

**Exhibit 7.2: Emissions Data**

| Year | VMT     | VOC  | Budget | Nox  | Budget |
|------|---------|------|--------|------|--------|
| 2008 |         |      | 4.14   |      | 9.68   |
| 2010 | 5375696 | 3.81 |        | 7.89 |        |
| 2020 | 6487825 | 3.17 |        | 2.34 |        |
| 2030 | 6614003 | 1.95 |        | 1.66 |        |

Notes:

- 1) 2008 Fleet Data (MOBILE6.2 files: KENT10OZ.TB1, KENT20OZ.TB1, KENT30OZ.TB1).
- 2) D/K MPO Land Use Data - DelDOT TDM TAZ File A30POPemp\_N3.DBF
- 3) DelDOT Transportation Model Network File BASE\_NETWORK\_15B.NET (D/K MPO Project List 11-25-08)
- 4) DelDOT/WRA Travel Model CLEAN MODEL 15B 1-26-09

#### **7.4 Conclusions**

The Dover/Kent County MPO Regional Transportation Plan meets the conformity criteria established by the EPA and the Federal Highway Administration (FHWA). According to the analysis, the plan contributes required emissions reductions for 2010, 2020 and 2030 in comparison to the 2008 budgets for VOCs and NOx.



## **8. Implementation of the Plan**

This section discusses how the Dover/Kent County MPO Regional Transportation Plan (RTP) Update will be carried out. The RTP update is built on a foundation of coordination between local, county, and state agencies working with the MPO. The coordination extended to the development of the RTP along with the rewriting of the two major Comprehensive Plans, Kent County (approved 10/7/2008) and the City of Dover (slated for approval 1/2009). 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 State Department of Transportation is required to comply with the RTP. The federal agencies that approve the expenditure of federal transportation funds will base their decisions on this document.

### **8.1 SAFETEA-LU Compliance**

To obtain federal funding, long-range planning must be in compliance with the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) reauthorization, signed into law on August 10, 2005. This latest federal surface transportation act authorizes a transportation program for the five-year period of federal fiscal year 2004 through 2009. This act covers all surface transportation programs, such as highways, highway safety, transit, freight, and transportation research.

To meet SAFETEA-LU metropolitan planning requirements, 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.
- Safety and security are to be considered as separate planning factors, as opposed to being combined in TEA-21 regulations.
- 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 SAFETEA-LU requirements in the development of the RTP update. The Dover/Kent County MPO has prepared and will adopt this plan update before the May 7, 2009 anniversary and due date. This plan's long-range planning horizon is through 2030, slightly longer than the required 20 year planning perspective. The MPO developed a public involvement plan to accompany the RTP update, adopted in 2007. 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. Separate strategies for safety and security were developed for the RTP update. Also, several state and local plans and patterns have been reviewed and updated with the RTP to ensure that the improvements proposed in this RTP update are consistent with their plans. Air quality is addressed through the Conformity Analysis, Chapter 7 of this plan. A summary of how SAFETEA-LU requirements are met is listed in **Exhibit 8.3**.

In addition to being a SAFETEA-LU requirement, the RTP 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 RTP 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] and to the south by Sussex County. The Livable Delaware Agenda is used to coordinate state agency planning and to support growth as appropriate. County comprehensive plans are reviewed by the Livable Delaware Advisory Council. 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 RTP update. Additionally, transit and state bicycle and pedestrian plans were referenced and are included in the recommended actions.

**Plans Referenced – Regional**

|  |
|--|
| Bowling-Green Warren County Long-Range Transportation Plan 2030      |
| City of Dover Comprehensive Plan Update (2003, Amended 2005)         |
| City of Milford Comprehensive Plan 2003 Update (Amended 2006)        |
| Concept Plan for US 13 and 113 in Dover – Phase I (November 1, 2000) |
| SR 8 Concept and Operations Study (May 2008)                         |
| Delaware Bicycle Facility Master Plan Report (October 2005)          |
| Delaware Economic Development Office (DEDO), Kent County Action Plan |
| Delaware Statewide Pedestrian Action Plan (July 2007)                |
| Delaware Transit Corporation (DTC) Business Plan (February 2007)     |
| Kent County Comprehensive Plan (draft version, 2007)                 |
| Kent County Economic Development Strategy Initiative                 |
| South State Street Area and Access Study ((May 2002)                 |
| Suburban and Community Street Design Standards Project (June 2000)   |
| Town of Smyrna Comprehensive Plan (2002, Updated 2005)               |
| US 13 Pedestrian Improvements (October 2003)                         |
| WILMAPCO Regional Transportation Plan (March 22, 2007)               |

**Peer**

|  |
|--|
| 2025 Chittenden County Metropolitan Transportation Plan (Vermont)      |
| Lebanon County Long-Range Transportation Plan 2005-2030 (Pennsylvania) |
| United Jefferson Area Mobility Plan 2025 (Virginia)                    |

The eight planning factors required by SAFETEA-LU 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; and Increase Transportation Security.

Access, safety, security, and mobility are included as a theme of this RTP update. The framework of the RTP 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 SAFETEA-LU required factors during the TIP project selection process.

**Exhibit 8.1: SAFETEA-LU Federally-Required Planning Factors**

|   |  | Dover/Kent County MPO TIP Project Scoring   |        |
|---|--|---|--------|
| Federally-Required Planning Factors   | How The 2030 RTP 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 – 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     |

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|                                     |   |   |            |
|-------------------------------------|---|---|------------|
| 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.<br><br>Extent to which a project can be adequately maintained after completion. | 6<br><br>2 |

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

**Exhibit 8.2: SAFETEA-LU Federally-Required Emphasis Areas**

| EMPHASIS AREA   | HOW THE 2030 RTP 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, the DE 8 Concept and Operations Study and the North Dover Study. 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 as Appendix Z. 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 D/KCMPO has enhanced our Technical Capacity in Planning for this Regional Transportation Plan. In development, the MPO enlisted the assistance of a consultant to complete the Plan. Nearing completion of the draft, the MPO hired a certified planner 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 X as part of “Goal 4 – Improve access and mobility while ensuring the safety of all citizens”. Coordination done through Delaware United We Ride.  |

### 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 a new requirement for long-range transportation plans. Under the new 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 2014 project costs. Outside of the first 10 years of the RTP, most projects do not have a specific implementation date and are grouped, with some exceptions, into the 2030 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 RTP 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. Minimizing environmental impacts of transportation improvements is a goal for all recommended actions in this plan. This RTP 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 RTP 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 RTP update meets the requirements set forth by SAFETEA-LU for long-range transportation planning.

#### **Exhibit 8.3: Relationship of the Regional Transportation Plan Update to SAFETEA-LU**

| <b>SAFETEA-LU Requirement</b>   | <b>How the 2030 RTP Meets Requirement</b>   |
|---|---|
| Plan Cycle – Plans shall be updated every four years in air quality non-attainment and maintenance areas.   | This RTP is an update to the previous version completed in May, 2005.   |
| 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 TIP, anticipated in March, 2008, 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 monthly meetings with the Technical Advisory Committee (TAC) and Public Advisory Committee (PAC). The Plan was formulated concurrently with at least two local comprehensive plans.  |
| 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 was formulated concurrently with at least two local comprehensive plans. Kent County TIDs, State Strategies, and growth plans in comprehensive plans are addressed in Chapter 5.   |
| 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 November 2007 to promote an affirmative policy to encourage participation.   |
| 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 MS Powerpoint Presentation and offered to present it at local government or community meetings and events. The MPO staff made the presentation for xx groups during the comment period.                         |



**Exhibit 8.3: Relationship of the Regional Transportation Plan Update to SAFETEA-LU**

| SAFETEA-LU Requirement  | How the 2030 RTP 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 Dover/Kent county 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 RTP update during and after the comment period . |
| Air Quality Conformity  | The Dover/Kent County 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 RTP meets the requirements for air quality for a Plan in a non-attainment area.  |

## 8.2 The Planning Process for Specific Projects

This Regional Transportation Plan 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 a rigorous MPO prioritization process that includes consideration of project merits as they relate to the requirements of SAFETEA-LU, 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 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 to do nothing. 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 RTP 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 will occur in the future. Transportation funding is dictated by legislation at both the state and federal levels. Through the publication of this RTP 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 RTP. 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 RTP.

### **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 RTP as an "Aspirations List" Please see Chapter 6 for additional detail on the project list and phasing.

### **8.4 Updating the Plan**

The Dover/Kent County Regional Transportation Plan is an active document. To meet SAFETEA-LU requirements, a long-range plan would have to be updated every four years. However, this document will be reviewed periodically, amended as needed, and updated at a minimum of every three years. The previous plan was completed in 2005. 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, and
- adding proposed improvements for consideration.

## **Appendix A: Travel Forecasting**

## Travel Forecasting

Travel forecasting is a process that estimates future traffic levels and resulting traffic conditions in order to assess how continuing growth will affect mobility and identify where transportation improvements are needed. DelDOT has developed a travel forecasting model that includes Delaware's three counties and the nine counties of Maryland's Eastern Shore. The modeling process for Kent County (as well as the other counties) is used to estimate current and future (year-2030) traffic volumes and project travel conditions. The computer application CUBE is the framework for this model.

The DelDOT model generates travel forecasts based on estimated population, employment and socio-economic data. Trips are assigned to the roadway network by the model based on estimated travel times, which are iteratively calculated by the model based on roadway characteristics and projected traffic levels. The resulting forecasts may be compared to estimated capacity to evaluate projected travel conditions in terms of volume-to-capacity ratios and level of service (LOS).

The DelDOT model uses a five-step process to estimate traffic conditions. These steps are as follows:

1. Determine the number of trips expected based on forecast population, employment and socio-economic conditions ("Trip Generation"). Trip generation estimates are developed at a zone level for small areas called Traffic Analysis Zones (TAZs). The greater Dover/Kent County MPO planning area is divided into 166 TAZs in the current DelDOT model. There are no "external stations" in the Kent County TAZ structure. There are 2,136 TAZs in DelDOT's model with about 1,000 reserved for future model refinements. Trips are generated for seven trip purposes.
2. Trips are distributed between TAZs ("Trip Distribution") based on the degree of connectivity between the zones (measured as estimated travel times) and the amount of population and employment forecast for each zone. For example, the number of trips forecast between a TAZ with a large population and a nearby TAZ with a large employment base would be far greater than the number of trips forecast to occur between two distant TAZs with small population bases.
3. Trips are allocated to the different travel modes using a "mode choice model" that includes automobiles, express bus routes, line-haul bus routes, and passenger rail routes based on "walk access" and "drive access" to all available transit services as well as relative travel time ratios between auto and non-auto modes (bus and rail), and between toll and non-toll route choices.
4. Traffic is routed to the transportation network ("Trip Assignment") using peak hour capacities and a capacity-constrained equilibrium path choice model. Up to twenty assignments are performed for morning, mid-day, afternoon, and off-peak travel periods and then summed together to estimate 24-hour "daily" traffic volumes for the particular scenario requested.
5. Feedback occurs. The process summarized above is repeated up to four times based on expected travel times given the projected traffic volumes forecasted for each link in the

network. This "feedback" allows the modeling process to account for differences between peak and off-peak traffic conditions in the estimation of where trips will be made to and from in the trip distribution phase.

Figure A-1 illustrates the Traffic Analysis Zone coverage for the Kent County portion of DelDOT's travel demand modeling tool.

The model process also includes a number of post-processing mechanisms to facilitate a variety of transportation planning functions, including estimation of vehicle emissions, a process to visually display where trips are projected to be made to and from, and a process for modeling evacuation scenarios.

### **Population and Employment Estimates**

The DelDOT model relies on population and employment forecasts developed by the Delaware Population Consortium for the State of Delaware and for each of its three counties (including Kent County) as a basis for estimating the number of trips made. The Consortium used data gathered by the US Bureau of the Census and then developed projection estimates for growth in Kent County for the Year 2030 based on national trends, County and municipal land use plans, local trends, and local knowledge provided by planning officials. The Consortium data was first calculated at the County level then disaggregated into County Census Divisions (CCDs). To use the growth-oriented data in transportation planning models (as described above), Kent County planning staff worked with other planning agencies in the county (including the Dover/Kent MPO and DelDOT, among others) to further disaggregate the data among Traffic Analysis Zones (TAZ's) which are the base units of DelDOT's travel demand model. The DelDOT model used for this effort comprised 157 TAZs in Kent County.

Exhibit A.1: Travel Demand Model Coverage

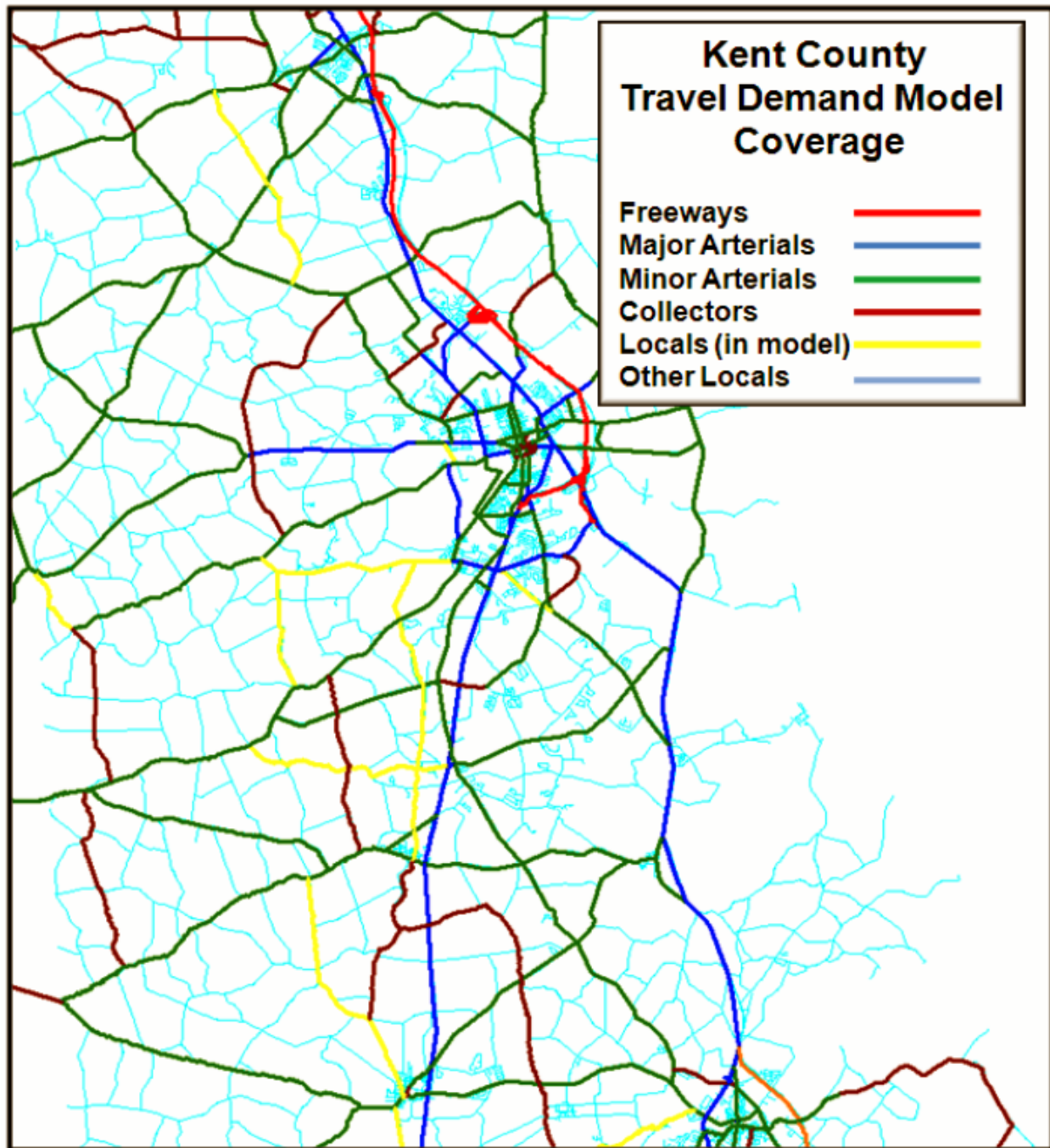


Exhibit A.2: Traffic Analysis Zone Coverage

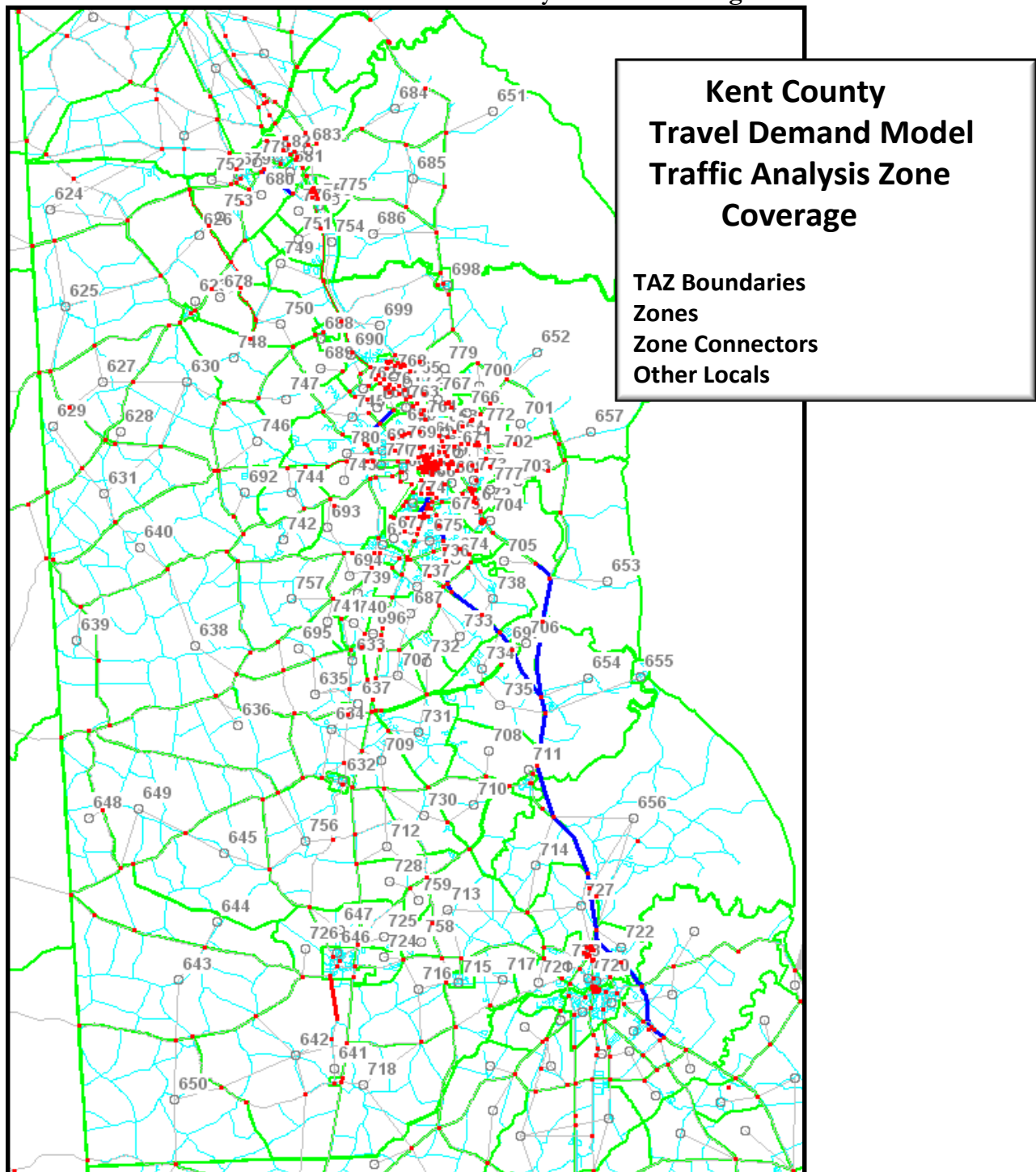


Figure A-2 illustrates the relative size and locations of the 157 traffic analysis zones located in the Kent County portion of DelDOT's travel demand model. The "green lines" present the traffic analysis zone boundaries; each traffic analysis zone has a unique "record number" (shown in gray) and various data points (shown in red).

