

8. Implementation of the Plan

This section discusses how the Dover/Kent County MPO Metropolitan Transportation Plan (MTP) update will be carried out. The MTP update is built on a foundation of coordination between local, county, and state agencies working with the MPO. The MTP is consistent with the two major Comprehensive Plans in the region, Kent County (approved October 2008) and the City of Dover (adopted February 2009). In addition, the vision, strategies, and actions noted in the MTP are in accordance with the DelDOT Statewide Long-Range Transportation Plan, which was adopted in 2010. This cooperation and coordination must continue as the plan is implemented by the agencies partnering with and members of the MPO.

This plan will be implemented through the Transportation Improvement Program (TIP) and the day-to-day activities of MPO member agencies and the MPO staff. The Department of Transportation is required to comply with the MTP. In addition, the federal agencies that approve the expenditure of federal transportation funds will base their decisions on this document.

8.1 Federal Compliance

To obtain federal funding, long-range planning must be in compliance with the newly adopted MAP-21 legislation, signed into law in July, 2012. This latest federal surface transportation act authorized a transportation program for the two-year period of federal fiscal years 2013 and 2014. This act covers all surface transportation programs, such as highways, highway safety, transit, freight, and transportation research.

To meet Federal metropolitan planning requirements for regional transportation plans, the following must be met:

- A plan must have a 20-year planning perspective and include air quality conformity, fiscal constraint, and public involvement.
- A plan must be updated within four years of the previous plan's completion.
- A plan must contain operational and management strategies to improve the performance of existing transportation facilities and investment and other strategies that provide for multimodal capacity increases based on regional priorities and needs, as well as propose transportation and transit enhancement activities.
- The metropolitan planning process must promote consistency between transportation improvements and state and local plans and patterns.
- A plan must contain a discussion of potential environmental mitigation activities.
- Transit operators must participate in the cooperative development of funding estimates for the financial plan.

The MPO fully considered the above listed requirements in the development of the MTP update. The Dover/Kent County MPO has prepared and will adopt this plan update by the January 2013 due date. This plan's long-range planning horizon is through 2040, slightly longer than the required 20 year planning perspective. The MPO developed a public involvement plan to accompany the MTP update, originally adopted in 2010 and revised in 2012. Fiscal constraints are applied to the proposed projects listed in this plan. An estimated planning-level budget has been developed and is applied to the actions required for this plan. All project/activity lists are limited to those prioritized projects that add up to the projected amount available. Fundamental strategies of the plan, and applicable recommended actions, are developed to preserve and enhance the operations and management of the existing transportation system. Also, several state and local plans and patterns have been reviewed and updated with the MTP to ensure that the improvements proposed in this MTP update are consistent with their plans. Air quality is addressed through the Conformity Analysis, Chapter 7 of this plan.

In addition to being a MAP-21 requirement, the MTP update makes all efforts to include and be consistent with other state and local agency plans. Several state, county, and local plans are also updated periodically and look to the MTP to guide consistency and conformity of future transportation plans. Long-range transportation plans have been updated or are in the process of being updated in the areas adjacent to the MPO; to the north by the Wilmington Area Planning Council [WILMAPCO – updated in 2011] and to the south by Sussex County. The *State Strategies for Policies and Spending* is used to coordinate state agency planning and to support growth as appropriate. County comprehensive plans are reviewed by the Office of State Planning Coordination. Transportation plans described within county plans must also be consistent with the goals of state planning programs. Since future land use and growth plans go hand in hand with transportation plans, these elements of local comprehensive plans were referred to in the development of this MTP update. Additionally, transit and state bicycle and pedestrian plans were referenced and are included in the recommended actions.

