management, coordinating regional storm water issues, and regional water trails.

4.11.3 Findings

The Des Moines Area meets all the requirements listed under 23 CFR 450. 306 for planning factors that address non-motorized users.

Commendation:

1. Bicycle and Pedestrian Planning - The DMAMPO is commended for their enthusiastic approach to the Complete Street's Model Policy and the Mini-Grant Program with the Wellmark Foundation. The DMAMPO is also commended for their efforts and leadership role in the development and implementation of the Iowa Data Bike and regional efforts to establish a bicycle and pedestrian counting program.
2. Livability and Public Health Initiatives – The Review Team commends DMAMPO for livability and public health initiatives such as The Greater Des Moines Water Trails and Greenways Master Plan, watershed management planning, and incorporating health into the transportation planning process.

4.12 Integration of Land Use and Transportation

4.12.1 Regulatory Basis

23 U.S.C. 134(g)(3) encourages MPOs 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.

23 U.S.C. 134 (h)(1)(E) and 23 CFR 450.306(a)(5) set forth requirements for the MPO Plan to 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.

4.12.2 Current Status

Des Moines is among the 143 regions and communities to receive HUD Sustainable Communities Initiative funding, as part of the Partnership for Sustainable Communities. The

region received a \$2.2 million grant in October 2010 to create a comprehensive regional housing, environmental and land use plan. The grant allowed them the opportunity to develop the Tomorrow Plan, finalized in November 2013, which incorporates planning strategies and implementation measures that will guide the region's growth through 2050. Multiple growth scenarios were tested during the process and compared with a baseline approach. A successful aspect from the Tomorrow Plan was a speaker series that brought thought leaders to the area for a series of lectures during the planning process. The Tomorrow Plan Speaker Series continues, and the MPO has successfully partnered with numerous community organizations to host dozens of speaker events over the last four years.

4.12.3 Findings

The Des Moines Area meets all the requirements for listed under 23 U.S.C. 134 and 23 CFR 450.306.

Commendation:

1. Scenario Planning - The Review Team commends the MPO on the land-use scenarios created as part of the Tomorrow Plan as well as the speaker series that was established as a result of the plan. The growth scenario work is a sophisticated planning practice not commonly found in MPOs of this size.

4.13 Travel Demand Forecasting

4.13.1 Regulatory Basis

23 CFR 450.324(f)(1) requires that the Metropolitan Transportation Plan include the projected transportation demand of persons and goods in the Metropolitan Planning Area over the period of the transportation plan. Travel demand forecasting models are used in the planning process to identify deficiencies in future year transportation systems and evaluate the impacts of alternative transportation investments. In air quality non-attainment and maintenance areas, they are also used to estimate regional vehicle activity for use in mobile source emission models that support air quality conformity determinations.

4.13.2 Current Status

The current TDM for Des Moines was developed in 2014 with later updates to future year projects. A mode choice and transit assignment script was added to the Des Moines Area travel forecasting file in 2016 and subsequently used to model forecasted ridership for DART future growth scenarios. The MPO regularly contracts with consultants for assistance with travel

demand model development and could benefit from a more defined process for reviewing deliverables.

The Review Team also observed that the Iowa DOT provides a role in the development of the MPO travel demand and coordination problems have been voiced by the MPO and Iowa DOT over the past several years. There is no written planning agreement in place for coordination efforts.

4.13.3 Findings

The Des Moines Area meets all the requirements listed under 23 CFR 450.324.

Recommendations:

1. TDM Documentation - DMAMPO should update current documentation files with additional information that demonstrates sufficient validation of model up-stream model components and to develop a process to support the review of contracted deliverables. A single document that summarizes the model process, inputs, assumptions, calibration methods, and validation results is recommended as documentation and a tool for staff and the public to better understand the TDM process. (Travel survey samples may not provide sufficient observations to examine local area trip generation. Emerging data resources – for example, GPS and passive cell phone data – can be useful for exploring the temporal and spatial distribution of travel, particularly for non-resident travel.)
 - a. Desirable checks on model performance include:
 - i. Comparisons of estimated and observed trip length frequency distributions
 - ii. Comparisons of estimated and observed trip productions and attractions
 - iii. Comparisons of estimated and observed person-travel flows (at district to district level).
 - iv. Comparisons of estimated and observed transit flows
 - v. Comparisons of estimated and observed travel speeds in corridors where congestion has been observed.
 - b. The MPO also needs to develop a clear written process for receiving data from contracted providers and a process to support the QA/QC of deliverables.
2. TDM Agreement - The Review Team recommends that the MPO and Iowa DOT develop a cooperative agreement to specify roles and responsibilities for maintaining and updating the regional travel model. The agreement should outline a collaborative and continuous approach for managing updates to travel demand model network files and socioeconomic inputs based on discoveries in model application. The agreement may also outline procedures for reconciling future year external year forecasts developed by both agencies, and the process for integrating the soon to be released Iowa Standardized Model Structure (ISMS) standards. DMAMPO is

encouraged to identify TDM development activities and develop technical work plans in consultation with Iowa DOT.

Proposed FHWA/FTA Technical Assistance:

The FHWA Resource Center has agreed to provide assistance by conducting a coordination workshop with the Iowa DOT and DMAMPO. This workshop is intended as a forum to facilitate the discussion about current activities and develop a process to coordinate future activities.

The Review Team recommends that DMAMPO consider using a peer review process. Model peer reviews are also often a valuable source for insight on methods and processes that could help the agency assess and prioritize future improvements to the model, often aided by assistance from FHWA through the Travel Model Improvement Program

4.14 Congestion Management Process / Management and Operations

4.14.1 Regulatory Basis

23 U.S.C. 134(k)(3) and 23 CFR 450.322 set forth requirements for the congestion management process (CMP) in TMAs. The CMP is a systematic approach for managing congestion through a process that provides for a safe and effective integrated management and operation of the multimodal transportation system. TMAs designated as non-attainment for ozone must also provide an analysis of the need for additional capacity for a proposed improvement over travel demand reduction, and operational management strategies.

23 CFR 450.324(f)(5) requires the MTP include Management and Operations (M&O) of the transportation network as an integrated, multimodal approach to optimize the performance of the existing transportation infrastructure. Effective M&O strategies include measurable regional operations goals and objectives and specific performance measures to optimize system performance.

4.14.2 Current Status

The Federal Review team noted that the CMP was cited as a correction action during the last review in 2013. The MPO updated its CMP in 2013 and then again in 2016 to incorporate performance measures that were identified in the MTP. The new CMP developed a hierarchy of strategies from operational to capital, and identified congested corridors and hot spots. The MPO has also incorporated strategies into STBG process. The Review Team also noted that the MPO is beginning to conduct planning for autonomous and connected vehicles and has shifted to increase focus on planning for operations. The Federal Review Team notes that the next CMP

be expanded to include an element to evaluate implemented projects, including those identified as the most congested corridors.

The Des Moines area ITS architecture is current through 2019. The current update process is being coordinated to ensure that the regional and state process are in sync with one another.

4.14.3 Findings

The Des Moines Area meets all the requirements listed under 23 CFR 450.322 and 23 CFR 450.324.

5.0 CONCLUSION AND RECOMMENDATIONS

The FHWA and FTA review found that the metropolitan transportation planning process conducted in the Des Moines urbanized area meets Federal planning requirements as follows.

5.1 Commendations

The following are noteworthy practices that the Des Moines Area MPO is doing well in the transportation planning process:

1. **MPO Staff** - The Review Team noticeably highlights the DMAMPO staff as being highly professional, skilled, and demonstrating a high technical ability in developing and preparing transportation planning documents. The MPO has been diligent in its efforts to provide training for staff to deepen their skills in the technical areas of transportation planning and has produced imaginative planning initiatives that take full advantage of a wide range of technical tools for analysis and visualization, to portray studies graphically to stakeholders and the public. Throughout the certification review process, the MPO staff was open to suggestions, willing to share ideas, and discuss challenges or issues. The Federal Review Team also commends the MPO for dedicating a staff position to community outreach.
2. **Funds Carryover** - The Review Team commends the Des Moines MPO for having very low FHWA-FTA Planning Balance Carryover. The MPO uses allocated planning funds in a timely manner that prevents funds from lapsing.
3. **Performance Measures** - The Federal Review team commends the MPO for proactively developing performance measures in Mobilizing Tomorrow and subsequent performance reports to better evaluate and communicate the performance of the transportation network in the region. The Team also commends the commitment of Des Moines MPO to utilize sustainability planning as basis for the Mobilizing Tomorrow.
4. **MPO Support of Transit** - The MPO is assisting DART in the process of updating the DART Forward 2035 Plan which includes five (5) Bus Rapid Transit study corridors. The planning agreement between DART and the Des Moines MPO is a best practice regarding its delineation of short term (DART) and longer term (MPO) planning work activities included in the Unified Planning Work Program.
5. **Visualization Techniques** - The Federal Team commends the MPO for its use of visualization techniques and reader-friendly graphics and maps in its planning products such as its MTP, performance reports and MPO website. The team believes that these efforts have resulted in better products that generate greater public interest and are easier to understand. Despite having a small staff, it is clear that the DMAMPO makes public engagement a priority.
6. **Public Participation** - The Federal Review Team was impressed with the level of enthusiasm and innovative techniques the MPO is employing in its day-to-day implementation of its planning responsibilities. The Mobilizing Tomorrow and Tomorrow Plans, development of monthly

performance reports, and the use of current social media and technology to educate and engage its members and partners are a few examples of the MPO's work in this area. The MPO Board, Committees and Staff are always seeking innovative ways to create more ownership of the MPO process with the public and its partners.

7. Freight Planning - The Federal Review Team commends the DMAMPO on its continued emphasis and integration of freight into the planning process. The MPO has developed a strong partnership with the region's freight stakeholders and provides and is a pivotal player in positioning the region into a transportation hub. As a result, the MPO has moved forward the Transload Facility by completing the 2014 Des Moines Rail Transload Feasibility Study.
8. Bicycle and Pedestrian Planning - The DMAMPO is commended for their enthusiastic approach to the Complete Street's Model Policy and the Mini-Grant Program with the Wellmark Foundation. The DMAMPO is also commended for their efforts and leadership role in the development and implementation of the Iowa Data Bike and regional efforts to establish a bicycle and pedestrian counting program.
9. Livability and Public Health Initiatives – The Review Team commends DMAMPO for livability and public health initiatives such as The Greater Des Moines Water Trails and Greenways Master Plan, watershed management planning, and incorporating health into the transportation planning process.
10. Scenario Planning - The Review Team commends the MPO on the land-use scenarios created as part of the Tomorrow Plan as well as the speaker series that was established as a result of the plan. The growth scenario work is a sophisticated planning practice not commonly found in MPOs of this size.

5.2 Corrective Actions

The following are corrective actions that the Des Moines Area MPO must take to comply with Federal Regulations:

None

5.3 Recommendations

The following are recommendations that would improve the transportation planning process:

1. Coordination – The Review Team recommends that Des Moines MPO and Iowa DOT improve their cooperation and coordination and develop an action plan to address the following specific coordination and cooperation deficiencies:
 - a. Coordination on Project Design and Standards - The local project sponsors, Iowa DOT and the MPO should increase coordination on project design and design standards and

define where and when in the process it would be beneficial to engage local stakeholders for improved coordination.

