

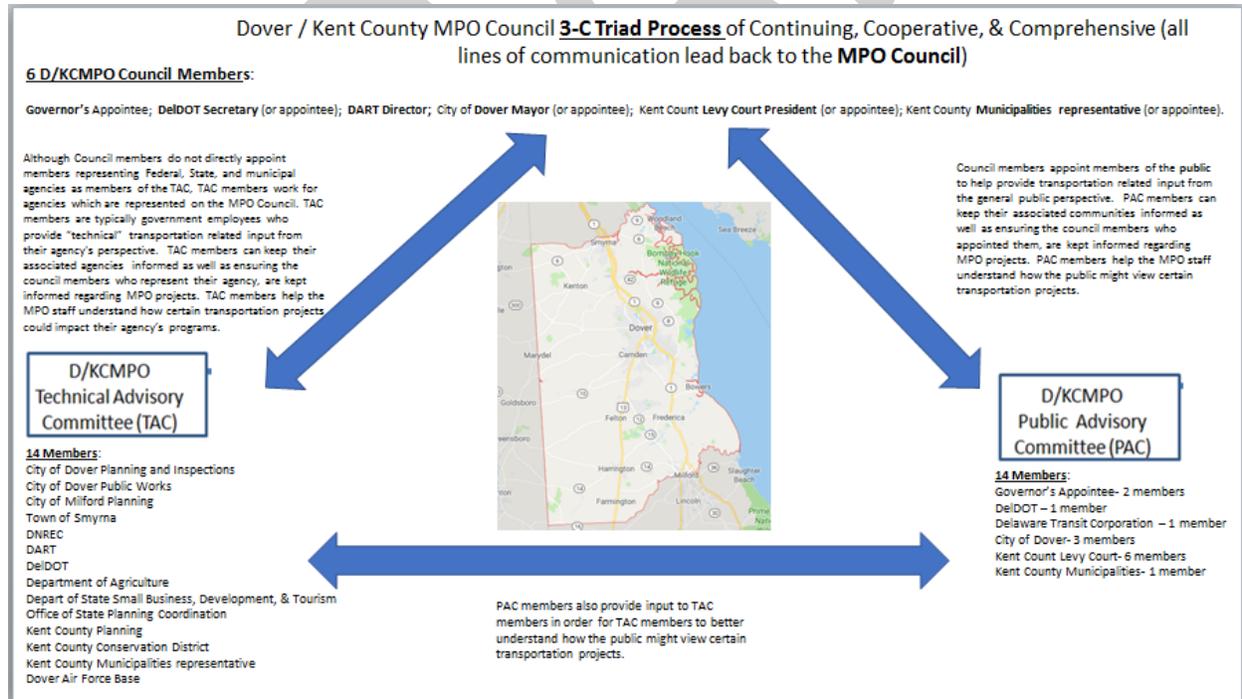
Chapter I- INTRODUCTION

The Dover Kent County Metropolitan Planning Organization

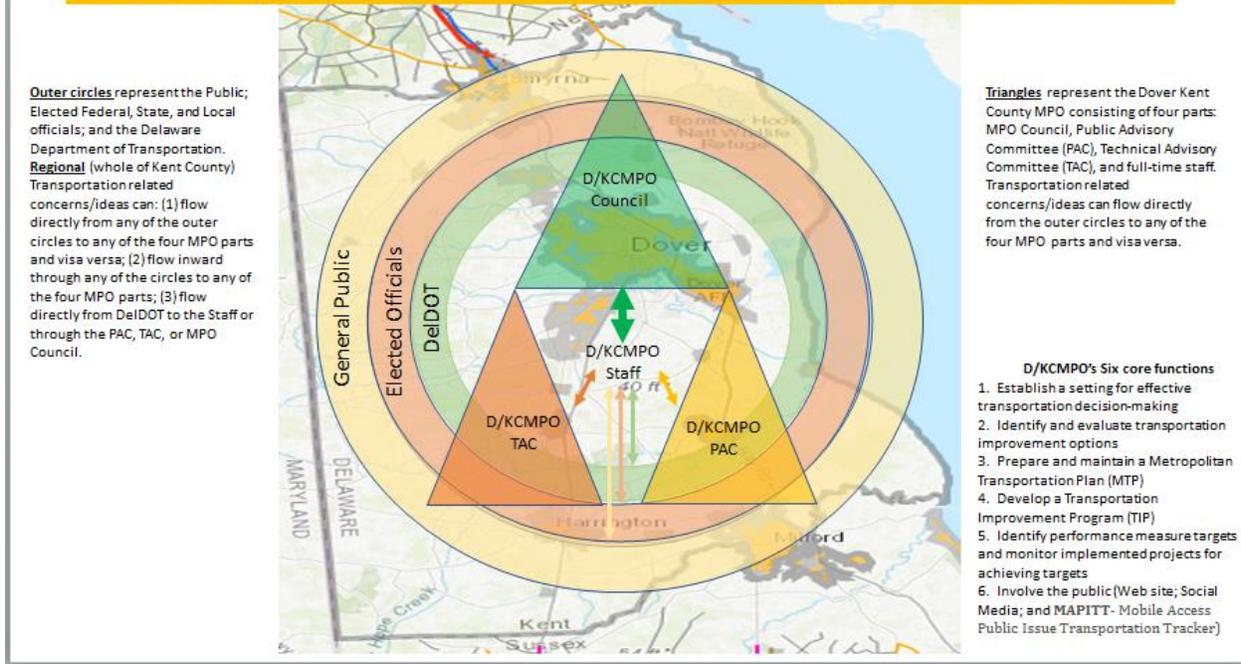
Two questions continually asked of our staff are, "what is an MPO" and "when was your organization established?" These, of course, could take a long time to answer; however, a fast general summary called "[A Brief History of Metropolitan Planning Organizations](#)" provides an excellent overview of MPO's. A second summary found on the Association of Metropolitan Planning Organizations (AMPO) is called "[Brief History](#)." These documents provide a short historical overview regarding when Metropolitan Planning Organizations (MPOs) in general were first established under the 1962 Federal Highway Act. It gives some historical context related to how and why the Dover/Kent County MPO (D/KC MPO) exists.

The D/KC MPO was created in 1992 with a primary focus on the City of Dover, Delaware. However, our Urbanized Area (UA) boundary continued to grow after each US Census (1990, 2000, 2010, and soon 2020). Nonetheless, our MPO Boundary is easily understood as being the same as the Kent County boundary in Delaware. The D/KC MPO is a significant contributor and coordinator to transportation policies and plans impacting citizens in Kent County and the 20 municipalities within Kent County, Delaware.

The D/KC MPO is a not for profit organization consisting of 4 full time and two part-time staff employees, two reviewing (Public Advisory and Technical Advisory) committees, and a decision making and approval council. The D/KC MPO is responsible for **transportation policy making and planning** to ensure existing and future transportation projects and program expenditures are based on the **3C (continuing, cooperative, & comprehensive)** process.



