

## Summary Report

# Economic Assessment: Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning Final Rule

## 1 Executive Summary

On July 6, 2012, the President signed into law P.L. 112-141, the Moving Ahead for Progress in the 21st Century Act (MAP-21) and on December 4, 2015, signed into law P.L. 114-94, the Fixing America's Surface Transportation Act (FAST). The MAP-21 makes significant changes to the statewide and nonmetropolitan planning process and the metropolitan transportation planning process, and the FAST makes minor changes to existing provisions. As a result, FHWA and FTA have issued a final rule that makes the regulations consistent with current statutory requirements. The rule is central to the implementation of the overall performance management framework created by MAP-21.

This Regulatory Impact Analysis (regulatory analysis or RIA) supports the final rule on Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning. The regulatory analysis estimates the economic impact, in terms of costs and benefits, on State departments of transportation (States), metropolitan planning organizations (MPOs) and providers of public transportation regulated under this action. The economic impacts are measured on an incremental basis, relative to current planning activities.

The benefits of this rule include increased transparency and accountability in the transportation decision making process, an increased focus for investments of Federal-aid program funds on strategies that support the national goal areas and general transit purposes identified in MAP-21, improved decision making, and more efficient use of limited transportation funds. The FHWA and FTA estimate that the annual increase in costs attributable to the rulemaking for all 52 States and 409 MPOs in 2014 dollars will be \$28.4 million, in aggregate. These costs are primarily due to an increase in staff time needed to meet the new requirements. In addition, the changes may require MPOs to incur nominal one-time costs. For the 600 (estimated) providers of public transportation that operate within metropolitan planning areas, the annual increase in costs will be \$2.5 million in 2014 dollars, in aggregate, for coordination with States and MPOs, on average. The FHWA and FTA believe that the economic impact of this rulemaking will be minimal and the benefits of implementing this rule will outweigh the costs.

This document estimates the costs and benefits of the rule in order to inform policy makers and the public of the relative impact of the rule. Section 2 of the document briefly discusses the legislation that necessitates the rule and summarizes the rule's substantive content. Section 3 details the costs that FHWA and FTA anticipate States, MPOs, and providers of transportation will incur to comply with the rule's new requirements. These costs are presented as level of effort estimates for each component of the proposed rule and are expressed in labor hours and labor categories. The level of effort estimates are monetized using loaded wage rates. Section 4 lists the benefits that FHWA and FTA anticipate from the rule. It also includes a brief break-even cost analysis.

## 2 Introduction

Changes to Federal regulations must undergo several economic analyses. Executive Order (E.O.) 12866, Regulatory Planning and Review (58 FR 51735, October 4, 1993), as supplemented by E.O. 13563, Improving Regulation and Regulatory Review (76 FR 3821, January 21, 2011), directs each Federal agency to propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. This RIA supports the Joint final rule on Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning. The regulatory analysis estimates the economic impact, in terms of costs and benefits, on States, MPOs, and providers of public transportation regulated under this action, as required by E.O. 12866 and E.O. 13563. The economic impacts are measured on an incremental basis, relative to current planning activities.

In addition to the economic analysis required by the Executive Order, FHWA and FTA determined that the Paperwork Reduction Act of 1995 (PRA) (44 USC 3501, et seq.) applies because the changes create additional collection of information requirements. This RIA includes the burden hours associated with the additional collections as part of the overall costs of the changes in the rule.

Finally, with respect to the Regulatory Flexibility Act of 1980 (5 U.S.C. 601-612, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996), as addressed in the NPRM, FHWA and FTA have certified that the NPRM will not have a significant economic impact on a substantial number of small entities. They have also determined that the rule will not impose unfunded mandates as defined by the Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531-1538).

### 2.1 Background

This subsection describes the Moving Ahead for Progress in the 21st Century Act (MAP-21) which provides the impetus for FHWA and FTA to promulgate the final rule.

#### MAP-21

The MAP-21 transforms the Federal-aid highway program and the Federal transit program by requiring a transition to performance-driven, outcome-based approaches to key areas. Although it leaves the existing structure of the planning process largely untouched, the statute introduces significant changes to the planning process by requiring States, MPOs, and providers of public transportation to link investment priorities (the transportation improvement program of projects) to the achievement of performance targets. The MAP-21 requires States, MPOs, and providers of public transportation to establish performance targets to address performance measures in key areas such as safety, infrastructure condition, congestion, system reliability, emissions, and freight movement.

Accordingly, this rule is central to the implementation of the overall performance management framework that MAP-21 created. Additional changes include a new emphasis on nonmetropolitan transportation planning, changes to the structure of MPOs that serve a transportation management area (TMA)<sup>1</sup>, and codification of some existing best practices.

#### FAST

<sup>1</sup> A transportation management area (TMA) is an urbanized area having a population of over 200,000, or otherwise requested by the Governor and the MPO and officially designated by FHWA and FTA. 23 U.S.C. 134(k); 49 U.S.C. 5303 (k)(1)

The FAST makes minor amendments to existing transportation planning provisions in 23 U.S.C. 134 and 135 and leaves the existing structure of the planning process untouched. It adds two new planning factors that States and MPOs should consider and implement, it adds new entities that States and MPOs shall engage in the planning process, and adds additional elements that States and MPOs shall consider in their planning processes, it requires that States shall include a description of performance measures and targets and a system performance report in the long—range statewide transportation plan, and it updates optional provisions for using planning products in the environmental review process.

## **2.2 Final Rule**

The changes to the FHWA/FTA statewide and nonmetropolitan and metropolitan transportation planning regulations (23 CFR Part 450 and 49 CFR Part 613) make the regulations consistent with current statutory requirements. Major regulatory revisions include a new mandate for States and MPOs to take a performance-based approach to planning and programming; a new emphasis on the nonmetropolitan transportation planning process, by requiring States to have a higher level of involvement with nonmetropolitan local officials and providing a process for the creation of regional transportation planning organizations (RTPOs); a structural change to the membership of the larger MPOs; a new framework for voluntary scenario planning; and a process for programmatic mitigation plans. Changes in each of these areas are described below.