- b. Coordination and Transparency for Iowa DOT Sponsored Projects - The Iowa DOT should increase efforts to communicate transparency in the project prioritization process conducted to select projects within the Des Moines TMA. The Iowa DOT and DMAMPO should develop an improved timeline for incorporating DOT projects in the Des Moines MPO project selection process for the annual TIP. It is also recommended that early coordination occur between the Iowa DOT, DMAMPO and DART as needed for Interchange Justification Studies, Planning and Environmental Linkages (PEL), and other initiatives of the Iowa DOT regarding state highway system and intermodal transportation.
2. MOU – The Review Team recommends that the Des Moines MPO and DART update their Planning Memorandum of Understanding to address Federal performance based planning as described by Iowa DOT guidance.
3. Financial Planning - The MPO, DART and the Iowa DOT, in keeping with a cooperative, comprehensive, and continuing transportation planning process, should work together to develop the financial projections for the MTP and TIP in order to demonstrate fiscal constraint for all projects. Collectively, the documents should present the revenues, costs and comprehensive system-level estimates of operation and maintenance for the region, including the regional share of the statewide system. The written agreement and/or guidance should be updated to more clearly define and articulate the roles, responsibilities, and expectations of the various parties, as well as document methods and assumptions for determining revenues and costs in their financial plans.
4. Project Delivery - The Review Team recommends that the MPO staff continue to work closely with Iowa DOT, project sponsors, and other partners in the process to continue to ensure the timely delivery of projects from the planning stage through to construction. This effort directly supports the FHWA initiative Every Day Counts which promotes a variety of efforts intended to expedite project delivery. It is also recommended that the MPO develop a tracking process to ensure that multimodal components of MPO selected projects are maintained throughout the construction process.
5. Training - The Review Team recommends that the Des Moines MPO document its overall Civil Rights Training including Title VI, Environmental Justice and Limited English Proficiency.
6. Outreach - The Review Team recommends that the MPO sustain its current practices, but extend its outreach efforts based on a more inclusive data profile and contact list, to include groups and organizations serving all persons considered under the Title VI/Nondiscrimination Program. It is recommended that the Des Moines MPO, on a voluntary basis, as part of their public participation process collect demographic information from the public both at meetings/events and electronic public outreach.
7. TDM Documentation - DMAMPO should update current documentation files with additional information that demonstrates sufficient validation of model up-stream model components and

to develop a process to support the review of contracted deliverables. A single document that summarizes the model process, inputs, assumptions, calibration methods, and validation results is recommended as documentation and a tool for staff and the public to better understand the TDM process. (Travel survey samples may not provide sufficient observations to examine local area trip generation. Emerging data resources – for example, GPS and passive cell phone data – can be useful for exploring the temporal and spatial distribution of travel, particularly for non-resident travel.)

- a. Desirable checks on model performance include:
 - i. Comparisons of estimated and observed trip length frequency distributions
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 - iii. Comparisons of estimated and observed person-travel flows (at district to district level).
 - iv. Comparisons of estimated and observed transit flows
 - v. Comparisons of estimated and observed travel speeds in corridors where congestion has been observed.
 - b. The MPO also needs to develop a clear written process for receiving data from contracted providers and a process to support the QA/QC of deliverables.
8. TDM Agreement - The Review Team recommends that the MPO and Iowa DOT develop a cooperative agreement to specify roles and responsibilities for maintaining and updating the regional travel model. The agreement should outline a collaborative and continuous approach for managing updates to travel demand model network files and socioeconomic inputs based on discoveries in model application. The agreement may also outline procedures for reconciling future year external year forecasts developed by both agencies, and the process for integrating the soon to be released Iowa Standardized Model Structure (ISMS) standards. DMAMPO is encouraged to identify TDM development activities and develop technical work plans in consultation with Iowa DOT.

5.4 Training/Technical Assistance

The following training and technical assistance is recommended to assist the MPO with improvements to the transportation planning process:

The FHWA Resource Center has agreed to provide assistance by conducting a coordination workshop with the Iowa DOT and DMAMPO. This workshop is intended as a forum to facilitate the discussion about current activities and develop a process to coordinate future activities.

The Review Team recommends that DMAMPO consider using a peer review process. Model peer reviews are also often a valuable source for insight on methods and processes that could help the agency assess and prioritize future improvements to the model, often aided by assistance from FHWA through the Travel Model Improvement Program

APPENDIX A - PARTICIPANTS

Federal reviewers prepared this Certification Review report to document the results of the review process. The report and final actions are the responsibility of the FHWA Iowa and the FTA Region 7 Office. See Appendix B for the sign-in sheets. The following individuals were involved in the Des Moines urbanized area on-site review:

The Federal Review Team included:

- Ms. Darla Hugaboom, FHWA Iowa Division
- Mr. Sean Litteral, FHWA Iowa Division
- Mr. Paul LaFleur, FHWA Iowa Division
- Ms. Karla Kudart, FHWA Iowa Division
- Mr. Mark Bechtel, FTA Region 7

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APPENDIX B – NOTIFICATION LETTER



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816-329-3921 (fax)

Federal Highway Administration
105 6th Street
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515-233-7300
515-233-7499 (fax)

February 8, 2017

Mr. Tom Hockensmith
Des Moines Area Metropolitan Planning Organization
420 Watson Powell Junior Way
Des Moines, Iowa 50309

Subject: Des Moines Area MPO Federal Certification Review: April 18 – 20, 2017

Dear Mr. Chairperson:

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) will be conducting a Certification Review of the transportation planning process for your metropolitan area on April 18-20, 2017. These dates were selected in consultation with your staff. The review will begin on the afternoon of April 18, 2017, and will look at the cooperative planning process as conducted by the Des Moines Area Metropolitan Planning Organization, Iowa DOT, DART, and local governments in the area. You and all participants in the planning process are welcome to attend the review.

The Fixing America's Surface Transportation Act (FAST) continues the requirement for Certification of the transportation planning process in urbanized areas over 200,000 populations once every four years. Certification Reviews are conducted with the objective of evaluating the transportation planning process. Consequently, we will not be conducting a pass/fail review, but rather we intend to highlight good practices, exchange information, and identify opportunities for improvements. The Certification process will rely extensively on knowledge gained throughout the previous four years since the last Certification Review regarding the planning process in the Des Moines area, as well as the scheduled Certification Review meeting. The specific focal points we are proposing for the Certification Review meeting include the following:

- **Status of Recommendations from the previous Certification**
- **Status of Travel Demand and Forecasting Models**
- **The Metropolitan Transportation Plan and Transportation Improvement Program update/amendment process**
- **Consideration of Title VI/Environmental Justice/Public Involvement**
- **Integrating Freight, Transit and Bike/Ped Modes in the Transportation Planning Process**

There will be an opportunity for the public, including key MPO committee members and special interest groups, to talk directly with FHWA and FTA in an open public involvement session concerning their views on the transportation planning process being conducted in the

metropolitan area. We will also offer the opportunity for any committee members or other local elected officials to meet with us separately if they so desire.

The review will be conducted by FTA and FHWA staff. We anticipate and welcome participation by the staff of the MPO, the Iowa DOT, DART, as well as any representatives of cities, counties and other local official who wish to participate.

If you have any questions concerning this review, please call Darla Hugaboom of the FHWA Iowa Division (515) 233-7305 or Mark Bechtel of the FTA Region 7 (816) 329-3937.

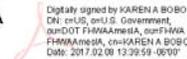
Sincerely yours,



Mokhtee Ahmad
Regional Administrator
Federal Transit Administration

Sincerely yours,

KAREN A
BOBO



Digitally signed by KAREN A BOBO
DN: cn=US, o=U.S. Government,
ou=DOT FHWA/America, ou=FHWA,
email=KARINA_BOBO@FHWA.
gov, c=US
Date: 2017.02.08 13:39:59 -0500

Karen A. Bobo
Division Administrator
Federal Highway Administration

cc:

Todd Ashby, DMAMPO
Elizabeth Presutti, DART
Craig Markley, Iowa DOT
Phil Mescher, Iowa DOT
Kristin Haar, Iowa DOT
Darla Hugaboom, FHWA
Mark Bechtel, FTA Region 7

APPENDIX C – AGENDA

**Des Moines Area Metropolitan Planning Organization
Federal TMA Certification Review
April 18th – 20th, 2017
420 Watson Powell, Jr., Way, Suite 200
Des Moines, IA**

Agenda

Tuesday, April 18th, 2017
1:30 p.m. – 4:30 p.m.

1:30 p.m. - 2:30 p.m.	Welcome and Scope of Review <ul style="list-style-type: none">• Introductions• MPO Overview and Presentation• Organizational Structure• Demographics• Transportation Planning Process
2:30 p.m. – 4:00 p.m.	MPO Role and Responsibilities <ul style="list-style-type: none">• Agreements• Process and Procedures• Partners Expectations• Cooperation, Coordination and Consultation
4:00 p.m. – 4:30 p.m.	Unified Planning Work Program (UPWP)
4:30 p.m.	Adjourn

Wednesday, April 19th, 2017
8:30 a.m. – 5:00 p.m.

8:30 a.m. - 10:30 a.m.	Major Planning Products <ul style="list-style-type: none">• Metropolitan Transportation Plan (MTP)• Transportation Improvement Program (TIP)• Break (15 minutes break)• Performance Based Planning Process (PBPP)
10:30 a.m. – 11:00 a.m.	Public Involvement
11:00 a.m. – 1:30 p.m.	Box Lunch and Tour of Projects
1:30 p.m. – 2:30 p.m.	Management Systems <ul style="list-style-type: none">• Freight• Operations and Management/ITS• Congestion Management Process
2:30 p.m. – 3:00 p.m.	Safety and Security Resiliency and Vulnerability of the System

**Des Moines Area Metropolitan Planning Organization
Federal TMA Certification Review
April 18th – 20th, 2017
420 Watson Powell, Jr., Way, Suite 200
Des Moines, IA**

Agenda

3:00 p.m. – 3:15 p.m.	Break
3:15 p.m. – 4:15 p.m.	Bicycle and Pedestrian Planning Air Quality and Livability
4:15 p.m. – 5:00 p.m.	Travel Demand Model
5:00 p.m.	Adjourn

**Thursday, April 20th, 2017
8:30 a.m. – 5:00 p.m.**

8:30 a.m. - 10:30 a.m.	Public Transit Providers <ul style="list-style-type: none"> • Coordination of planning and programming responsibilities • Involvement in the planning process • MOA and roles/responsibilities
10:30 a.m. – 10:45 a.m.	Break
10:45 a.m. – 12:00 p.m.	Civil Rights <ul style="list-style-type: none"> • Title IV • Environmental Justice • LEP • ADA • Self-Certification
12:00 p.m. – 1:00 p.m.	Lunch (on your own)
1:00 p.m. – 2:30 p.m.	Review Team Debrief
2:30 p.m. – 3:15 p.m.	<ul style="list-style-type: none"> • Review of 2013 Certification Review Findings • Close out meeting & preliminary findings
3:30 p.m. – 5:00 p.m.	<ul style="list-style-type: none"> • Public Hearing • Policy Board Meeting and FHWA Presentation

APPENDIX D – PUBLIC COMMENT

No comments were received from the public during the meeting, online form or by any other means.



U.S. Department
of Transportation

Public Involvement Session Notice

An opportunity for you to talk directly with Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) in open public meeting session concerning your views on the transportation planning process in the Des Moines metropolitan area is scheduled for:

Time: 3:30 p.m. – 5:00 p.m.
Date: Thursday, April 20, 2017
Place: Des Moines Area MPO
420 Watson Powell, Jr., Way, Suite 200
Des Moines, Iowa 50309

This public meeting is part of a review that will assess compliance with Federal regulations pertaining to the transportation planning process conducted by the Des Moines Area Metropolitan Planning Organization (DMAMPO), the Iowa Department of Transportation, Des Moines Area Regional Transit Authority (DART), Heart of Iowa Regional Transit Agency (HIRTA) and local units of government in the Des Moines metropolitan area. A public hearing will begin at 3:30 p.m. with a formal presentation by FHWA/FTA staff during the regularly scheduled Policy Committee meeting beginning at 4:00 p.m.

If you are not able to attend either meeting, you may submit comments at:

Online: <https://www.surveymonkey.com/r/NVZJL39>

Email: FHWA Iowa Division - Darla.Hugaboom@dot.gov FTA Region 7 – Mark.Bechtel@dot.gov

Mail: Darla Hugaboom, Community Planner Mark Bechtel, Planning Team Leader
FHWA IA Division FTA Region 7
105 6th Street 901 Locust Street
Ames, IA 50010 Kansas City, MO 64106

Individuals with disabilities requiring auxiliary aids for services should contact the Des Moines MPO by writing or calling:

Tracey Deckard
Des Moines Metropolitan Planning Organization (DMAMPO)
420 Watson Powell, Jr., Way, Suite 200
Des Moines, Iowa 50309
Tel: (515) 334 - 0075

DMAMPO Certification Review Comments

Public Comment Opportunity for Des Moines Transportation Planning Area

This comment form is being provided as an opportunity for the public to comment on the transportation planning process in the Des Moines Metropolitan Area as part of the quadrennial federal certification review process. Comments will be accepted until June 20, 2017.