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## **Appendix B: Air Quality Conformity**

## Introduction

This report demonstrates transportation conformity of the Dover/Kent County Metropolitan Planning Organization (MPO) for the fiscal year (FY) 2010-2013 Transportation Improvement Program (TIP) and the 2030 Regional Transportation Plan (RTP) for the Kent County, Delaware portion of the PA-NJ-MD-DE 8-hour ozone non-attainment area. This document replaces the previous approved conformity demonstration of the TIP and RTP and ensures that the findings meet all current and imminent conformity criteria established by the United States Environmental Protection Agency (USEPA).

## Background on 8-Hour Ozone

Ozone is an odorless, colorless, gas and is created by a reaction between oxides of nitrogen (NO<sub>x</sub>) and volatile organic compounds (VOC) in the presence of sunlight. While ozone in the stratosphere forms a protective layer, shielding the earth from the sun's harmful rays, ground level ozone is a key contributor to smog. Motor vehicle exhaust, industrial emissions, gasoline vapors, chemical solvents, and natural sources all contribute to NO<sub>x</sub> and VOC emissions. Since ozone is formed in the presence of heat and sunlight, it is considered a summertime pollutant.

The health effects of ozone vary. Ozone can irritate lung airways and cause inflammation similar to sunburn. Other symptoms include wheezing, coughing, pain when taking a deep breath and breathing difficulties during exercise or outdoor activities. People with respiratory problems, children and the elderly are most vulnerable, but even healthy people that are active outdoors can be affected when ozone levels are high. Even at very low levels, ground-level ozone triggers a variety of health problems including aggravated asthma, reduced lung capacity, and increased susceptibility to respiratory illnesses such as pneumonia and bronchitis. In addition to adverse health effects, ground-level ozone also interferes with the ability of plants to produce and store food, which makes them more susceptible to disease, insects, other pollutants, and harsh weather. Furthermore, ozone damages the leaves of trees and other plants, ruining the appearance of cities, national parks, and recreation areas. In 1997, the USEPA issued the 8-hour ozone National Ambient Air Quality Standards (NAAQS) at a concentration of 0.080 ppm. to better protect public health. Areas that have failed to meet the standards outlined above have been designated as non-attainment areas and, as a result, are subject to the requirements of transportation conformity. Transportation conformity requires non-attainment and maintenance areas to demonstrate that all future transportation projects will not hinder the area from reaching and attaining its air quality improvement goals. In particular, projects may not:

- Cause or contribute to new air quality violations
- Worsen existing violations
- Delay timely attainment of the relevant NAAQS

USEPA originally designated areas as non-attainment for the 8-hour ozone standard on April 15, 2004. Following modifications, the designations became final on June 15, 2005. USEPA designated the PA-NJ-MD-DE area as moderate non-attainment for the 8-hour ozone standard. This classification resulted in an attainment date of six years following the original designations or, June 2010, for the PA-NJ-MD-DE non-attainment area.

## **Status of the 2030 Regional Transportation Plan (RTP) and FY2009-2012 Transportation**

### **Improvement Program (TIP):**

As the Metropolitan Planning Organization (MPO) for Kent County, Delaware, Dover/Kent County MPO is charged with authoring a long-range transportation plan with at least a 20-year planning horizon. The RTP presents recommendations for enhanced transportation efficiency and functionality, including the construction of new facilities, improved connectivity to multiple travel modes, and the enhancement of existing highway, transit, and bicycle/pedestrian facilities. Transportation projects that address challenges faced by the region are identified in this plan and placed on the four-year TIP that corresponds to that project's development timetable. The FY 2010 – 2013 TIP and the 2030 RTP were created by the Dover/Kent County MPO staff and member agencies. The 2030 RTP was adopted by the Dover/Kent County MPO Council on January 28, 2008 and the FY 2010-2013 TIP is scheduled to be adopted on March 4, 2009.

### **Interagency Consultation Process**

As required by the federal transportation conformity rule (40 CFR 93.105) the transportation conformity process includes a significant level of cooperative interaction among federal state and local agencies. Interagency consultation requires coordination with local county representatives, the MPO and representatives from state, city and federal agencies which include but are not limited to:

- City of Dover
- Dover/Kent County MPO
- Delaware Transit Corporation
- Delaware Department of Transportation
- Delaware Department of Natural Resources and Environmental Control
- FHWA
- USEPA
- FTA
- Kent County Department of Planning

### **Determining Planning Assumptions**

#### **8-Hour Ozone Standard**

The emissions resulting from regional transportation conformity analysis equal to or less than the USEPA approved, Delaware Department of Natural Resources and the Environment's (DNREC) Motor Vehicle Emission Budgets. USEPA regulations, as outlined in the Final Transportation Conformity Rule, Section 93.118, Criteria and procedures further require that regional conformity emissions analyses be conducted for specific analysis years as follows:

- NAAQS Attainment year
- A near-term year, one to five years in the future

- The last year of the RTP's forecast period
- An intermediate year or years such that analyses years are no more than ten years apart.

All analysis years are determined through the interagency consultation process. 2010 has been selected as the near term year and is also the attainment year. The last year of the plan is 2030. 2020 has been chosen as the intermediate year so that the analysis years are no more than ten years apart, making the analysis years 2010, 2020 and 2030. As discussed above, ozone formation is a direct result of VOC and NO<sub>x</sub> emissions reacting with each other in the presence of sunlight. The USEPA has ruled that both precursor emissions, VOC and NO<sub>x</sub>, must be included in a regional analysis for the 8-hour ozone NAAQS to demonstrate regional transportation conformity.

### **Air Quality Modeling Methodology:**

The air quality analysis conducted for the FY 2010-2013 TIP and 2030 RTP used a series of computer-based modeling methods which are briefly described below. These methods are consistent with methods Dover/Kent County MPO and DelDOT have used in conducting air quality analyses required by the Clean Air Act Amendments of 1990, and are similar to those used by other state and regional transportation agencies in preparing air quality analyses. They are also consistent with the modeling procedures Dover/Kent County MPO and DelDOT have used when assisting in the preparation of the State Implementation Plan for air quality (SIP) documents with DNREC.

### **Emission Factor Estimate**

The USEPA required modeling software used in the regional air quality analysis is MOBILE 6.2, a program designed to calculate mobile source emission factors. These factors are generated for each one-mile per hour increment from 3 miles per hour to 65. The factors identify the emission rates for all on road vehicle classifications at the previously prescribed speeds. The input file for the modeling process reflects air quality strategies anticipated according to the SIP and its amendments as submitted by DNREC to the USEPA. (Examples of such strategies include fuel formula requirements and motor vehicle inspection programs).

### **Mobile Source Emissions Estimates**

The estimates of emissions for Kent County are generated by DelDOT using a model post-processor combines the travel model output with output from the mobile model to calculate link based emissions. This process links the estimated roadway speeds and volumes generated by the travel demand model with emission factors derived from MOBILE 6.2. These emission factors are then multiplied by the link-based travel speeds generated in the travel demand modeling process to calculate link based emission estimates. Once emissions for each segment are calculated, they are summed to identify the countywide totals that are presented in this document. Adjustment factors are used to account for seasonal traffic variations and alignment of Delaware based vehicle miles traveled (VMT) estimates with the federal, Highway Performance Management System (HPMS). These data are used to standardize the Delaware specific VMT data as required by the USEPA so that direct comparisons can be made among different years and modeling scenarios.

## **Conformity Results**

The following tables provide the Kent County conformity analysis results. These include tabulations of VMT and emissions by functional classes for the county, and a comparison to the applicable conformity budgets.

**APPENDIX B**  
**Part B: Support Documents**

Dover/Kent County MPO Regional Transportation Plan Update 2009  
Appendix B

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TOTAL Volatile Organic Compound Emissions(grams/day)

| 2010 | Kent County           | Vehicle Type |        |        |        |      |      |        |       |         |
|------|-----------------------|--------------|--------|--------|--------|------|------|--------|-------|---------|
|      | Functional Class      | LDGV         | LDGT12 | LDGT34 | HDGV   | LDDV | LDDT | HDDV   | MC    | TOTAL   |
|      | Interstate-rural      | 0            | 0      | 0      | 0      | 0    | 0    | 0      | 0     | 0       |
|      | PA-rural              | 425498       | 248233 | 112930 | 32943  | 104  | 715  | 35934  | 26136 | 882416  |
|      | Minor Arterial-rural  | 203217       | 117613 | 53622  | 15893  | 50   | 348  | 18075  | 11166 | 420080  |
|      | Major collector-rural | 175859       | 99139  | 45763  | 18672  | 55   | 409  | 27350  | 10052 | 377232  |
|      | minor collector-rural | 46650        | 26299  | 12140  | 4953   | 15   | 109  | 7255   | 2667  | 100069  |
|      | local-rural           | 147098       | 82925  | 38279  | 15619  | 46   | 342  | 22877  | 8408  | 315537  |
|      | interstate-urban      | 0            | 0      | 0      | 0      | 0    | 0    | 0      | 0     | 0       |
|      | freeway-urban         | 191202       | 111774 | 50811  | 14919  | 47   | 325  | 16426  | 13169 | 398508  |
|      | PA-urban              | 101465       | 58810  | 26801  | 7886   | 25   | 172  | 8840   | 5588  | 209649  |
|      | Minor Arterial-urban  | 223702       | 129078 | 58895  | 17930  | 57   | 397  | 21255  | 12334 | 463731  |
|      | Major collector-urban | 68843        | 38811  | 17915  | 7310   | 22   | 160  | 10707  | 3935  | 147674  |
|      | Local-urban           | 68657        | 38717  | 17866  | 7290   | 22   | 160  | 10678  | 3924  | 147274  |
|      | Total                 | 1652192      | 951398 | 435021 | 143415 | 442  | 3138 | 179398 | 97380 | 3462172 |
|      | Total(in Tons)        | 1.82         | 1.05   | 0.48   | 0.16   | 0    | 0    | 0.2    | 0.11  | 3.81    |

TOTAL Volatile Organic Compound Emissions(grams/day)

| 2020 | Kent County           | Vehicle Type |        |        |       |      |      |        |        |         |
|------|-----------------------|--------------|--------|--------|-------|------|------|--------|--------|---------|
|      | Functional Class      | LDGV         | LDGT12 | LDGT34 | HDGV  | LDDV | LDDT | HDDV   | MC     | TOTAL   |
|      | Interstate-rural      | 0            | 0      | 0      | 0     | 0    | 0    | 0      | 0      | 0       |
|      | PA-rural              | 226655       | 144777 | 65799  | 19453 | 43   | 335  | 30403  | 29196  | 516918  |
|      | Minor Arterial-rural  | 109845       | 69454  | 31610  | 9598  | 22   | 167  | 15729  | 12852  | 249254  |
|      | Major collector-rural | 92821        | 57431  | 26305  | 10115 | 22   | 180  | 21643  | 11055  | 219742  |
|      | minor collector-rural | 25747        | 15930  | 7297   | 2806  | 6    | 50   | 6003   | 3067   | 60952   |
|      | local-rural           | 77110        | 47710  | 21853  | 8403  | 18   | 150  | 17980  | 9184   | 182550  |
|      | interstate-urban      | 0            | 0      | 0      | 0     | 0    | 0    | 0      | 0      | 0       |
|      | freeway-urban         | 104858       | 67426  | 30623  | 9017  | 20   | 156  | 14139  | 15331  | 241305  |
|      | PA-urban              | 54276        | 34398  | 15651  | 4691  | 11   | 81   | 7515   | 6357   | 123018  |
|      | Minor Arterial-urban  | 111631       | 70319  | 32042  | 9925  | 22   | 174  | 16829  | 13080  | 254005  |
|      | Major collector-urban | 36360        | 22497  | 10304  | 3962  | 9    | 71   | 8478   | 4331   | 86078   |
|      | Local-urban           | 44209        | 27353  | 12529  | 4818  | 11   | 86   | 10308  | 5265   | 104659  |
|      | Total                 | 883511       | 557294 | 254014 | 82788 | 184  | 1449 | 149029 | 109719 | 2038480 |
|      | Total(in Tons)        | 0.97         | 0.61   | 0.28   | 0.09  | 0    | 0    | 0.16   | 0.12   | 2.24    |

Dover/Kent County MPO Regional Transportation Plan Update 2009  
Appendix B

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TOTAL Volatile Organic Compound Emissions(grams/day)

| 2030 | Kent County           | Vehicle Type |        |        |       |      |      |        |        |         |
|------|-----------------------|--------------|--------|--------|-------|------|------|--------|--------|---------|
|      | Functional Class      | LDGV         | LDGT12 | LDGT34 | HDGV  | LDDV | LDDT | HDDV   | MC     | TOTAL   |
|      | Interstate-rural      | 0            | 0      | 0      | 0     | 0    | 0    | 0      | 0      | 0       |
|      | PA-rural              | 152695       | 109964 | 49766  | 13329 | 25   | 218  | 24047  | 24871  | 375060  |
|      | Minor Arterial-rural  | 100031       | 71129  | 32229  | 8787  | 17   | 144  | 16243  | 14245  | 242738  |
|      | Major collector-rural | 85007        | 57392  | 25957  | 9097  | 17   | 157  | 22193  | 11765  | 211746  |
|      | minor collector-rural | 28780        | 19431  | 8788   | 3080  | 6    | 53   | 7514   | 3983   | 71690   |
|      | local-rural           | 68600        | 46310  | 20947  | 7341  | 14   | 127  | 17910  | 9495   | 170878  |
|      | interstate-urban      | 0            | 0      | 0      | 0     | 0    | 0    | 0      | 0      | 0       |
|      | freeway-urban         | 76279        | 55056  | 24926  | 6662  | 13   | 110  | 12212  | 13834  | 188873  |
|      | PA-urban              | 40945        | 29024  | 13152  | 3602  | 7    | 59   | 6695   | 5785   | 99237   |
|      | Minor Arterial-urban  | 96781        | 67852  | 30740  | 8729  | 17   | 146  | 17200  | 13611  | 235034  |
|      | Major collector-urban | 32990        | 22270  | 10074  | 3530  | 7    | 61   | 8613   | 4566   | 82177   |
|      | Local-urban           | 36790        | 24833  | 11234  | 3937  | 7    | 68   | 9605   | 5092   | 91641   |
|      | Total                 | 718899       | 503261 | 227811 | 68093 | 129  | 1144 | 142232 | 107247 | 1769075 |
|      | Total(in Tons)        | 0.79         | 0.55   | 0.25   | 0.07  | 0    | 0    | 0.16   | 0.12   | 1.95    |

| 2010 | Kent County           | Vehicle Type |        |        |        |      |      |         |       |         |
|------|-----------------------|--------------|--------|--------|--------|------|------|---------|-------|---------|
|      | Functional Class      | LDGV         | LDGT12 | LDGT34 | HDGV   | LDDV | LDDT | HDDV    | MC    | TOTAL   |
|      | Interstate-rural      | 0            | 0      | 0      | 0      | 0    | 0    | 0       | 0     | 0       |
|      | PA-rural              | 381043       | 285672 | 161371 | 129070 | 345  | 2002 | 1230465 | 12807 | 2202599 |
|      | Minor Arterial-rural  | 171627       | 127483 | 72414  | 55864  | 124  | 720  | 442542  | 5145  | 875817  |
|      | Major Collector-rural | 104310       | 72872  | 41746  | 24845  | 86   | 500  | 291206  | 2279  | 537783  |
|      | minor Collector-rural | 27671        | 19331  | 11074  | 6591   | 23   | 133  | 77249   | 605   | 142658  |
|      | local-rural           | 87251        | 60954  | 34919  | 20781  | 72   | 418  | 243580  | 1906  | 449830  |
|      | interstate-urban      | 0            | 0      | 0      | 0      | 0    | 0    | 0       | 0     | 0       |
|      | freeway-urban         | 176727       | 133022 | 75022  | 60182  | 189  | 1102 | 711017  | 6404  | 1163459 |
|      | PA-urban              | 86804        | 64599  | 36641  | 28466  | 64   | 371  | 228141  | 2614  | 447693  |
|      | Minor Arterial-urban  | 185679       | 137089 | 77995  | 58653  | 132  | 764  | 469627  | 5444  | 935258  |
|      | Major Collector-urban | 40834        | 28527  | 16342  | 9726   | 34   | 196  | 113998  | 892   | 210525  |
|      | Local-urban           | 40724        | 28450  | 16298  | 9700   | 34   | 195  | 113689  | 890   | 209954  |
|      | Total                 | 1302670      | 957999 | 543823 | 403877 | 1103 | 6401 | 3921514 | 38987 | 7175576 |
|      | Total(in Tons)        | 1.43         | 1.05   | 0.6    | 0.44   | 0    | 0.01 | 4.31    | 0.04  | 7.89    |



**Dover/Kent County MPO Regional Transportation Plan Update 2009**  
**Appendix B**

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**TOTAL Nitrogen Oxide Emissions(grams/day)**

| <b>2020</b> | <b>Kent County</b>      | <b>Vehicle Type</b> |        |        |       |      |      |         |       |         |
|-------------|-------------------------|---------------------|--------|--------|-------|------|------|---------|-------|---------|
|             | <b>Functional Class</b> | LDGV                | LDGT12 | LDGT34 | HDGV  | LDDV | LDDT | HDDV    | MC    | TOTAL   |
|             | Interstate-rural        | 0                   | 0      | 0      | 0     | 0    | 0    | 0       | 0     | 0       |
|             | PA-rural                | 155645              | 134808 | 77711  | 31611 | 72   | 634  | 319951  | 15218 | 735876  |
|             | Minor Arterial-rural    | 71637               | 61213  | 35389  | 13894 | 27   | 239  | 120352  | 6263  | 309049  |
|             | Major Collector-rural   | 43462               | 33703  | 18815  | 5879  | 18   | 157  | 76075   | 2644  | 180485  |
|             | minor Collector-rural   | 12056               | 9349   | 5219   | 1631  | 5    | 44   | 21102   | 733   | 50063   |
|             | local-rural             | 36106               | 27999  | 15630  | 4884  | 15   | 130  | 63199   | 2196  | 149937  |
|             | interstate-urban        | 0                   | 0      | 0      | 0     | 0    | 0    | 0       | 0     | 0       |
|             | freeway-urban           | 74727               | 65252  | 37673  | 15326 | 42   | 368  | 193995  | 7946  | 395218  |
|             | PA-urban                | 35838               | 30763  | 17784  | 7073  | 14   | 122  | 61389   | 3185  | 156210  |
|             | Minor Arterial-urban    | 71566               | 60750  | 35126  | 13502 | 27   | 235  | 118256  | 6141  | 305647  |
|             | Major Collector-urban   | 17025               | 13202  | 7370   | 2303  | 7    | 61   | 29800   | 1036  | 70700   |
|             | Local-urban             | 20700               | 16052  | 8961   | 2800  | 8    | 75   | 36233   | 1259  | 85962   |
|             | Total                   | 538761              | 453092 | 259678 | 98903 | 234  | 2064 | 1040354 | 46620 | 2439147 |
|             | Total(in Tons)          | 0.59                | 0.5    | 0.29   | 0.11  | 0    | 0    | 1.14    | 0.05  | 2.68    |