The FHWA and FTA have updated the analysis for the RIA that was prepared for the NPRM for the final rule and have reflected those changes in this analysis. In the RIA for NPRM FHWA and FTA assumed that there would be 420 total MPOs, composed of 210 MPOs serving TMAs and 210 MPOs serving non-TMA urbanized areas. This analysis was based on the fact that at the time the RIA was prepared for the NPRM, there were 384 existing MPOs and there were 36 new urbanized areas resulting from the 2010 census. Since that time, not all of the new urbanized areas resulting from the 2010 census have formed MPOs, some of the new urbanized areas were instead absorbed by existing MPOs. As a result, the actual numbers of new MPOs is less than what was anticipated at the time the RIA was prepared for the NPRM. Currently there are 409 MPOs, with 201 MPOs serving TMA areas and 208 MPOs serving non-TMA areas. These updated numbers are used throughout this analysis. Additionally, the average wage for a planner has increased from \$31.62 per hour in 2012 to \$32.59 in 2014, an increase of 3.0%, according to the Federal Bureau of Labor Statistics. As a result, the FHWA and FTA have updated the costs throughout this document from 2012 to 2014 dollars using this 3.0% adjustment for inflation. This adjusted cost increase to 2014 is based on the increase in the hourly wage for a planner from 2012 to 2014. The FHWA and FTA note that costs in this analysis are based on labor costs so FHWA and FTA applied a 3.0% increase to the costs in the RIA for the NPRM for use in this analysis of costs for the final rule.

### ***Performance-Based Planning and Programming***

As a fundamental element of a performance management framework, States, MPOs, and providers of public transportation will need to establish targets in key national performance areas to document expectations for future performance. This final rule provides in sections 450.206 and 450.306 that States, MPOs, and providers of public transportation coordinate the development of their targets. The MAP-21 requires that MPOs reflect those targets in their metropolitan transportation plans and encourages States to do the same in their long-range statewide transportation plan. Accordingly, this final rule provides that MPOs will reflect those targets in the metropolitan transportation plans and that

States should reflect the targets in their long-range statewide transportation plans. Both States and MPOs will describe, to the maximum extent practicable, the anticipated effect toward achieving the targets in their respective transportation improvement programs.

In addition to these changes to the planning provisions, MAP-21 contains new performance-related provisions that require States, MPOs, and public transportation providers to develop other performance-based plans and processes. The final rule provides in sections 450.206 and 450.306 that MPOs and States integrate the goals, objectives, performance measures, and targets of other performance-based plans and processes into their planning processes.

The metropolitan planning agreement helps facilitate the working relationship among MPOs, States, and providers of public transportation. In order to carry out the performance-based planning and programming process in the metropolitan areas, the rule amends section 450.314 to require that MPO(s) in a metropolitan area, in cooperation with the State(s) and provider(s) of public transportation, mutually develop and document the roles and responsibilities for coordination on performance based planning and programming for a metropolitan area in writing, either as part of the metropolitan planning agreement, or in some other form. The documentation will describe the roles and responsibilities of the MPO(s), the State(s), and the operator(s) of public transportation for developing and sharing information related to transportation systems performance data, the selection of performance targets, the reporting of performance targets, and the reporting of systems performance to be used in tracking progress toward the attainment of critical outcomes for the region of the MPO. The Metropolitan Planning Agreements, or other mutually developed written documentation, will also reflect the collection of data in the MPO metropolitan planning area for the State asset management plans for the National Highway System (NHS).

#### ***New Emphasis on Nonmetropolitan Transportation Planning***

This final rule also places a new emphasis on the importance of nonmetropolitan transportation planning. Sections 450.208, 450.210, 450.216, 450.218, and 450.222 require the States to work more closely with nonmetropolitan areas. Additionally, the final rule provides in Section 450.210 that States should have the option of designating RTPOs to help address the transportation planning needs of the nonmetropolitan areas of the State.

#### ***Additions to the Metropolitan Planning Process***

The MAP-21 made two changes specific to the metropolitan planning process. The first change affects the policy board structure of large MPOs. For each MPO serving a TMA, the planning statutes and current planning regulations identify a list of government or agency officials that must be on that policy board. Consistent with MAP-21, this final rule provides in section 450.310 to add representation by providers of public transportation to this list of officials.

The second change, in section 450.324 of the final rule, is that MPOs may use scenario planning, a tool to inform decision-makers about potential implications of various transportation system investments and performance, during the development of their plan. Both of these changes will support the effective implementation of a performance-based planning process.

#### ***Programmatic Mitigation Plans***

In addition to changing the planning statutes, MAP-21 continues efforts to expedite project delivery through better coordination between the transportation planning process and the environmental review

process. The MAP-21 creates a new statutory framework for the optional development of programmatic mitigation plans as part of the planning process for use during the environmental review process. Prior to the passage of MAP-21, States and MPOs could develop programmatic mitigation plans as part of the statewide metropolitan transportation planning process. The new sections 450.214 and 450.320 create a regulatory framework that States and MPOs may use to develop programmatic mitigation plans, as well as provide guidance on the use of these plans during the project development and environmental review process.

**Optional Use of Planning Products in Project Development**

The MAP-21 includes new authority for the optional use of planning products in project development. The final regulations in sections 450.212(d) and 450.318(e) include new authority for States or MPOs to use planning products in the environmental review process. The use of this new authority is optional. This authority has the potential to streamline the project development process resulting in potential time and cost savings in the project development process. The potential savings can be derived by avoidance of duplicating planning work in the environmental review process, improved decision making in the project development process, and early identification and coordination of environmental issues. The FHWA and FTA did not specifically quantify the costs or benefits for the States and MPOs to use this new authority for using planning information in the environmental review process because it is optional.

**Methodology and Assumptions**

**Impacted Entities**

The rulemaking will directly impact the transportation planning processes at 52 States (50 states plus Puerto Rico and the District of Columbia), 600 providers of public transportation and 409 (384, based on the 2000 Census) MPOs (representing all urbanized areas over 50,000 population as defined in the 2010 decennial Census). The MPOs are further categorized as to whether or not the MPO serves a TMA. MPOs that serve a TMA have additional planning requirements and generally have larger staff to support their planning functions.