Dover / Kent County MPO 3-C Triad Transportation Planning Process: Continuing, Cooperative, & Comprehensive



(Images represent the D/KC MPO 3-C process)

For example, we utilize the 3-C process with the Delaware Department of Transportation (DeIDOT), the Delaware Transit Corporation (DTC), and the Delaware Authority for Regional Transit (DART) to **set spending levels** for Federal funds meant for transportation projects. Furthermore, our MPO has six core functions:

1. Establish a setting for effective decision-making
2. Identify and evaluate transportation improvement options
3. Prepare and maintain a Metropolitan Transportation Plan
4. Develop a Transportation Improvement Program (TIP)
5. Identify performance measure targets and monitor implemented projects for achieving targets
6. Involve the public

To carry out our six core functions, the D/KC MPO establishes and maintains four primary documents. These documents are also required by DeIDOT and the FHWA as part of the metropolitan transportation planning and programming process found in [23 CFR 450, Subpart C.](#)

The first document, titled "a **Metropolitan Transportation Plan (MTP)**," is updated every four to five years. The MTP is a 20-year long range plan that identifies how the metropolitan area will manage and operate a multi-modal transportation system. The multi-modal system includes transit, highway, bicycle, pedestrian, and accessible transportation for a 20 plus-year planning horizon. The Plan must remain financially constrained yet meet the region's goals - including but not limited to economic, transportation, development, and sustainability. The D/KC MPO is currently updating its MTP titled, "Innovation 2045."