**TOTAL Nitrogen Oxide Emissions(grams/day)**

| <b>2030</b> | <b>Kent County</b>      | <b>Vehicle Type</b> |        |        |       |      |      |        |       |         |
|-------------|-------------------------|---------------------|--------|--------|-------|------|------|--------|-------|---------|
|             | <b>Functional Class</b> | LDGV                | LDGT12 | LDGT34 | HDGV  | LDDV | LDDT | HDDV   | MC    | TOTAL   |
|             | Interstate-rural        | 0                   | 0      | 0      | 0     | 0    | 0    | 0      | 0     | 0       |
|             | PA-rural                | 97087               | 97681  | 57024  | 11570 | 23   | 443  | 120327 | 13894 | 398045  |
|             | Minor Arterial-rural    | 60618               | 60258  | 35239  | 7006  | 12   | 228  | 61724  | 7931  | 233067  |
|             | Major Collector-rural   | 35017               | 30261  | 16891  | 2651  | 7    | 129  | 34926  | 2923  | 122813  |
|             | minor Collector-rural   | 11855               | 10245  | 5719   | 898   | 2    | 44   | 11825  | 990   | 41580   |
|             | local-rural             | 28259               | 24421  | 13631  | 2139  | 5    | 104  | 28185  | 2359  | 99109   |
|             | interstate-urban        | 0                   | 0      | 0      | 0     | 0    | 0    | 0      | 0     | 0       |
|             | freeway-urban           | 49376               | 50180  | 29455  | 5918  | 14   | 262  | 71365  | 7568  | 214200  |
|             | PA-urban                | 24557               | 24290  | 14200  | 2807  | 5    | 88   | 23742  | 3093  | 92767   |
|             | Minor Arterial-urban    | 55851               | 54477  | 31897  | 6097  | 10   | 193  | 52037  | 6802  | 207377  |
|             | Major Collector-urban   | 13590               | 11744  | 6555   | 1029  | 3    | 50   | 13555  | 1135  | 47662   |
|             | Local-urban             | 15155               | 13097  | 7310   | 1147  | 3    | 56   | 15116  | 1265  | 53152   |
|             | Total                   | 391364              | 376653 | 217923 | 41262 | 84   | 1596 | 432801 | 47960 | 1509772 |
|             | Total(in Tons)          | 0.43                | 0.41   | 0.24   | 0.05  | 0    | 0    | 0.48   | 0.05  | 1.66    |

Vehicle Miles of Travel

| <b>2010 Kent County</b> |                             |  |  |
|-------------------------|-----------------------------|--|--|
| <b>Functional Class</b> | <b>Network Model Output</b> | <b>HPMS &amp; Seasonal Factor Adjusted</b> |  |
| interstate-rural        | 0                           | 0  |  |
| freeway-rural           | 96270                       | 140319                                     |  |
| PA-rural                | 981676                      | 1532048                                    |  |
| Minor Arterial-rural    | 484676                      | 706444                                     |  |
| Major collector-rural   | 295549                      | 412727                                     |  |
| minor collector-rural   | 75115                       | 109485                                     |  |
| local-rural             | 236852                      | 345226                                     |  |
| interstate-urban        | 0                           | 0  |  |
| freeway-urban           | 425746                      | 691446                                     |  |
| PA-urban                | 243826                      | 355391                                     |  |
| Minor Arterial-urban    | 589226                      | 759910                                     |  |
| Major collector-urban   | 127533                      | 161569                                     |  |
| minor collector-urban   | 0                           | 0  |  |
| local-urban             | 110549                      | 161131                                     |  |

Vehicle Miles of Travel

| <b>2020 Kent County</b> |                             |  |  |
|-------------------------|-----------------------------|--|--|
| <b>Functional Class</b> | <b>Network Model Output</b> | <b>HPMS &amp; Seasonal Factor Adjusted</b> |  |
| interstate-rural        | 0                           | 0  |  |
| freeway-rural           | 114808                      | 167339                                     |  |
| PA-rural                | 1192937                     | 1861750                                    |  |
| Minor Arterial-rural    | 596107                      | 868861                                     |  |
| Major collector-rural   | 342821                      | 478741                                     |  |
| minor collector-rural   | 91107                       | 132794                                     |  |
| local-rural             | 272861                      | 397712                                     |  |
| interstate-urban        | 0                           | 0  |  |
| freeway-urban           | 534137                      | 867482                                     |  |
| PA-urban                | 298909                      | 435678                                     |  |
| Minor Arterial-urban    | 668323                      | 861920                                     |  |
| Major collector-urban   | 148028                      | 187534                                     |  |
| minor collector-urban   | 0                           | 0  |  |
| local-urban             | 156436                      | 228015                                     |  |
| Total                   | 4416474                     | 6487825                                    |  |

Vehicle Miles of Travel

| <b>2030 Kent County</b> |                             |  |  |
|-------------------------|-----------------------------|--|--|
| <b>Functional Class</b> | <b>Network Model Output</b> | <b>HPMS &amp; Seasonal Factor Adjusted</b> |  |
| interstate-rural        | 0                           | 0  |  |
| freeway-rural           | 119645                      | 174390                                     |  |
| PA-rural                | 1049069                     | 1637224                                    |  |
| Minor Arterial-rural    | 713855                      | 1040486                                    |  |
| Major collector-rural   | 379072                      | 529366                                     |  |
| minor collector-rural   | 122962                      | 179224                                     |  |
| local-rural             | 293089                      | 427195                                     |  |
| interstate-urban        | 0                           | 0  |  |
| freeway-urban           | 503019                      | 816943                                     |  |
| PA-urban                | 289891                      | 422533                                     |  |
| Minor Arterial-urban    | 738245                      | 952096                                     |  |
| Major collector-urban   | 162164                      | 205442                                     |  |
| minor collector-urban   | 0                           | 0  |  |
| local-urban             | 157183                      | 229103                                     |  |
| Total                   | 4528194                     | 6614003                                    |  |

**APPENDIX B**  
**Part C – Mobile 6 Input Files**

**Available Upon Request**



# Dover/Kent County Metropolitan Planning Organization

P.O. Box 383, Dover, Delaware 19903

<http://www.doverkentmpo.org>

(302) 760-2713 FAX: (302) 739-6340

## RESOLUTION

### ADOPTING THE AIR QUALITY CONFORMITY ANALYSIS FOR THE 2009 UPDATE OF THE REGIONAL TRANSPORTATION PLAN

**WHEREAS**, Kent County, Delaware has been designated as a moderate non-attainment area under the 8-hour National Ambient Air Quality Standards (NAAQS) for ozone by the United States Environmental Protection Agency (US EPA) with a designated attainment year of 2010, as required by the Clean Air Act as amended (CAAA); and

**WHEREAS**, the DOVER/KENT COUNTY METROPOLITAN PLANNING ORGANIZATION (D/KC MPO) has been designated the Metropolitan Planning Organization for Kent County, Delaware by the Governor of Delaware; and

**WHEREAS**, Statewide and Metropolitan Planning Regulations (23 CFR Part 450 and 49 CFR Part 613) require that regional transportation plans and transportation improvement programs be developed and updated by the MPO, approved by the Governor, reviewed by the Federal Transit Administration and the Federal Highway Administration; and

**WHEREAS**, MPO transportation plans and programs are required to conform to the purposes of the State Implementation Plan (SIP) and the CAAA under the Final Conformity Rule (Final Rule) promulgated by the US EPA in November 1993 and amended in July 2004; and

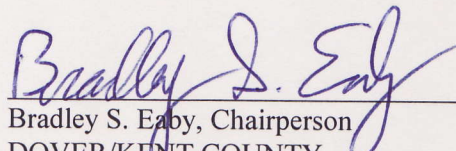
**WHEREAS**, the D/KC MPO has completed a conformity analysis of the RTP according to the procedures detailed in the Final Rule under the CAAA in a manner meeting the requirements of all appropriate federal and state regulations pertaining to statewide and metropolitan planning and air quality; and

**WHEREAS**, the analysis demonstrates that emissions of ozone precursors are less than the established motor vehicle emission budgets in the SIP; and

**WHEREAS**, the D/KC MPO has provided a reasonable opportunity for all interested parties to participate and have their views considered in the development and adoption of this conformity determination;

**NOW, THEREFORE, BE IT RESOLVED** that the DOVER/KENT COUNTY METROPOLITAN PLANNING ORGANIZATION determines that the 2009 Update of the 2030 RTP is found to conform to the current Delaware SIP and all NAAQS requirements under the CAAA, as amended, and that the finding is consistent with the Final Rule.

1/28/09  
Date:

  
Bradley S. Eaby, Chairperson  
DOVER/KENT COUNTY  
METROPOLITAN PLANNING ORGANIZATION

JSW:crs



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

Federal Transit Administration  
Region III  
1760 Market, Suite 500  
Philadelphia, PA 19103  
215-656-7100  
215-656-7260 (fax)

Federal Highway Administration  
Delaware Division  
300 S. New Street, Suite 2101  
Dover, Delaware 19904  
302-734-5323  
302-734-3066 (fax)

MAY 04 2009

Reply to: HDA-MD  
(709)

The Honorable Carleton Carey Sr., Chair  
Dover/Kent County MPO  
P. O. Box 383  
Dover, DE 19903

Dear Mr. Carey:

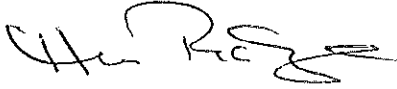
The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed our review of the Dover/Kent MPO Regional Transportation Plan Update 2008. Our review has been coordinated with the regional office of the United States Environmental Protection Agency (EPA). The EPA has documented their review of the Region Transportation Plan Update 2008 in a letter to the FHWA's Delmar Division, Delaware Office dated April 22, 2009, (copy enclosed). U.S. EPA's review concluded that your transportation conformity determination met the requirements of the Clean Air Act and the applicable regulations promulgated thereunder at 40 CFR Part 93.

We find that the program of projects contained in the above mentioned Regional Transportation Plan Update 2008 are based upon a transportation planning process that meets the requirements of 23 CFR Part 450 Subpart A, B, and C, 23 USC Sections 134 and 135, and 49 USC Sections 5303-5305. We find that the analysis adopted by the Dover Kent MPO on January 28, 2009, demonstrates conformity of the Regional Transportation Plan Update 2008 and that the conformity determination has been performed in accordance with the Transportation Conformity Rule (40 CFR Part 93). In accordance with the provisions of Section 134, Title 23 USC, this approval does not constitute a final commitment of Federal funds. Federal funding for these projects is finalized when project authorization is requested of FHWA or upon approval of a grant application to FTA. Each FTA application must meet the appropriate project requirements.

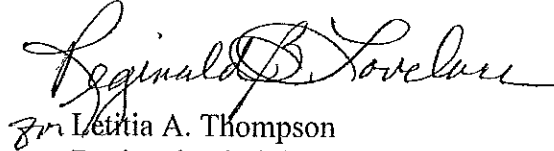
Any questions concerning this approval should be directed to Kwame Arhin, FHWA, DelMar Division, 410-779-7158, or Keith Lynch, FTA Region III, 215-656-7056

Any questions concerning this approval should be directed to Kwame Arhin, FHWA, DelMar Division, 410-779-7158, or Keith Lynch, FTA Region III, 215-656-7056

Sincerely yours,



Hassan Raza  
Division Administrator  
Federal Highway Administration



Leticia A. Thompson  
Regional Administrator, Region III  
Federal Transit Administration

Enclosure

cc:

Carolann Wicks, DelDOT  
Ralph Reeb, DelDOT  
Judith Katz, EPA Region 3  
Mark Glaze, DelDOT  
Martin Kotsch, EPA Region 3  
Juanita Wiczoreck, Dover/Kent MPO  
Basharat Siddiqi, FHWA  
Keith Lynch, FTA  
Kwame Arhin, FHWA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103

APR 22 2009

Mr. Nelson Castellanos, Division Administrator  
Federal Highway Administrator  
DELMAR Division -Maryland  
10 S. Howard Street  
Suite 2450  
Baltimore, Maryland 21201

Dear Mr. Castellanos:

The U.S. Environmental Protection Agency (EPA) has reviewed the 8-hour ozone transportation conformity determinations for the FY 2010-2013 Transportation Improvement Programs and 2030 Regional Transportation Plan for Kent County Delaware submitted to us with your request dated February 3, 2009. EPA reviewed the conformity determinations in accordance with the procedures and criteria of the Transportation Conformity Rule contained in 40 CFR Part 93, Sections 93.106, 93.108, 93.110, 93.111, 93.112, 93.113(b), 93.113(c), 93.118.

Our review of the conformity determinations for Kent County indicates that the determinations meet the requirements of the Clean Air Act and the applicable regulations promulgated thereunder at 40 CFR Part 93. Enclosed, please find EPA's detailed evaluations titled "Technical Support Document for Review of 8-Hour Ozone Conformity Determinations for the Kent County, Delaware FY 2010-2013 Transportation Improvement Program and 2030 Regional Transportation Plan".

If you have any questions, please contact Ms. Carol Febbo, Chief, Energy, Radiation, and Indoor Environment Branch, at 215-814-2076 or Mr. Martin Kotsch, at 215-814-3335.

Sincerely,

A handwritten signature in cursive script, appearing to read "Diana Esher", is written over the typed name.

Diana Esher, Acting Director  
Air Protection Division

Enclosure

cc: Juanita Wieczoreck (Kent/Dover MPO) w\enclosure  
Mark Glace (DelDOT) w\enclosure  
Tony Tarone (FTA) w\enclosure  
Phil Wheeler (DNREC) w\enclosure




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103


April 14, 2009

**SUBJECT:** Technical Support Document for Review of 8-Hour Ozone Conformity Determinations for the Kent County, Delaware FY 2010-2013 Transportation Improvement Program and 2030 Regional Transportation Plan

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**FROM:**   
Martin Kotsch, (3AP23)

**TO:** Administrative Record of EPA's Review of 8-Hour Ozone Conformity Determinations for the Kent County, Delaware FY 2010-2013 Transportation Improvement Program and 2030 Regional Transportation Plan

**THRU:** Carol Febbo, Chief   
Energy, Radiation and Indoor Environment Branch (3AP23)

The purpose of this document is to review 8-hour ozone transportation conformity determinations for the Kent County, Delaware FY 2010-2013 Transportation Improvement Program (TIP) and 2030 Regional Transportation Plan (Plan) and to determine whether or not the conformity determinations meet the requirements of the Clean Air Act and the applicable regulations promulgated thereunder at 40 C.F.R. Part 93. On February 3, 2009, EPA Region III received the Kent County conformity determinations for the TIP and Plan and a request from the Maryland Division Office of the Federal Highway Administration (FHWA) to review the document. The conformity determinations were prepared by the Dover/Kent County Metropolitan Planning Organization (MPO). The conformity determinations were reviewed in accordance with the procedures and criteria of the Federal Transportation Conformity Rule, 40 CFR Part 93, Sections 93.106, 93.108, 93.110, 93.111, 93.112, 93.113(b), 93.113(c) and 93.118.

The Kent County area is a moderate 8-hour non-attainment area for ozone. For the 8-hour conformity analysis, the 2008 Reasonable Further Progress Plan budgets are applicable for use in the 8-hour conformity analysis.

**EVALUATION OF CONFORMITY DETERMINATIONS FOR THE KENT COUNTY,  
DELAWARE TIP AND PLAN SUBMITTED TO EPA BY FHWA ON  
FEBRUARY 3, 2009**

**GENERAL CRITERIA APPLICABLE TO BOTH PLAN AND TIP**

| <b>SECTION<br/>of 40 CFR<br/>Part 93</b> | <b>CRITERIA</b>   | <b>Y/N</b>                 | <b>COMMENTS</b>   |
|--|---|----------------------------|---|
| 93.110                                   | <p>Are the conformity determinations based upon the latest planning assumptions?</p> <p>(a) Are the conformity determinations, with respect to all other applicable criteria in §§93.111 - 93.119, based upon the most recent planning assumptions in force at the time of the conformity determinations?</p> <p>(b) Are the assumptions derived from the estimates of current and future population, employment, travel, and congestion the most recently developed by the MPO or other designated agency? Are the conformity determinations based upon the latest assumptions about current and future background concentrations?</p> | <p>Y</p> <p>Y</p> <p>Y</p> | <p>(a, b) The conformity determinations are based upon the latest planning assumptions in force and approved by the MPO at the time of the determinations. Year 2008 vehicle registration data were used in the analysis. The analyses utilized socio-economic data based upon the year 2007 Delaware state demographic data and projected to each of the analysis years.</p> |
|  | <p>(c) Are any changes in the transit operating policies (including fares and service levels) and assumed transit ridership since the previous conformity determination discussed?</p>  | Y                          | <p>There have been no changes in any operating policies or assumptions for ridership since the last conformity determination.</p>   |

|  |  |     |   |
|--|--|-----|---|
|  | (d) The conformity determinations must include reasonable assumptions about transit service and increases in transit fares and road and bridge tolls over time.                                | Y   | The conformity determinations included reasonable toll, transit service and fare assumptions.   |
|  | (e) The conformity determinations must use the latest existing information regarding the effectiveness of the TCMs and other implementation plan measures which have already been implemented. | N/A | There are no TCMs in the SIP. However, the following implementation plan measures were accounted for in the conformity analyses: the Federal Motor Vehicle Control Program (FMVCP), reformulated gas, Reed Vapor Pressure 7.8 psi for all analysis years, Stage II vapor recovery, I&M, On Board Diagnostics and anti-tampering programs. |
|  | (f) Key assumptions will be specified and included in the draft documents and supporting materials used for the interagency and public consultation required by §93.105.                       | Y   | Key assumptions have been included in the documents and supporting materials used for interagency and public consultation. They were included in the materials made available during the public review period.  |

|        |   |   |  |
|--------|---|---|--|
| 93.111 | Are the conformity determinations based upon the latest emissions model?  | Y | The conformity determinations were based upon emission factors developed using MOBILE6.2, the currently-approved EPA mobile emissions model.   |
| 93.112 | Did the MPO make the conformity determinations according to the consultation procedures of the conformity rule or the state's conformity SIP? | Y | Consultation has occurred among all appropriate agencies. Public participation occurred through out the entire TIP/Plan development process over period of two years. No comments were received on the conformity determination. |