These stratifications result in 4 distinct entities for which FHWA and FTA estimated regulatory costs that are provided in Table 1.

**Table 1.**

Entity	Number After 2000 Census	Number After 2010 Census (estimated)
States	52	52
Non-TMA MPOs	201	208
MPOs serving TMAs	183	201
Providers of Public Transportation	600	600
Total Impacted Entities	1036	1061

**Estimating current average costs**

The rulemaking generally will increase the level of effort and costs associated with carrying out several specific transportation planning functions, such as the development of metropolitan and statewide long-range transportation plans, the development of transportation improvement programs (TIPs) and the development of statewide transportation improvement programs (STIPs). The costs associated with these functions vary considerably across agencies, depending on staff resources and priorities, local political environment, etc. The regulations change existing processes and procedures. In most cases, it does not require completely new activities. Therefore, FHWA and FTA estimated a relative change (increase or decrease) from current average costs as reported by the entities, rather than estimating an absolute cost for each significant regulatory change. The FHWA and FTA assumed that implementing the performance-based planning provisions of the rule will increase the costs of preparing State and MPO long-range plans, STIPs, and TIPs by an average of 15 percent. Based on telephone discussions with 3 MPOs and 3 States, FHWA and FTA believe that this assumption is reasonable.

The FHWA and FTA obtained current average costs for specific MPO planning functions from recent Unified Planning Work Program (UPWP) documents for a sample of MPOs posted on the respective agencies' web sites. The FHWA and FTA sampled a total of 17 TMAs and 12 non-TMA MPOs. The FHWA and FTA believe this sample is adequate because it is weighted toward the MPOs that program the largest amount of funds. See Table 2. For each agency, annual costs for plan development, TIP preparation, public outreach, and data collection and analysis were recorded. These costs are shown in Table 3.

**Table 2.**

Population Category	Number of MPOS	Number Sampled	Percent Sampled (%)
Greater than 1,000,000	42	9	21
200,000 to 1,000,000	141	8	6
50,000 to 200,000	201	12	6
Totals	384	29	8

As shown in Table 3, annual costs for specific activities varied considerably across MPOs, even when they were stratified by TMA versus non-TMA. In some cases, the costs likely included supporting analyses, while in others they only included actual preparation of the final planning document (e.g., long-range plan or TIP). Since it was impossible to separate the various component costs from the information provided in the UPWP, FHWA and FTA used the total costs by function and calculated an average cost for two groups of MPOs: non-TMAs and those serving TMAs. In cases where data was not available, FHWA and FTA assumed that there were no costs.

**Table 3 - Planning Function Costs (2012 Dollars) for Sample MPOs  
(Rounded Annual Costs in \$ Thousands)**

<b>TMA MPO</b>	<b>Metropolitan Transportation Plan</b>	<b>TIP</b>
Anchorage, AK	\$93.0	\$50.0
Atlanta, GA	\$1,094.3	\$647.4
Baltimore, MD	\$175.0	\$66.9
Charlotte, NC	\$128.5	\$42.2
Cleveland, OH	\$282.8	\$525.3
Dallas, TX	\$910.6	\$548.6
Des Moines, IA	\$215.0	\$46.6
Detroit, MI	\$493.9	\$238.3
Kansas City	\$194.9	\$146.5
Little Rock, AR	\$50.0	\$7.5
Nashville, TN	\$577.6	\$131.6
Oahu, HI	\$220.8	\$67.9
Philadelphia, PA	\$550.0	\$540.0
Port St. Lucie, FL	\$15.0	\$10.0
Richmond, VA	\$160.0	\$210.0
Salt Lake City	\$482.6	\$180.0
Washington, DC	\$588.4	\$240.6
Total (17 TMA MPOs)	\$6,232.4	\$3,699.40
Ave. (17 TMA MPOs)	\$366.6	\$217.6
<b>Non-TMA MPO</b>		
Bismarck, ND	\$300.0	\$10.0
Champaign, IL	\$77.4	\$58.4
Dalton, GA	\$22.9	\$22.9
Dubuque, IA	\$49.5	\$40.2
Farmington, NM	\$17.5	\$6.0
Lawrence, KS	\$73.2	\$64.5
Pittsfield, MA	0	\$34.0
Pocatello, ID	\$344.1	\$9.0
San Angelo, TX	\$28.4	\$8.4
St. George, UT	\$197.3	\$40.0
Wilmington, NC	\$28.5	\$1.0
Winchester, VA	\$50.0	\$5.0
Total (12 Non-TMA MPOs)	\$1,188.8	\$299.4
Ave. (12 Non-TMA MPOs)	\$99.1	\$25.0

States are required to develop a Statewide Planning and Research Work Program (similar in purpose to the UPWP). However, these documents are not generally posted on State web sites, and do not typically categorize costs by such activities as plan or STIP preparation. The FHWA and FTA therefore assumed that the annual costs for preparing a long-range statewide transportation plan and STIP are approximately the same as those experienced by larger MPOs serving a TMA, and FHWA and FTA used those averages as the basis for their estimates of State costs.

As providers of public transportation participate in the development of metropolitan transportation plans, TIPs, long-range statewide transportation plans and STIPs, they need to work with MPOs and States providing information and participating in public outreach efforts. The FHWA and FTA estimated the number of additional hours that providers of public transportation in both metropolitan and nonmetropolitan areas will need to expend to fully participate in the performance-based planning process.



In looking at the wage rates used for State, MPO, and public transportation provider planning staff, FHWA and FTA utilized a wage rate of \$32.59<sup>2</sup> per hour and a load rate of 1.54<sup>3</sup> resulting in a loaded wage rate of \$50.19 per hour to estimate the cost and burden hours of effort.

### 3 Cost Estimates for Regulatory Changes

The FHWA and FTA have determined that the rulemaking will have three significant cost impacts for MPOs, three significant cost impacts for States and one significant cost impact for providers of public transportation. Descriptions of these impacts and their associated costs are presented below.