1. Please enter your name (optional) 

2. Please enter your address (optional) 

3. Please enter your Agency or Group (optional) 

4. Please provide any comments about the transportation planning process in the Des Moines Transportation Management Area: 

Done

APPENDIX E - LIST OF ACRONYMS

ADA: Americans with Disabilities Act
AMPO: Association of Metropolitan Planning Organizations
CFR: Code of Federal Regulations
CMP: Congestion Management Process
DOT: Department of Transportation
EJ: Environmental Justice
FAST: Fixing America’s Surface Transportation Act
FHWA: Federal Highway Administration
FTA: Federal Transit Administration
FY: Fiscal Year
HSIP: Highway Safety Improvement Program
ITS: Intelligent Transportation Systems
LEP: Limited-English-Proficiency
M&O: Management and Operations
MAP-21: Moving Ahead for Progress in the 21st Century
MPA: Metropolitan Planning Area
MPO: Metropolitan Planning Organization
MTP: Metropolitan Transportation Plan
SHSP: Strategic Highway Safety Plan
STIP: State Transportation Improvement Program
TDM: Travel Demand Management
TIP: Transportation Improvement Program
TMA: Transportation Management Area
U.S.C.: United States Code
UPWP: Unified Planning Work Program
USDOT: United States Department of Transportation

APPENDIX F – FEDERAL PRESENTATION

7/6/2017

TMA Certification Review
Public Meeting: April 20, 2017

U.S. Department of Transportation
Federal Highway Administration
Federal Transit Administration

Introduction of the Federal Team

U.S. Department of Transportation
Federal Transit Administration

- FTA Region 7
- Kansas City, MO

U.S. Department of Transportation
Federal Highway Administration

- FHWA Iowa Division
- Ames, IA

Why Are We Here?

- Every 4 years FTA and FHWA jointly review the metropolitan transportation planning process for those areas with over 200,000 population
- Part of this review includes seeking public input.

Why Are You Here?

- To give your opinions of the metropolitan area's transportation planning process

What Will Happen To Your Comments Today?

- Comments received today and by mail (within the next 60 days) will be summarized in a report.
- Comments are taken into consideration while evaluating the transportation planning completed for the area

What is the Outcome of this Review?

- Report is issued in approximately 60 days summarizing the discussions during the review

Process is:

- Certified
- Certified subject to corrective actions
- Certified for use of only certain construction funding categories

Metropolitan Transportation Planning Process

What is the *Planning Process*?

- A process by which transportation decisions are made and projects are planned, selected and prioritized for implementation within the region.



Metropolitan Transportation Planning Process

Why is the *Planning Process* important?

- Decides how a substantial share of federal funding is spent nationwide.
- Because of limited funding, the MPO must prioritize the regional needs and determine the best and most economical solution.
- The process lays the framework for the future transportation system.




Metropolitan Transportation Planning Process

Who is *involved*?

- MPO(s)
 - Policy Committee
 - Technical Committee
 - Citizen's Committee (optional)
- State Department(s) of Transportation
- Public Transportation Operator(s)*
- Local Jurisdictions (cities, counties)
- Local Citizens
- Interest Groups
- FTA & FHWA



Metropolitan Transportation Planning Process

How?

- 3-C Approach
 - Continuing
 - Cooperative
 - Comprehensive
- Multimodal
- Public Input



Metropolitan Transportation Planning Process

Products of the Process

- Unified Planning Work Program (UPWP)
- Transportation Plan
- Congestion Management Process (CMP)
- Transportation Improvement Program (TIP)
- Public Participation Plan (PPP)

What is... *Unified Planning Work Program*?

- A mechanism document describing the planning activities to be completed and costs.
- MPO Budget
- "A Plan for Planning"

What is... The Transportation Plan?

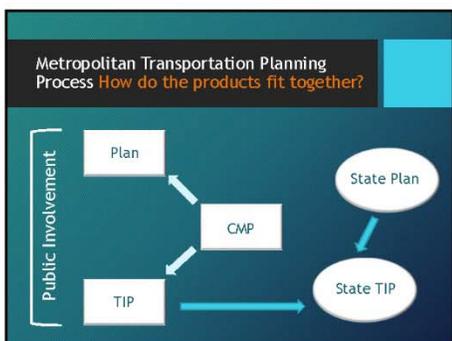
- 20-Year multi-modal guide to regional needs and potential solutions
- Financially feasible
- Conforms to Clean Air Standards
- Contains: financial plans, local goals & objectives, public involvement

What is... A Congestion Management Process?

- Short term and long term strategies
 - **Short term**—looks at current traffic and transit problems and tries to solve
 - **Long Term**—tries to prevent problems from occurring

What is... A Transportation Improvement Program?

- 4-Year list of financially feasible projects
- A document prioritizing regional projects for funding and implementation
- If the region has air quality issues, this mix of projects must be within given emissions limits



Public Comments

Here are some suggested items/thoughts for you to consider in making your comments:

- What is your opinion of the effectiveness of the Des Moines Area Metropolitan Planning Organization and its planning partners in conducting their planning products?
- How is DWAMPO and its planning partners doing in regard to multimodal planning?

Public Comments Cont.

- What is your opinion of the effectiveness of the DMAMPO in seeking public input into its transportation planning process?
- Do you have an adequate opportunity to participate in the planning process? Have you been involved in the transportation planning process?
- And finally, what are your views of the process?

Mail, Email, Call or Submit
Comments Online Before June 20,
2017



Mark Bechtel,
Planning Team Leader
FTA Region 7
901 Locust Street
Kansas City, MO 64106

Darla Hugaboom
Community Planner
FHWA IA Division
105 6th Street
Ames, IA 50010

(816) 329-3937

(515) 233-7305

Mark.Becht@dot.gov

Darla.Hugaboom@dot.gov

Comments may be submitted online at:
<https://www.surveymonkey.com/r/NVZJL39>

APPENDIX G – DMAMPO RESPONSE TO REVIEW TEAM

Please discuss your interagency coordination including interagency planning agreements.

Background: Coordination between the MPO and other agencies is essential. These other agencies may include: local public agencies (i.e. cities and counties), universities, adjacent RPA, transit agencies and other modes of transportation, the state DOT(s), other state agencies, FHWA, FTA, and other federal agencies.

In regard to planning agreements, 23 CFR 450.314(a) states: "The MPO, the state(s), and the public transportation operator(s) 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(s), and the public transportation operator(s) serving the MPA."

The MPO enters into an annual planning agreement with the Iowa DOT to perform transportation planning functions for the Des Moines Urbanized Area, and to document how those funds will pass through to the MPO to support the work element activities identified in the MPO's Unified Planning Work Program (UPWP). The MPO also has a signed Memorandum of Understanding (MOU) with DART outlining each agency's transit planning activities, including the MPO's role for long-range transit planning and DART's role for short- and mid-range transit planning. The MPO-DART MOU was originally developed in 2000, and an update was signed on February 13, 2013.

The MPO and the Iowa DOT have entered into a Memorandum of Understanding for Quick Clearance Guidelines. These guidelines provide guidance for handling incidences within the MPA to restore roadways to full capacity as soon as possible following an incident while maintaining safety of law enforcement and other responders. The MPO and the Iowa DOT periodically make updates to this agreement as necessary.

The MPO also has an agreement with the Central Iowa Regional Transportation Planning Alliance (CIRTPA) to provide staff support for that organization. This agreement has been in place since 1994 and is reaffirmed each year.

Over the last few years the MPO has become involved in additional planning activities, many of which have led to planning agreements/contracts. These include:

- A MOU with the Polk Soil and Water Conservation District for ongoing watershed planning efforts. This builds off both organizations' ongoing roles in the development and facilitation of watershed management association (WMA) efforts. The MPO's role largely involves providing a forum for local governments to convene on watershed issues and assisting in the development of policy language.
- Contract with Iowa Economic Development Authority for transportation energy efficiency studies.
- Contract with AARP Iowa for data collection and Age Friendly Cities documentation.
- Contract with the Iowa Department of Natural Resources for water trails planning efforts.
- Contract with the Iowa Department of Public Health for transportation activities that impact public health.

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- Contracts with communities for local planning assistance, including 1) the City of Melcher/Dallas for comprehensive plan development and zoning code update, 2) the City of Wattersdale for GDBG grant assistance, 3) Boone County for county trail plan development, 4) the City of Windsor Heights for sidewalk ordinance facilitation, 5) the City of Carlisle for sidewalk ordinance facilitation.

In addition to formal agreements for planning services, the MPO convenes several roundtables and working groups that bring together stakeholders from numerous agencies that work to help address various planning issues. Examples of these include:

- The MPO's Bicycle and Pedestrian Roundtable consists of land managers, advocates, elected officials, non-profits, and interested citizens. The Roundtable addresses regional bicycle and pedestrian issues and assists in aligning local bicycle and pedestrian projects to fit within the regional network.
- MPO coordinates and hosts the regional Transportation Advisory Group, which consists of health and human service providers, and transportation providers. The advisory group helps develop the regional Passenger Transportation Plan and tackles shorter term transportation issues faced by health and human service providers.
- The Traffic Management Advisory Committee brings together traffic engineers, first responders, emergency management officials, and tow operators to discuss techniques related to congestion management, ITS, and traffic incident response.
- The Environment Roundtable brings together environmental stakeholders to assist the MPO and its members on issues related to environmental protection and restoration.
- The Water Trails and Greenways Steering Committee is comprised of user groups – such as anglers, paddlers, and boaters – along with federal, state, and local officials to guide the planning process.

2. Transportation Projects – Historical and Planned

Please provide an overview of major achievements in the metropolitan planning area in sufficient detail - i.e. by individual projects, project types, corridors, etc. Include a listing of the major projects and initiatives that the MPO is focusing on in the near-term and long-term future.

Success can be seen and measured by the type of work that has been completed and planned improvements to the transportation system.

Over the last several years, many high profile projects, of which many were among the MPO's top priorities, have been implemented or are under construction currently. These include the following:

- DART Central Station in Des Moines
- The Southeast Connector/ML King Parkway extension in Des Moines
- Grand Prairie Parkway Interchange at I-80 in West Des Moines/Waukee
- NE 36th Street Interchange at I-26 in Ankeny

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- 100th Street Overpass Reconstruction/Interchange at I-80 in Urbandale
- 66th Avenue/Kempston Bridge reconstruction over the Des Moines River in Johnston
- Grand Avenue Bridge reconstruction over the Des Moines River in downtown Des Moines

As noted previously, the MPO, via a Wellmark Foundation grant, provided funding to complete street projects. A variety of project types and locations were considered during the funding allocation process. The projects include the following:

- Bicycle corral on Ingersoll Avenue in Des Moines
- Portable parking on 66th Avenue in Windsor Heights
- Trail crossing improvements across NW 40th Avenue in Johnston
- Dedicated bike lane and sharrows on 5th Street in Carlisle
- B-Cycle program expansion in Des Moines
- Connection between 6th Avenue and the Neal Smith Trail in Des Moines

A full list of future projects anticipated can be found in the Mobilizing Tomorrow plan. The plan includes many types of projects, though funding was targeted particularly to maintenance projects, bridge repair/replacement projects, complete streets, and projects that complete gaps within the trail system. Specific projects of note include the following:

- Interstate 36/30 interchange reconfiguration at Highway 141 (aka Rider Corner) in Urbandale/Don-So (JK recently completed)
- Designation of US Highway 65/Iowa Highway 5 as an interstate (efforts underway)
- Replacement/repair of downtown Des Moines bridges (TIGER grant received)
- Expansion of Veterans Parkway in West Des Moines (construction to begin soon)
- Conversion of one-way streets to two-way streets in downtown Des Moines (study underway)
- Installation of the region's first protected bicycle lane on East Grand Avenue in downtown Des Moines (anticipated installation in summer 2017)
- Development of a transit facility in Des Moines (land lease negotiations and operator selection underway)
- Water trails implementation (engineering study to begin soon)

Additional projects of note include the previously mentioned container locator project and the launch of the MPO Data Bike. The Data Bike will allow the MPO to collect trail condition information, as well as trail imagery for use in Google Street View. This information will be used to forecast trail conditions and assist local jurisdictions understand their trail maintenance budgetary needs.