| SPECIFIC CRITERIA APPLICABLE TO THE PLAN |   |             |  |      |     |     |      |             |             |      |             |             |      |             |             |
|--|---|-------------|--|------|-----|-----|------|-------------|-------------|------|-------------|-------------|------|-------------|-------------|
| SECTION<br>of 40 CFR<br>Part 93          | CRITERIA  | Y/N         | COMMENTS   |      |     |     |      |             |             |      |             |             |      |             |             |
| 93.106(a) (1)                            | Are the horizon years correct?  | Y           | The years 2010, 2020 and 2030 are appropriate horizon years.   |      |     |     |      |             |             |      |             |             |      |             |             |
| 93.106(a)<br>(2)(i)                      | Does the plan quantify and document the demographic and employment factors influencing transportation demand?   | Y           | Chapter 4 of the Plan discusses demographic and employment factors.  |      |     |     |      |             |             |      |             |             |      |             |             |
| 93.106(a)<br>(2)(ii)                     | Is the highway and transit system adequately described in terms of the regionally significant additions or modifications to the existing transportation network which is envisioned to be operational in the horizon years? | Y           | The highway and transit system is adequately described in terms of regionally significant additions or modifications to the existing transportation network, which the transportation plan envisions to be operational in the horizon years.   |      |     |     |      |             |             |      |             |             |      |             |             |
| 93.108                                   | Is the Transportation Plan fiscally constrained?  | Y           | EPA is deferring to the MPO and FHWA who have found the Plan to be fiscally constrained.   |      |     |     |      |             |             |      |             |             |      |             |             |
| 93.113(b)                                | Are TCMs being implemented in a timely manner?  | N/A         | There are no TCMs in the SIP.  |      |     |     |      |             |             |      |             |             |      |             |             |
| 93.118                                   | For areas with SIP budgets:<br>Is the Transportation Plan, TIP or Project consistent with the motor vehicle emissions budget(s) in the applicable SIP?  | Y           | <p>For Kent County, projected emissions for 2010, 2020 and 2030 are less than the 2008 RFP SIP emission budgets (in parentheses) as shown below (all emissions in tons per day):</p> <table><tr><td>Year</td><td>VOC</td><td>NOx</td></tr><tr><td>2010</td><td>3.81 (4.14)</td><td>7.89 (9.68)</td></tr><tr><td>2020</td><td>3.17 (4.14)</td><td>2.34 (9.68)</td></tr><tr><td>2030</td><td>1.95 (4.14)</td><td>1.66 (9.68)</td></tr></table> | Year | VOC | NOx | 2010 | 3.81 (4.14) | 7.89 (9.68) | 2020 | 3.17 (4.14) | 2.34 (9.68) | 2030 | 1.95 (4.14) | 1.66 (9.68) |
| Year                                     | VOC   | NOx         |  |      |     |     |      |             |             |      |             |             |      |             |             |
| 2010                                     | 3.81 (4.14)   | 7.89 (9.68) |  |      |     |     |      |             |             |      |             |             |      |             |             |
| 2020                                     | 3.17 (4.14)   | 2.34 (9.68) |  |      |     |     |      |             |             |      |             |             |      |             |             |
| 2030                                     | 1.95 (4.14)   | 1.66 (9.68) |  |      |     |     |      |             |             |      |             |             |      |             |             |

| SPECIFIC CRITERIA APPLICABLE TO THE TIP |  |             |   |      |     |     |      |             |             |      |             |             |      |             |             |
|---|--|-------------|---|------|-----|-----|------|-------------|-------------|------|-------------|-------------|------|-------------|-------------|
| SECTION<br>of 40 CFR<br>Part 93         | CRITERIA   | Y/N         | COMMENTS  |      |     |     |      |             |             |      |             |             |      |             |             |
| 93.108                                  | Is the Transportation Improvement Program fiscally constrained?  | Y           | EPA is deferring to the MPO and FHWA who have found the TIP to be fiscally constrained  |      |     |     |      |             |             |      |             |             |      |             |             |
| 93.113(c)                               | Are TCM's being implemented in a timely manner?  | N/A         | There are no TCMs in the SIP.   |      |     |     |      |             |             |      |             |             |      |             |             |
| 93.118                                  | For areas with SIP budgets:<br>Is the Transportation Plan, TIP or Project consistent with the motor vehicle emissions budget(s) in the applicable SIP? | Y           | <p>For Kent County, projected emissions for 2010, 2020 and 2030 are less than the 2005 Attainment SIP emission budgets (in parentheses) as shown below (all emissions in tons per day):</p> <table><tr><td>Year</td><td>VOC</td><td>NOx</td></tr><tr><td>2010</td><td>3.81 (4.14)</td><td>7.89 (9.68)</td></tr><tr><td>2020</td><td>3.17 (4.14)</td><td>2.23 (9.68)</td></tr><tr><td>2030</td><td>1.95 (4.14)</td><td>1.66 (9.68)</td></tr></table> | Year | VOC | NOx | 2010 | 3.81 (4.14) | 7.89 (9.68) | 2020 | 3.17 (4.14) | 2.23 (9.68) | 2030 | 1.95 (4.14) | 1.66 (9.68) |
| Year                                    | VOC  | NOx         |   |      |     |     |      |             |             |      |             |             |      |             |             |
| 2010                                    | 3.81 (4.14)  | 7.89 (9.68) |   |      |     |     |      |             |             |      |             |             |      |             |             |
| 2020                                    | 3.17 (4.14)  | 2.23 (9.68) |   |      |     |     |      |             |             |      |             |             |      |             |             |
| 2030                                    | 1.95 (4.14)  | 1.66 (9.68) |   |      |     |     |      |             |             |      |             |             |      |             |             |

## CONCLUSION

Pursuant to FHWA's February 3, 2009 request, we have reviewed the Kent County, Delaware 8-hour ozone conformity determinations for the 2010-2013 TIP and 2030 Plan. We have determined that the TIP and Plan meet the requirements of the Clean Air Act and the applicable regulations promulgated thereunder at 40 C.F.R. Part 93.

## **Appendix C: Glossary**

A glossary of terms commonly used in transportation planning is provided below. Not all of the terms are used in this report; the definitions of these other terms are included as a help to the reader in review of other documents.

|                                 |  |
|---------------------------------|--|
| <b>Alternative</b>              | A collection of transportation improvements for model testing, from which one or more will be chosen as a recommended plan.  |
| <b>Alternative Modes</b>        | Transportation other than one person in a motorized private vehicle, such as transit, walking, bicycling & carpooling.   |
| <b>Arterial</b>                 | A class of street serving a major movement of traffic not served by a freeway.   |
| <b>Attainment</b>               | Have pollutant concentrations less than the specified standard.  |
| <b>Auto Ownership</b>           | In common modeling parlance, the number of passenger vehicles available to a household for routine daily travel.   |
| <b>Average Daily Trip (ADT)</b> | The average number of vehicles passing a specified point during a 24-hour period.  |
| <b>Baseline</b>                 | A scenario against which the results of alternative scenarios are measured.  |
| <b>CAAA</b>                     | Clean Air Act Amendments   |
| <b>Capacity</b>                 | For highways, the maximum number of vehicles that can pass over a given section of a lane or roadway in one or both directions during a given time period under prevailing environmental, roadway, and traffic conditions. |
| <b>Capacity Deficiency</b>      | A situation where travel demand exceeds the ability of a facility to handle that demand.   |
| <b>Carpool</b>                  | A group of people who share their automobile transportation to designated destinations on a regular basis.   |
| <b>CBD</b>                      | Central Business District  |
| <b>CO</b>                       | Carbon Monoxide  |



|   |  |
|---|--|
| <b>Complete Streets</b>                   | Designing streets that accommodate a variety of user groups.   |
| <b>Cost Effectiveness</b>                 | Cost per unit of a measure of effectiveness (e.g. tons of pollutant reduced).  |
| <b>Congestion Management System (CMS)</b> | A requirement of ISTEA that each Transportation Management Area develop a CMS that provides for effective management of new and existing transportation facilities through the use of travel demand reduction and operational management strategies. Unless a part of a CMS, future highway projects which significantly increase capacity for single occupant vehicles may be ineligible for federal funding. |
| <b>Density</b>                            | When used in transportation planning, the number of persons or houses per square mile.   |
| <b>Destination</b>                        | The point at which a trip terminates or the zone in which a trip ends.   |
| <b>Diurnal emissions</b>                  | Vehicular emissions that occur on a daily cycle, and are not necessarily related to vehicle use (though usage patterns may affect diurnal emissions rates). Currently, diurnal emissions factors are available for evaporative hydrocarbon emissions only.   |
| <b>Expressway</b>                         | A divided arterial highway for through traffic with full or partial control of access and generally with grade separations at major intersections.   |
| <b>Fixed route transit</b>                | Transit services with regular established routes & schedules. Other types of transit might be demand responsive or door-to-door service  |
| <b>Forecasting</b>                        | In planning, the process of determining the future conditions, magnitudes, and patterns within the urban area such as future population, demographic characteristic and, travel demand   |
| <b>Freeway</b>                            | A divided arterial designed for the safe non-impeded movement of large volumes of traffic, with full control of access and grade separations at intersections  |

|   |   |
|---|---|
| <b>Functional Classification</b>                | The classification of urban roadways by function. Roadways at the top of the hierarchy and other long-distance movement of traffic, roadways at the bottom provided access to land. Traffic volume and spacings typical of each level in the hierarchy.                                   |
| <b>Goal</b>                                     | The end towards which effort is directed. The desired eventual end of a planning process.   |
| <b>Growth factor</b>                            | A value used to adjust existing data to produce an estimate for some future year.   |
| <b>HPMS</b>                                     | Highway Performance Monitoring System   |
| <b>High Occupancy Vehicle (HOV)</b>             | Applied to a vehicle carrying two or more people. High volume roadways may have lanes designated for HOV use. These may be dedicated for use by carpools, vanpools, and buses.  |
| <b>HSIP</b>                                     | Highway Safety Improvement Program  |
| <b>Intelligent Transportation Systems (ITS)</b> | Transportation systems that involve integrated applications of advanced surveillance, communications, computer, display, and control process technologies on the roadway network, in the vehicle, and modes. Examples include electronic toll collection, and automated vehicle location. |
| <b>Incorporated</b>                             | Areas that fall under city/town as well as county jurisdictions.  |
| <b>Intermodal</b>                               | Between or including more than one means or mode of transportation.   |
| <b>Internoc</b>                                 | A post processing linkage program which multiplies the estimated volume on each segment of the roadway network corresponding to each segments average speed.  |
| <b>Land Use</b>                                 | The way specific portions of land or the structures on them are used (e.g., commercial, residential, industrial, etc.).   |
| <b>Level of Service</b>                         | The quality of service provided by a facility under a given set of operating conditions.  |

|   |   |
|---|---|
| <b>Local Street</b>                                   | A street or road primarily for access to residence, business or other abutting property.  |
| <b>Long-Range Plan</b>                                | Generally referring to a transportation plan covering a time span of 10 or more years. ISTEA requires metropolitan planning organizations, in consultation with the State, prepare a plan spanning 20 years by October 1, 1993.                           |
| <b>Macroscopic Model</b>                              | A model that describes traffic flow in the aggregate.   |
| <b>Measures of Effectiveness</b>                      | MOEs are used to determine the degree to which a particular goal or objective has been attained. MOEs are used as a basis or standard of comparison (measure), of an action which "produce a decisive, desired result" (effectiveness).                   |
| <b>Microscopic Model</b>                              | A model that describes traffic flow in terms of individual vehicles.  |
| <b>Metropolitan Planning Organizations (MPO)</b>      | The organizational entity designated by law with lead responsibility for developing transportation plans and programs for urbanized areas of 50,000 or more in population.  |
| <b>Mobile Source</b>                                  | A moving source of emissions, including but not limited to motor vehicles.  |
| <b>Mode</b>   | A means of transportation, such as car, bicycle, bus, or train.   |
| <b>Mode Choice</b>                                    | A process by which an individual selects a transportation mode for use on a trip or trip chain, given the trip's purpose, origin, and destination; characteristics of the individual; and characteristics of travel by the realistically-available modes. |
| <b>National Ambient Air Quality Standards (NAAQS)</b> | Standards established by the Environmental Protection Agency that determine the maximum allowable amount of air pollutants.   |
| <b>Non-Attainment Areas</b>                           | An area that does not achieve one or more federal national ambient air quality standards.   |
| <b>NO<sub>x</sub></b>                                 | Nitrogen oxides along with volatile organic compounds (VOCs) the two compounds are precursors of ozone formation.   |

|                                   |   |
|-----------------------------------|---|
| <b>Objectives</b>                 | Operational statements of goals, measurable and attainable.   |
| <b>Origin-Destination Survey</b>  | A survey of the number, purpose, and mode of trips from various zones of destination.   |
| <b>Ozone</b>                      | The O <sub>3</sub> form of oxygen, a regulated pollutant and a key component of smog.   |
| <b>PSI</b>                        | Present Serviceability Index  |
| <b>Paratransit</b>                | Typically, on-demand transit service that does not follow a fixed route or schedule. Riders may have to meet eligibility requirements in order to use the service.  |
| <b>Park and Ride</b>              | A procedure that permits a patron to drive a private automobile to a transit station, park in the area provided for that purpose, and ride the transit system to his or her destination.  |
| <b>Peak Hour (Peak Period)</b>    | That hour (period) during which the maximum amount of travel occurs. Generally, there is a morning peak and an afternoon peak.  |
| <b>POV</b>                        | Privately owned vehicle   |
| <b>Ridesharing</b>                | A transportation service which includes carpooling, vanpooling, buspooling and transit.   |
| <b>Right-of-Way</b>               | A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes.  |
| <b>SAFETEA-LU</b>                 | Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users is legislation that followed TEA-21. It was passed by Congress in 2005 attempting to address the Nation's changing transportation needs by investing funds in highways, highway safety, and public transportation. |
| <b>State Resource Areas (SRA)</b> | SRAs are the most important natural open space lands valued for their natural, cultural, and geological significance as determined by the Delaware Department of Natural Resources and Environmental Control (DNREC).   |

|  |   |
|--|---|
| <b>Strategic Planning</b>  | A style of planning that assesses opportunities/strengths and constraints/weaknesses and identifies options for capitalizing on the opportunities and overcoming or minimizing the constraints.                                       |
| <b>TIP</b>   | Transportation Improvement Program  |
| <b>TCM</b>   | Traffic Control Mitigation  |
| <b>Transit-oriented development (TOD)</b>                                | A transit-oriented development (TOD) is a mixed-use residential or commercial area designed to maximize access to public transport, and often incorporates features to encourage transit ridership.                                   |
| <b>Transit-ready development (TRD)</b>                                   | Transit ready development is development that accommodates future potential transit alignments.   |
| <b>Transferable Development Right (TDR)</b>                              | Transferable Development Right is a development right that may be transferred from a “Sending Site” to lands that are designated as suitable for development (“Receiver Site”).   |
| <b>Transportation Control Measure (TCM)</b>                              | An action to adjust traffic patterns or curtail vehicle use intended to reduce air polluting emissions, (e.g., ridesharing, alternative work hours, trip reduction ordinances).   |
| <b>Transportation Demand Management (TDM)</b>                            | An action designed to regulate the use of a transportation mode or facility as a means of travel, primarily intended to reduce congestion, (e.g., transit enhancements, road pricing, parking strategies).                            |
| <b>Transportation Equity Act for the 21<sup>st</sup> Century (TEA21)</b> | Legislation passed by Congress restructuring funding for highway and transit programs, authorizing funds for a period of six years.   |
| <b>Transportation System Management (TSM)</b>                            | Actions implemented at relatively low cost which improve a transportation system and allow more efficient use of existing transportation facilities (e.g. intersection improvements, lane striping, synchronized signalization, etc.) |
| <b>Travel Demand Forecasting</b>   | Predicting the impacts that various policies and programs will have on travel demand in the area.   |

|                                     |   |
|-------------------------------------|---|
| <b>Trip generation</b>              | The determination of the number of trips that have their origin or destination in a specified location or area.                         |
| <b>Vehicle Availability</b>         | The number of passenger vehicles available to a household for routine daily travel.   |
| <b>Vehicle Occupancy</b>            | The number of people in a car, truck, bus, etc.   |
| <b>Vehicle Miles Traveled (VMT)</b> | A standard area-wide measure of travel activity, most often calculated by multiplying average trip length by the total number of trips. |
| <b>VOCs</b>                         | Volatile Organic Compound   |
| <b>Volume-to-Capacity Ratio</b>     | Used in figuring the level of service of a roadway. The number of vehicles versus the capacity of the road.                             |
| <b>Zone</b>                         | Geographically, the smallest analysis area for transportation analysis.   |

*Adapted from Base Comprehensive Transportation Planning Bulletin Appendix E, United States Air Force, May 1984.*

**Appendix D: Population and Household Estimates by TAZ**

**Appendix D: Population and Household Projections  
by Traffic Analysis Zone 2005 and 2030**

| <b>TAZ<br/>Number</b> | <b>Housing<br/>Units 2005</b> | <b>Housing<br/>Units 2030</b> | <b>Population<br/>2005</b> | <b>Population<br/>2030</b> |
|-----------------------|-------------------------------|-------------------------------|----------------------------|----------------------------|
| K001                  | 92                            | 92                            | 262                        | 252                        |
| K002                  | 545                           | 685                           | 1555                       | 1876                       |
| K003                  | 479                           | 639                           | 1367                       | 1750                       |
| K004                  | 128                           | 288                           | 365                        | 788                        |
| K005                  | 318                           | 451                           | 862                        | 1172                       |
| K006                  | 27                            | 27                            | 68                         | 66                         |
| K007                  | 88                            | 200                           | 223                        | 489                        |
| K008                  | 654                           | 849                           | 1753                       | 2190                       |
| K009                  | 729                           | 998                           | 1848                       | 2438                       |
| K010                  | 261                           | 262                           | 692                        | 667                        |
| K011                  | 76                            | 77                            | 210                        | 203                        |
| K012                  | 550                           | 635                           | 1472                       | 1630                       |
| K013                  | 210                           | 264                           | 581                        | 701                        |
| K014                  | 376                           | 492                           | 1041                       | 1309                       |
| K015                  | 67                            | 67                            | 185                        | 179                        |
| K016                  | 685                           | 842                           | 1896                       | 2237                       |
| K017                  | 234                           | 285                           | 630                        | 735                        |
| K018                  | 557                           | 765                           | 1412                       | 1870                       |
| K019                  | 35                            | 35                            | 92                         | 90                         |
| K020                  | 347                           | 695                           | 915                        | 1761                       |
| K021                  | 298                           | 465                           | 786                        | 1177                       |
| K022                  | 107                           | 246                           | 282                        | 624                        |
| K023                  | 185                           | 196                           | 488                        | 495                        |
| K024                  | 1193                          | 1211                          | 3149                       | 3068                       |
| K025                  | 92                            | 148                           | 243                        | 376                        |
| K026                  | 137                           | 166                           | 361                        | 419                        |
| K027                  | 289                           | 332                           | 762                        | 838                        |
| K029                  | 349                           | 598                           | 921                        | 1515                       |
| K054                  | 90                            | 91                            | 230                        | 225                        |
| K055                  | 91                            | 91                            | 231                        | 221                        |
| K056                  | 233                           | 339                           | 591                        | 829                        |
| K057                  | 341                           | 560                           | 826                        | 1303                       |
| K058                  | 166                           | 169                           | 402                        | 394                        |
| K059                  | 756                           | 943                           | 1828                       | 2195                       |
| K060                  | 73                            | 73                            | 185                        | 177                        |
| K074                  | 643                           | 668                           | 1741                       | 1742                       |
| K075                  | 876                           | 901                           | 2782                       | 2764                       |
| K076                  | 585                           | 593                           | 1557                       | 1523                       |
| K077                  | 399                           | 416                           | 1029                       | 1034                       |
| K078                  | 123                           | 126                           | 312                        | 309                        |
| K079                  | 781                           | 784                           | 1980                       | 1916                       |
| K080                  | 848                           | 853                           | 2154                       | 2088                       |
| K081                  | 15                            | 612                           | 38                         | 1495                       |
| K082                  | 366                           | 369                           | 1071                       | 1045                       |
| K083                  | 484                           | 493                           | 1230                       | 1206                       |
| K084                  | 290                           | 298                           | 753                        | 745                        |
| K085                  | 114                           | 115                           | 289                        | 282                        |
| K086                  | 133                           | 133                           | 337                        | 326                        |
| K087                  | 727                           | 912                           | 1909                       | 2293                       |
| K088                  | 618                           | 630                           | 1567                       | 1539                       |
| K089                  | 457                           | 523                           | 1158                       | 1276                       |
| K090                  | 184                           | 229                           | 466                        | 559                        |
| K091                  | 1057                          | 1133                          | 2677                       | 2767                       |
| K092                  | 791                           | 807                           | 2005                       | 1972                       |