#### 3.1 Metropolitan Regulatory Costs

##### Metropolitan Transportation Plan

Several provisions in the rule will directly impact the level of effort required by MPOs in developing their metropolitan transportation plans. These provisions include:

- Metropolitan transportation plan becomes performance-driven and outcome based.
- New requirement for the metropolitan transportation planning process to support the seven national goals and the general transit purposes identified in MAP-21.
- Metropolitan transportation plan to include MPO established performance targets to address USDOT-established surface transportation system performance measures.
- Selection of performance targets by the MPO must be coordinated with relevant State(s) and providers of public transportation to ensure consistency.
- Each MPO must integrate elements of other performance-based plans, either directly or by reference, into the metropolitan transportation planning process (goals, objectives, performance measures, and targets.)
- Each MPO plan update must include a system performance report and subsequent updates evaluating the condition and performance of the transportation system, including progress achieved by the MPO in meeting the performance targets in comparison with system performance recorded in previous reports.

Because some of these provisions are requirements for the overall planning process, FHWA and FTA are accounting for these costs as part of the metropolitan transportation plan.

The primary impact of these provisions will be additional staff time devoted to coordinate with other agencies involved in other planning activities such as the State, local governments, public transit providers, as well as elected officials and the public. Many, but not all, MPOs already consult with some of these agencies and stakeholder groups.

<sup>2</sup> Source – Bureau of Labor Statistics, National Industry-Specific Occupational Employment and Wage Estimates, NAICS 999000 – Federal, State, and Local Government, Occupation code #19-3051, Occupation title – Urban and Regional Planners, Average mean wage \$32.59 per hour, Average annual wage \$67,790 per year in 2014 dollars.

<sup>3</sup> The FHWA and FTA loaded wage rate for the public sector, which adjusts the average wage rate to reflect compensation, including health and retirement benefits (loaded wage rate = (\$32.59/hr.) x (1.54) = \$50.19 per hour; \$104,379 per year in 2014 dollars).

The other major impact of these provisions will be the effort required to prepare additional sections of the plan covering performance-based planning elements such as transportation system performance goals, performance measures, targets, and strategies and funding associated with meeting those targets, as well as to integrate elements of other performance-based plans such as the Strategic Highway Safety Plan (SHSP), the Asset Management Plan, the State Freight Plan (if one exists), the Congestion Mitigation and Air Quality Improvement Program (CMAQ) Performance Plan, the Congestion Management Process (CMP), the Transit Asset Management Plan, and the Public Transportation Agency Safety Plan.

The FHWA and FTA estimate that these additional requirements could increase the cost of preparing a metropolitan transportation plan by 15 percent over current levels. The FHWA and FTA are analyzing the costs of the data collection and analysis associated with the national performance measures under separate rulemaking(s) that establish those highway and transit system performance measures. The costs associated with including those performance measures and targets in the metropolitan transportation plan are included in this cost estimate.

The aggregate cost increases for developing the metropolitan transportation plan are calculated below for MPOs that serve a TMA:

TMA:  $\$366.6\text{K} \times 1.03 \times 15\% \times 201 \text{ MPOs} = \mathbf{\$11,384.6\text{K} (\$11.4\text{M})}$  per year where:

- \$366.6K is the year 2012 average annual cost for plan development for MPOs serving a TMA (See Table 3, Column 2 for TMAs).
- 1.03 is a 3% inflation adjustment to adjust the cost in Table 3 from year 2012 to 2014.
- 15% is the estimated 15 percent increase in the cost of preparing the plan, as described above.
- 201 is the number of MPOs that serve a TMA.

Similarly, for MPOs that don't serve a TMA, the estimated costs are calculated as follows:

Non-TMAs:  $\$99.1\text{K} \times 1.03 \times 15\% \times 208 \text{ MPOs} = \mathbf{\$3,185.5\text{K} (\$3.2\text{M})}$  per year where:

- \$99.1K is the year 2012 average annual cost for plan development for non-TMA MPOs (See Table 3, Column 2 for non-TMA MPOs).
- 1.03 is a 3% inflation adjustment to adjust the cost in Table 3 from year 2012 to 2014.
- 15% is the estimated 15 percent increase in the cost of preparing the plan, as described above.
- 208 is the number of non-TMA MPOs.

### Transportation Improvement Program (TIP)

Several provisions in the rule will directly impact the level of effort required by MPOs in developing their transportation improvement programs. These provisions include:

- Each MPO TIP must reflect the performance-based planning and programming provisions of MAP-21 and the planning regulations.

- Each TIP must include, to the maximum extent practicable, a discussion of the anticipated effect of the TIP toward achieving the performance targets established in the metropolitan transportation plan, linking investment priorities to those performance targets.
- Once implemented, each TIP is designed to make progress toward achieving transportation system performance targets.

The primary impact of these provisions will be additional staff time devoted to coordination with other agencies involved in other planning activities such as the State, public transportation providers, local agencies, elected officials, stakeholder groups, and the public. The other major impact of these provisions will be the effort required by staff to prepare additional sections of the TIP to include performance-based planning elements such as a description of the anticipated effect of the TIP toward achieving performance targets. FHWA and FTA estimate that these additional requirements could increase the cost of preparing a TIP by 15 percent over current levels.

The aggregate cost increases for developing the TIP are calculated below for MPOs that serve a TMA:

TMA:  $\$217.6K \times 1.03 \times 15\% \times 201 \text{ MPOs} = \mathbf{\$6,756.6K (\$6.8M)}$  per year where:

- \$217.6K is the year 2012 average annual cost for TIP development for MPOs serving a TMA (See Table 3, Column 3 for TMAs).
- 1.03 is a 3% inflation adjustment to adjust the cost in Table 3 from year 2012 to 2014.
- 15% is the estimated 15 percent increase in the cost of preparing the TIP, as described above.
- 201 is the number of MPOs that serve a TMA.