3. Project Selection

What are the MPO's project selection processes and accomplishments for all modes?

Background: 23 CFR 450.314(c) states that "In areas designated as TMA's, the MPO shall select all 23 U.S.C. and 49 U.S.C. Chapter 53 funded projects (excluding projects on the NHS and Tribal Transportation Program, Federal Lands Transportation Program, and Federal Lands Access Program) in consultation

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with the State and public transportation operator(s) from the approved TIP and in accordance with the priorities in the approved TIP. The State shall select projects on the NHS in cooperation with the MPO, from the approved TIP."

The MPO project selection process is outlined in the following timeline:

- October: Staff posts applications on the website and begins the project solicitation process.
- November: Staff hosts an information workshop for project applicants. The workshop provides an overview of the process and provides:
- December: Application deadline and technical scoring by staff.
- February: Applicant presentations to Funding Subcommittee.
- March: Funding Subcommittee develops funding recommendation.
- April/May: Executive and Policy Committee's approve funding recommendation.

Staff evaluates projects based on a scoring system that ties into the performance measures outlined in the Mobilizing Tomorrow. This changed was made after the last review and has resulted in project selection that has a stronger tie to performance based planning.

This has resulted in following accomplishments:

- Greater focus on multi-modal elements of submitted projects;
- Greater emphasis on funding for public transit;
- Greater emphasis on funding reconstruction/maintenance of existing roadways; and,
- Greater emphasis on funding deficient bridges.

4. Transit Planning

Please describe the MPO's transit planning efforts and accomplishments.

Background: Alternative transportation includes public transportation services and bicycle and pedestrian infrastructure. Transit is vital for providing transportation services to low income and elderly populations, students, events and special traffic generators, and other groups of populations. A reliable and accessible transit system can replace single-vehicle trips for work and shopping activities as well. Transit is also an important element to address air quality issues, congestion, livability, and sustainability efforts.

The MPO consistently emphasizes the importance of transportation options throughout all the MPO's plans, policies, and actions. The MPO is a steady partner of DART and HIRTA to ensure transit options for all communities. The MPO periodically updates its regional Passenger Transportation Plan, which helps coordinate these agencies with the needs of various communities and health and human services providers. The MPO routinely participates in transit planning activities through both transit agencies and assists with specific projects and data analysis. Some of the specific activities completed by the MPO in this certification period include:

- Updating the travel model to include transit inputs and outputs

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- Planning transit service scenarios for the City of Carlisle
- Developing, with consultant assistance, a [feasibility study](#) for transit service between Ames and Des Moines
- Participating in the DART Forward 2035 planning process, and
- Assisting in the development of a model transit-oriented development zoning ordinance for the City of Des Moines.

The MPO has also initiated a number of projects that improve the availability of transportation options for the region including transportation demand management strategies, model policies, community assistance, programs and studies. Some of the new and existing programs that advance multimodal transportation options include:

- Developing a complete street model policy and assisting local governments in tailoring the policy for local adoption
- Working with Des Moines Public Schools, City of Des Moines, and public health officials on a new Step It Up DSM safe routes to school program that can be replicated throughout the region
- Assisting local governments in walkability improvements and planning efforts
- Continuing a robust automated trail counter program to measure walking and bicycling activity on multi-use trails
- Piloting a [SmartTrip](#) program that encourages residents to walk, bike, and ride transit for short trips (program on hold but may be relaunched pending demand)
- Creating a mini-workshop series where member governments and partner organizations can request MPO staff to give a presentation on a number of different topics, many of which are best practices on improving infrastructure for walking, biking, and transit
- Establishing a trail pavement condition measuring program using a "data bike", and
- Working with local governments to prioritize "nodes and corridors" development to ensure growth coincides with transportation options.

5. Self-Certification

Background: Self-Certification of the metropolitan planning process, concurrent with the submittal of the entire proposed TIP to the FHWA and the FTA as part of the STIP approval (at least once every four years), is required under 23 CFR 450.306.

Please demonstrate how the MPO complies with each one of these individual requirements:

- [23 U.S.C. 135](#) and [136](#), [23 U.S.C. 3303](#) and [5304](#), and this part;
- Title VI of the Civil Rights Act of 1964, as amended ([42 U.S.C. 2000d-1](#)) and [49 CFR part 21](#);
- [42 U.S.C. 5332](#), prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
- Section 1101(b) of the FAST Act ([Public Law 114-327](#)) and [49 CFR part 26](#) regarding the involvement of disadvantaged business enterprises in DOT funded projects;
- [23 CFR part 230](#), regarding implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;

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- 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](#);
- In States containing 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](#);
- 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;
- [23 U.S.C. 324](#), regarding the prohibition of discrimination based on gender; and
- Section 504 of the Rehabilitation Act of 1973 ([29 U.S.C. 794](#)) and [49 CFR part 27](#) regarding discrimination against individuals with disabilities.

The following documents how the MPO complies with self-certification requirements:

- The MPO complies with 23 U.S.C. 134/135 and 49 U.S.C. 5303/5304 in the following ways:
 - The MPO maintains a long-range transportation plan with a minimum 20-year horizon that is updated every four years;
 - The MPO develops a Transportation Improvement Program annually that covers a four year period and includes all federally funded transportation projects;
 - The MPO maintains board representation according to the organizations bylaws which includes representation from local municipalities, state organizations, and public transit;
 - The MPO maintains an updated planning area boundary;
 - The MPO implements a planning process that address the eight strategies listed in subsection (N)(1) and uses a performance-based approach; and,
 - The MPO maintains an updated Congestion Management Process that is updated as least every four years in conjunction with the LRTP update;
- The MPO complies with the Civil Rights Act in the following ways:
 - The MPO does not discriminate in accordance with subsection 21.5
- The MPO affirms it does not discriminate based on these factors and notes this in its Title VI declaration.
- The MPO complies the Section 1101(b) of the FAST Act when evaluating RFP/RFP submittals. The MPO typically provides points in the evaluation criteria if the consultant is or includes a DBE on their project team.
- The MPO ensures it complies with this provision on any consulting procurement using federal funds.
- The MPO ensures its facilities are ADA compliant, and works to promote ADA compliant facilities with its member communities.
- The Des Moines Area MPO is not consider a nonattainment or maintenance area under the Clean Air Act;
- The MPO does not discriminate against anyone based on age and adheres to the Older Americans Act;
- The MPO does not discriminate based on gender;
- The MPO does not discriminate against individuals with disabilities.

The MPO meets with and follows the Iowa DOT's requirements for developing plans and programs to ensure documents meet the federal regulations' full intent. The MPO submits to the Iowa DOT, FHWA

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Iowa Division, and FTA Region 7 draft versions of the TIP and UPWP annually for review and comment. The MPO staff also meets internally on a regular basis to discuss and review planning project status, activity, and progress. The MPO staff also makes sure that the annual UPWP addresses the various requirements placed upon the MPO.

In development of the annual UPWP, the MPO staff reviews the federal requirements placed upon MPOs and how the UPWP's work elements address those requirements. The MPO reviews with the policy board any changes to MPO requirements stemming from new legislation or rulemaking to ensure they understand these changes. The MPO staff hosts a Representative Workshop each year after new MPO representatives join the committee to explain MPO processes, requirements, and activities.

The MPO includes the following language on its Technical, Executive, and Policy agendas: *The MPO receives federal funding and may not discriminate against anyone on the basis of race, color, or national origin, according to Title VI of the Civil Rights Act of 1964. For more information or to obtain a Title VI Complaint form, visit [www.dmapo.org/title-vi/](#) or call 515-384-0075.*

Since the last review, the MPO has also developed a [Title VI page](#) on the website to better uphold the principles of Title VI of the Civil Rights Act of 1964 and related guidance. The Des Moines Area MPO's policies and programs should not discriminate against people based on race, color, national origin or sex. The webpage includes a [Language Assistance Plan](#) (LAP) which seeks to ensure that individuals with limited English proficiency have meaningful access to the transportation planning process. It also includes staff contact information and outlines a complaint process. The webpage includes a printable PDF complaint form as well as an online form.

6. TPWP, LRTP, TIP and PPP

Please discuss accomplishments, procedures and adoption dates for each of the following Major Planning Products in accordance to the regulations provided for each planning product.

- TPWP Regulatory Basis:** A UPWP covers one to two years and typically contains several elements. According to 23 CFR 450.306(c) "each MPO, in cooperation with the State(s) and public transportation operator(s), shall develop a UPWP that includes a discussion of the planning priorities facing the MPA. The UPWP shall identify work proposed for the next 1- or 2-year period by major activity and task (including activities that address the planning factors in 450.306(b)), in sufficient detail to indicate who (e.g., MPO, State, public transportation operator, local government, or consultant) will perform the work, the schedule for completing the work, the resulting products, the proposed funding activity/task, and a summary of the total amounts and sources of Federal and matching funds."

The MPO begins development of its annual UPWP in January of each year by soliciting project ideas from MPO representatives and committees, as well as stakeholders such as DART. A list of potential activities is developed and shared with the MPO's Planning and Engineering

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subcommittees for discussion in February, who provide feedback on what projects and activities would be most impactful to members. A draft UPWP and budget is taken to the MPO's committees in March for approval before being sent to the Iowa DOT, FHWA, and FTA for comment. As the MPO awaits comments, it meets with a Budget and Finance subcommittee that reviews the budget and financial implications of the organizations. Once comments from Iowa DOT, FHWA, and FTA are provided, updates to the document are made and the final product is taken to the MPO committees for approval.

Throughout the year, the MPO staff periodically provides budget status updates to its committees and the Budget and Finance subcommittee. UPWP and budget amendments are made as needed throughout the fiscal year.

With the development of the FY 2017 UPWP and budget, which identified more costs than revenues for the fiscal year, the MPO, upon the recommendation from the Budget and Finance subcommittee, agreed to update how member assessments are collected. Assessments are based a per capita rate, with the decennial census used as the population base. Beginning with the FY 2018 UPWP and budget, the MPO now uses the latest census estimate for each city as the population base for assessments.

- TIP Regulatory Basis:** According to 23 CFR 450.306, the MPO shall cooperatively develop a TIP that is consistent with the MTP and is financially constrained. The TIP must cover at least a four-year period and be updated at least every four years. Additionally, the TIP must list all projects in sufficient detail outlined in the regulations, reflect public involvement, and identify the criteria for prioritizing projects.

The Des Moines Area MPO's [Transportation Improvement Program](#) (TIP) serves as a list of Federal-aid eligible surface transportation improvements for the Des Moines Area MPO's MPA. The TIP covers a period of no less than four years and is updated annually for compatibility with the Statewide Transportation Improvement Program development and approval process. State Transit Assistance (STA) and Statewide Transportation Alternatives Program (Statewide TAP) funds are the only source of state funding shown in the TIP. The TIP identifies all Federal funds programmed during the four-year period. Additionally, the TIP identifies all projects by Federal funding program and by FFY.

Adoption of the Des Moines Area MPO's TIP is subject to the Des Moines Area MPO's review and approval. The review process consists of a public comment period that offers opportunities for review and comment of the draft TIP, which is submitted to the Iowa DOT in June. At the conclusion of the public review period, Des Moines Area MPO staff reviews and summarizes all submitted comments and presents the findings to the Des Moines Area MPO committees for consideration into the final TIP. The Des Moines Area MPO submit the final (approved) TIP, with a copy of the formal resolution, to the Iowa DOT in July. The Iowa DOT then reviews the plan to ensure compliance with Federal regulations.