Specifically, the MTP identifies the transportation capital and non-capital surface transportation projects, bicycle and pedestrian facilities and other transportation enhancements, Federal Lands Highway projects, and safety projects included in the State's Strategic Highway Safety Plan. These projects are evaluated and ranked in each of Delaware's three MPOs' MTPs. The D/KC MPO will list the region's transportation projects in the MTP for approval by the D/KC MPO Council. After the Council has approved the projects, the list is evaluated by DeIDOT on a statewide basis and reviewed by the Delaware Council on Transportation (COT). The COT will approve evaluated statewide transportation projects and list the ranked projects in the Capital Transportation Program (CTP).

(note: the CTP is a State process and overseen by a [Council on Transportation](#) (COT))

Projects selected by the Delaware COT are included in the sequential four-year **Transportation Improvement Program (TIP)**. The TIP is the MPO's second document necessary to carry out its six core functions. In addition to being a core function, the TIP is updated every two years. It includes funded projects (via the CTP), which are also listed in the MTP. Each time a TIP is updated or amended, it is available for public review via newspaper and social media announcements.

The third document is the "**Public Participation Plan (PPP)**." It outlines how the MPO will engage the public (another core function) regarding any information on transportation projects, the MTP, and the TIP. The PPP demonstrates how the D/KC MPO ensures public participation when carrying out the six core functions. The PPP, like the MTP, must be updated at least every four years.

The fourth document is titled a "**Unified Planning Work Program (UPWP)**." The UPWP is an annual statement of work identifying the planning priorities and activities to be carried out within the D/KC MPO planning area (metropolitan area). At a minimum, a UPWP includes a description of the planning work and resulting products, who will perform the action, time frames for completing the work, the cost of the work, and the source(s) of funds. The UPWP describes how projects, goals, and objectives outlined in the MTP and TIP are to be implemented.

In summary, the D/KC MPO is a transportation planning not for profit organization funded with 80% Federal Funds, 10% Delaware State Funds, and 10% Local Funds. MPOs are required organizations for Cities, Counties, and Towns that have a combined population exceeding 50,000 and that use Federal Funding for a variety of transportation projects (i.e., multi-modal projects including roads, transit (bus and train), bicycle, pedestrian, freight (ship, plane, truck). The D/KC MPO's main objective is to collect and share information on transportation projects within Kent County Delaware and provide a venue for Federal, State, and local MPO partners to consider these projects relative to fiscal, environmental, economic, and social perspectives.

Federal Metropolitan Transportation Planning

Before diving into specifics of Innovation 2045, it might be helpful to provide a review regarding the evolution of metropolitan transportation planning. Since 1991, there have been several transportation laws, regulations, and policies encouraging the shift from a primary focus on highway expansion to accommodate the use of motor vehicles to a focus on encouraging the development of a multi-modal transportation planning process to include roadways, public transit, bicycle and pedestrian facilities.

There are six Federal Transportation Acts that shaped the D/KC MPO.

The [Intermodal Surface Transportation Efficiency Act \(ISTEA\)](#) 1991. This Act provided additional powers to MPOs and allowed more flexible funding strategies. It also required consideration of planning factors that address societal issues such as energy conservation, economic development, and system preservation.

The [Transportation Equity Act for the 21st Century \(TEA-21\)](#) 1998 continued many of the planning requirements of ISTEA. It emphasized seven planning factors (consolidated from the 15 planning factors in ISTEA) for metropolitan and statewide transportation planning. It continued to focus on public involvement and increased emphasis, including transit and freight stakeholders in transportation planning initiatives.