**Appendix D: Population and Household Projections  
by Traffic Analysis Zone 2005 and 2030**

| <b>TAZ<br/>Number</b> | <b>Housing<br/>Units 2005</b> | <b>Housing<br/>Units 2030</b> | <b>Population<br/>2005</b> | <b>Population<br/>2030</b> |
|-----------------------|-------------------------------|-------------------------------|----------------------------|----------------------------|
| K093                  | 1051                          | 1058                          | 2702                       | 2624                       |
| K094                  | 229                           | 870                           | 627                        | 2214                       |
| K095                  | 344                           | 344                           | 878                        | 851                        |
| K096                  | 277                           | 1030                          | 707                        | 2546                       |
| K097                  | 546                           | 546                           | 1668                       | 1626                       |
| K098                  | 833                           | 833                           | 2125                       | 2061                       |
| K099                  | 669                           | 669                           | 1707                       | 1655                       |
| K100                  | 180                           | 191                           | 459                        | 473                        |
| K101                  | 133                           | 133                           | 339                        | 329                        |
| K102                  | 125                           | 141                           | 319                        | 349                        |
| K103                  | 291                           | 507                           | 806                        | 1346                       |
| K104                  | 138                           | 137                           | 350                        | 336                        |
| K105                  | 121                           | 393                           | 307                        | 960                        |
| K106                  | 456                           | 545                           | 1156                       | 1332                       |
| K107                  | 1335                          | 1385                          | 3499                       | 3502                       |
| K108                  | 230                           | 270                           | 583                        | 659                        |
| K109                  | 88                            | 157                           | 223                        | 384                        |
| K110                  | 152                           | 158                           | 385                        | 387                        |
| K111                  | 124                           | 141                           | 343                        | 375                        |
| K112                  | 173                           | 192                           | 479                        | 511                        |
| K113                  | 93                            | 94                            | 257                        | 249                        |
| K114                  | 85                            | 85                            | 215                        | 207                        |
| K115                  | 629                           | 921                           | 1594                       | 2249                       |
| K116                  | 104                           | 126                           | 264                        | 309                        |
| K117                  | 24                            | 27                            | 61                         | 66                         |
| K118                  | 23                            | 24                            | 58                         | 58                         |
| K119                  | 28                            | 28                            | 71                         | 68                         |
| K120                  | 27                            | 27                            | 449                        | 447                        |
| K121                  | 1106                          | 1154                          | 2801                       | 2820                       |
| K122                  | 93                            | 117                           | 257                        | 310                        |
| K123                  | 642                           | 836                           | 1777                       | 2221                       |
| K124                  | 215                           | 717                           | 569                        | 1834                       |
| K125                  | 408                           | 637                           | 1091                       | 1626                       |
| K126                  | 170                           | 2488                          | 412                        | 5790                       |
| K127                  | 291                           | 293                           | 705                        | 683                        |
| K128                  | 144                           | 147                           | 384                        | 375                        |
| K129                  | 510                           | 763                           | 1309                       | 1880                       |
| K130                  | 85                            | 164                           | 206                        | 383                        |
| K131                  | 168                           | 170                           | 443                        | 430                        |
| K132                  | 522                           | 673                           | 1380                       | 1704                       |
| K133                  | 304                           | 538                           | 782                        | 1343                       |
| K134                  | 336                           | 650                           | 886                        | 1648                       |
| K139                  | 905                           | 958                           | 2251                       | 2292                       |
| K142                  | 401                           | 428                           | 971                        | 996                        |
| K207                  | 180                           | 250                           | 436                        | 581                        |
| K208                  | 225                           | 294                           | 545                        | 685                        |
| K209                  | 236                           | 269                           | 571                        | 625                        |
| K210                  | 220                           | 387                           | 580                        | 980                        |
| K211                  | 132                           | 163                           | 348                        | 412                        |
| K212                  | 70                            | 149                           | 185                        | 379                        |
| K213                  | 301                           | 812                           | 729                        | 1889                       |
| K214                  | 118                           | 124                           | 311                        | 312                        |
| K215                  | 0                             | 0                             | 0                          | 0                          |
| K216                  | 76                            | 187                           | 200                        | 472                        |

**Appendix D: Population and Household Projections  
by Traffic Analysis Zone 2005 and 2030**

| <b>TAZ<br/>Number</b> | <b>Housing<br/>Units 2005</b> | <b>Housing<br/>Units 2030</b> | <b>Population<br/>2005</b> | <b>Population<br/>2030</b> |
|-----------------------|-------------------------------|-------------------------------|----------------------------|----------------------------|
| K217                  | 786                           | 1058                          | 2167                       | 2799                       |
| K218                  | 384                           | 623                           | 1063                       | 1656                       |
| K219                  | 402                           | 620                           | 1113                       | 1648                       |
| K220                  | 432                           | 467                           | 1196                       | 1242                       |
| K221                  | 1002                          | 1583                          | 2774                       | 4207                       |
| K222                  | 768                           | 908                           | 1947                       | 2217                       |
| K223                  | 734                           | 1099                          | 1861                       | 2684                       |
| K224                  | 688                           | 1134                          | 1905                       | 3013                       |
| K225                  | 218                           | 243                           | 553                        | 593                        |
| K226                  | 128                           | 140                           | 354                        | 372                        |
| K227                  | 37                            | 84                            | 102                        | 222                        |
| K228                  | 329                           | 443                           | 834                        | 1082                       |
| K229                  | 379                           | 604                           | 961                        | 1476                       |
| K230                  | 157                           | 215                           | 398                        | 525                        |
| K231                  | 946                           | 1135                          | 2399                       | 2776                       |
| K232                  | 316                           | 430                           | 801                        | 1050                       |
| K233                  | 311                           | 595                           | 788                        | 1454                       |
| K234                  | 269                           | 427                           | 766                        | 1168                       |
| K235                  | 394                           | 869                           | 1004                       | 2148                       |
| K236                  | 151                           | 692                           | 384                        | 1707                       |
| K237                  | 227                           | 1442                          | 621                        | 3608                       |
| K238                  | 2                             | 190                           | 5                          | 470                        |
| K239                  | 248                           | 451                           | 633                        | 1116                       |
| K240                  | 208                           | 960                           | 531                        | 2373                       |
| K241                  | 76                            | 101                           | 194                        | 250                        |
| K242                  | 434                           | 496                           | 1144                       | 1255                       |
| K243                  | 295                           | 342                           | 817                        | 910                        |
| K244                  | 85                            | 163                           | 224                        | 412                        |
| K245                  | 26                            | 26                            | 69                         | 67                         |
| K246                  | 74                            | 92                            | 294                        | 330                        |
| K247                  | 146                           | 145                           | 370                        | 355                        |
| K248                  | 134                           | 133                           | 340                        | 326                        |
| K249                  | 15                            | 22                            | 1617                       | 1632                       |
| K250                  | 381                           | 389                           | 966                        | 951                        |
| K251                  | 31                            | 31                            | 79                         | 75                         |
| K252                  | 458                           | 456                           | 1161                       | 1113                       |
| K253                  | 111                           | 117                           | 281                        | 287                        |
| K254                  | 430                           | 439                           | 1090                       | 1072                       |
| K255                  | 107                           | 106                           | 271                        | 260                        |
| K256                  | 274                           | 277                           | 695                        | 676                        |
| K257                  | 659                           | 694                           | 1670                       | 1695                       |
| K258                  | 215                           | 289                           | 545                        | 705                        |
| K259                  | 179                           | 178                           | 454                        | 435                        |
| K260                  | 955                           | 961                           | 2418                       | 2349                       |
| K261                  | 20                            | 20                            | 51                         | 49                         |
| K262                  | 479                           | 890                           | 1236                       | 2216                       |
| K263                  | 151                           | 155                           | 383                        | 379                        |
| K264                  | 696                           | 780                           | 1776                       | 1930                       |
| K265                  | 42                            | 55                            | 106                        | 134                        |
| K266                  | 1592                          | 1671                          | 4033                       | 4082                       |

## **Appendix E**

### **Part A: Funded Projects**

**List of Recommended Projects**

|   |  | Year Completed By | Year Of Expenditure \$ Amount | Road Classification |
|---|--|-------------------|-------------------------------|---------------------|
| <b>Estimated Available Statewide Programs Funding</b> |  |                   | <b>\$1,059,587</b>            |                     |
| <b>Statewide Programs</b>                             | <b>Statewide Projects</b>  |                   |                               |                     |
|   | Transit (Expanded Bus Service and Rail Service)  | 2030              | \$289,979                     |                     |
|   | Civil Air Terminal   | 2030              | \$45,886                      |                     |
|   | Bicycle lending or sharing programs  | 2010              | \$500                         |                     |
|   | Bridges  | 2030              | \$12,501                      |                     |
|   | Corridor Preservation  | 2030              | \$43,359                      |                     |
|   | Environmental Improvements   | 2030              | \$12,782                      |                     |
|   | Equipment  | 2030              | \$24,920                      |                     |
|   | Intersection Improvements  | 2030              | \$12,247                      |                     |
|   | Materials and Minor Contracts  | 2030              | \$65,260                      |                     |
|   | Operations   | 2030              | \$86,234                      |                     |
|   | Paving Program   | 2030              | \$210,149                     |                     |
|   | Rail Crossings   | 2030              | \$1,369                       |                     |
|   | Highway Safety Improvement Program/Plan  | 2030              | \$8,799                       |                     |
|   | Signage and Pavement Markings  | 2030              | \$9,389                       |                     |
|   | Technology   | 2030              | \$2,870                       |                     |
|   | Traffic Calming  | 2030              | \$2,319                       |                     |
|   | Transit Facilities   | 2030              | \$773                         |                     |
|   | Transportation Enhancements  | 2030              | \$50,622                      |                     |
|   | Transportation Facilities  | 2030              | \$28,568                      |                     |
|   | Transportation Management  | 2030              | \$8,756                       |                     |
|   | Engineering & Contingencies  | 2030              | \$3,062                       |                     |
|   | EZ Pass  | 2030              | \$4,358                       |                     |
|   | Aeronautics  | 2030              | \$1,770                       |                     |
|   | <b>Estimated Total Cost</b>  |                   | <b>\$926,474</b>              |                     |
| <b>Estimated Available Highway Project Funding</b>    |  |                   | <b>\$566,895</b>              |                     |
| <b>Committed Projects</b>                             | <b>Highway Projects</b>  |                   |                               |                     |
|   | South Governors Ave Reconstruction Webbs Lane to Water Street  | 2011              | \$12,850                      |                     |
|   | 27.1 Complete the SR 1 Little Heaven Grade Separated Intersection  | 2015              | \$59,123                      | Arterials           |
|   | 26.4 Complete the SR 1 and SR 9 Grade Separated Intersection at DAFB   | 2010              | \$13,826                      | Arterials           |
|   | 23.2 Complete the SR 1 / Thompsonville Road Grade Separated Intersection (K 19)  | 2014              | \$25,222                      | Arterials           |
|   | 23.2 Complete the SR 1 South Frederica Grade Separated Intersection (Cedar Neck Road K 120)  | 2015              | \$25,000                      | Arterials           |
|   | 23.2 Complete the SR 1, North Frederica Grade Separated Intersection   | 2012              | \$13,074                      | Arterials           |
|   | 29.0 Upgrade Barratts Chapel Road from SR 1 to Kersey Rd to include adequately wide travel lanes and shoulders and include bicycle, pedestrian and transit facilities as appropriate | 2020              | \$20,810                      | Major Collector     |

|                             |                          |      | Year Completed By   | Year Of Expenditure \$ Amount | Road Classification |                 |
|-----------------------------|--------------------------|------|---|-------------------------------|---------------------|-----------------|
| Capital Projects - Highways | Committed Projects       | 29.0 | Improve Carter Road from Sunnyside Road to Wheatley's Pond Road (DE 300) to include adequately wide travel lanes and shoulders and pedestrian and bicycle facilities                | 2020                          | \$8,800             | Major Collector |
|                             |                          | 28.3 | Upgrade Duck Creek Parkway from Bassett Street to Main Street in north Smyrna to include adequate travel lanes, shoulders, curbs, drainage, and bicycle and pedestrian improvements | 2020                          | \$9,052             | Major Collector |
|                             |                          | 28.3 | Construct the West Dover Connector  | 2020                          | \$42,665            | Minor Arterial  |
|                             |                          | 25.1 | Realign Wyoming Mill Road with the Village of Westover entrance and signalize   | 2012                          | \$1,500             | Major Collector |
|                             |                          | 28.3 | Construct the Clarence Street Extension   | 2020                          | \$1,400             | Local           |
|                             |                          | 29.0 | Complete gateway improvements on Forest St, including a roundabout at the intersection of Loockerman Street and Forest Street   | 2016                          | \$5,327             | Minor Arterial  |
|                             |                          | 27.2 | Construct a grade separated intersection at SR 1 and NE Front St. in Milford  | 2020                          | \$30,000            |                 |
|                             | Recommended New Projects | 37.0 | DE 8: Construct recommendations from the DE 8 Concept and Operations Study  | 2030                          | \$37,986            | Minor Arterial  |
|                             |                          | 37.0 | - D8: Intersection Improvements: Left turn phasing at 4 intersections   | 2030                          |                     | Minor Arterial  |
|                             |                          | 37.0 | - D8: Intersection Improvements: Access to the new High School site (Carey Farm), Calvary Church site   | 2030                          |                     | Minor Arterial  |
|                             |                          | 37.0 | - D8: Intersection Improvements: Mifflin Road right turn and realignment of Brandywine Apts entrance  | 2030                          |                     | Minor Arterial  |
|                             |                          | 37.0 | - D8: N/S Connector Road: Chestnut Hill Road to Rt 8  | 2030                          |                     | Major Collector |
|                             |                          | 37.0 | - D8: N/S Connector Road: Rt 8 to Hazletville Rd  | 2030                          |                     | Major Collector |
|                             |                          | 37.0 | - D8: N/S Connector Road: Connection above road to Artis Drive  | 2030                          |                     | Major Collector |
|                             |                          | 37.0 | - D8: Install Bicycle and pedestrian improvements including bike lanes, designated, controlled crossings with ped signals and an alternative shared use path                        | 2030                          |                     | Minor Arterial  |
|                             |                          | 37.0 | - D8: Connector Road behind Greentree Shopping Center between Independence Blvd and Kenton Road   | 2030                          |                     | Local           |
|                             |                          | 37.0 | - D8: Realign intersection of Artis Drive with DE 8   | 2030                          |                     | Local           |
|                             |                          | 37.0 | - D8: Interconnections to enhance Rt 8 Corridor Capacity Independence south of Rt 8 to Mifflin Road, Dove View to Modern Maturity, Heatherfields/Fox Hall West & Cranberry Run,     | 2030                          |                     | Exempt          |
|                             |                          | 37.0 | - D8: Connector Road south of Gateway West to Commerce Way  | 2030                          |                     | Local           |
|                             |                          | 37.0 | NDS: Implement the recommendations of the Concept Plan for US 13 and 113 in Dover   | 2030                          | \$39,391            | Minor Arterial  |
|                             |                          | 37.0 | - NDS: Construct a collector road between the Scarborough Rd. and US 13 to the East of Dover Mall and Dover Downs, to Leipsic Road (NDS is North Dover Study)                       | 2030                          |                     | Major Collector |

|                             |                          | Year Completed By    | Year Of Expenditure \$ Amount   | Road Classification |                 |                 |
|-----------------------------|--------------------------|----------------------|---|---------------------|-----------------|-----------------|
| Capital Projects - Highways | Recommended New Projects | 37.0                 | - NDS: Construct a collector between above and US 13 adjacent to Best Buy   | 2030                | Major Collector |                 |
|                             |                          | 37.0                 | - NDS: Realign Exit 104 toll plaza and access roads to accommodate above  | 2030                | Other Freeway   |                 |
|                             |                          | 37.0                 | - NDS: Realign Leipsic Road and connect to US 13 at Jefferic Blvd. and to the Barry Van Lines site  | 2030                | Major Collector |                 |
|                             |                          | 37.0                 | - NDS: Construct Crawford Carroll Rd extension from behind Lowes to College Rd east of DSU  | 2030                | Major Collector |                 |
|                             |                          | 37.0                 | - NDS: Construct a local road between above and US 13 across from a realigned Dover Mall North entrance   | 2030                | Major Collector |                 |
|                             |                          | 34.7                 | Upgrade Kenton Road from DE 8 to Chestnut Grove Road in Dover with shoulders, sidewalks, bike and transit facilities and closed drainage  | 2030                | \$20,858        | Minor Arterial  |
|                             |                          | 33.2                 | Intersection Improvements to South State Street at SR 10 (Lebanon Road)   | 2020                | \$593           | Minor Arterial  |
|                             |                          | 33.2                 | Intersection Improvements to South State Street: Sorghum Mill Rd. to SR 10 (Lebanon Road)   | 2020                | \$237           | Minor Arterial  |
|                             |                          | 33.2                 | South State St. Intersection Improvements various intersections (8 total) between US 13 and SR 1  | 2020                | \$1,521         | Minor Arterial  |
|                             |                          | 32.4                 | Upgrade West Street from New Burton Road (Queen Street) to North Street in Dover to include adequate travel lanes, shoulders, curbs, drainage, and bicycle and pedestrian improvements            | 2020                | \$1,431         | Major Collector |
|                             |                          | 32.4                 | Construct pedestrian improvements on US 13 from Duck Creek to the north Smyrna SR 1 interchange   | 2030                | \$8,793         | Major Collector |
|                             |                          | 30.8                 | Upgrade Front Street corridor from Rehoboth Blvd to SR 1, Milford to include adequate travel lanes, shoulders, curbs, drainage, bicycle and pedestrian improvements and intersection improvements | 2030                | \$3,588         | Major Collector |
|                             |                          | 30.8                 | Construct /fill gaps in pedestrian improvements on US 13 in Smyrna  | 2030                | \$14,185        | Minor Arterial  |
|                             |                          | 30.7                 | Upgrade corridor of DE 14 from DE 15 to Church Street and from Washington Street to SR 1 with adequate lane width, shoulders, sidewalks and transit facilities                                    | 2030                | \$28,396        | Minor Arterial  |
|                             |                          | 30.7                 | Complete upgrade of DE 300 from railroad tracks to US 13 to include sidewalks, bicycle and transit facilities and intersection improvements at Carter Rd/DE 6 area                                | 2030                | \$20,739        | Major Collector |
|                             |                          | 30.7                 | Upgrade Irish Hill Road from SR 1 to US 13 to include adequate travel lanes, shoulders, and bicycle and pedestrian improvements   | 2030                | \$86,025        | Major Collector |
|                             |                          | 30.7                 | Upgrade College Road from Salisbury to Kenton Road to include turn lanes where needed, shoulders, sidewalks or multi-use path, curbing and closed drainage  | 2030                | \$4,289         | Minor Arterial  |
|                             |                          | 29.1                 | Construct a connector road from White Oak Road to DE 8  | 2015                | \$1,092         | Major Collector |
|                             |                          | Estimated Total Cost |   |                     | \$5,826,580     |                 |