Similarly, for MPOs that don't serve a TMA, the estimated costs are calculated as follows:

Non-TMAs:  $\$25.0K \times 1.03 \times 15\% \times 210 \text{ MPOs} = \mathbf{\$805.0K (\$0.81M)}$  per year where:

- \$25.0K is the year 2012 average annual cost for TIP development for MPOs serving a TMA (See Table 3, Column 3 for non-TMA MPOs).
- 1.03 is a 3% inflation adjustment to adjust the cost in Table 3 from year 2012 to 2014.
- 15% is the estimated 15 percent increase in the cost of preparing the TIP, as described above.
- 208 is the number of non-TMA MPOs.

### New TMA MPO Structure Provision

MAP-21 provides that not less than 2 years after its enactment, each MPO that serves an area designated as a TMA must consist of: local elected officials; officials of public agencies that administer or operate major modes of transportation in the metropolitan area, including representation by providers of public transportation; and appropriate State officials. The requirements to have this structure in place “not later than 2 years after the date of enactment of MAP-21” and to include “representation by providers of public transportation” are new. While FHWA and FTA cannot determine with certainty how

many MPOs serving TMAs currently meet this provision, FHWA and FTA estimate that about half do not.<sup>4</sup>

FHWA and FTA expect that MPOs restructuring to meet this provision will incur a nominal one-time cost associated with staff time. Staff may need to revise or adopt new MPO bylaws to reflect the new structure; invite, contact, and orient new MPO members; and implement other administrative changes, including updating mailing lists, stationary, and the MPO website. However, MAP-21 specifically states that MPOs restructuring to satisfy this provision are not required to redesignate. The FHWA and FTA estimate that if an MPO serving a TMA does not already meet this requirement, then it will expend about 100 hours of staff time, on average, to make this change. This effort translates into an estimated one-time cost of \$4,900 for each MPO that serves a TMA. The total one-time cost for the MPOs serving TMAs to comply over the 2-year implementation period from Oct. 1, 2012 to Oct. 1, 2014 is estimated to be:

$(201 \text{ TMA MPOs}) \times (0.50 \text{ do not currently comply}) \times (\$4,900 \text{ one-time cost}) \times (1.03 \text{ inflation cost adjustment to adjust costs from 2012 to 2014}) = \mathbf{\$507,200}$ .

If all 201 TMA MPOs have to take action to comply with this requirement, the estimated one-time cost is \$1,014,400 in 2014 dollars.

### Update of MPO Agreements

The proposed planning regulations include provisions for MPOs to work with their planning partners to review and update their existing MPO planning agreements (or other format outside of the metropolitan planning agreement) to cooperatively determine the mutual responsibilities of the MPO(s), State(s), and provider(s) of public transportation as it relates to performance-based planning and programming. The written documentation will include the specific provisions for cooperatively developing and sharing information related to transportation systems performance data, the selection of performance targets, the reporting of performance targets, and the reporting of system performance to be used in tracking progress toward the attainment of critical outcomes for the region of the MPO as well as for the collection of data for the State asset management plans for the NHS. The FHWA and FTA estimate that, adjusted for inflation to 2014 from the 2012 analysis done in the NPRM, on average, it will take an MPO 50 person-hours to update its planning agreement (or document in some other format) at an estimated one-time cost of  $(\$2,400) \times (1.03) = \$2,472$  per MPO. Cumulatively for all 409 MPOs the one-time cost is \$1,011,000 and the burden is be 21,000 person hours.

The final rule also includes the requirement in section 450.314(b) that the MPO(s), State(s), and provider(s) of public transportation should periodically review and update the metropolitan planning agreement, as appropriate, to reflect effective changes. The FHWA and FTA do not believe that there are added costs associated with this provision because FHWA and FTA have a long history of working with the MPOs to encourage them to review and update their agreements as necessary and this section

<sup>4</sup> Source: "Staffing and Administrative Capacity of Metropolitan Planning Organizations", Center for Urban Transportation Research, University of South Florida research report prepared under a grant from the FHWA, May 2010.

does not require a prescribed cycle for the MPOs to review and update the metropolitan planning agreements.

**Optional Scenario Development** The final planning regulations include metropolitan planning provisions for optional scenario development as part of the metropolitan transportation plan development. The MPOs are encouraged, but not required, to consider scenarios for: potential regional investment strategies for the planning horizon of their metropolitan transportation plan; assumed population and employment distribution; a scenario that, to the maximum extent practicable, maintains baseline conditions for the transportation system performance measures; and a scenario(s) that improves the baseline conditions for as many of the transportation system performance measures as possible. The MPOs are also encouraged, but not required, to develop revenue constrained scenarios, estimate costs and potential revenues available to support each scenario, and evaluate scenarios using the USDOT transportation system performance measures and, if an MPO so chooses, evaluate scenarios using locally developed measures.

Scenario planning has become more common among MPOs developing metropolitan transportation plans. Because it is already common practice, and because MAP-21 and the final planning regulations encourage, but do not require, scenario development as part of the metropolitan transportation plan, a cost estimate for implementation of scenario planning is not included here.

### Optional Development of Programmatic Mitigation Plans

The final regulations include an optional framework for State DOT and MPO development of a programmatic mitigation plan as part of the statewide and the metropolitan transportation planning processes. This framework could be used by the States and MPOs to identify environmental resources early in the planning process and as a result, potentially minimize or avoid impacts to these resources. This has the potential to streamline project development and to protect environmental resources and may have benefits that outweigh the costs of performing the analysis. The FHWA and FTA did not specifically quantify the costs or benefits for States and MPOs to develop a programmatic mitigation plan as part of the planning process because it is optional.

### Optional Use of Planning Products in Project Development

The final regulations include new authority for States or MPOs to use planning products in the environmental review process. The use of this new authority is optional. This authority has the potential to streamline the project development process resulting in potential time and cost savings in the project development process. The potential savings can be derived by avoidance of duplicating planning work in the environmental review process, improved decision making in the project development process, and early identification and coordination of environmental issues. The FHWA and FTA did not specifically quantify the costs or benefits for the States and MPOs to use this new authority for using planning information in the environmental review process because it is optional.