The [Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users \(SAFETEA-LU\)](#) 2005. This addressed improving safety and security, reducing traffic congestion, improving freight movement efficiency, increased intermodal connectivity, heightened public participation, and environmental protection. Additionally, it added an eighth planning factor by separating the "safety and security of the transportation systems for motorized and non-motorized users" factor in TEA-21.

TEA-21 Planning Factors:

- *support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency*
- *increase the safety and security of the transportation system for motorized and non-motorized users*
- *increase the accessibility and mobility options available to people and for freight*
- *protect and enhance the environment, promote energy conservation, and improve quality of life*
- *enhance the integration and connectivity of the transportation system, across and between modes, for people and freight*
- *promote efficient system management and operation*
- *emphasize the preservation of the existing transportation system*

The [Moving Ahead for Progress in the 21st Century Act \(MAP-21\)](#) 2012 created a streamlined and performance-based surface transportation program and built on many of the highway, transit, bike, and pedestrian programs and policies established in the 1991 ISTEA. Changes included:

- Reformed environmental review process to speed up project development;
- Funding for bicycle and pedestrian transportation was included in a broader program called "Transportation Alternatives;"
- Developed a national freight policy; and
- Reformed tolling on federal highways.

The [Fixing America's Surface Transportation Act \(FAST\)](#) 2015 authorized \$305 billion over fiscal years 2016 through 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. With the enactment of the FAST Act, states and local governments moved forward with critical transportation projects slated for FY16-FY20.

Lastly, the [America's Transportation Infrastructure Act](#) of 2019 is the current transportation act. This bill addresses several provisions related to highway transportation infrastructure. It includes provisions to improve road safety, accelerate project completion, improve resilience to disasters, and reduce highway emissions. Among other things, the bill:

- reauthorizes several transportation programs from FY2021-FY2025, including the federal-aid highway program and the transportation infrastructure finance and innovation program;
- increases funding for tribal and federal lands transportation programs;
- provides for a bridge investment program to award competitive grants to certain governmental entities for projects that improve (1) the condition of bridges; and (2) the safety, efficiency, and reliability of the movement of people and freight over bridges;
- requires the Department of Transportation to encourage each state to develop a voluntary plan that provides for the immediate and long-term personnel and workforce needs of the state to deliver transportation and public infrastructure projects;
- establishes a two-year goal for the completion of environmental review with respect to highway projects and a 90-day timeline for related project authorizations;
- sets forth several new climate-related grant programs, including for resiliency, carbon reduction, charging and refueling, alternative road user fees, carbon capture, and diesel emissions;
- expands the flexibility and eligible uses of formula funds provided out of the Highway Trust Fund; and
- prioritizes the research and development of animal detection systems that reduce the number of wildlife-vehicle collisions.

Many Federal transportation requirements are noted in the above-referenced Transportation Acts as well as in multiple laws, regulations, and policies. At the federal level, two Department of Transportation (DOT) agencies review and approve MPO long range plans: the Federal Highway Administration and Federal Transit Administration.

The [Federal Highway Administration](#) (FHWA) provides stewardship over the construction, maintenance, and preservation of the Nation's highways, bridges, and tunnels. They also conduct research and provide technical assistance to state and local agencies to improve safety, mobility, and to encourage innovation.

The [Federal Transit Administration](#) (FTA) is responsible for conducting oversight activities to ensure that recipients of grants use the funds in a manner consistent with their intended purpose and in compliance with regulatory and statutory requirements. FTA also implements a comprehensive national oversight program to ensure that funding recipients remain compliant

with the FTA requirements for federal funds, performance metrics, and recipient compliance trends.

Additionally, the FHWA and FTA ensure State Departments of Transportation incorporate Federal requirements into State Transportation Long Range Plans, primarily when States utilize Federal funds for many of their road and transit transportation projects.