|                            |              |  |  |  |  | Year Completed By | Year Of Expenditure \$ Amount | Road Classification |          |       |  |
|----------------------------|--------------|--|--|--|--|-------------------|-------------------------------|---------------------|----------|-------|--|
| Transit Projects           | New Projects | Estimated Available Transit Project Funding                  |  |  |  |                   |                               | \$49,530            |          |       |  |
|                            |              | Transit Projects   |  |  |  |                   |                               |                     |          |       |  |
|                            |              | Expand fixed-route bus service                               |  |  |  |                   |                               | 2010                | \$2,987  |       |  |
|                            |              | Expand paratransit service                                   |  |  |  |                   |                               | 2020                | \$2,434  |       |  |
|                            |              | Create/operate the Smyrna Shuttle                            |  |  |  |                   |                               | 2020                | \$2,156  |       |  |
|                            |              | Delaware Air Park - DRBA - Runway Extension                  |  |  |  |                   |                               | 2020                | \$1,249  |       |  |
|                            |              | Implement recommendations of Civil Air Terminals Studies     |  |  |  |                   |                               | 2020                | \$128    |       |  |
|                            |              | Construct the Dover Transit Center at Water and West Streets |  |  |  |                   |                               | 2020                | \$11,699 |       |  |
| Estimated Total Cost       |              |  |  |  |  |                   | \$20,653                      |                     |          |       |  |
| Studies and Other Planning | Studies      | Estimated Available Planning Study Funding                   |  |  |  |                   |                               | \$16,061            |          |       |  |
|                            |              | Planning Studies   |  |  |  |                   |                               |                     |          |       |  |
|                            |              | 34.8   | Develop a commercial corridor/modified corridor preservation concept for US 13 in Camden   |  |  |                   |                               |                     | 2010     | \$135 |  |
|                            |              | 34.8   | Develop commercial corridor concepts for US 113 in Milford, and DE 10 from US 113 to US 13   |  |  |                   |                               |                     | 2010     | \$301 |  |
|                            |              | 33.1   | Study the need to upgrade DE 14 west of DE 15  |  |  |                   |                               |                     | 2010     | \$81  |  |
|                            |              | 32.5   | Develop a Main Street concept plan for DE 42 in Cheswold   |  |  |                   |                               |                     | 2020     | \$59  |  |
|                            |              | 30.8   | Reassess feasibility study of implementing passenger rail service between Dover and Wilmington   |  |  |                   |                               |                     | 2020     | \$148 |  |
|                            |              | 29.1   | Study the need to upgrade DE 15 west of Wyoming in future annexation areas   |  |  |                   |                               |                     | 2020     | \$98  |  |
|                            |              | 29.1   | Study US 13 Alt. south of South Street in Camden to determine how to improve safety and traffic flow   |  |  |                   |                               |                     | 2020     | \$33  |  |
|                            |              | 28.5   | Study the need to bring Denneys Road in Dover to urban standards   |  |  |                   |                               |                     | 2020     | \$65  |  |
|                            |              | 26.8   | Study the need to upgrade Church Hill Road north of Milford between DE 14 and Road 119   |  |  |                   |                               |                     | 2020     | \$65  |  |
|                            |              | 25   | Monitor conditions on DE 8 between Forest Street and US 13 to determine the need for additional corridor and intersection improvements                         |  |  |                   |                               |                     | 2020     | \$392 |  |
|                            |              | 25   | Study the transportation system south of Smyrna to determine required future transportation improvements   |  |  |                   |                               |                     | 2020     | \$196 |  |
|                            |              | 25   | Study where/how to make a new connection(s) between SR-1 and DE-12 outside of Frederica  |  |  |                   |                               |                     | 2020     | \$361 |  |
|                            |              | 25   | Develop an access management program to preserve capacity on key roadways serving regional travel needs such as DE 15, DE 12, DE 14                            |  |  |                   |                               |                     | 2020     | \$541 |  |
|                            |              | 24.5   | Conduct walkable community workshops in the region's municipalities as a means to creating local bicycle and pedestrian plans and accomplishing ADA compliance |  |  |                   |                               |                     | 2020     | \$115 |  |
|                            |              | 23.3   | Study ways to reduce congestion on SR 1 north of Dover   |  |  |                   |                               |                     | 2020     | \$80  |  |

|         |                             |  | Year Completed By | Year Of Expenditure \$ Amount | Road Classification |
|---------|-----------------------------|--|-------------------|-------------------------------|---------------------|
| Studies | 22.8                        | Study access to employment and commercial areas of Milford   | 2020              | \$199                         |                     |
|         | 22.7                        | Expand the Corridor Capacity Preservation Program to include DE 10   | 2020              | \$159                         |                     |
|         | 21.1                        | Conduct site studies to determine the best locations for intermodal freight transfer facilities                          | 2020              | \$80                          |                     |
|         | 19.4                        | Study how pinchpoints on DE 15 west of Smyrna and Clayton can be improved to constitute a westerly bypass of those towns | 2020              | \$318                         |                     |
|         | 16.7                        | Study creating a truck route outside of/around the Milford historic district   | 2020              | \$278                         |                     |
|         | <b>Estimated Total Cost</b> |  |                   | <b>\$3,704</b>                |                     |



## **Appendix E**

### **Part B: Unfunded Projects: Aspiration List**

|  |  | Year Completed By  | Year Of Expenditure \$ Amount | Road Classification |                 |
|--|--|--|-------------------------------|---------------------|-----------------|
| Aspirations List of Projects   |  |  |                               |                     |                 |
| Highway Projects   |  |  |                               |                     |                 |
| Capital Projects - Highways<br><br>Excluded New Projects (Aspiration List) | 29.1   | Upgrade Sunnyside Road from DE 300 to US 13 in Smyrna to include adequate travel lanes, shoulders, curbs, drainage, and bicycle and pedestrian improvements                            | >2030                         | \$30,845            | Major Collector |
|  | 29.1   | Construct/fill gaps in pedestrian facilities on US 113 between Court Street and Lafferty Lane  | >2030                         | \$5,774             | Minor Arterial  |
|  | 28.5   | Upgrade N. Main Street in Smyrna to include adequate travel lanes, shoulders, curbs, drainage, and bicycle and pedestrian improvements   | >2030                         | \$7,150             | Major Collector |
|  | 28.5   | Upgrade Joe Goldsborough Road from Duck Creek Road to US 13 to include adequate travel lanes, shoulders and bicycle and pedestrian facilities  | >2030                         | \$2,240             | Major Collector |
|  | 28.5   | Upgrade Paddock Road from US 13 to SR 1 to include adequate travel lanes, shoulders and bicycle and pedestrian facilities  | >2030                         | \$5,096             | Major Collector |
|  | 27.3   | Upgrade Messina Hill Road to improve safety and include adequate travel lanes, shoulders and bicycle and pedestrian facilities   | >2030                         | \$4,480             | Major Collector |
|  | 26.8   | Upgrade Peachtree Run Road (from Voshells Mill Star Hill Road to Irish Hill Road) to include adequate travel lanes, shoulders, and bicycle and pedestrian improvements                 | >2030                         | \$12,300            | Major Collector |
|  | 26.8   | Upgrade New Burton Road from Westview Terrace to Wyoming town limit with turn lanes, where needed, adequate shoulders and bicycle and pedestrian facilities                            | >2030                         | \$11,200            | Major Collector |
|  | 26.7   | Construct/ fill gaps in pedestrian facilities on US 13 from Smyrna-Leipsic Road (K 12) to Duck Creek Road.   | >2030                         | \$4,362             | Minor Arterial  |
|  | 26.4   | South State Street Center left turn lane: SR 10 to SR 1  | >2030                         | \$55,000            | Minor Arterial  |
|  | 26.3   | Upgrade SR 36 west of US 113 to include pedestrian, bicycle and transit facilities and adequate travel lane and shoulder widths (in Milford)   | >2030                         | \$28,000            | Major Collector |
|  | 26.2   | Upgrade the McKee Road/ Saulsbury Road/Morton Road corridor from Denneys Road to Lynnbury Woods Road with adequate lane width, shoulders, sidewalks and bicycle and transit facilities | >2030                         | \$10,200            | Major Collector |
|  | 26.2   | Upgrade DE 15 between DE 14 and US 13 and from DE 10A to DE 10 to include adequate lane width, shoulders, multi-use path and transit facilities.                                       | >2030                         | \$39,300            | Minor Arterial  |
|  | 25.7   | Upgrade DE 42 from Kenton to US 13 with adequate travel lanes and shoulders and bicycle and pedestrian facilities  | >2030                         | \$21,056            | Major Collector |
| 25.7   | Upgrade corridor of Lynnbury Woods Road to include adequate travel lanes, shoulders, curbs, drainage, and bicycle and pedestrian improvements              | >2030  | \$5,600                       | Minor Collector     |                 |
| 25.1   | Upgrade sections of Brenford Road not included in developer improvements to include adequate travel lanes, shoulders and bicycle and pedestrian facilities | >2030  | \$200                         | Minor Arterial      |                 |

| Capital Projects - Highways |                  |   | Year Completed By | Year Of Expenditure \$ Amount | Road Classification |
|-----------------------------|------------------|---|-------------------|-------------------------------|---------------------|
| Excluded New Projects       | 25.1             | Upgrade Walnut Shade Road from US 13 to S. State St. to include adequate travel lanes, shoulders, and bicycle and pedestrian improvements                                 | >2030             | \$8,000                       | Major Collector     |
|                             | 25.0             | Widen US 13 from Scarborough Road to South Smyrna SR 1 Interchange  | >2030             | \$112,000                     | Minor Arterial      |
|                             | 24.6             | Upgrade DE 15 west of Clayton and Smyrna (Vandyke Greenspring Road to DE 6) to include adequate travel lanes and shoulders and bicycle, pedestrian and transit facilities | >2030             | \$6,900                       | Major Collector     |
|                             | 24.5             | Construct Bike and Pedestrian Improvements on Duck Creek Road from Main St to US 13 and from DE 6 to VanDyke Spring Road  | >2030             | \$550                         | Major Collector     |
|                             | 254.5            | Upgrade Carpenter Bridge Road from Frederica to DE 15 to include adequate lane width, shoulders, multi-use path and transit amenities                                     | >2030             | \$18,816                      | Minor Arterial      |
|                             | 24.5             | Upgrade DE 12 from SR 1 to US 13 with adequate lane width, shoulders, multi-use path and transit facilities   | >2030             | \$30,016                      | Minor Arterial      |
|                             | 24.5             | Construct/fill gaps in bicycle and pedestrian facilities on Hazletville Road within the Dover city limits.  | >2030             | \$2,240                       | Minor Arterial      |
|                             | 24.5             | Construct a Bike route on S. State Street from Webbs Lane to SR 10  | >2030             | \$1,200                       | Minor Arterial      |
|                             | 24.0             | Construct/fill gaps in bicycle and pedestrian improvements on DE 10 between Bay Road (US 113) and DE 15 west of Wyoming   | >2030             | \$5,600                       | Minor Arterial      |
|                             | 21.0             | Construct grade-separated intersection at SR 1 and Barratts Chapel Road   | >2030             | \$30,000                      | Principal Arterials |
|                             | 20.6             | Construct pedestrian improvements on Washington Street bridge in Milford  | >2030             | \$224                         | Major Collector     |
|                             | 17.1             | Upgrade Brick Store Landing Road from Paddock Road to SR 1 in Smyrna  | >2030             | \$3,696                       | Major Collector     |
|                             | 17.0             | Improve the intersection of Airport and Bowman Roads in Milford   | >2030             | \$900                         | Major Collector     |
|                             | 14.9             | Upgrade DE 6 between the Maryland state line and DE 300 with adequate travel lanes and shoulders.   | >2030             | \$7,900                       | Local               |
| Transit                     | Transit Projects |   |                   |                               |                     |
|                             |                  | Implement Bus Rapid Transit/BRT recommendations through Kent County by creating a dedicated lane and intelligent signalling on existing ROW                               | >2030             | \$0                           |                     |
|                             |                  | Expand Rail service to Dover  | >2030             | \$0                           |                     |
|                             | Planning Studies |   |                   |                               |                     |
|                             |                  | Studies not specifically listed in the RTP  | >2030             | \$0                           |                     |

|  |  |  |  | <b>Year<br/>Completed<br/>By</b> | <b>Year Of<br/>Expenditure \$<br/>Amount</b> | <b>Road<br/>Classification</b> |
|--|--|--|--|----------------------------------|--|--------------------------------|
|--|--|--|--|----------------------------------|--|--------------------------------|

## **Appendix F: Summary of Public Outreach and Comments**

## Public Outreach

Public outreach for the Dover/Kent County Metropolitan Planning Organization's 2035 Long-Range Transportation Plan began in early 2008 when MPO staff partnered with Kent County government to present transportation data at public workshops for the county's comprehensive plan update. The information included travel modeling results and population/employment estimates.

MPO staff additionally spoke with workshop attendees about new concepts being developed for the RTP such as Complete Streets and Transit-Ready development. Since these workshops focused on the Comprehensive Plan, the MPO gathered no comments. Due to the contentious nature of other issues in the county's draft comprehensive plan, neither county nor MPO staff received any substantive comments about the transportation system during the workshops.

MPO staff later in 2008 initiated media coverage and public presentations regarding the RTP to encourage people to lend their input to the plan.

In December 2008, MPO staff mailed letters to Kent County-area mayors to offer PowerPoint presentations describing the RTP, sent postcards to residents and businesses to invite them to a January 15, 2009 public workshop and created and released a television advertisement through Comcast cable on a number of channels. The television ad was narrated in English, with Spanish subtitles, as central Delaware has a sizeable Hispanic population. All information about the plan directed the public to the MPO's Web site, [www.doverkentmpo.org](http://www.doverkentmpo.org).

Drafts of the RTP were placed on the MPO's Web site, hard copies of the plan went to Kent County area public and university libraries and media releases about the ad, workshop and availability of the RTP for public review went to local newspapers and radio networks such as the *The News Journal*, *Delaware State News*, *Dover Post*, *Clear Channel* and *DelawareTalkRadio.net*.

Examples of the mayors' letter and workshop invitation follow:

Dover/Kent County MPO Regional Transportation Plan Update 2009  
Appendix F

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Dover/Kent County Metropolitan Planning Organization

P.O. Box 383, Dover, Delaware 19903  
<http://www.doverkentmpo.org>

(302) 760-2713 FAX: (302) 739-6340

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December 5, 2008

Hon. Harold H. Lane  
Mayor of Woodside  
POB 211  
Woodside, DE 19980

Dear Mayor Lane:

Complete Streets, sustainable communities and transit-ready development.

Alone, these terms sound far removed from the average person. But in fact, they are concepts based upon historic development patterns that could shape the Dover and Kent County area toward easier mobility.

These progressive planning concepts are in the latest draft of the Dover/Kent County Metropolitan Planning Organization's Regional Transportation plan.

Thus far, the Dover/Kent County MPO has conducted an analysis of future transportation needs and compiled a list of projects.

Now, we're ready to take our plan on the road to share with municipalities and community organizations. We would be happy to make a presentation for you sometime in the first few weeks of January. The plan would take about 20 to 30 minutes to present.

The Regional Transportation Plan defines how the region's transportation system will develop over the next 20 years. This type of plan, which is updated every four years, is required by the U.S. Department of Transportation as a prerequisite for federal funding. It must be developed through a process that includes input from the public and private sectors and coordination with local and state plans.

Transit-ready development is a concept to develop communities that are more easily served by public transit. Sustainable communities is a concept that supports the sustainability of good quality of life for the area. Complete Streets, a new term, describes streets that are designed with all potential users in mind -- bicyclists, pedestrians, the disabled and transit.

If you are interested in a presentation, please contact us by telephone at (302) 760-2713 or e-mail at [juanita.wieczoreck@state.de.us](mailto:juanita.wieczoreck@state.de.us).

Sincerely,

Juanita S. Wieczoreck  
Executive Director

JSW:kls



## Public Workshop

The Dover/Kent County Metropolitan Planning Organization wants your input on its draft Regional Transportation Plan. Stop by and give us your thoughts about the plan and transportation services in Dover and Kent County.

**Date: Jan. 15, 2009**  
**Time: 4-7 p.m.**

*Public Assembly Room  
Dover Police Station  
400 Bank Lane*

*To preview a copy of the plan, call the office, go to your local public library or visit the MPO on the Web at:*  
**www.doverkentmpo.org**

Dover/Kent County MPO  
Phone: 302-760-2713  
Fax: 302 739-6340

Examples from the television commercial and the media release are also displayed:



**DoverKentMPO.org (302) 760-2713**

**Dover/Kent County**  
**RTP**  
**Regional Transportation Plan Update**

La Organización de Planificación Metropolitana de Dover/Condado de Kent actualiza su Plan Regional de Transporte de veinte años. Los fondos son limitados.



**DoverKentMPO.org (302) 760-2713**

Tendremos que hacer elecciones difíciles. Sus comentarios son esenciales para un mejor futuro. Llame al (302) 760-2713 o visite nuestro sitio web: doverkentmpo.org.



Hello, folks. Would welcome any coverage you could give us on this. If you have any questions, give me a call at the office.

Thanks!

Wishing very happy holidays to everyone.

Kate Layton  
Public Liaison  
Dover/Kent County MPO  
(302) 760-2712

Dover/Kent County Metropolitan Planning Organization  
**P.O. Box 383, Dover, Delaware 19903**  
**(302) 760-2713 FAX: (302) 739-6340**  
**<http://www.doverkentmpo.org>**

**MPO to air commercial on Comcast**  
**30-second spot encourages participation in the agency's Regional Transportation Plan**

**DOVER** – Comcast cable television customers may see a new ad on some of their favorite channels over the next few weeks.

From the end of December through January, the Dover/Kent County Metropolitan Planning Organization will challenge residents via a 30-second advertisement to tell the agency what they think about local transportation services.

The MPO developed the ad over the past few months, using colorful photos of various places around Dover and Kent County and cheerful music.

Narrated in English with Spanish subtitles, the commercial's message says:

“Growth brings congestion and a need for better transportation services.  
The Dover/Kent County Metropolitan Planning Organization is updating its 20-year Regional  
Transportation Plan.  
Funds are limited. We'll have to make tough choices.  
Your comments are vital.  
Be an agent of change. Lend your voice to the RTP.  
Call (302) 760-2713 or visit [doverkentmpo.org](http://doverkentmpo.org).

**The Dover/Kent County MPO: Planning transportation for you, for me, for everyone.”**

A Regional Transportation Plan defines how an area's transportation system will develop over the next 20 years. Updated every four years, the RTP is required by the U.S. Department of Transportation as a prerequisite for federal funding.