## Summary of Annualized Costs to Metropolitan Planning Organizations

**Table 4 - Estimated Change in Average Annual MPO Planning Costs**

(in thousands of dollars)

<b>Proposed Regulatory Changes</b>	<b>TMA MPOs (201 MPOs)</b>	<b>Non-TMA MPOs (208 MPOs)</b>	<b>All MPOs (409 MPOs)</b>
Metropolitan Transportation Plan	\$11,384.6	\$3,185.5	\$14,570.1
Transportation Improvement Program (TIP)	\$6756.6	\$805.0	\$7,561.6
Total Annual Changes in Cost	\$18,141.2	\$3,990.5	\$22,131.7
Average Annual Cost Increase per MPO	\$90.3	\$19.2	\$54.1
Average Additional Person Hours at \$50.19/hr	1,800 hrs	400 hrs	1,080 hrs

**Table 5 - One Time MPO Costs<sup>5</sup>**

(in thousands of dollars)

<b>Proposed Regulatory Changes</b>	<b>TMA MPOs</b>	<b>Non-TMA MPOs</b>
TMA MPO Structure Average One Time Cost (101 TMA MPOs)	\$507.2	\$0
Update MPO agreements Average One Time Cost Increase per MPO (409 MPOs)	\$496.8	\$514.2
Total One Time Cost	\$1,004.0	\$514.2
Total One Time Person Hours at \$50.19/hr	20,000hrs	10,200hrs

### 3.2 Statewide Regulatory Costs

#### Long-Range Statewide Transportation Plan

Several provisions in the final rule directly impact the level of effort required by States in developing their long-range statewide transportation plans. These provisions include:

- Statewide transportation plan should become performance-driven and outcome based.
- Statewide transportation planning process should support the seven national goals and the general transit purposes identified in MAP-21.
- Statewide transportation plan should include established performance targets to address USDOT-established surface transportation system performance measures.
- Selection of performance targets by the State must be coordinated with relevant MPOs.
- Each State must integrate elements of other performance-based plans, either directly or by reference into the statewide transportation planning process (goals, objectives, performance measures, and targets.)
- Each State plan update should include a system performance report and subsequent updates

<sup>5</sup> These calculations are based on estimated person hours to accomplish these tasks, unlike the calculations in Table 4 that are based on costs that are converted to person hours.

evaluating the condition and performance of the transportation system, including progress achieved by the State and the MPOs in meeting the performance targets in comparison with system performance recorded in previous reports.

Because some of these are requirements for the overall planning process, FHWA and FTA are accounting for these costs as part of the long-range statewide transportation plan.

The primary impact of these provisions will be additional staff time devoted to implementing a performance-based approach to the statewide plan and to coordinate with others involved in other performance-based planning activities, including other units within States, MPOs, public transportation providers, elected officials, stakeholder groups, and the public, as necessary. States already consult with most these agencies and stakeholder groups.

The other major impact of these provisions will be the effort to prepare additional sections of the plan, covering performance-based planning elements such as transportation system performance goals, performance measures, targets, and strategies and funding associated with meeting those targets as well as coordinating with other performance-based plans such as the SHSP, the Asset Management Plan, the State Freight Plan (if one exists), and the CMP.

The FHWA and FTA estimate that these additional provisions could increase the cost of preparing a statewide transportation plan by 15 percent over current levels. The agencies encourage States to include descriptions of the performance measures and targets used in assessing performance and a system performance report in the plan. Because inclusion of these elements is encouraged rather than mandatory, FHWA and FTA assume, for the purposes of this analysis, that all States will include these elements in their plans. The FHWA and FTA will analyze the costs of the data collection and analysis associated with the national performance measures under a separate rulemaking(s) that establish those performance measures. The costs associated with including those performance measures and targets in the long-range statewide transportation plan are included in this cost estimate.

The aggregate annual cost increases for developing the statewide transportation plan are calculated below for the 50 States, Washington DC, and Puerto Rico:

States  $\$366.6\text{K} \times 1.03 \times 15\% \times 52 \text{ States} = \mathbf{\$2,945.3\text{K} (\$2.9\text{M})}$  per year where:

- $\$366.6\text{K}$  is the year 2012 average annual cost for plan development for each State (See Table 3, Column 2 for TMAs).
- 1.03 is a 3% inflation adjustment to adjust the cost in Table 3 from year 2012 to 2014.
- 15% is the estimated 15 percent increase in the cost of preparing the plan, as described above.
- 52 is the number of States (including Washington DC and Puerto Rico.)

### Statewide Transportation Improvement Program (STIP)

Several provisions in the final rule will directly impact the level of effort required by States in developing their Statewide Transportation Improvement Programs (STIPs). These provisions include:

- Each State STIP must reflect the performance-based planning and programming provisions of MAP-21 and the proposed planning regulations.

- Each STIP must include, to the maximum extent practicable, a discussion of the anticipated effect of the STIP toward achieving the performance targets established in the statewide transportation plan, linking investment priorities to those performance targets.

The primary impact of these provisions will be additional staff time devoted to coordination with other agencies involved in other planning activities such as the MPOs, public transportation providers, local agencies, elected officials, stakeholder groups and the public. It is anticipated that additional effort will be needed to prepare a new section within the STIP, covering the performance-based planning aspects of the STIP as described above. The FHWA and FTA estimate that these additional requirements could increase the cost of preparing a TIP by 15 percent over current levels. The aggregate annual cost increases for developing the STIP are calculated below for the States:

States:  $\$217.6K \times 1.03 \times 15\% \times 52 \text{ States} = \mathbf{\$1,748.0K (\$1.7M)}$  per year where:

- \$217.6K is the average annual cost for year 2012 for STIP development for an average State (See Table 3, Column 3 for TMAs).
- 1.03 is a 3% inflation adjustment to adjust the cost in Table 3 from year 2012 to 2014.
- 15% is the estimated 15 percent increase in the cost of preparing the TIP, as described above.
- 52 is the number of States (including Washington DC and Puerto Rico.)

### Cooperation with Nonmetropolitan Officials

The MAP-21 provides that “consultation” with nonmetropolitan officials in the statewide (and nonmetropolitan) transportation planning process (i.e. statewide transportation plan and STIP development) becomes “cooperation” with nonmetropolitan officials and/or RTPOs, if applicable.