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Each project or project phase included in the TIP must be consistent with other Des Moines Area MPO plans, including the Horizon Year 2050 Metropolitan Transportation Plan Mobilizing Tomorrow (HY 2050 MTP Mobilizing Tomorrow). In addition, the Des Moines Area MPO requires consistency among the TIP and member governments' and agencies' capital improvement plans. In particular, the Des Moines Area MPO requires consistency among proposed short- and long-range projects, strategies, plans, and programs.

The Des Moines Area MPO is responsible for selecting projects that use Surface Transportation Block Grant Program (STBG) and Surface Transportation Block Grant Set Aside Program (STBG Set Aside) funding. When considering project requests for STBG or STBG Set Aside funds, the MPO requires that projects be consistent with the goals of the MPO's Mobilizing Tomorrow plan. The project must be listed in the plan unless it is a project that primarily maintains and optimizes the transportation system, addresses deficient or obsolete bridges, or focuses on multi-modal transportation. Additionally, the MPO places primary emphasis upon metropolitan-wide transportation system improvement needs as identified in the Des Moines Area MPO's Long-Range Transportation Plan, how those needs impact the movement of people and goods throughout this metropolitan area, and how the requested project will have potential benefits and potential impacts on all communities in the Des Moines metropolitan area.

All projects applying for Des Moines Area MPO STBG or STBG Set Aside funding must be sponsored by one or more of the nineteen Des Moines Area MPO member governments, the Iowa DOT, or DART. Other entities in the Des Moines Area MPO MPA are eligible only with co-sponsorship by one of the organizations listed above. Additionally, all road project applying for Des Moines Area MPO STBG funding must be located on a federal-aid eligible route, bridges must be on the Structurally Deficient/Functionally Obsolete (SD/FO) list, and transit accommodations must be compliant with the DART 2038 plan. When applying for STBG or TAP funds, a sponsor must submit a resolution from that sponsor's council, board of supervisors, or similar governing body, guaranteeing the local funds for the STBG and TAP match and authorizing the project.

Funding of projects with STBG or TAP funds for inclusion in the Des Moines Area MPO's TIP shall be based on the procedures outlined in Mobilizing Tomorrow.

The Des Moines Area MPO staff shall submit to the STBG Funding Subcommittee a technical ranking of individual project requests for Des Moines Area MPO STBG funding assistance. Des Moines Area MPO staff's recommendations for individual projects shall be used by the MPO in the MPO's decision-making process for assigning STBG funds to requesting transportation improvement projects. Des Moines Area MPO staff's recommendations shall be based on the project's ability to support achievement of the MPO's performance measure targets.

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Once the MPO has selected projects, the Des Moines Area MPO staff shall forward a letter to the recipients outlining the stipulation associated with acceptance of the Des Moines Area MPO's funds, including the need for the recipient to provide periodic updates on the project to the MPO.

When a jurisdiction changes the scope of a project after funds are awarded by the Des Moines Area MPO, the project must be reviewed again by the TTC and the STBG Funding Subcommittee to determine whether the change in project scope would have materially changed the original prioritization ranking. Based on that determination, the STBG Funding Subcommittee will make a recommendation to the MPO Executive Committee, up to and including the withdrawal of Policy Committee approval for STBG funding for the project. This is the same process that may occur when a project does not make appropriate, scheduled progress, leading to receipt and reallocation of future funds previously designated for the project. The Des Moines Area MPO Executive Committee will, after due consideration, make a recommendation to the Des Moines Area MPO for a final decision. Immaterial changes that would not affect the original scoring of a project previously ranked and approved for Des Moines Area MPO funding may be permitted in the sound discretion of the Des Moines Area MPO Executive Director.

d) **L RTP Regulatory Basis:** In regard to the Metropolitan Transportation Plan, 23 CFR 450.304 states, "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 formulating the transportation plan, the MPO shall consider factors described in § 450.306 ... the transportation plan shall include both long-range and short-range strategies/actions that provide for the development of an integrated multimodal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demands."

Mobilizing Tomorrow, the MPO Long-Range Transportation Plan, was adopted on November 20, 2014. The plan has a 35-year horizon and was developed around twelve performance measures addressing multimodal transportation options, optimizing and maintaining the existing system, improving the environment, and furthering health and safety.

Mobilizing Tomorrow looks out to the year 2050, falling in line with the time horizon laid out in The Tomorrow Plan and meeting the federal requirement of an L RTP looking out a minimum of twenty years. The plan is fiscally constrained and will be updated in another five years to reflect completed projects as well as any changes in priorities and/or funding. Any project that seeks to receive funding from the MPO must be included in the L RTP.

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The MPO depended heavily on the insight and data collected during the development of The Tomorrow Plan. In addition, staff hosted three public outreach series during the development of the L RTP:

- Outreach Series 1: Hosted in early 2014, this outreach focused on resident's vision for the future of the transportation system. It consisted of three public meetings and an online survey where people were asked to identify the strengths and weaknesses of the system.
- Outreach Series 2: Hosted in the summer of 2014, this outreach series focused on project funding and prioritizing the type of projects that should receive funding; and,
- Outreach Series 3: Hosted in the September/October of 2014, this final outreach sought feedback on the draft plan.

The development of the plan was guided by a steering committee consisting of approximately 12-15 members of the MPO Policy Board. Throughout the process staff prepared draft sections for the steering committee to review and provide feedback. Staff also depended on feedback from the subcommittees and roundtables of the MPO including the Funding Subcommittee, Planning/Engineering Subcommittee's, Environment Roundtable, and Bicycle and Pedestrian Roundtable.

Mobilizing Tomorrow accomplished the following:

- A more rigorous fiscal analysis leading to a higher level of scrutiny of the projects included in the fiscally constrained project list;
- Successfully integrated the results from The Tomorrow Plan process into Mobilizing Tomorrow; and,
- Developed a plan based on trackable performance measures that will allow the MPO to measure progress towards the plan's goals.

d) **PPP and Public Involvement Regulatory Basis:** The requirements for public involvement are set forth primarily in 23 CFR 450.310(a)(1)(2)(3) and (b), which address elements of the metropolitan planning process. Public involvement also is addressed specifically in connection with the Transportation Plan in 450.304(g)(1)(2), (j), and (k) and with the TIP in 450.306(b), participation and consultation requirements, which pertain to the Transportation Plan and the TIP, also are included in 450.304 (f)(1)(i) and in 450.326(a).

The MPO staff completed an update of its **Public Participation Plan** in October 2015, and the plan was adopted by resolution by the MPO Policy Committee on November 19, 2015. The MPO seeks to provide a continuous, cooperative, and comprehensive (8-C) transportation planning process for Greater Des Moines. As part of a successful 8-C transportation planning process, the MPO solicits public review and comment on the work, projects, and products proposed and created by the MPO. The MPO's Public Participation Plan (PPP) outlines the process by which the MPO provides citizens, stakeholder groups, and other interested parties with reasonable

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opportunities to be involved in the transportation planning process. The MPO developed this PPP in consultation with the public and other interested parties. The PPP includes the MPO's policies and procedures for conducting public outreach, scheduling public meetings, and incorporating public input into the transportation planning process.

7. Travel Demand Modeling

Please describe the MPO's modeling efforts with accomplishments.

Background: A metropolitan transportation plan shall include the projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan. These forecasts are frequently made using travel demand models, which allocate estimates of regional population, employment and land use to person-trips and vehicle-trips by travel mode, route, and time period. The outputs of travel demand models are used to estimate regional vehicle activity, evaluate the impacts of alternative transportation investments being considered in the transportation plan, provide base and design year data for NEPA and to assist the transportation decision making process in the region.

The MPO hired a consultant to complete base year model refinements in 2014. Since the model refinements, MPO staff has made updates to future year projects included in the network to better differentiate fiscally constrained projects and illustrative projects. In August 2016, the MPO Policy Committee approved an update to Mobilizing Tomorrow to add Appendix III: Travel Demand Model Validation and Analysis. Appendix III provided additional performance statistics for each of the timeframes for the fiscally constrained project list, as well as, a no build for each of the timeframes.

MPO staff continues to provide forecast data to member communities upon request. Recent projects staff has provided forecasts to include the Downtown Walkability Study (traffic modeling portion) in the City of Des Moines, Hickman Road corridor study and IIR, Interstate 26/50/206 Interchange Study, and the City of Ankeny Comprehensive Plan. MPO staff has also offered support to the City of Des Moines Master Transportation Plan team to provide additional scenario forecasts as the Master Plan gets underway.

Transit Component

In June 2016, a mode choice and transit assignment script was added to the Des Moines Area travel forecasting file. The new script added the capability to forecast transit ridership for the intermittent years (2020, 2030, and 2040), as well as, base and horizon year forecasts (2010 and 2050). Model documentation was updated in June 2016 to include the additional mode choice element, base year observed vs. modeled transit ridership, and procedures for running the model.

In the Winter of 2016, MPO staff utilized the mode choice and transit assignment component to model forecasted ridership for the Des Moines Area Regional Transit Authority's (DART) future growth scenarios included in the Draft DART Forward 2040 plan.

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Trained Staff

A recommendation from the 2013 Certification Review was to retain the ability to perform modeling work. In 2015, the MPO provided support for a planner to attend Urban Transportation Planning and Modeling at Iowa State University. The course, co-instructed by Iowa DOT staff, included hands-on training in modeling with TransCAD. Additionally, in January 2016 the MPO hired a planner who completed the Travel Demand Modeling with TransCAD course developed and taught by Caliper.

MPO staff continues to participate in MTMUG including presentations on modeling efforts in the Des Moines Area at meetings in 2014. Staff is continuing to identify training opportunities and needs. Anticipated staff activities include attending the TRB Planning Applications Conference in May 2017 and identifying future TransCAD trainings offered by the Iowa DOT and Caliper.

NHTS Add-On

One recommendation from the 2013 Certification Review was to consider purchasing an NHTS Add-on sample for the 2015 program. This recommendation was considered and the MPO is currently an Add-on partner for the current NHTS survey that will provide response data in 2017. The MPO staff plans to incorporate the NHTS survey results into the model after receiving the survey data.

Iowa Statewide Model Standardization

The MPO continues to support the Iowa DOT's effort to provide a standardized framework from which transportation demand modeling is done in the state of Iowa. While the Des Moines Area MPO is unique in its modeling needs, the MPO believes there may be elements of the model standardization process that will be valuable to the Des Moines Area model. The MPO will continue to monitor developments and identify elements that could be implemented to improve the Des Moines Area model.

8. Review of 2013 Certification Review Findings

Please discuss efforts to address the 2013 DMAMPO Certification Review Findings

Corrective Action

1. Congestion Management Process: The Des Moines Area MPO does not have an approved Congestion Management Process (CMP) that meets the requirements of 23 CFR 450.320.
 - Resolution: The Des Moines Area MPO needs to adopt a CMP that adheres to the eight-step CMP approach.
 - Action Plan: A compliant CMP shall be approved by January 1, 2014.

The 2013 Certification Review identified the need for the MPO to develop a Congestion Management Process (CMP) by January 1, 2014. The MPO's CMP was adopted on August 15,

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2013. The 2013 CMP adhered to the eight-step CMP approach and met all the other requirements of CMP's. In April 2016, the MPO updated the CMP to incorporate performance measures identified in the LTRP.

Recommendations

1. Organizational Framework: It is recommended that the MPO, the Iowa DOT, and local public agencies continue to increase cooperation and coordination, the clear delineation of roles in the areas of project planning and development, sharing of data, and assuring there is a common long-range vision for the region.

Cooperation with regards to planning services, data sharing, and regional planning continues to evolve.

The MPO and DART have collaborated on several things over the last few years, including the following:

- The MPO providing modeling assistance for DART's Transit Forward 2035 plan update
- DART and MPO have met to discuss planning activities to ensure consistency with the established MOU
- DART has invited MPO staff to help in the interviewing of new planning staff.