State Transportation Planning

The State of Delaware's transportation planning authority is the Delaware Department of Transportation (DeIDOT). Similar to MPO long range planning requirements, each state must prepare a long range statewide transportation plan, per [49 USC 5304\(f\)](#), which provides for the development and implementation of the multi-modal transportation system, including transit, highway, bicycle, pedestrian, and accessible transportation. This Plan must identify how the transportation system will meet the state's economic, transportation, development, and sustainability goals – among others – for a 20+-year planning horizon.

On May 3, 2019, DeIDOT completed their long range transportation plan, "Innovation in Motion." This document defines the Statewide transportation goals, strategies, actions, and performance measures to make Delaware's economy more competitive, our communities more vibrant, and our environment more sustainable for future generations. DeIDOT's additional planning documents include Rail, Freight, and Highway Safety Plans. The plans also provide long range transportation goals and objectives to be considered when drafting the D/KC MPO's Innovation 2045 MTP. Innovation 2045 **aligns our goals and objectives to better support DeIDOT's goals and objectives regarding transportation planning** in Kent County, Delaware.

Local Transportation Planning

The D/KC MPO partners include **all towns, cities, and county land area** within Kent County Delaware. The 20 municipalities and one county-level government, Kent County Levy Court, all consider transportation planning projects at the local level. All 21 governments are required by Delaware State Law to complete long range plans at least every ten years. These plans are called "Comprehensive Plans." The comprehensive planning process determines community goals and aspirations in terms of community development. The result is a comprehensive plan expressing and regulating public policies on transportation, utilities, land use, recreation, and housing.

Municipal and County Comprehensive Plans in Delaware are updated every ten years and must be certified by the Governor of Delaware through the Delaware Office of State Planning

Coordination (OSPC). Copies of all Delaware comprehensive plans can be found on the [OSPC Comprehensive Plans website](#). These plans often include transportation goals and recommendations for the municipality or county. An analysis of Kent County's 21 comprehensive plans revealed 12 typical transportation recommendation categories as well as future land use maps, annexation maps, and transportation maps. These are discussed later in this MTP.

When conducting our Innovation 2045 MTP update, we reviewed all 21 Kent County plans to see where we could **link common goals and objectives**. Our challenge was to develop our Innovation 2045 MTP goals and objectives as well as list financially responsible projects that **support our MPO partners' comprehensive plans** whenever possible. A summary of the common transportation goals and objects is detailed later in this MTP.

Putting it all together

Long range transportation planning is a vision of the transportation system's future conditions, needs, and opportunities, which guide decision-making today.

These long range plans generally project the transportation system needs and requirements 20 to 25 years into the future. The plans help shape local, regional, and state strategies for addressing economic growth, safety, congestion, air quality, and public mobility. Long range plans are developed through a process of intergovernmental cooperation and coordination at the Federal, State, Regional, and Local level, as well as citizen involvement. The primary goal is to bring all affected parties to the table to address the unique transportation needs of each locality and region. It also provides a forum to discuss the overall transportation infrastructure growth and development for the MPO region.



Innovation 2045 is the Metropolitan Transportation Plan (MTP)(also known as a long range transportation plan (LRTP)) for the D/KC MPO region. The MTP identifies transportation needs, provides strategies to address those needs, guides transportation investment, and provides measurable goals and performance measures for the region's transportation system over the next 25 years. The Plan, which is updated every four years, is required of all MPOs, as only projects found in the MTP are eligible for Federal funding. The D/KC MPO prepared its initial long range transportation plan in 1996, and Innovation 2045 is the 6th update to the original Plan.

Goals and Objectives

For Innovation 2045, the D/KC MPO wanted to capture the various goals and objectives depicted by our Federal, State, Regional, and Local partners. In March 2020, MPO staff analyzed the following:

- Federal transportation goals from the FHWA and FTA;
- Delaware State goals from Governor Carney, DelDOT, and the OSPC;
- Regional goals from MPOs representing adjacent Delaware counties (Wilmington Area Planning Council (WILMAPCO) for New Castle County and the Salisbury/Wicomico MPO (S/W MPO) for southwestern parts of Sussex County); and
- Local goals found in the most recent comprehensive plans for Kent and the 20 Kent County municipalities.