As provided in 23 CFR 450.104, cooperation means that the parties involved in carrying out the transportation planning and programming processes work together to achieve a common goal or objective. Consultation means that one or more parties confer with other identified parties in accordance with an established process and, prior to taking action(s), considers the views of the other parties and periodically informs them about actions(s) taken. As such, cooperation will take more time and effort on the part of each State in developing their transportation plans and STIPs. It is anticipated that there will be additional costs associated with the additional staff time necessary to meet this new requirement. The FHWA and FTA estimate that it will increase the annualized costs of developing a long-range statewide transportation plan and STIP by 5%. The agencies invite comments on this estimate.

States (long-range plan development)  $\$366.6 \times 1.03 \times 5\% \times 52 \text{ States} = \mathbf{\$981.8K}$  where:

- \$366.6K is the average annual cost for plan development for year 2012 each State (See Table 3, Column 2 for TMAs).
- 1.03 is a 3% inflation adjustment to adjust the cost in Table 3 from year 2012 to 2014.
- 5% is the estimated 5 percent increase in the cost of preparing the plan, as described above.



- 52 is the number of States (including Washington DC and Puerto Rico.)

States (STIP Development):  $\$217.6K \times 1.03 \times 5\% \times 52 \text{ States} = \mathbf{\$582.7K}$  where:

- \$217.6K is the average annual cost for STIP development for year 2012 for an average State (See Table 3, Column 3 for TMAs).
- 1.03 is a 3% inflation adjustment to adjust the cost in Table 3 from year 2012 to 2014.
- 5% is the estimated 5 percent increase in the cost of preparing the STIP, as described above.
- 52 is the number of States (including Washington DC and Puerto Rico.)

## Regional Transportation Planning Organizations (RTPO)

The MAP-21 gives States the option to establish an RTPO. An RTPO is a multi-jurisdictional organization of nonmetropolitan local officials and representatives of local transportation systems. An RTPO has a policy committee, the majority of which are nonmetropolitan local officials, and, as appropriate, additional representatives from the State, private business, transportation service providers, economic development practitioners, and the public in the region. If a State establishes and designates an RTPO, it must have a fiscal and administrative agent to provide professional planning, management, and administrative support. Duties of an RTPO include developing and maintaining regional long-range transportation plans; developing regional transportation improvement programs; fostering the coordination of local planning, land use and economic development; and providing a forum for public participation in regional and statewide planning process.

Because establishment of RTPOs by a State is optional, FHWA and FTA have not developed a cost estimate for implementation of this optional provision. Certainly there is a cost for establishing and maintaining an RTPO. Those costs will be eligible for state planning and research (SPR) funds if a State chooses to utilize SPR funds. There could also be some cost savings realized as part of establishing an RTPO. For example, cooperation with local nonmetropolitan officials during statewide planning, such as plan and STIP development, or corridor studies, could be conducted by the State with the RTPO. The RTPO could help the State conduct public involvement, outreach to local officials and the local business community, as well as help with the development of the STIP and the statewide transportation plan.

## Summary of Annualized Costs to States

The estimated annualized costs resulting from the proposed changes in the statewide planning regulations are summarized below:

**Table 6 - Estimated Change in Average Annual Statewide and Nonmetropolitan Planning Costs***(in thousands of dollars)*

<b>Proposed Regulatory Changes</b>	<b>Associated Incremental Costs to States</b>
Long-range Statewide Transportation Plan	\$2,945.3
Statewide Transportation Improvement Program (STIP)	\$1,748.0
“Cooperation” with nonmetropolitan officials (Plan)	\$981.8
“Cooperation” with nonmetropolitan officials (STIP)	\$582.7
Total Annual Changes in Cost	6,257.8
Average Annual Cost Increase per State	\$120.3
Additional Person Hours at Average Additional Person Hours at \$50.19/hr.	2,400

### 3.3 Providers of Public Transportation Regulatory Costs

As providers of public transportation participate in the development of metropolitan transportation plans, TIPs, long-range statewide transportation plans and STIPs, they need to work with MPOs and States by providing information and participating in public outreach efforts. The FHWA and FTA have split the discussion below into providers of public transportation that serve areas designated as a TMA and those that do not serve TMAs because of the increased complexity in the TMA areas as well as the new MAP-21 requirement to include representation by providers of public transportation on MPOs that serve areas designated as TMAs.

#### Providers of Public Transportation Serving Areas Designated as a TMA

FTA estimates that there are 380 agencies providing public transportation in areas designated as a TMA. FTA estimates that these providers of public transportation will expend an additional 120 hours of effort annually to coordinate with MPOs and States to meet metropolitan and statewide and nonmetropolitan transportation planning regulatory requirements. Those requirements include increased coordination with States and MPOs, particularly with respect to target setting, and participation on boards of MPOs that serve areas designated as TMAs.<sup>6</sup> Assuming a loaded rate labor cost of \$50.19 per hour, the average cost per agency per year is \$6,000. The total cost for all providers of public transportation serving areas designated as a TMA is \$2.29 million annually and 45,600 burden hours of effort annually.

<sup>6</sup> The FHWA and FTA estimate that about half of the MPOs that serve TMAs do not currently comply with this new requirement (see discussion above). The FHWA and FTA are using 120 hours as an average estimate because some areas currently meet the new requirements and some do not.

### Providers of Public Transportation Serving Non-TMA Areas

FTA estimates that 220 providers of public transportation serve areas that are not designated as a TMA. FTA estimates that these providers of public transportation will expend an additional 20 hours of effort annually to meet the new requirements of the metropolitan and statewide and nonmetropolitan transportation planning regulation to coordinate with States and MPOs. Assuming a loaded rate labor cost of \$50.19 per hour, the average cost per agency per year is \$1000. The total cost for all providers of public transportation serving areas not designated as a TMA is \$220,000 annually and 4,400 burden hours of effort annually.

### Summary of Annualized Costs to Providers of Public Transportation

The total annual cost for all providers of public transportation is \$2,510,000.