The MPO and the Iowa DOT also have collaborated over the years. With respect to travel demand modeling, the Iowa DOT has helped train new MPO staff on modeling practices. The Iowa DOT also has worked to develop model data sharing practices, of which the MPO has been supportive. As rulemaking around performance based planning evolve, the Iowa DOT has worked with MPOs to ensure collaboration on data needs and targets.

One area the MPO hopes to engage the Iowa DOT more is the identification of projects for the long-range transportation plan and the annual TIP. This will likely become more natural as performance criteria should help ensure the selection of projects that are consistent with both the MPO and Iowa DOT long-range plans.

2. Metropolitan Transportation Plans: It is recommended that the MPO consider making the next MTP more user-friendly and readable for the general public. A summary document, poster, or other such handout could be used to convey the highlights of the plan.

Staff took several steps to make the LTRP more user-friendly. Mobilizing Tomorrow is more visually appealing using charts, maps, and infographics to communicate information. This is in contrast to previous plans that tended to be text heavy. The Plan was condensed into five concise chapters with additional information and data moved to one of nine appendices.

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Staff has also made Mobilizing Tomorrow more accessible on the website by dividing the document into individual chapters and appendices.

We Plan on continuing to make the LTRP more user-friendly in the next update in the following ways:

- Use Story Maps to communicate existing conditions, and,
- Remove spreads so the document is more user-friendly on website.

3. Public Involvement: It is recommended that the MPO's Public Participation Plan be updated to reflect the new address of MPO Office and any changes to the public involvement process that have taken place since the current Public Participation Plan was adopted in 2010.

The Public Participation Plan has been updated twice since the last certification review. The first was in December 2013, which served to bring the PPP into alignment with what the MPO actually did at the time.

The second update came in November 2015. This version further updated the MPO's actual practices involving public participation, including referencing updates that had been made to the MPO's website, as well as updated Title VI procedures, Environmental Justice, Language Assistance Plan, and complaint procedures.

4. Title VI, Environmental Justice, Limited English Proficiency

- It is recommended that the MPO collect data to assist in determining that the public involvement process is non-discriminatory, and that a non-discrimination policy statement and Title VI information is made available.
- It is recommended that the MPO ensure that their public participation process includes methods for outreach to and services offered to the LEP population and a method to document services and evaluate.
- It is recommended that the MPO document a complaint disposition process for Title VI/Non-discrimination complaints. It is also recommended that the Title VI Coordinator contact information, along with their complaint procedures, be made readily available to the public.

As noted above, the MPO updated its Public Participation Plan in 2015 to reference new activities related to its Title VI procedures, Environmental Justice, Language Assistance Plan, and complaint procedures. As part of this package, the MPO developed the following:

- Environmental justice demographic profile identifying seven degrees of disadvantage, including Limited English Proficiency (LEP), non-white population, persons in poverty, carless households, persons with a disability, single heads of households with children, and persons over 65.
- Language Assistance Plan

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- Title VI complaint procedures
- Language to notify the public of the MPO's compliance with Title VI for inclusion on MPO agendas, the MPO website, and other MPO documents

5. Travel Forecasting:

- It is recommended that the Des Moines Area MPO retain the ability to perform modeling work.
- It is recommended to further analyze the level of transit analysis required by the MPO, and then either build that functionality into the model or find a surrogate methodology to fill that need.
- Additional technical recommendations are included in the Travel Forecasting section of this document.

This information was addressed in the Travel Demand Modeling section. In summary, the MPO has staff capable of running the MPO travel demand model, has incorporated transit into its model, and has addressed other technical recommendations made at the 2013 review.

6. Congestion Management and Operations: It is recommended that the MPO establish a maintenance plan for their ITS architecture.

The current regional ITS architecture was completed in 2009 and covers the timeframe up to 2018. MPO staff has begun work on updating the ITS architecture, including ascertaining existing elements, but has slowed the update process to ensure Iowa DOT ITS updates and the soon to begin City of Des Moines ITS plan are coordinated with the update of the regional architecture.

As noted previously, the MPO also has updated its Congestion Management Process since the last certification review.

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2017 Des Moines Area MPO TMA Certification Review Topics

1. MPO Organization and Interagency Coordination

Please describe the accomplishments in regard to the MPO organization.

Background: The MPO is actually a reference to the MPO Policy Board. According to the federal planning regulations, each MPO that serves a TMA, when designated or redesignated under this section, shall consist of local elected officials, officials of public agencies that administer or operate major modes of transportation in the metropolitan planning area, and appropriate State transportation officials. This structure is commonly extended to all MPOs, TMAs or non-TMAs.

MPO organizations also have other committees, such as technical committees and other advisory committees that report to, or make recommendations to, the MPO. According to the federal planning regulations, where appropriate, MPOs may increase the representation of local elected officials, public transportation agencies, or appropriate State officials on their policy boards and other committees as a means for encouraging greater involvement in the metropolitan transportation planning process.

The MPO organization also includes professional staff that manages the day to day functions of the organization. The staff should be educated, experienced and well trained in transportation planning or a related area.

The Des Moines Area MPO's organizational structure is outlined in its [2013 agreement and bylaws](#) and has changed little since the 2013 Certification Review. Voting members of the MPO include 16 cities, 3 counties, and the Des Moines Area Regional Transit Authority (DART). Non-voting members include 3 cities, 1 county, the Heart of Iowa Regional Transit Agency (HIRTA), and the Des Moines International Airport. FHWA, FTA, and the Iowa DOT are advisory, non-voting members. The MPO's Policy Committee consists of 41 voting, 6 non-voting, and 3 advisory representatives. Of the voting representatives, 32 are elected officials, 8 are staff, and 1 is an appointed citizen.

The MPO's technical committee includes the same member communities, with 34 voting, 6 non-voting, and 3 advisory representatives.

The MPO selects seven representatives to serve on its Executive Committee. The Executive Committee consists of a chair, vice-chair, secretary/treasurer, ex-officio past chair, and three at-large positions.

The MPO employs nine full-time staff persons and occasionally up to two seasonal interns. Since the last certification review, the MPO's staff positions and personnel have changed to varying degrees. In 2015 the MPO created a Communications Manager position. This position helps coordinate public events, media engagement, and general internal and external communications with MPO members, stakeholders, and the public. The MPO previously had a Travel Demand Modeler on staff.

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Following a vacancy in that position, the MPO made the decision to hire transportation planners with experience in travel demand modeling vs. an exclusive travel demand modeler. Overall the MPOs staff is more experienced than it has been historically.

In terms of accomplishments, the MPO staff notes the following:

The Tomorrow Plan

The [Tomorrow Plan](#) was approved in November 2013. The plan provides a vision for how the metro area can grow sustainably through the year 2050, and incorporates goals and strategies related to economic development, transportation, affordable housing, environmental protection, recreation, arts and culture, and intergovernmental cooperation. The Tomorrow Plan's strategies have largely been folded into the ongoing Capital Crossroads strategy, which is a business community led strategic planning and workforce retention effort. A successful aspect from the Tomorrow Plan was a speaker series that brought thought leaders to the area for a series of lectures during the planning process. The [Tomorrow Plan Speaker Series](#) continues, and the MPO has successfully partnered with numerous community organizations to host dozens of speaker events over the last four years. The MPO also recently began offering a series of mini-workshops to help educate community organizations and stakeholders on several transportation, land use, and economic development topics.

Mobilizing Tomorrow

Following approval of the Tomorrow Plan, the MPO updated its long-range transportation plan. This plan, [Mobilizing Tomorrow](#), was approved in November 2014 and builds from the Tomorrow Plan's transportation elements. Mobilizing Tomorrow takes a performance-based approach to planning, emphasizing funding towards projects and strategies that help achieve the plan's goals and performance targets. The plan also was made to be more user friendly than the previous plan.

STP Funding

On the heels of Mobilizing Tomorrow, the MPO revised its [Surface Transportation Block Grant Program](#) (STBG) scoring process to better tie funding to the long-range transportation plan. The annual STBG process now uses a scoring system similar to that used to score projects in Mobilizing Tomorrow. Funding targets also were adjusted to match the investment scenario developed for Mobilizing Tomorrow.

Data Driven Decision Making and Communications

As noted, the MPO took a performance-based approach with Mobilizing Tomorrow. Following the plan's completion, the MPO has developed [quarterly performance reports](#) that focus more in depth on a category of performance data. This provides the MPO staff an opportunity to highlight updates to data, to reinforce the importance of the data and its use in transportation planning, to demonstrate best practices and the latest research, and to communicate to the media and public the status of the transportation system. The MPO won the APA Iowa Communications Initiative Award in 2015 for its efforts.

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Additionally, the MPO assembled a team that participated throughout 2016 in the Transportation For America Leadership Academy, which focused on performance-based planning. The information gathered throughout this academy will be used as the MPO begins to update Mobilizing Tomorrow.

The MPO also has worked to visualize data for users. The MPO's website has a series of [interactive maps](#) that display information about the transportation system. The MPO also partnered with the Greater Des Moines Partnership to develop a [Regional Data Hub](#). The data hub provides a variety of data about the region, including demographic, economic, and transportation information.

Energy Efficiency

The MPO was contracted by the Iowa Economic Development Authority in 2013 to produce work related to transportation energy efficiency. This project was conducted with funding the authority received from the US Department of Energy. The MPO used IDEA funding to develop an [Electric Vehicle Roadmap Plan](#), an [On-Street Bicycle Facility Feasibility Study](#), and to incorporate energy efficiency in the MPO's long-range plan update.

Environmental Roundtable

In 2013 the MPO re-established an Environment Roundtable. The roundtable has brought together environmental stakeholders to assist the MPO in reviewing projects, in documenting environmentally-sensitive land for use in project analysis, and in developing environmental best practices like Green Street policies.

Public Health

Over the last few years, the MPO has developed partnerships with public health organizations and has worked to educate the MPO member communities and other stakeholders around issues of active transportation, complete streets, health impact assessments, and other topics. These agencies include Iowa Department of Public Health, Polk and Dallas County Health Departments, Iowa Healthiest State Initiative, and the Wellmark Foundation. This coordination supports several ongoing regional committees including Active Living Iowa Health and Wellness Committee, and the Wellness Capital of Capital Crossroads.

These partnerships helped establish a regional model for [complete streets policies](#) and positioned the MPO to assist local governments in educating staffs on how to implement complete streets within their communities. The MPO received a \$75,000 grant award from the Wellmark Foundation, which it used to develop a [Complete Streets Tactical Start Grant Program](#). This program was very well received by member communities and helped fund six complete street projects throughout the metro. A second Wellmark Foundation grant was received and will be used to assist with Safe Routes to Schools infrastructure within the City of Des Moines as part of a larger [Step It Up Challenge](#) effort.

The MPO also has received funding over the last few years from the Iowa Department of Public Health to assist in the development of model complete streets policies and to bring in health-related speakers as part of the Tomorrow Plan's Speaker Series. The MPO also is beginning to work with public health officials on the development of a public health impact model. This model would be a complement to the

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MPO's travel demand model, predicting impacts of transportation projects and scenarios on public health.

Water Trails

Following completion of the Tomorrow Plan, the Iowa Department of Natural Resources contracted with the MPO to develop a regional water trails plan. The MPO approved the [Greater Des Moines Water Trails and Greenways Plan](#) in November 2016. This plan provides a blueprint for how the region's rivers and streams can be used for more recreational opportunities and identifies the corresponding improvements to the natural environment, particularly water quality, to do so. An [engineering feasibility study](#) will soon launch that will further refine the feasibility of projects identified in the plan, including the mitigation of two dams in downtown Des Moines.

Watershed Management

The MPO has engaged with member governments as they pursue the development of [watershed management authorities](#) (WMA) and conduct watershed assessment and planning efforts. The MPO has participated on the steering committee for the Fourmile Creek WMA and the Mud/Camp/Spring Creeks WMA, has helped facilitate watershed efforts in the Walnut Creek watershed, is working to get the North/Middle Rivers WMA established, and convenes a Council of WMA that brings together officers from all of the WMAs in the MPO region.