This plan must be developed through a process that includes input from the public and private sectors and coordination with state and local comprehensive plans.

“We see this as an opportunity to get the word out that we are working on the plan and we want to know what people think about it,” MPO Executive Director Juanita Wieczorek said about the TV spot.

The ad is set to air Dec. 29, playing on CNN, Comedy Central, Bravo, Discovery, ESPN 2, Food Network, FX, History Channel, CNN Headline News and The Weather Channel.

Those who wish to read the RTP can go to [www.doverkentmpo.org](http://www.doverkentmpo.org) and find a link to the document on the main page. To comment on the plan, readers may e-mail MPO executive director Juanita Wieczorek at [juanita.wieczorek@state.de.us](mailto:juanita.wieczorek@state.de.us), MPO planner Jim Galvin at [jim.galvin@state.de.us](mailto:jim.galvin@state.de.us) or call the office at (302) 760-2713.

MPO staff presented the plan to the MPO Council and committees throughout 2008 and early 2009. Prior to each of these meetings, media releases and public notices with agendas were sent to electronic and print media outlets. Meetings were open to the public and advertised as such. Media releases and public notices are shown:

**TO: Media outlets**

**FROM: Kate Layton, public liaison, Dover/Kent County MPO**

**DATE: 10/24/08**

**RE: Nov. 5 MPO Council meeting**

**The council of the Dover/Kent County Metropolitan Planning Organization will meet at 3 p.m. Nov. 5 in the MPO conference room, on the second floor of the Blue Hen Corporate Center, Dover.**

**Scott Muir of Norfolk Southern Railroad is scheduled to present an overview of the company's operations, infrastructure and needs.**

**MPO Executive Director Juanita Wiczoreck will present a draft of the MPO's Regional Transportation Plan Update, which includes a list of proposed transportation projects in Kent County.**

**An agenda for the meeting is enclosed.**

**KHL**

Dover/Kent County Metropolitan Planning Organization  
P.O. Box 383, Dover, Delaware 19903 (302) 760-2713 FAX: (302) 739-6340  
<http://www.doverkentmpo.org>

**TO:** Media Outlets  
**FROM:** Kate Layton, Public Liaison, Dover/Kent County MPO  
**DATE:** Nov. 26, 2008  
**RE:** Next MPO, Technical Advisory Committee meeting

Complete Streets, sustainable communities and transit-oriented development. Alone, these terms sound far removed from the average person. But in fact, they are concepts Based on historic development patterns that could shape the Dover and Kent County area toward easier mobility.

These concepts are in the latest draft of the Dover/Kent County Metropolitan Planning Organization's Regional Transportatino plan. MPO staff will go over the RTP at the Dec. 10 Technical Advisory Committee meeting.

The Regional Transportation Plan, updated every four years, defines how the region's transportation system will develop over the next 20 years. The plan must be developed through process that includes input from the public and private sectors, be coordinated with local and state long-range transportation plans.

Transit-oriented development is a concept to develop communities that are more easily served y public transit. Sustainable development is a concept that supports the sustainability of good quality of life for the area. Complete Streets, a new term, describes streets that are designed with all potential users in mind -- bicyclists, pedestrians, the disabled and motor vehicles. The latest RTP includes all these progressive planning ideas.

Also at the meeting, staff from the City of Dover will go over the latest draft of the city's comprehensive plan.

You are welcome to join us if you can!

**What:** Dover/Kent County Metropolitan Planning Organization's Technical Advisory Committee meeting.

**When:** 10 a.m. to noon, Dec. 10, 2008

**Where:** Blue Hen Corporate Center, Dover.

Suite 5 g.a. on the main floor of the corporate center.

**Dover/Kent County Metropolitan Planning Organization**  
**P.O. Box 383, Dover, Delaware 19903 (302) 760-2713 FAX: (302) 739-6340**  
**<http://www.doverkentmpo.org>**

**TO: Media**  
**FROM: Kate Layton, Public Liaison, Dover/Kent County MPO**  
**DATE: Dec. 2, 2008**  
**RE: Upcoming Public Advisory Committee meeting**

**The Dover/Kent County Metropolitan Planning Organization's next Public Advisory Committee meeting will be held at 7 p.m. on Tuesday, Dec. 16 in one of the meeting rooms of the new Eden Hill Medical Center in Dover.**

**A presentation on DelDOT's South Governor's Avenue project is on the agenda, as well as a general description to the PAC of DelDOT's public outreach process. MPO staff also is scheduled to present a draft of the MPO's Regional Transportation Plan and a presentation of a public outreach plan.**

**Please publish notice of the attached agenda and plan to attend the meeting if you are able.**

**Eden Hill Medical Center is located at 200 Banning St., Dover, off West North Street near downtown.**

**Thanks!**

Kate Layton  
Public Liaison  
Dover/Kent County MPO  
(302) 760-2712

Dover/Kent County Metropolitan Planning Organization  
**P.O. Box 383, Dover, Delaware 19903**  
**(302) 760-2713 FAX: (302) 739-6340**  
**<http://www.doverkentmpo.org>**

### **MPO hopes to take Regional Transportation Plan on the road**

DOVER -- Complete Streets, sustainable communities and transit-ready development are progressive planning concepts that could shape the Dover and Kent County area toward easier mobility.

These concepts are in the latest draft of the Dover/Kent County Metropolitan Planning Organization's Regional Transportation plan.

The MPO has conducted an analysis of future transportation needs and compiled a list of projects. Now, the group is ready to take the list on the road to share with municipalities and community organizations.

"It's essential that we share our Regional Transportation Plan with the communities that it will serve," said MPO Executive Director Juanita Wieczoreck. "We want to be sure that we have identified the region's transportation needs and the priority projects to be funded with the limited resources available."

Staff hopes to present a draft of its Regional Transportation Plan to Kent County towns and cities within the first few weeks of January.

The Regional Transportation Plan defines how the region's transportation system will develop over the next 20 years. This type of plan, which is updated every four years, is required by the U.S. Department of Transportation as a prerequisite for federal funding. It must be developed through a process that includes input from the public and private sectors and coordination with local and state plans.

Transit-ready development is a concept to develop communities that are more easily served by public transit.

The Sustainable Communities concept supports the continuation of good quality of life.

Complete Streets, a new term, describes streets that are designed with all potential users -- bicyclists, pedestrians, the disabled and transit -- in mind.

Any municipality or community organization that is interested in a presentation may contact the Dover/Kent County MPO at (302) 760-2713 or by e-mail at [juanita.wieczoreck@state.de.us](mailto:juanita.wieczoreck@state.de.us).

Kate Layton  
Public Liaison  
Dover/Kent County MPO  
(302) 760-2712

## Dover/Kent County Metropolitan Planning Organization

P.O. Box 383, Dover, Delaware  
(302) 760-2713 FAX: (302) 739-6340  
<http://www.doverkentmpo.org>

### Media Release

**TO: Media Outlets**

**FROM: Kate Layton, public liaison, Dover/Kent County Metropolitan Planning Organization**

**DATE: 12/31/08**

**RE: Upcoming meetings**

#### **Special meetings, workshops ahead in January**

**DOVER --** The Dover/Kent County Metropolitan Planning Organization's Technical Advisory Committee (TAC) will hold a special meeting from 10 a.m. to noon on Wednesday, Jan. 14 in Suite 5 g.a. on the main floor of the Blue Hen Corporate Center. (The full meeting agenda is attached)

At this meeting, TAC members are scheduled to review and approve the MPO's draft Regional Transportation Plan. If the TAC approves the draft, the document next goes to the MPO Council, the MPO's policy-making body. At the same time, the draft is subject to public view.

A Regional Transportation Plan defines how the region's transportation system will develop over the next 20 years. This type of plan, which is updated every four years, is required by the U.S. Department of Transportation as a prerequisite for federal funding. It must be developed through a process that includes input from the public and private sectors and coordination with local and state plans.

The MPO will bring the draft plan to the public the day after the TAC meeting on Jan. 15. From 4 to 7 p.m., the MPO will hold a public workshop to present the draft plan. The workshop will be held in the public assembly room of the Dover Police Department.

All meetings of the Dover/Kent County Metropolitan Planning Organization are open to the public, which is encouraged to attend. The Regional Transportation Plan can be viewed on the MPO's website: <http://www.doverkentmpo.org>.

**KHL**

**Dover/Kent County Metropolitan Planning Organization**  
**P.O. Box 383, Dover, Delaware 19903**  
**(302) 760-2713 FAX: (302) 739-6340**  
<http://www.doverkentmpo.org>

**TO: Media Outlets**

**FROM: Kate Layton, public liaison, Dover/Kent County MPO**

**DATE: Jan. 13, 2009**

**RE: Special MPO Council Meeting**

**Dover/Kent County Metropolitan Planning  
Organization  
Council to hold special meeting**

**DOVER --** The Dover/Kent County Metropolitan Planning Organization's Council will hold a special meeting at 3 p.m. on Wednesday, Jan. 28 to vote on the MPO's recent draft of the Regional Transportation Plan.

The Regional Transportation Plan defines how the region's transportation system will develop over the next 20 years. This type of plan, which is updated every four years, is required by the U.S. Department of Transportation as a prerequisite for federal funding. It must be developed through a process that includes input from the public and private sectors and coordination with local and state plans.

The meeting will be held at the MPO conference room, Suite 210, on the second floor of the Blue Hen Corp. Ctr., Dover.

Members of the public are invited to attend. The full agenda is attached.

MPO information is available on the Web at [www.doverkentmpo.org](http://www.doverkentmpo.org)



specialagenda09.  
doc (62 KB)

Hi, everyone, this is a reminder of our public workshop today from 4-7 p.m. regarding our Regional Transportation plan.

Dover/Kent County Metropolitan Planning Organization

P.O. Box 383, Dover, Delaware 19903

(302) 760-2713 FAX: (302) 739-6340

<http://www.doverkentmpo.org>

## **MPO to hold Regional Transportation Plan workshop**

DOVER -- Complete Streets, sustainable communities and transit-ready development are progressive planning concepts that could shape the Dover and Kent County area toward easier mobility.

These concepts are in the latest draft of the Dover/Kent County Metropolitan Planning Organization's Regional Transportation plan.

The MPO will share information in the plan during a **public workshop from 4-7 p.m. today (Jan. 15) in the public assembly room of Dover Police Department.** The workshop will be held in an open house format.

The Regional Transportation Plan defines how the region's transportation system will develop over the next 20 years. This type of plan, which is updated every four years, is required by the U.S. Department of Transportation as a prerequisite for federal funding. It must be developed through a process that includes input from the public and private sectors and coordination with local and state plans.

Kate Layton

Public Liaison

Dover/Kent County MPO

(302) 760-2712



Offers for presentations yielded requests for presentations from Kent County, the City of Dover and the Kent County Association of Realtors. MPO staff made presentations to the Dover City Council Safety Advisory and Transportation Committee on December 1, 2008; Kent County Regional Planning Commission on January 14, 2009; Kent County Association of Realtors on January 15, 2009 and Kent County Levy Court on January 20, 2009.

At the January 15 public workshop, hard copies of an abbreviated version of the staff's PowerPoint presentation were made available to the public. Hardcopies of the plan also were available at the workshop. The event had few attendees and few comments.

Media outreach yielded a number of news articles and two radio interviews describing the plan and the invitation for public input. Radio interviews were with Phil Feliciangeli on January 8, 2009 which played on a number of Delaware *Clear Channel* stations. The second interview was with John Flaherty of *DelawareTalkRadio.com*, an Internet-based radio station. Other local radio stations also mentioned the RTP hearings in morning newscasts. Newspaper articles follow:

12/23/2008

The Dower

## State Capital

### Transportation plan ready for viewing

**DOVER** — The Dover/Kent County Metropolitan Planning Organization has conducted an analysis of future transportation needs and compiled a list of projects. Now, the group is ready to take the list on the road to share with municipalities and community organizations.

The Regional Transportation Plan defines how the region's transportation system will develop over the next 20 years. This type of plan, which is updated every four years, is required by the U.S. Department of Transportation as a prerequisite for federal funding.

Any municipality or community organization that is interested in a presentation may contact the Dover/Kent County MPO at 760-2713 or by e-mail at [juanita.wieczoreck@state.de.us](mailto:juanita.wieczoreck@state.de.us).

Delaware State News, Tuesday, December 30, 2008

The Dower

## State Capital

### Transportation plan ready for viewing

**DOVER** — The Dover/Kent County Metropolitan Planning Organization has conducted an analysis of future transportation needs and compiled a list of projects. Now, the group is ready to take the list on the road to share with municipalities and community organizations.

The Regional Transportation Plan defines how the region's transportation system will develop over the next 20 years. This type of plan, which is updated every four years, is required by the U.S. Department of Transportation as a prerequisite for federal funding.

Any municipality or community organization that is interested in a presentation may contact the Dover/Kent County MPO at 760-2713 or by e-mail at [juanita.wieczoreck@state.de.us](mailto:juanita.wieczoreck@state.de.us).

The Dover Post, Wednesday, January 7, 2009 Page 3A

## Regional transportation plan up for review

The Dover/Kent County Metropolitan Planning Organization's Technical Advisory Committee will hold a special meeting from 10 a.m. to noon Wednesday, Jan. 14, in Suite 5 on the main floor of the Blue Hen Corporate Center.

TAC members will review the MPO's draft Regional Transportation Plan. If the TAC approves it, the document will go to the MPO Council, the MPO's policy-making body. A Regional Transportation Plan defines how the region's transportation system will develop over the next 20 years. The MPO will hold a public workshop from 4 to 7 p.m. Thursday, Jan. 15, in the public assembly room at the Dover Police Department.

The plan can be viewed on the MPO's website, [www.doverkentmpo.org](http://www.doverkentmpo.org).

Delaware State News, Monday, January 26, 2009

## MPO to vote on transportation plan

**DOVER** — The Dover/Kent County Metropolitan Planning Organization's Council will hold a special meeting at 3 p.m. on Wednesday to vote on the MPO's recent draft of the Regional Transportation Plan. The meeting will be held at the MPO conference room, Suite 210, on the second floor of the Blue Hen Corporate Center, Dover.

MPO information is available on the Web at [www.doverkentmpo.org](http://www.doverkentmpo.org)

To share news about the State Capital, call 674-3600 or e-mail [newsroom@newszap.com](mailto:newsroom@newszap.com).

Page 20B The Dover Post, Wednesday, January 21, 2009

## Dover/Kent County MPO meet Jan. 28

The Dover/Kent County Metropolitan Planning Organization's Council will hold a special meeting at 3 p.m. Wednesday, Jan. 28, to vote on the MPO's recent draft of the Regional Transportation Plan.

The plan defines how the region's transportation system will develop over the next 20 years. Updated every four years, the plan is required by the U.S. Department of Transportation in order to receive federal funding.

The meeting will be held at the MPO conference room, Suite 210, on the second floor of the Blue Hen Corporate Center, Dover, and members of the public are invited to attend.

Additional information is available at [www.doverkentmpo.org](http://www.doverkentmpo.org).



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I

December 31, 2008

**Section:** Local

**Edition:** Final

**Page:** B2

### Kent County transportation plan ready for review

JAMES MERRIWEATHER

*Staff*

By JAMES MERRIWEATHER

The News Journal

DOVER — The Dover/Kent County Metropolitan Planning Organization has completed the draft of a four-year update of its Regional Transportation Plan and is looking to share the information with municipalities and community organizations.

The transportation plan — which features 123 transportation projects worth hundreds of millions of dollars — is intended to guide the development of Kent County's transportation system for a 20-year period. By federal edict, the plan must be updated every four years for the county to get federal subsidies for its transportation projects.

"It's essential that we share our Regional Transportation Plan with the communities that it will serve," MPO Executive Director Juanita Wieczorek said. "We want to be sure that we have identified the region's transportation needs and the priority projects to be funded with the limited resources available."

Already, the MPO has scheduled presentations to the Kent County Regional Planning Commission for 7 p.m. Jan. 14 and Kent County Levy Court at 7 p.m. Jan. 20. The organization will sponsor its own community meeting from 4 to 7 p.m. Jan. 15 at Dover police headquarters.

Any local government or community organization that wants to host a presentation can call the MPO at 760-2713 or pass along an e-mail request by way of [juanita.wieczorek@state.de.us](mailto:juanita.wieczorek@state.de.us). A copy of the draft plan and a list of priority projects are available at the MPO's Web site at [www.doverkentmpo.org](http://www.doverkentmpo.org).

Next month, the organization will launch a TV campaign intended to let residents know they can pass along their ideas about local transportation services. A series of 30-second spots will air during January on CNN, CNN Headline News, Comedy Central, Bravo, Discovery, ESPN2, the Food Network, FX, the History Channel and The Weather Channel.

"We don't want residents to just attend community meetings," said Kate Layton, the MPO spokeswoman. "We also want them to go the Web site, read the plan and send us their comments. We want to know what they think."

Excluding 23 projects to be implemented on a statewide basis, MPO officials have assigned priority ratings to each of 100 Kent County projects based on criteria such as local economic benefits, environmental protection and safety.

No. 1 on the list is \$38 million worth of improvements to Del. 8 between Dover's Lookerman Street and Artis Drive. Among other improvements, the elements include left-turn phasing at four intersections, intersection improvements at Mifflin Road and the selected site for a new Dover High School and four connector roads.

Another top priority is a \$39.4 million plan for improvements recommended by a study of north Dover — including a collector road beginning at Scarborough Road and U.S. 13 and running behind Dover Mall and Dover Downs southward to Leipsic Road.

Among 123 projects listed as priorities, only 13 are slated for completion before 2020.

For purposes of the transportation plan, no priorities were assigned to the list of general, statewide transportation needs. The big ticket of \$290 million is for the cost of expanded bus service and new rail service that would be implemented by 2030.

As he collected comments recently from constituents on how the state might weather the current financial crisis, Gov.-elect Jack Markell questioned whether the state would ever be able to afford train service — given the ever-expanding backlog of more urgent transportation needs. A questioner had suggested that rail service connecting Wilmington and Dover would provide an economic boost while improving the quality of life for the state's residents.

"We have expenses that grow with inflation and revenues that don't," Markell observed in his response. "That's just a fact of DelDOT's life."

Contact James Merriweather at 678-4273 or [jmerriweather@delawareonline.com](mailto:jmerriweather@delawareonline.com).

#### GET INVOLVED:

The Dover/Kent County Metropolitan Planning Organization will hold a community meeting to present the Regional Transportation Plan update from 4 to 7 p.m. Jan. 15 at Dover police headquarters.

Any local government or community organization that wants to host a presentation can call the MPO at 760-2713 or e-mail [juanita.wieczorek@state.de.us](mailto:juanita.wieczorek@state.de.us).

A copy of the draft plan and a list of priority projects are available at the MPO's Web site, [www.doverkentmpo.org](http://www.doverkentmpo.org).



January 2, 2009

## Dover/Kent planners make sure the public knows what's coming

Even if you find long-range government planning as boring as watching grass grow, the folks behind the Dover/Kent County Metropolitan Planning Organization have set a shining example of how to make sure the public is involved in its plans.

The MPO recently completed a draft of a four-year update to the Regional Transportation Plan that includes some 123 projects that could build out by 2030. The projects combined are worth hundreds of million of dollars and obviously will affect tens of thousands of local residents.