Plans Referenced – Regional

City of Dover Comprehensive Plan Update (2009)
City of Milford Comprehensive Plan Update (2006)
Delaware Bicycle Facility Master Plan Report (2005)
Delaware Economic Development Office, Kent County Action Plan
Delaware Statewide Pedestrian Action Plan (2007)
Delaware Transit Corporation (DTC) Business Plan (2007)
Kent County Comprehensive Plan (2008)
Kent County Economic Development Strategy Initiative
MPO Regional Bicycle Plan (2011)
Statewide Long Range Transportation Plan (2011)
Strategies for State Spending and Policies (2004)
Town of Smyrna Comprehensive Plan (2005)
WILMAPCO Regional Transportation Plan (2011)

The eight planning factors required by MAP-21 are:

- Support Economic Vitality
- Increase Accessibility and Mobility
- Protect the Environment, including promote consistency with planned growth and economic development patterns
- Enhance Modal Integration
- Promote Efficient System Management
- Preserve the Existing System
- Increase Safety
- Increase Transportation Security

Access, safety, security, and mobility are included as a theme of this MTP update. The framework of the MTP is based on five fundamental goals that embody the planning factors, as discussed in Chapter 5. These fundamental goals are developed to guide growth for infrastructure investments and planning. **Exhibit 8.1** summarizes the planning factors that must be met along with how they are met through the specific goals. The table also demonstrates how the evaluation criteria are linked to the MAP-21 required factors during the TIP project selection process.

Exhibit 8.1: MAP-21 Federally-Required Planning Factors

Dover/Kent County MPO TIP Project Scoring			
Federally-Required Planning Factors	How The 2040 MTP Implements The Factors	Description	Weight
Support Economic Vitality	Primarily addressed by the actions as part of Goal 1 – Strengthen the Local Economy.	Extent to which project supports worker and customer access to major commercial sites, freight, major business/industrial sites, and trans-shipment points, and supports economic development.	17
Protect the Environment (including promoting consistency with planned growth and economic development patterns)	Primarily addressed by the actions as part of Goal 2 – Improve quality of life, and Goal 3 – Support desired land use and effective growth management.	Extent to which the project supports policies or is derived from an approved county or municipal comprehensive plan or a special transportation study or bike plan.	16
		Extent to which project avoids problems related to drainage, noise, cultural/historic areas, and ecologically-sensitive areas.	5
Increase Accessibility and Mobility	Primarily addressed by the actions as part of Goal 2 – Improve quality of life, and Goal 3 – Support desired land use and effective growth management, and Goal 4 – Improve access and mobility while ensuring the safety of all citizens, and Goal 5 – Safely and efficiently transport people and goods.	Extent to which project has disproportionately high and adverse effects on minority and low-income populations or disproportionately benefits populations not protected under Title VI of the Civil Rights Act of 1964.	4
		Extent to which project supports shifting people/goods to rail or bus, or supports more efficient operation of rail or bus.	6
Enhance Modal Integration	Primarily addressed by the actions as part of Goal 2 – Improve quality of life, and Goal 3 – Support desired land use and effective growth management, and Goal 4 – Improve access and mobility while ensuring the safety of all citizens, and Goal 5 – Safely and efficiently transport people and goods.	Extent to which project incorporates/supports/enhances bicycle/pedestrian access or use as well as transit.	8
Preserve the Existing System	Primarily addressed by the actions as part of Goal 3 – Support desired land use and effective growth management.	Extent to which project supports and implements the goals of the MPO's long-range transportation plan.	8
Increase Safety	Primarily addressed by the actions as part of Goal 4 – Improve access and mobility while ensuring the safety of all citizens, and Goal 5 – Safely and efficiently transport people and goods.	Extent to which project location represents a safety hazard/solution for motorists, pedestrians, bicyclists and/or transit users.	22
Increase Transportation Security	Primarily addressed by the actions as part of Goal 4 – Improve access and mobility while ensuring the safety of all citizens, and Goal 5 – Safely and efficiently transport people and goods.	Extent to which project supports and implements the goals of the MPO's long-range transportation plan.	6
Promote Efficient System Management	Primarily addressed by the actions as part of Goal 5 – Safely and efficiently transport people and goods.	Extent to which a project fills a gap or eliminates functional bottlenecks/pinch points. Project has been identified in the congestion management system.	6
		Extent to which a project can be adequately maintained after completion.	2

The five areas of emphasis contained in MAP-21, in addition to the eight federal planning factors described in the previous table, are identified in **Exhibit 8.2** below.