An informational video was developed and posted on our Innovation 2045 web site that described the analytical approach taken to establish goals and objectives for this MTP update. Throughout the development of Innovation 2045, the public, as well as Federal, State, Regional, and Local agencies had access to comment on draft goals, objectives, and performance measures. The analysis was intended to identify similar transportation goal objectives at the Federal, State, Regional, and Local levels. The MPO used these common issues to develop goals and objectives for Innovation 2045, then **fuse and nest** (where possible) shared goals and objectives at all levels of government.

The following illustration illustrates how this was accomplished.

Nest and Fuse for Innovation 2045 MTP Goals

Federal Transportation Goals	State Transportation Goals	Regional Transportation Goals	Local Transportation Goals
 <ul style="list-style-type: none"> Safety: Reduce Transportation-Related Fatalities and Serious Injuries Across the Transportation System. Infrastructure: Invest in Infrastructure to Ensure Mobility and Accessibility and to Stimulate Economic Growth, Productivity and Competitiveness for American Workers and Businesses. Innovation: Lead in the Development and Deployment of Innovative Practices and Technologies that Improve the Safety and Performance of the Nation's Transportation System. Accountability: Serve the Nation with Reduced Regulatory Burden and Greater Efficiency, Effectiveness and Accountability. 	 <p>Strengthening Delaware's Economy Improving Schools for all Delaware Children A Healthier Delaware Investing in Public Safety Building Strong Communities Responsive Government Economic Vitality Safety and Security Quality of Life Connectivity System Preservation System Management & Operations Resiliency & Reliability Environmental Stewardship Travel & Tourism Customer Service and Communication Effective State, County, & Local Planning efforts Strategies for State Policy and Spending</p>	 <p>Support sustainable Economic Development and Goods Movement Improve Quality of Life Efficiently Transport People Management the Existing Transportation System Increase Safety and Security Enhance Access and Mobility Provide a Connected, Multi-Modal Transportation System Protect the Environment and Quality of Life Support Economic Development</p>	 <p>Safe and reliable vehicular and non-vehicular circulation within town Improved transportation links and Preserve and Maintain Existing Transportation System Provide a Transportation System that Encourages Safe, Healthy, and Active Living Through Comprehensive and Integrated Transportation network for Pedestrians, Bicycles, Public Transportation Riders and Drivers, and People of all Ages and Abilities Enable the Safe and Efficient Mobility of Residents utilizing all Modes of Travel (Pedestrian, Cyclists, Drivers, or Transit Riders) via a Safe and Interconnected Transportation System Assure Timely Maintenance of Roads, Sidewalks to Improve Pedestrian Connectivity and Safety throughout Town Provide a Safe and Efficient Mobility of Residents utilizing all Modes of Transportation Achieve a Safe, Efficient, Pleasant, Multi-Modal circulation system Create and Maintain a transportation System with Kent County that is Safe, Supports Economic Development, Allows Easy Access and Mobility for People and Goods while Reinforcing the Unique Character and Quality of Life of each Community ad Preserving the Region and Natural Resources.</p>

Once the common objectives were identified in Federal, State, Regional, and Local transportation goals, Innovation 2045 MTP goals and objectives were developed.

D/KC MPO: Innovation 2045 MTP Goals and Objectives		
<p>Safely move people and commodities efficiently on connected and reliable transportation networks.</p>	<p>Integrate multi-modal transportation with local land use decisions for healthier, stronger, and economically viable communities</p>	<p>Support transportation system preservation through enhanced system operations, management and sound environmental practices.</p>
<p>Objectives:</p> <ul style="list-style-type: none"> Consider Safety as highest priority for project selection; Reduce fatalities through an enhance a multi-modal transportation network that optimizes and increases safe movement of people and commodities; Enhance and support safe, resilient, and reliable transportation systems that minimize average delay times through predictable travel times under normal conditions while not exceeding LOS C. 	<p>Objectives</p> <ul style="list-style-type: none"> Increase transit accessibility and ridership; Increase economic considerations in projective prioritization for rail and highway freight activities; Increase pedestrian and bicycle network use and access by supporting land use decisions which highlight "complete communities" based on Federal, State and Local transportation, pedestrian, bicycle, and comprehensive plans objectives. 	<p>Objectives</p> <ul style="list-style-type: none"> Reduce pollutants generated by motorized vehicles; Preserve existing roadway and bridge networks through innovative strategies and technologies which minimize environmental impact through planning and design best practices; Increase project prioritizations for environmental considerations that reduce impact to air quality, historical and natural resources, and disadvantaged communities.