## 3.5 Federal Agency Cost Impacts

The FHWA and FTA estimate that the implementation of this final rule will result in no net cost increase to FHWA or FTA. Consistent with planning workforce assessments completed in 2013, FHWA and FTA plan to use their existing planning staff and financial resources for the implementation and oversight of this proposed rule by adjusting the duties of existing staff, and by adjusting the priorities in their existing transportation planning research, oversight and stewardship, and technical capacity building programs.

## 3.6 Summary of Regulatory Cost Impacts

Based on the above cost analysis, FHWA and FTA estimate that the aggregate increase in annual costs attributable to the final rule in 2014 dollars is \$30,898,700, distributed among MPOs, States, and public transportation providers as shown in Table 7.

The FHWA and FTA also estimate that there are one-time costs to MPOs of \$1,518,200 (\$1,004,000 for TMA MPOs and \$514,200 for non-TMA MPOs) from one-time burden hours of 30,200 for all MPOs (20,000 hours for TMA MPOs and 10,200 hours for non-TMA MPOs).

**Table 7 – Average Annual Regulatory Costs and Burden Hours of Effort Summary**

Entity	Total Additional Cost	Non-Federal Share (20%)	Average Additional Person Hours per Agency
TMA MPOs (201)	\$18,141,200	\$3,628,200	1800
non-TMA MPOs (208)	\$3,990,500	\$798,100	400
States (52)	\$6,257,000	\$1,251,600	2,400
Providers of Public Transportation (600)	\$2,510,000	\$502,000	100
TOTAL	\$30,898,700	\$6,179,900	

Generally, eighty percent<sup>7</sup> of these eligible costs are directly reimbursable through Federal transportation funds allocated for metropolitan planning [23 U.S.C. 104(d) and 49 U.S.C. 5305(f)] and for State planning and research [23 U.S.C. 505 and 49 U.S.C. 5305(f)]. States, MPOs and providers of public transportation have the flexibility to use some FHWA Federal capital funds or some FTA formula program funds for transportation planning [23 U.S.C. USC 133(b)(1) and 49 U.S.C. USC 5307(a)(1)(B) and 5311(B)(1)(A)]. Consequently, \$6,179,900 of the increase in annual cost will be borne by the States, MPOs, and public transportation providers.

FHWA and FTA believe that the economic impact of this rulemaking is minimal because the estimated costs are a small portion of the spending on transportation planning. As shown above, the total annual burden of the proposed total rulemaking is \$30,898,700. For fiscal year 2014, FHWA distributed to the States \$1,065,612,000 in State and metropolitan planning funds. For fiscal year 2014, FTA distributed \$129,482,000 for planning. Therefore, a total Federal share of \$1,195,094,000 was distributed. The combined Federal cost and State/local matching cost of the planning program is \$1,493,868,000. For fiscal year 2014, the total federal-aid highway program was \$37,798,000,000 and the total FTA federal-aid program was \$10,724,088,000, for a combined total program of \$48,522,088,000. Thus, the cost burden of this rule on States, MPOs, and public transportation providers is 2.5% of the total program.

## 4 Benefits

While it is difficult to assess a monetary value of the potential benefits of these changes to the planning process, FHWA and FTA expect that the regulatory changes will improve decision-making through increased transparency and accountability and will support the national goals described in 23 U.S.C. 150(b) and general purposes in 49 U.S.C. 5301. The final rule will promote transparency by requiring the establishment of performance targets in key areas, such as safety, infrastructure condition, system reliability, emissions, and congestion, and by expressly linking investment decisions to the achievement

<sup>7</sup> The Federal share for FHWA funding sources available for planning is established in 23 U.S.C. 120 and 505(d). The Federal share for FTA funding sources available for planning is established in 48 USC 5305(f). For purposes of this analysis, FHWA and FTA assumed a set non-Federal share of 20%, the maximum required by statute.

of such targets. This will be documented in plans or programs developed with public review. It is also expected that the planning process will become more transparent in that investments of Federal funds will be based on a decision-making process that is focused on transportation system performance, and that the specific transportation system performance goals, measures, and targets that drive investment decisions will be known to the public, elected officials, and other interested parties.

The final rule will establish accountability through mandating reports on progress towards meeting those targets. In addition, FHWA and FTA expect that these regulatory changes will make the planning process more accountable by having States, MPOs and providers of public transportation identify desired transportation system performance outcomes related to the national performance areas and that investments made by the States, MPOs, and providers of public transportation will be more focused on achieving these system performance outcomes.

Other elements of the final rule also will improve decision-making, such as including representation by providers of public transportation on each MPO that serves a TMA, updating the metropolitan planning agreements, requiring States to have a higher level of involvement with nonmetropolitan local officials, and providing an optional process for the creation of RTPOs. It also could improve decision-making through optional provisions for the use of scenario planning, the development of programmatic mitigation plans, and use of planning products in the environmental review process.

A break-even cost analysis is provided as part of this regulatory cost analysis to determine at what point the benefits from the planning rule exceed the annual costs of complying with the rule. The benefits include increased transparency, increased accountability, improved decision-making, and an improved investment process that is more focused on the national goal areas identified in MAP-21. The performance-based approach to metropolitan and statewide transportation planning increases the transparency and accountability of decisions and increases the effectiveness of investments of Federal transportation funds by focusing investments on system performance outcomes and on the national performance goal areas. As States and MPOs report on the outcomes of those investments with respect to safety, asset condition, congestion, and mobile emissions, the result will be a more efficient use of limited Federal transportation dollars. The total annual MAP-21 funding programmed through this process is \$40.0 billion in FHWA funds and \$8.5 billion in FTA transit funds. The annual average cost of the regulation is estimated to be \$30.9 million per year. If return on investment increases by at least 0.064% of the combined FHWA and FTA annual funding programs, the benefits of the regulation exceed the costs.

The implementation of this final rule is critical to the successful implementation of the other performance management-related rules such as those on safety, infrastructure condition, congestion, freight, and emissions performance measures. This final rule sets the context for including performance measures, targets, and transportation investments required by the other rules into the transportation planning process and into the transportation plans and programs. It provides the means for linking transportation investments to the achievement of performance targets. The planning process is where the system performance measures and targets required by the other performance management related rules are actualized through the investment decision-making process.