Exhibit 8.2: MAP-21 Federally-Required Emphasis Areas

EMPHASIS AREA	HOW THE 2040 MTP IMPLEMENTS THIS PLANNING EMPHASIS AREA
Consideration of Safety and Security in the Transportation Planning Process	This area is met through Goal 5 – Safely and efficiently transport people and goods.
Linking the Planning and NEPA Process	The Plan has few elements that are of a scale to trigger NEPA review requirements. The West Dover Connector has undergone a NEPA review. Each study includes consideration of NEPA requirements and land use best practices in the study definition and evaluation. The process of developing recommendations for these studies includes data collection, analysis, development of alternatives, and the identification of a preferred alternative. It is intended that the analyses and decisions occurring during this project can carry through to the NEPA process, as appropriate.
Consideration of Management and Operations within the Planning Process	The MPO includes a matrix of Goals and related Performance Measures in this Plan in Chapter 5. DelDOT is in the process of developing performance measures to monitor the state of the state-wide system on an annual basis.
Enhancing the Technical Capacity of the Planning Process	The MPO has enhanced our Technical Capacity in Planning for this MTP. The MPO used in-house certified planners to both complete the Plan and to develop the procedures and metrics to assess our progress toward meeting its goals.
Coordination of Human Services Transportation	Led by DTC; primarily addressed by the actions described in Chapter 1 as part of “Goal 4 – Improve access and mobility while ensuring the safety of all citizens.”

8.1.1 Year-of-Expenditure Dollars

When the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) released their Statewide and Metropolitan Planning Rule, it included requirements for long-range transportation plans. Under the rule, financial constraint of the plan must be demonstrated in “Year-of-Expenditure” dollars, or YOE dollars. The rationale for this rule is that long-range estimates of transportation costs have understated the deficit between costs and revenues. Therefore, converting all costs and revenues to YOE dollars would theoretically present a more accurate picture of costs, revenues, and deficits associated with a long-range transportation plan.

The financial data reflects the YOE cost for each project. The total cost for each project has been increased to include inflation for the time period in which the project is to be implemented. All projects in the first 10 years of the plan were placed into YOE estimates based on anticipated project costs. Outside of the first 10 years of the MTP, most projects do not have a specific implementation date and are grouped, with some exceptions, into the 2040 time period.

8.1.2 Environmental Mitigation

Identifying key environmental resources at the planning stage plays an essential role in impact avoidance or minimization. This early identification provides better proposal scoping, analysis, and delivery. Municipal and county planning efforts previously referenced have been helpful in identifying the environmental protection considerations and potential impacts of proposed transportation improvements. Similarly, many environmental resources have been identified at the municipal and county levels in their respective comprehensive plans and other planning documents that were prepared in concert with this MTP update. This identification and analysis of regional environmental resources provides an ecosystem-based approach to address the potential environmental impacts of improving the overall transportation system.

General ideas of how mitigation can be carried out through various goals of this plan are referenced in the recommended actions of this plan. Adhering to growth plans to preserve open space and agricultural uses is one way this plan would integrate land use and transportation. The state Department of Agriculture has a very

successful Agricultural Lands Preservation Program, which to date has permanently preserved over 36,000 acres of farmland in Kent County. This represents the highest amount of permanently preserved farmland among the three counties. Minimizing environmental impacts of transportation improvements is a goal for all recommended actions in this plan. This MTP update and area comprehensive plans identify strategies and goals that conserve resources, including agriculture, open space, farmland, and natural resources.

Specific mitigation strategies would be preliminary at this point of the long-range planning process. A detailed environmental analysis would be conducted for each project, as necessary.