The Innovation 2045 MTP goals and objectives generally describe what the D/KC MPO is striving to accomplish.

Goals depict the overall programmatic outcomes, while objectives provide more specific results. The D/KC MPO staff utilized our public outreach process on social media as a mechanism to solicit comments regarding these goals and objectives. This process was ensured that the proposed goals and objectives mutually support all of our partners' transportation goals and, more importantly, reflect the desired vision for our region.

Performance Measures

As described earlier in this chapter, MAP-21 required a streamlined, performance-based, and multi-modal program to address challenges that included improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery.

MAP-21 directed MPOs to develop LRTPs,

MTPs, and Transportation Improvement Programs (TIPs) through a performance-driven and outcome-based approach to planning. It required the states, MPOs, and public transportation operators to establish targets for performance measures in key performance areas that address national goals for FHWA and FTA. All states, MPOs, and transportation operators are to coordinate with one another when setting these targets. These targets are part of the FHWA [Transportation Performance Management](#) program. These targets include seven national goals all transportation organizations like the D/KC MPO are trying to achieve.

There are seven FHWA national goals (safety; infrastructure (pavement and bridge) condition; congestion reduction; system reliability; freight movement and economic vitality; environmental sustainability; and reduced project delivery delays) and two FTA national goals (safety; and infrastructure condition (state of good repair-transit asset management)). Performance-based planning applies data to inform decisions aimed at helping achieve desired outcomes for the region's multi-modal transportation systems. This data is documented in three documents:

1. The MTP (or LRTP) is an investment plan covering 25 years;
2. The TIP, a four-year plan for funding capital infrastructure projects;
3. The Unified Planning Work Program (UPWP), produced annually to support conceptual plans and research.

In many ways, the D/KC MPO is already applying performance-based principles when making investment decisions as part of the MTP, TIP, and UPWP development process.

The FHWA established seven measure areas related to the seven national goals and categorized the measure areas in three performance measures (PMs). The D/KC MPO was responsible for establishing targets for the three PMs in FY18 and FY19. Safety Measures (PM1), Pavement and Bridge Condition (PM2), and the Performance of the NHS (National Highway System), Freight and CMAQ (Congestion Mitigation and Air Quality) (PM3) had established State (as managed by DeIDOT) targets in FY18. The D/KC MPO adopted DeIDOT's PM1 standards on March 7, 2018, as well as targets for PM2 and PM3 measures on November 14, 2018.

In addition to the three PMs, the United States Department of Transportation (US DOT) established three related rules categorized in two performance areas (Asset Management and Planning). As such, the D/KC MPO Council adopted the Delaware Transit Corporation's (DTC) Transit Asset Management Plan (TAMP) on **March 6, 2019**. After consultation between DeIDOT and an FHWA representative, it was recommended that the D/KC MPO Council adopt DeIDOT's PM1, PM2, and PM3 standards and DART's TAMP given Delaware's small size.