Smart Cities

The MPO worked with DART and the City of Des Moines to develop an [application](#) for the US DOT Smart City Challenge in 2016. While unsuccessful in its efforts, the MPO has continued to work with member communities and other stakeholders to identify opportunities to plan for Smart City technologies.

Freight Related Efforts

The MPO has been involved with two significant freight projects over the last several years. One is the development of a [transload facility](#) in Des Moines. The MPO has led efforts to study the feasibility of an identified site for transloading activities, has applied for Iowa DOT grant and loan funding, and has worked with the City of Des Moines on their application for a US DOT First Lane Grant. The other activity has been working with Iowa State University on the development of a container tracking website. The website takes provider information about containers destined for Iowa to potential shippers, allowing them the opportunity to make arrangement to use the containers, which otherwise would go back to port empty, for exports from Iowa.

Strategic Plan

Over the last year the MPO has undertaken strategic planning efforts. These efforts began as an assessment of MPO members on the effectiveness of the MPO staff. Based on the feedback received, the MPO agreed to develop a formal strategic plan for the organization. This planning process kicked off in February 2017 and will be completed by September 2017. It is envisioned that the strategic plan will help to clarify the MPO's activities beyond traditional transportation planning, if any, as well as identify any organizational adjustments that should be made.

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MPO ROLE AND RESPONSIBILITIES

- #### Agreements
- **Ongoing Agreements**
 - Iowa DOT for transportation planning services
 - UTRPA for RPA transportation planning
 - DART MOU for transit planning

- #### Agreements
- **Other Agreements**
 - Polk Soil and Water Conservation District MOU for watershed management
 - Iowa Economic Dev. Authority for transportation energy efficiency study
 - AARP for data analysis and document preparation
 - Iowa DNR for water trails
 - Iowa Department of Public Health for active living efforts
 - Local community assistance

UNIFIED PLANNING WORK PROGRAM

- #### UPWP Development Process
- **January/February**
 - Discussions with MPO committees
 - Review of required activities and goals of UTPP
 - Projects solicited from members
 - Staff begins developing budget
 - **March**
 - Review UPWP, including projects and budget
 - Approve draft for submission to DOT/IHWA/FTA

- #### UPWP Development Process
- **April**
 - Incorporate comments from draft review
 - Review budget and cost allocation plan with MPO Finance and Budget Subcommittee
 - **May**
 - Final UPWP/budget presented to committees
 - Approval of UPWP and submission to DOT/IHWA/FTA

- #### FY 2018 UPWP and Budget Development
- MPO's scope of work for FY 2018
- Summary of activities
 - Revenue/expenses
 - Staff hours and costs for each work element

- #### FY 2018 UPWP and Budget Development
- | Main Work Elements: | Each Help Achieve: |
|-----------------------------------|-----------------------------|
| 1. Long-Range Planning | Mobilizing Tomorrow's Goals |
| 2. Multimodal Planning | FAST Act Planning Factors |
| 3. Public Involvement | 4 |
| 4. Integrated Planning | MPO Federal Requirements |
| 5. Funding | |
| 6. Research, Reports and Services | |
| 7. Program Administration | |
| 8. CDBG | |
| 9. Contracted Services | |

FY 2018 UPWP and Budget Development

Projects of Note:

- Update Modeling Tomorrow
- Reassess Transportation Plan
- Performance measure reports
- Continued complete streets & Safe Routes to Schools planning
- Freight facility development & additional inventory website
- Speaker series
- National Household Travel Survey
- Bike and trail facility coating programs
- Road pavement condition data collection and analysis
- Transportation/public health model
- Smart City planning
- Springside Park Development
- Road diet feasibility/bike level of service analysis



FY 2018 UPWP and Budget Development

Contracted Services:

- CRTPA administration
- Workload management facilitation & policy development
- Water Trails Phase 3 Engineering Study
- Indiana Comprehensive Plan
- Marley/Delta Comprehensive Plan



MPO Revenues

Category	2017	2018
Primary Sources		
• US DOT Grants	\$1,100,000	\$1,100,000
• Member Dues	\$100,000	\$100,000
• IDNR Grant	\$100,000	\$100,000
• CRTPA Contract	\$100,000	\$100,000
• PSWCD	\$100,000	\$100,000
• Other contracts	\$100,000	\$100,000
Total	\$1,500,000	\$1,500,000



MPO Expenditures

Primary Expenses

- Salaries and Wages
- Fringe Benefits
- Indirect Costs
- Special Projects (other direct costs)




Salaries and Wages

- 9 full-time salaried staff
 - Current salaries range from \$45,000 to \$120,000
 - Budget 5% increase in salaries
- 2 intern positions @ \$11.75/hour



Fringe Benefits

- Insurance
- Paid leave
- Longevity bonus
- Membership dues
- ITERS, deferred comp.



Indirect Costs

Eligible Costs

- Rent, parking, insurance
- Attorney
- IT/Website/Phone
- Printing, postage, supplies

Ineligible Costs

- Computers
- Advertising
- Lobbying



FY 2018 Budget – Summary of Costs

Category	2017	2018
Salaries and Wages	\$1,100,000	\$1,155,000
Fringe Benefits	\$100,000	\$100,000
Indirect Costs	\$100,000	\$100,000
Special Projects	\$100,000	\$100,000
Total	\$1,400,000	\$1,455,000

Work Elements 3-8: 87% of staff time/costs



FY 2018 Budget Compared to Previous Years

Category	2018	2017	2016	2015	2014	2013
Salaries	\$1,155,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000
Fringe Costs	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Indirect Costs	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Special Projects	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Total Budget	\$1,455,000	\$1,400,000	\$1,400,000	\$1,400,000	\$1,400,000	\$1,400,000





- SCRPG – Required Outcomes**
- Aligned plans in the region
 - Increased participation = decision-making
 - Reduced environmental disparities
 - Decreased vehicle miles traveled
 - Decreased housing + transportation costs
 - Walk + transit development
 - Improved access
 - Improved public health
 - Decreased hazardous environmental threats
 - Enhanced regional competitiveness



Priorities of Greater Des Moines Residents

Greater Des Moines Random-Stratified Survey	#1 Priority	Lower Taxes	#8 Priority	Create new parks and recreational areas
	#2 Priority	Business/tech funding	#9 Priority	Create new bike paths and facilities
	#3 Priority	Revitalize vacant properties	#10 Priority	Pay our bills on time and convert to open office
	#4 Priority	Enhance storm water system	#11 Priority	Expand the trail network
	#5 Priority	Improve public transit	#12 Priority	Build more regional attractions downtown
	#6 Priority	Spend money to attract new businesses	#13 Priority	Add more parking
	#7 Priority	Support local planning	#14 Priority	Build more walk

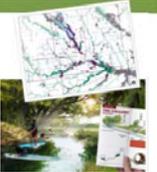
- GOAL 1:**
Create a Resilient Regional Economy
- GOAL 2:**
Improve the Region's Environmental Health and Access to the Outdoors
- GOAL 3:**
Further the Health and Well-Being of All Residents in the Region
- GOAL 4:**
Increase Regional Cooperation and Efficiency at All Levels



INITIATIVE 2

GREENWAYS

- Align efforts, coordinate – communicate greenway work
- Conduct a natural areas inventory
- Celebrate connecting land purchases
- Launch with bio-bits of most connected areas
- Coordinate WMA efforts for watershed planning



INITIATIVE 3

RESILIENT NEIGHBORHOODS

- Establish neighborhood associations throughout the region
- Include the regional affordable housing plan
- Create a model inclusionary zoning ordinance



INITIATIVE 4

REGIONAL COOPERATION

- Analyze the feasibility around the region for a shared stormwater utilities
- Analyze community stormwater practices + ordinances
- Develop sample ordinances for the region
- Coordinate utilities



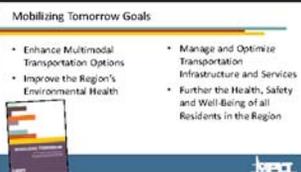
Mobilizing Tomorrow

- Long-Range Transportation Plan – builds from Tomorrow Plan
- Identifies projects, policies, and funding necessary to achieve vision for future network



Mobilizing Tomorrow Goals

- Enhance Multimodal Transportation Options
- Improve the Region's Environmental Health
- Manage and Optimize Transportation Infrastructure and Services
- Further the Health, Safety and Well-Being of all Residents in the Region

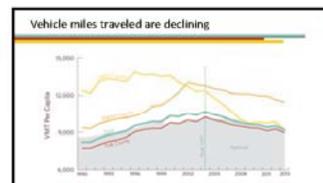


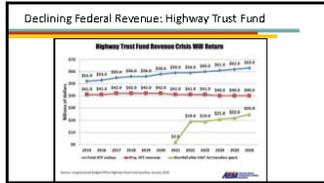
Plan Outline

- Introduction
- Setting Our Sights
 - Goals
 - Performance Measures
- Investment Strategies
- Taking Action
 - Capital Projects
 - Policy Language
 - Technical Resources
- Appendices
 - A: Acronyms
 - B: State of the System
 - C: Demographics & Growth Scenario
 - D: Fiscal Analysis
 - E: Project Selection & Project List
 - F: Environmental Analysis
 - G: Public Engagement
 - H: Travel Demand Model Doc.
 - I: Amendments

Performance Measures & Trends

- Pavement condition
- Bridge condition
- Freight impediments
- Level of service
- On-street system
- Trail gaps
- Vehicle miles traveled
- Increase multimodal rate
- Transit ridership
- Crash rates
- Environmental justice

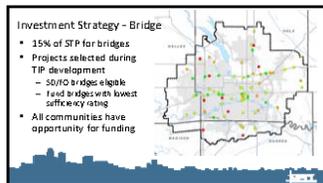
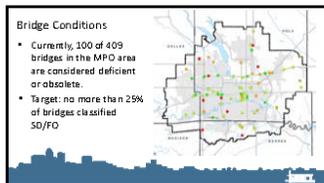





- ### Residents' priorities
- October 2012 survey of Greater Des Moines residents
 - Rated five transportation-related topics
- Highest Priority ↑
- Improve public transportation system
 - Create new bicycle paths and facilities
 - Expand trail networks
 - Build more roads
 - Add more parking
- ↓ Lowest Priority

What do these trends mean moving forward?

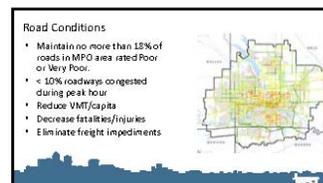
Less money, Changing needs & Aging infrastructure = Funding investments in transportation need to change



- ### Transit Conditions
- 2050 Targets
 - Decrease transit vehicles past useful life from 15% to 0%
 - Increase commuting by walk/bike from 7% to 20%
 - Double current annual ridership from 4.4 million to 8.8 million
 - No more than 10% of roadways congested during peak hours
 - Reduce vehicle miles traveled per capita
 - Investment strategy: increase STP target to 30% minimum

- ### Bike/Ped Conditions
- 2050 Targets
 - Increase miles of on-street facilities from 23 to 400
 - Complete all identified regional trail gaps
 - Increase commute by walk/bike from 4% to 10%
 - Decrease VMT/capita

- ### Investment Strategy - Bike/Ped
- Prioritize TAP funds for on-street facilities and regional trail gaps
 - Eligible projects selected annually during TIP process
 - Funds still remain for other TAP-eligible activities
 - All communities eligible
- | Category | 2017 |
|--------------------------|-------|
| Available to Provide | \$100 |
| Priority projects | \$200 |
| Remaining to be provided | \$200 |
| Not used | \$100 |



Investment Strategy - Roads

- Additional \$30 needed annually to maintain pavement condition
- Forecasted congestion with no improvements to system is under 10%
- Forecasted VMT/capita decreases with no improvements to system
- Remaining STP funds targeted towards roadways



Project List Development

- Considered STP funds and match required
- Projects scored using performance measures
- Each community gets one priority project
- Remaining projects ranked by performance score



Changes in Investment Strategies

- \$3.2 billion through 2050

	Previous target % of total	New target % of total
Resilience Projects	72% max	62% max
Performance 2	N/A	25% max
Bioclimatic Streets	18% max	18% max
STP	N/A	10% max
STP	18% max	18% max
Non STP	N/A	3% max



Policy Initiatives in Mobilizing Tomorrow

<h4>High-level overview</h4> <ul style="list-style-type: none"> Multimodal Access Nodes + Corridor Initiative Complete Streets Environmental Resiliency Parking Management Congestion Management 	<h4>Detailed design criteria</h4> <ul style="list-style-type: none"> Sample Complete Street Policy Roadway Design Standards Bicycle Facility Standards Parking Guidelines Nodes + Corridor Guidelines Transit Supportive Guidelines
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Transportation Improvement Program (TIP)

MAJOR PLANNING PRODUCTS



TIP Development Schedule

- MPO annually develops a four-year Transportation Improvement Program (TIP)
- Initial process begins with MPO member government and associated agencies receiving current TIP projects for review and update in February
- MPO staff requests that members determine projects programmed in current year will have FHWA authorization to proceed by September 30
- If not, a rollover into next year is required
- New projects as well as changes to currently programmed projects must be submitted to the MPO by March



STBG Program Schedule

- Applications posted early October
- Workshop early November
- Applications due early December
- Application presentations February
- STP Funding Subcommittee makes recommendation in February/March
- MPO vote to approve in April



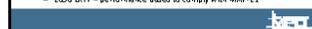
Performance Based Planning Process (PBP)

MAJOR PLANNING PRODUCTS



History with Performance Measures...