Potential environmental mitigation activities may include:

- Avoiding impacts.
- Minimizing a proposed activity/project size or its involved area.
- Restoring temporary impacts to pre-alteration state.
- Precautionary and/or abatement measures to reduce construction impacts.
- Providing a suitable replacement or substituting environmental resources of equivalent or greater value, on- or off-site that could even result in a net benefit as a last resort.
- Considering revisions to zoning and subdivision ordinances to further protect wetlands, natural areas, flood hazard areas, woodlands, riparian areas, forest and other natural corridors, and watersheds.
- Incorporating measures to protect environmentally-sensitive and biodiverse areas of the Dover/Kent County MPO region.

8.1.3 Visualization

Exhibits have been used throughout this document to illustrate the components of the MTP update. The exhibits convey how the different elements the planning process considered to create a unified plan. Exhibits are also used to show the nature and extent of the existing conditions in the Dover/Kent County MPO area and the relevant plans. The illustrations also identify the locations of the recommended actions and their relation to other projects within the Dover/Kent County MPO. A listing of all exhibits is provided in the beginning of this document.

8.1.4 Summary

Exhibit 8.3 provides a summary of how this MTP update meets the requirements set forth by the Federal government for long-range transportation planning.

Exhibit 8.3: Relationship of the Metropolitan Transportation Plan Update to MAP-21

MAP-21 Requirement	How the 2040 MTP Meets Requirement
Plan Cycle – Plans shall be updated every four years in air quality non-attainment and maintenance areas.	This MTP is an update to the previous version completed in January 2009.
Fiscal Constraint	A determination of estimated funds available during the term of the Plan is discussed in Chapter 7. This Plan is fiscally constrained. Projects to be listed in the FY 2012-2015 TIP will be fiscally-constrained to be implemented.
Transportation System Security – Safety and security are to be addressed as separate factors.	Projects are evaluated separately in terms of how they increase safety and transportation security. New strategy related to security has been incorporated into the plan.
Environmental Mitigation – Plans must include a preliminary discussion of the types of potential environmental mitigation activities, to be developed in consultation with federal, state, and tribal wildlife, land management, and regulatory agencies.	Preliminary and potential avoidance and mitigation strategies are discussed in Chapter 5. Specific environmental mitigation will be carried out with specific projects, as determined through a collaborative process.
Consultations – MPOs must consult “as appropriate” with “state and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation” in developing long-range transportation plans.	Development of this plan was completed through the support of DelDOT and bi-monthly meetings with the Technical Advisory Committee (TAC) and Public Advisory Committee (PAC).
Consistency of Plan with Planned Growth and Development Plans – Revises the previous planning factor related to environmental factors to add promoting consistency between transportation improvements, and state and local planned growth and economic development patterns.	The Plan is consistent with local comprehensive plans. Kent County TIDs, <i>State Strategies for Policies and Spending</i> , and growth plans in comprehensive plans are addressed in Chapter 5. The MTP is consistent with the <i>Statewide Long-Range Transportation Plan</i> .
Operational and Management Strategies – Plans shall include operational and management strategies to improve the performance of the existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods.	This plan has the two fundamental strategies of: “Preserve and Maintain the Existing Transportation System while improving Safety and Security of the Existing Transportation System” and “Improve the Management of the Existing Transportation System.” Implementation strategies are included that will meet these objectives.
Public Involvement – MPOs must develop and utilize a “Participation Plan” that provides reasonable opportunity for interested parties to comment on the content of the plan and TIP.	The Public Participation Plan was developed and adopted in March 2010 to promote an affirmative policy to encourage participation. It has been updated and will be adopted at the end of 2012.
Visualization Techniques in Plans and TIP Development – As part of the transportation plan and TIP development, MPOs shall employ visualization techniques.	Visualization techniques, charts, tables, and GIS-based maps, are used throughout the document. The MPO created a Power Point presentation and has presented it at local government or community meetings and events. The MPO staff made the presentation for several groups during the comment period.