To get the word out about the projects – some of which might never be built – the MPO has developed a wide range of media and other outlets to dispense information and take feedback from the public. It's a model to ensure public input that virtually any government-sanctioned organization would do well to emulate.

Said Juanita Wiecezoreck, executive director of MPO: "It's essential that we share our Regional Transportation Plan with the communities that it will serve. We want to be sure that we have identified the region's transportation needs and the priority projects to be funded with the limited resources."

Formally required presentations are already scheduled with the Kent County Regional Planning Commission on Jan. 14 and Kent County Levy Court on Jan. 20.

But what really shows MPO's commitment to full public disclosure is its use of other and somewhat unconventional outlets.

Any local organization can host a presentation by simply calling MPO. As many project drafts as needed will be supplied.

The group also plans to start a TV campaign with a series of 30-second spots this month. They will appear on CNN, Comedy Central, Bravo, ESPN2 and The Weather Channel, among others.

High on the priority list are projects including \$38 million in renovations to Del. 8 between Loockerman Street and Artis Drive in Dover and recommendations for improvements in the North Dover area beginning at Scarborough Road. It would include a new road to run behind Dover Mall and Dover Downs to Leipsic Road.

There are few government responsibilities that get more public attention than roads and transportation. That MPO is giving the public such open notification of its plans is what a good democracy is all about.



## Del. scans 'shovel-ready' road plans

Federal stimulus funding may get some rolling

BY JAMES MERRIWEATHER • THE NEWS JOURNAL • JANUARY 8, 2009

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DOVER — With millions of dollars in federal stimulus [money](#) at stake, the rush is on to identify Delaware road projects that could be made construction-ready within 180 days.

Transportation Secretary Carolann Wicks said Wednesday that such projects would have to be among the 30 percent of Delaware's identified road needs that qualify for federal funding — a limitation aggravated by the fact that Delaware moves projects to "shovel-ready" status only after funding is salted away.

Since the stimulus program would be aimed at jolting the economy with an infusion of new money for infrastructure, projects that already are funded are not likely to qualify, she said. Most projects that require negotiating for rights-of-way also can be ruled out, Wicks added, given the six-month window of opportunity expected to come with the stimulus package.

"The challenge for us is we don't have projects just sitting around," she told the governing body of the Dover/Kent County Metropolitan Planning Organization.

Her remarks came in response to a question from Camden Mayor Robert A. Mooney, who asked if the [Department of Transportation](#) harbored any "guesstimate of shovel-ready projects that might be ready to be started tomorrow" for purposes of the stimulus program.

Wicks is president of the National Association of State Transportation Officials, which is party to an effort to shape a federal stimulus package of about \$775 billion worth of public works projects. A day earlier, Wicks, the state's transportation czar since 2006, accepted an invitation from Gov.-elect Jack Markell to stay on as DelDOT secretary.

Delaware is at a disadvantage because it picks up 90 percent of the state's transportation load, including the cost of city streets, county roads and bus service that are picked up by local governments in most other states. Other states that pay only for bridges and "high-end" projects that qualify for federal money may be able to just pass along projects to the stimulus program from the top of their federal wish lists.

Wicks was invited to the Wednesday meeting to share a Transportation Trust Fund balance sheet that grows bleaker with each passing month.

In June, the Delaware Economic and [Financial](#) Advisory Council, the state's official revenue-forecasting arm, projected that trust-fund revenues would total \$468.8 million during the year that began July 1. By December, the estimate had dropped by \$24.6 million — or 5.2 percent — to \$444.2 million.

The big hit was a 15.7 percent decrease in motor vehicle document fees, reflecting the nationwide downturn in auto sales. Short of a car-buying frenzy, Wicks said, she's hard-pressed to identify new revenue sources to head off the need to push back even more road projects.

"There isn't any new money out there," she said. "It's just a question of how we keep working through it."

Richard Ornauer of Dover, a member of the MPO Council, called for an oft-recommended avenue to reserving more money for road projects. He would transfer DelDOT's operating expenses from the trust fund — financed largely with tolls, motor fuel taxes and motor vehicle document and registration fees — to the state's general revenue budget.

"Something has to give," Wicks responded, adding that she could see the pros and cons of both Ornauer's position and maintaining the status quo.

Contact James Merriweather at 678-4273 or [jmerriweather@delawareonline.com](mailto:jmerriweather@delawareonline.com).

## Transportation Plan up for Public Comment

By Doug Denison, Staff Writer  
Dover Post  
Tue Jan 13, 2009, 02:24 PM EST

Dover, Del. -

In the coming weeks, Kent County residents will have the opportunity to comment on the latest plan to manage traffic and transit in the region.

The Dover/Kent Metropolitan Planning Organization is in the process of drafting its 30-year Regional Transportation Plan, which prioritizes road projects and analyzes changing needs and transportation trends in the area.

Presentations are scheduled at upcoming Kent County Regional Planning Commission and Levy Court meetings on Jan. 14 and 20, respectively.

Juanita Wieczoreck, executive director of the Dover/Kent MPO, said she welcomes public input on the plan, which serves as an important catalogue for transportation projects.

If a project isn't in the plan, it can't receive funding from the Delaware Department of Transportation and move forward, Wieczoreck said.

The Dover/Kent MPO is one of three such organizations in the state, and was founded in 1992.

"The main thing we do is establish priorities in terms of what we need for the region, and then work with DelDOT and the local governments to get those needs met," Wieczoreck said at a meeting of the Dover/Kent MPO Council Jan. 7.

Those priorities, she said, take shape according to a set of underlying principles that guide the formulation of the plan.

The MPO first considers maintaining and upgrading the current infrastructure, then expanding to include other forms of transit like bikes, pedestrians and buses, and finally expanding the highway system.

Wieczoreck said highway expansion is last of the list for a reason.

"Studies have shown building new highway capacity is the really the least sustainable kind of transportation improvement you can make," she said. "Because you fill that one up, you need another one, then you fill that one up and need another one, that's why it's always the last choice."

The MPO applies these planning principles to its list of projects to come up with a ranking that prioritizes transportation projects, which can come from DelDOT research, municipal and legislator recommendations,

even concerned citizens.

"Projects that are considered for inclusion in the RTP are prioritized using a numeric scoring system to reflect qualitative ratings based on transportation system data," Kate Layton, spokeswoman for the Dover/Kent MPO said in an email. "Scoring criteria is based on the goals of the RTP: to strengthen the local economy; improve the quality of life; support desired land use and effective growth management; improve access and mobility while ensuring the safety of all citizens; and safely and efficiently transport people and goods."

Currently, top priority projects include improvements to the Route 13/Route 8 and South State Street/Lebanon Road intersections in Dover and the intersection of Route 13 and Walnut Shade Road in Woodside. But even though these projects earned high scores, their timelines stretch as far out as 2030.

The Dover/Kent MPO Council, a governing body made up of representatives from municipal governments, the community and DelDOT, has final say on the prioritized list, but it rarely rejects projects, Wieczoreck wrote in an email.

"We have not rejected any projects in this plan due to lack of Council support," she wrote. "In past years, large expansion projects, such as widening [Route] 8 to four lanes from Dover to the Maryland state line have not been included because they did not have enough support."

The main reason projects do not make it into the plan is finances, she added.

And according to DelDOT Secretary Carolann Wicks, state money for transportation projects is tight and getting tighter.

Wicks told the Dover/Kent MPO Council Jan. 7 that DelDOT revenue projections for fiscal year 2009 are down by more than \$24 million, mostly because of a sharp drop in the take from tolls and vehicle registration fees.

This could put many of the plan's projects with high priorities and long timelines in jeopardy.

"If funding decreases to the level predicted by DelDOT ... then very few of the projects in the plan beyond the first four years will be able to actually be implemented," Wieczoreck wrote in an email.

Email Doug Denison at [doug.denison@doverpost.com](mailto:doug.denison@doverpost.com)



## Levy Court questions criteria used to determine road improvements

By Melissa Steele, Staff Writer  
Dover Post  
Thu Jan 22, 2009, 10:25 AM EST

Dover, Del. -

A presentation by the Dover/Kent Metropolitan Planning Organization on its latest transportation plan segued into a discussion of how road projects should be prioritized at the Jan. 20 Levy Court meeting.

The MPO is a group that works with the Department of Transportation and local governments to prioritize road improvements. Projects are ineligible for federal money unless they are listed in the plan.

One of the listed projects is a new connector running from behind Delaware State University to Delaware Technical & Community College and branching off to cross Route 13 at the Dover Mall. A service road running between the mall and Dover Downs Hotel & Casino and then following Route 1 could relieve some of the congestion along Route 13, said Juanita Wiecezoreck, executive director of the Dover/Kent MPO.

"The more alternate routes you have, the more you pull people off the major routes," she said.

During the presentation, the discussion turned to what factors are considered before a road is tagged for improvement. Wiecezoreck said the MPO plan uses DelDOT road usage statistics based on the number of cars traveling along a roadway to determine whether a road is in need of improvement.

But both Commissioners Eric L. Buckson and Allan F. Angel had problems with that process of assessing road improvements because it does not take into consideration road safety.

In particular, both commissioners have expressed unease for several months over the intersection of Autumn Moon and Millchop lanes near Magnolia. The intersection was the source of concern during the approval of a nearby development in August and since then has been the scene of at least two recent accidents — the latest taking the life of a 17-year-old girl.

Despite that, the road is not considered for improvements because it has not reached the level of service that would require it, according to DelDOT standards, Buckson said.

"My goal is to lessen [the reliance on] level of service in unincorporated areas," he said.

Though not part of the Dover/Kent MPO purview, Wiecezoreck said it is an issue other areas are considering.

"Many states are struggling with what the alternative should be," she said. "How do you truly define what indicator should be used for roadways."

County Administrator Michael Petit de Mange said he does not expect DelDOT to change the way it goes about road improvements but safety should be considered.

"Level of service will continue to have a role but it's a quantitative not a qualitative analysis," he said. "There are safety issues that level of service doesn't address."

Email Melissa Steele at [melissa.steele@doverpost.com](mailto:melissa.steele@doverpost.com).

## County road improvement criteria questioned

By Melissa Steele, Staff Writer  
Dover Post  
Tue Jan 27, 2009, 01:43 PM EST

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Dover, Del. -

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Email Melissa Steele at [melissa.steele@doverpost.com](mailto:melissa.steele@doverpost.com)



## Regional Transportation Plan passes amid concerns for bike travel



By Doug Denison, Staff Writer  
Dover Post  
Fri Jan 30, 2009, 12:49 PM EST

Dover, Del. -

The Dover Kent Metropolitan Planning Organization approved its updated Regional Transportation Plan Jan. 28, but not without considering some public criticism of the plan, especially its treatment of bike routes throughout the area.

The plan is a long-term planning document that catalogs and prioritizes road and transit projects, calculates their costs and projects the environmental impact transportation will have on the region in the future.

In a summary of comments received during a month-long public review period, MPO staff outlined citizen concerns related to bike paths, traffic signals and passenger rail service.

The most substantial of the comments, however, indicated displeasure with how the updated plan characterized the availability and usefulness of established bicycle-friendly travel routes in the county.

"The MPO should make mention of problematic areas for bicycle use and emphasize that small, hazardous gaps along bike routes make the entire route unacceptable for bicyclists, specifically in cases of U.S. 13 and Bay Road, which have heavy traffic and no bike paths," read one entry in the comments summary.

Area cyclists have complained about the lack of continuity in dedicated bike lanes along major roads, especially at busy intersections.

MPO Executive Director Juanita Wieczorek responded to the criticism at a meeting of the MPO Council Jan. 28. The council, which voted to approve the plan, is made up of representatives from local governments, the Delaware Department of Transportation and the community.

"We agree that Routes 13 and 113 do pose significant barriers for people riding from one side to another," Wieczorek said. "We're getting more bike paths, but that volume of traffic is daunting."

Another citizen comment asked the MPO to complete a regional bike plan by January 2010, and to "insist that bike and pedestrian projects be funded separately from auto projects and built every year."

Wieczorek said she's not opposed to including stronger language on the importance of well-planned and continuous bike routes, but cautioned against adding rules that would make it more difficult to complete road projects.

MPO council member and DelDOT Planning Director Ralph Reeb said at the meeting that updating the MPO's bike plan by the end of 2010 is a reasonable idea.

"We do welcome the interest," he said. "We do have a bicycle plan, but I think it's time to refresh it."

Camden Mayor Robert Mooney agreed with public comments that cited unsafe conditions for bikers at major intersections, especially in right-hand turn lanes. He asked Reeb if DelDOT has any means to erect physical barriers that would prevent vehicles from crossing into bike lanes and protect cyclists from cars making right-hand turns.

Reeb said that DelDOT has developed no plans for barriers, and that a combination of painted lines and "Share the Road" signs are the primary means for reminding drivers to watch out for cyclists.

Another comment urged the MPO to add plans for passenger rail service that would serve Kent County, but Wieczorek said such an addition would not be feasible.

"Passenger rail service can't be included in the plan because there's no funding for it," she told the council at

the meeting.

Federal regulations governing regional transportation plans require final drafts to include realistic funding provisions that cover their lists of projects. If no such funding is expected to be available for a project from state or local sources, it can't be listed in the plan.

Conversely, transportation projects only can be initiated if they are listed in the plan.

Now that the MPO has approved the plan, it will be submitted to the Federal Highway Administration and the Environmental Protection Agency for a final review.

After those agencies lend their seals of approval, Reeb said the plan and the MPO's list of transportation improvement projects can be amended should additional federal stimulus funds for infrastructure become available.

Brad Eaby, member of the MPO council and Kent County Levy Court commissioner, said that by March the council will have an updated list of projects that can be expedited if funding materializes.

## Transportation Plan passes despite cyclists' concerns

ADVERTISEMENT



By Doug Denison, Staff Writer  
Dover Post  
Tue Feb 03, 2009, 03:01 PM EST

Dover, Del. -

The Dover Kent Metropolitan Planning Organization approved its updated Regional Transportation Plan Jan. 28, but not without considering some public criticism of the plan, especially its treatment of bike routes throughout the area.

The plan is a long-term planning document that catalogs and prioritizes road and transit projects, calculates their costs and projects the environmental impact transportation will have on the region in the future.

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Email Doug Denison at [doug.denison@dukepost.com](mailto:doug.denison@dukepost.com)

As a result of the public outreach, the MPO received several comments via e-mail, telephone and in-person conversations. Comments and responses are summarized in the following table:

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Include roundabout in the list of calming devices in the city of Dover on item 3.4.3 on pages 30-31.</li> </ul>   | <ul style="list-style-type: none"> <li>• A roundabout is not considered the type of traffic calming device that facilitates pedestrian access since it moves the pedestrian farther from the intersection and is designed to keep traffic moving, reducing gaps during which a pedestrian can cross the street</li> </ul> |
| <ul style="list-style-type: none"> <li>• Although private, list the Bayhealth Medical Centers heliports with those listed in 3.6 on pages 3-36-37.</li> </ul>  | <ul style="list-style-type: none"> <li>• The MPO Council determined that the Plan should only list public heliports.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Spell out TAZ the first time on 4.17.2 on pages 4-19-20.</li> </ul>   | <ul style="list-style-type: none"> <li>• The MPO will double check all acronyms and abbreviations to ensure that they are defined the first time that they are used.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• On 5-11, the MPO advocates more interchanges on SR 1, and on 5.2.2, it presses for reduction of intersections for Corridor Preservation. Looks like a conflict to me.</li> </ul>                                    | <ul style="list-style-type: none"> <li>• The MPO's advocacy of additional "interchanges" on SR 1 refers only to those intersections that the Corridor Capacity Preservation Program has identified needing to be reconstructed as grade-separated intersections.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• When will the improved traffic control signals on 5-13 work properly? Signals on Division Street offer left turn priority at each intersection even if no driver wishes to turn left. Unnecessary delay.</li> </ul> | <ul style="list-style-type: none"> <li>• The Department of Transportation was contacted regarding this problem and said that the signals had been adjusted to prevent activation of the left turn signal if when there are no vehicles present that want to turn left.</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Repeat need for passenger rail service on 5.2.3 page 5-16.</li> </ul>   | <ul style="list-style-type: none"> <li>• Passenger rail service is supported by the MPO Council and committees, however adequate funding is not anticipated to be available for this improvement by 2030. Consequently, it is not included in the Plan recommendations.</li> </ul>  |
| <ul style="list-style-type: none"> <li>• Shouldn't the MPO advocate removal of DelDOT operational costs from the Trust Fund on 6.1.2 on page 6.6? It would free up millions of dollars for transportation projects.</li> </ul>                               | <ul style="list-style-type: none"> <li>• The MPO Council determined that recommendations regarding how the State administers the Trust fund are not appropriate for inclusion in the RTP.</li> </ul>  |

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• MPO should look into securing a direct bus route between Harrington and Milford. Currently, riders must take bus from Harrington to Dover and then transfer to a Milford bus. Trip lasts two hours instead of fraction of time could spend on direct route.</li> </ul>  | <ul style="list-style-type: none"> <li>• During FY 2010, the MPO plans to assist DART First State with a ridership survey that will determine where additional transit service may be feasible within the MPO region.</li> </ul>  |
| <p>Bicycle paths:</p> <ul style="list-style-type: none"> <li>• MPO should emphasize limitations and hazards to bike travel and insist that specific actions be taken to relieve them, specifically regarding lack of bike paths at bridge crossings and limited east-west travel options in Dover due to railroad crossings and heavy traffic.</li> <li>• The MPO should make mention of problematic areas for bicycle use and emphasize that small, hazardous gaps along bike routes make the entire route unacceptable for bicyclists, specifically in casers of U.S. 13 and Bay Road which have heavy traffic and no bike paths.</li> <li>• MPO should point out that DelDOT's established bike corridors are completely unrealistic when passing through the cities and are therefore useless, specifically in reference to Del. 8 and State Street, streets that are narrow and have heavy traffic or on-street parking and will never have bike lanes. MPO also should ask DelDOT why it publishes maps of designated bike routes that do not help cyclists looking for safe routes to their destinations.</li> <li>• Asked for a regional bike plan to be completed by January 2010 with annual prioritization updates and</li> </ul> | <ul style="list-style-type: none"> <li>• The MPO has made a commitment to completing a regional bicycle plan during FY 2010. In addition, the MPO will be working with the Department of Transportation to review bicycle and pedestrian facility policies with regard to ensuring accommodation of all modes within constrained rights-of-way.</li> </ul> <p>In addition, the MPO reviewed the language of the bicycle section of the plan and ensured that the language is clear with regard to the sufficiency of the existing system.</p> |

|   |  |
|---|--|
| <p>for the MPO to insist that bike and pedestrian projects be funded separately from auto projects and built every year.</p> <ul style="list-style-type: none"><li>• Generally said the language of the MPO plan gives false impression of sufficient bicycle transportation facilities.</li></ul>  |  |
| <p><b>Milford Bypass project:</b></p> <p>Four people wrote via e-mail to the MPO regarding a proposed overpass at Del. 1 and Thompsonville Road near Milford.</p> <p>All the comments adamantly supported the overpass, citing traffic, especially from visitors to and from the beach, as well as increased risk of crashes at the highway intersection.</p> |  |

**DoverKentMP0.org (302) 760-2713**



**La Organización de Planificación Metropolitana de  
Dover/Condado de Kent actualiza su Plan Regional de Transporte de  
veinte años. Los fondos son limitados.**