- 2035 long-range plan (2009)
 - 7 goals, 57 objectives, 61 measures!
 - Too much, could not get data
- The Tomorrow Plan (2013)
 - Used measures to evaluate growth scenarios
- Mobilizing Tomorrow (2014)
 - 2050 TIP - performance based to comply with MAP-21



Performance Measures in Mobilizing Tomorrow (2014)

- Pavement condition
- Bridge condition
- Transit fleet age
- Freight impediments
- Level of service/congestion
- On-street bike system
- Trail gaps
- Vehicle miles traveled
- Peak hour mode share
- Transit ridership

- Crash rates
- Sensitive areas disturbed
- Environmental justice*



Aging Infrastructure

- 19% of roads in MPO area rated Poor or Very Poor.
- To prevent roads from worsening, WETA needs to spend \$45 million annually over next 10 years – at least \$10 million more annually than current spending levels.



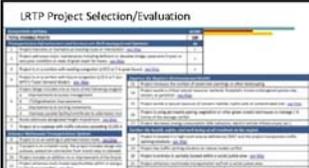
Performance Measures in Mobilizing Tomorrow (2014)



Environmental Justice Considerations

Measure	2014 Score	2015 Score	2016 Score
Number of facilities	4	4	4
Number of facilities with poor or very poor condition	1	1	1
Number of facilities with poor or very poor condition in sensitive areas	1	1	1
Number of facilities with poor or very poor condition in sensitive areas with high population density	1	1	1
Number of facilities with poor or very poor condition in sensitive areas with high population density and high environmental justice score	1	1	1
Number of facilities with poor or very poor condition in sensitive areas with high population density and high environmental justice score and high environmental justice score	1	1	1
Number of facilities with poor or very poor condition in sensitive areas with high population density and high environmental justice score and high environmental justice score and high environmental justice score	1	1	1
Number of facilities with poor or very poor condition in sensitive areas with high population density and high environmental justice score	1	1	1

L RTP Project Selection/Evaluation




STP Scoring Summary

STP Measure	2014 Score	2015 Score	2016 Score	2017 Score
Number of facilities	4	4	4	4
Number of facilities with poor or very poor condition	1	1	1	1
Number of facilities with poor or very poor condition in sensitive areas	1	1	1	1
Number of facilities with poor or very poor condition in sensitive areas with high population density	1	1	1	1
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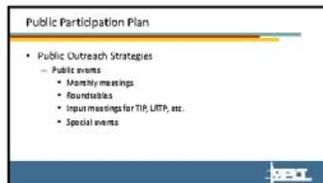
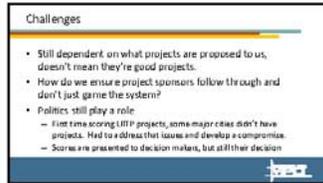
Average score increased 2 points from 2015 round to 2020 round

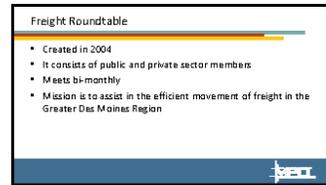
Annual Report on Performance Measures

Measure	2014 Score	2015 Score	2016 Score	2017 Score
Number of facilities	4	4	4	4
Number of facilities with poor or very poor condition	1	1	1	1
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Number of facilities with poor or very poor condition in sensitive areas with high population density and high environmental justice score	1	1	1	1

Monthly Data Reports – Deeper Dive







Intermodal vs. Transload

- Intermodal Freight
 - Higher capacity in existing corridors
 - Limited to specific size of containers
 - Uses multiple modes of transportation
 - No handling requirements changing mode




Intermodal Freight




Intermodal vs. Transload

- Transload Freight
 - Variety of commodities
 - Stored in tanks or trailers
 - Uses multiple modes of transportation
 - Unique handling requirements




Transload Freight




Project History

- 2014 Des Moines Rail Terminal Feasibility Study
- Rail Revolving Loan and Grant from the Iowa DOP
- Feasibility Analysis of Specific Line in Des Moines
- Led McClure Engineering, ERS, Via Railto concurrent study





Site Selection




Railroad Access




Railroad Access





Railroad Access





Rail Road Access

UNION PACIFIC

Rail Road Access

IOWA ILLINOIS

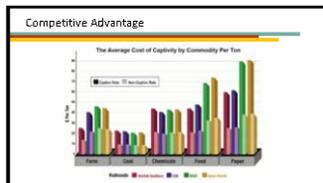
Rail Road Access

CSX TRANSPORTATION

CSX SYSTEM MAP

Competitive Advantage

25%



Regional Benefits

- Greater access to national and global markets
- More attractive to existing and new business
- Provides more cost-effective shipping option
- Diverts city-to-city truck traffic
- Lower emissions
- Reduces maintenance needs on roadways
- Reduces road congestion

Potential Site Layout & Challenges

Container Coordination Project

- Problem: Freight container is emptying the plane full and leaving empty
- Goal: Connect them and allow to empty containers

Container Coordination Project

International Traders of Iowa

BRIDGESTONE Americas, Inc.

MPO

CyBIZLab

partnership

Container Coordination Project

- Phase 1
 - Payment strategy
- Phase 2
 - Website development




Container Coordination Project

Phase 1 – Feasibility Study

- Determined that project is feasible
- Need to use data mining company
- Negotiated with DataMyne




Container Coordination Project

Phase 2 – Website Development

- How will data be uploaded
- Website design
- Website Administration



Container Coordination Project

Next Steps

- Pilot the website
- Open website to public
- www.containerlab.com



Congestion Management Process

MANAGEMENT SYSTEMS



Congestion Management Process

- SAFETEA-LU required Metropolitan transportation plans to have a CMP
- Map 21 relaxes the CMP requirements while enhancing congestion and reliability monitoring and reporting




Congestion Management Process

According to MAP-21 CMPs must provide for:

“effective management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy of new and existing transportation facilities eligible for funding... through the use of travel demand reduction and operational management strategies”



Congestion Management Process

Goals & Objectives




Congestion Management Process

- Use INRIX data to identify congestion
- Travel Time Index
 - The measure of travel time during the hour ended at the time reported relative to the 1995 base year
- Spacing Time Index
 - The measure of the number of vehicles that pass a point on the road in a given hour relative to the 1995 base year

Travel Time Index	Period
100.00	1995
100.00	2000
100.00	2005
100.00	2010
100.00	2015

Spacing Time Index	Period
100.00	1995
100.00	2000
100.00	2005
100.00	2010
100.00	2015



Congestion Management Process

- Developed Point Based System
- Congestion Threshold set at 7 points

Point Based System	Score
100%	7
90%	6
80%	5
70%	4
60%	3
50%	2
40%	1
30%	0

- Hierarchy of Strategies
 - Demand Management Strategies (best supported)
 - Operational Management Strategies (secondarily supported) and
 - Capital Investment Strategies (most supported)




Congestion Management Process

- CMSP Implementation
 - Incorporated into STP scoring process
 - Help communities identify potential projects
 - Scale
 - Signal Timing Improvements




BIKE/PED, AIR QUALITY, LIVABILITY



Complete Streets

- Model policy
- Education, engagement, and training
- Mapping and analysis
- Mini-Grant Program with Wellmark Foundation
- Resources and best practices




Adoptions

- Carlisle
- Des Moines
- Norwalk
- Altoona
- Johnston
- Pleasant Hill
- Urbandale
- Windsor Heights
- West Des Moines
- Clive
- Park City



Data-Driven Decisions

- Trail Counting Program
- On-Street Counter Pilot
- Data Bike
- On-Street Bicycle Feasibility Study
- Proof of Concept Programs




Education and Best Practices

- Best Practices Series
- Mini-Workshop Series
- Bicycle and Pedestrian Roundtable
- APEP Webinars
- Public Health Partnerships
- Local Partnerships

- City Councils
- Parks and Rec Boards
- Chambers of Commerce
- Public Health Conferences
- Employers
- Universities
- City Committees
- Human Service Providers
- Housing Organizations
- Non-profits (community.org)



Other Programs

- Step It Up DSM
- SmartTrips
- Iowa Walking College
- Active Living Iowa
- TDM Activities




Step It Up DSM

- April 2016 awarded WACB by CDC grant
- Awarded 3 day training
- Produced a replicable Action Plan for improving walkability
- Policy, infrastructure and process

The Team:

- City of Des Moines
- Des Moines Public Schools
- Iowa Dept. of Public Health
- Iowa Healthiest State Initiative
- MHO



SmartTrips

- Summer 2015
- Proof of concept
- Targets new residents
- Incentives and Education
- Positive response



Iowa Walking College

- Based on America Walks program
- Led by Healthiest State and IDPH
- Curriculum and partnerships
- Faculty and support



Overview

- Complete Streets and Safe Routes
- Data Collection and Analysis
- Education and Outreach
- Best Practices and Training
- Partnerships and Support
- TOM Activities

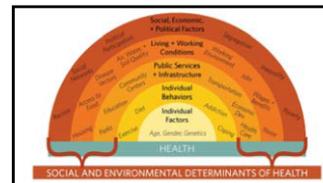
Public Health Impacts

Park (driving to walk)



School (drive to avoid walking)





Iowa's First Regional Water Trails Plan




Variety of User Experiences




Raccoon River: I-35 to downtown



dmampo.org/water-trails





Watershed Management Authorities

- Walnut Creek
- Fournile Creek
- Mud/Camp/Spring Creeks

Green Streets

- Using green infrastructure to mitigate flooding and treat stormwater
- 32% of the MPO's impervious surfaces are roads

PUBLIC TRANSIT PROVIDERS

CIVIL RIGHTS

Title VI Documents

- Title VI of Civil Rights Act may not discriminate
- Must document compliance every 4 years
- Title VI Plan is prepared and following updates made - November 2015:
 - Add Non-English Speaking
 - Create process in the document
 - Complete procedures and form procedures
 - Rehabilitation with technology and standards issues

Limited English Proficiency (LEP)

- Spanish
- Somali/Arabic
- Vietnamese
- Other Languages

(1,000 or at least 5% of population)

Title VI Compliance

- Added language to the cover page of all our agendas regarding Title VI
- Include language on Public Notices that note MPO office is accessible via numerous DART routes
- Developed a Title VI binder that we keep at the front desk
 - Language Assistance Plan
 - FTA and FHWA Title VI Plan/Program
 - Several language identification guides

Title VI Webpage

- Developed a Title VI webpage
 - Public Participation Plan
 - Language Assistance Plan
 - Outlines Complaint Process
 - Printable PDF Complaint form
 - Online form
 - Staff Contact Information
 - Translation Links on webpage

<https://dmmmpo.org/title-vi/>





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