Exhibit 8.3: Relationship of the Metropolitan Transportation Plan Update to MAP-21

MAP-21 Requirement	How the 2040 MTP Meets Requirement
Publication of Plans and TIP – MPOs shall publish or otherwise make available for public review the transportation plans and TIPs “including (to the maximum extent practicable) in electronically-accessible formats and means, such as the World Wide Web”.	This plan, both draft and final, will be available on the MPO Web site when completed. Printed copies will be available at public libraries and government offices in the County. The public had an opportunity to make comments during preparation and will have a chance to make comments on the MTP update during and after the comment period.
Air Quality Conformity	The MPO area is classified as non-attainment for ozone under the Clean Air Act Amendments of 1990 (CAAA). Conformity analysis is discussed in Chapter 7. The MTP meets the requirements for air quality for a Plan in a non-attainment area.

8.2 The Planning Process for Specific Projects

This MTP update represents a feasible set of transportation improvements for the region; however, inclusion of a project in the plan does not guarantee that it will happen. Major construction and management projects go through an MPO prioritization process that includes consideration of project merits as they relate to Federal requirements, public review, programming decisions by DelDOT, and prioritization by the Council on Transportation. Finally, review by the Legislature is required before state or federal funding is allocated. All state agencies are required to follow Delaware’s *Strategies for State Policies and Spending* when considering locations for capital improvement projects. Once a project is initiated, it must be scoped in order to determine the specific actions that will be taken and the environmental permits that will be required. Next it is designed and right-of-way is acquired if necessary. If a project is federally-funded or regionally-significant, it must appear in the MPO’s TIP.

For proposed improvements, project planning and environmental studies will be performed to determine the best problem-solving alternatives. Depending on the outcome of data gathered to this point and public input, the best alternative may be the “no-build” option. If a project is warranted, it will be refined through preliminary and final design phases, and then constructed. Public involvement continues to be a part of each step of the planning process. Community input will be essential to ensure that the county’s transportation system meets the needs of its residents.

Smaller scale projects that are undertaken as part of statewide programs are not subject to the same process. For some of these programs, such as bridge repair or pavement management, state and/or federal criteria exist for setting project priorities. For other categories, such as non-motorized transportation, the state has criteria for project selection. Regardless of the priority process used, all projects show a direct relationship with this MTP update.

The MPO depends on coordination with state and local government and the private sector to make this plan update a reality. State, county, and municipal zoning dictates where development is anticipated in the future. Transportation funding is dictated by legislation at both the state and federal levels. Through the publication of this MTP update, the Dover/Kent County MPO provides tools for decision-makers to make informed choices about projects and policies that advance the improvement of the transportation system. The public is included in making these choices identified in the MTP. To build a partnership, regular public meetings are held, attendance at community events is encouraged, and the MPO participates in events and meetings hosted by related entities. A newsletter and the MPO’s Web site provide current information to the community on the implementation of the MTP.

8.3 Staging the Improvements

All projects that are listed in this plan could not be completed at the same time. Some projects are suggested for the short term while others are listed with the intention for future completion. Funding limitations and the planning process require that transportation improvements be prioritized and staged within constraints of a budget. The projects could be staged in phases for completion. Short-term projects would be completed among the first phases, while medium- and long-term projects would be among subsequent phases. Projects listed in the TIP and projects already underway are the immediate priority. The number and estimated cost of projects identified through this process far exceeds the amount anticipated to be available. These unfunded projects are included in the MTP as an “Aspirations List”. Chapter 6 provides additional details on the project list and phasing.

8.4 Updating the Plan

The Dover/Kent County MPO Metropolitan Transportation Plan is an active document. To meet Federal requirements, a long-range plan has to be updated every four years. The previous plan was completed in 2009. The public involvement process will be used for each plan update. Plan updates could include any or all of the following:

- changing the prioritization of proposed improvements
- suspending proposed improvements from consideration
- adding proposed improvements for consideration