Performance Measures and Targets						
National Performance Measure	National Goals	FHWA Performance Measures	FTA Performance Measures	Delaware Department of Transportation Performance Measures	Dover / Kent County MPO Measures	Dover / Kent County MPO Targets (same as DeIDOT)
PM1-Safety	Safety	Serious injuries per vehicle miles traveled (VMT)	Number of reportable fatalities and rate per total vehicle revenue miles.	1. # of fatalities;	Same	120.2 (not to exceed)
		Fatalities per VMT	Number of reportable injuries and rate per total vehicle revenue miles.	2. Rate of fatalities;	Same	1.208 (per 100 million vehicle miles traveled)
		Number of serious injuries	Number of reportable safety events and rate per total vehicle revenue miles.	3. # of serious injuries;	Same	578.6 (not to exceed)
		Number of fatalities	Mean distance between major mechanical failures.	4. Rate of serious injuries; and	Same	5.822 (per 100 million vehicle miles traveled)
				5. Combined number of non-motorized fatalities and serious injuries.	Same	94.2 (not to exceed)
PM2-Infrastructure	Infrastructure Condition	Pavement condition on the Interstate System	% of non-revenue service vehicles that have either met or exceeded their useful life	1. % of pavements of the Interstate System in Good condition	Same	At least 50% Good condition
			% of revenue vehicles within an asset class that have either met or exceeded their ULBs	2. % of pavements of the Interstate System in Poor condition	Same	no more than 2% in Poor Condition
		Pavement condition on the non-Interstate NHS	Infrastructure (rail fixed-gateway, track, signals, systems): % of track segments with	3. % of pavements of the non-Interstate NHS in Good Condition	Same	At least 50% Good condition
			% of facilities within an asset class rated below condition 3 on the TERM scale for state of good	4. % of pavements of the non-Interstate NHS in Poor Condition	Same	no more than 2% in Poor Condition
	Bridget Condition on the NHS		5. % of NHS Bridges classified as in Poor condition	Same	No more than 10% of bridge deck area in Poor condition	
	Transit Asset Management		6. % of all Bridges classified as in Poor and Good condition	Same	<5% in Poor condition; >75% in Good condition	
			Rolling stock % of vehicles that met or exceeded ULB	Same	<10%	
		Equipment % of non-revenue vehicles met or exceeded ULB	Same	<20%		
PM3-System Performance, Freight, and CMAQ	System Reliability	Performance of the non-Interstate System		1. % of person-miles on the Interstate that are Reliable	Same	>75%
				2. % of person-miles on the non-Interstate that are Reliable	Same	>88%
	Freight Movement and Economic Vitality	Freight Movement on the Interstate System		3. Annual Hours of Peak Hours Excessive Delay (PHED) per capita	Same	2017 = 16.8, 2018=16.9, 2019=17.0, 2020=17.1, 2021=17.2
				4. Truck Travel Time Reliability (TTR) Index	Same	<2.30
	Environmental Sustainability	On-Road Mobile Source Emissions		5. % of Non-Single Occupancy Vehicle (SOV) Travel	Same	2016 = 27.9% 2016 - 2018 = 28.0% 2016-2021 = 28.1% 2-Year Total NOx=7353.40, VOC=10521.40 4-Year Total NOx =16086.83, VOC=26229.83
			Traffic Congestion		6. Total Emission Reduction	Same
Reduced Project Delivery Delays						

The above reference chart shows the linkage with the Performance measures, seven National Performance Measure Areas, DeIDOT's Performance Measures and Targets that were adopted by the D/KC MPO.

The D/KC MPO is required to include the Performance Measures targets in all future primary documents we produce. Innovation 2045 is our attempt to link specific performance measures to each of our three MTP goals and provide the DeIDOT (State) targets (which were formally adopted by the D/KC MPO Council) and Kent County specific targets being proposed in our Innovation 2045 MTP.

Goal #1: Safely move people and commodities efficiently on connected and reliable transportation networks.

(note: Safety references found on pages II-42, 52-53, and 62-63 in DeIDOTs 2019 LRTP called, "[Innovation in Motion](#)" and Kent County specific references found in 2005, 2009, 2013, and 2017 (MTP years used to establish a baseline) [Delaware Annual Traffic Statistical Report by the Delaware State Police](#).)

(note: Although the D/KC MPO would like to see zero fatalities and injuries resulting from motorized and non-motorized forms of travel and the FHWA established a "Zero Deaths Vision", the following safety baseline and goal targets represent actual figures as depicted by the Delaware State Police).

- Reduce the Statewide **number** of fatalities (the total number of persons suffering fatal injuries in a motor vehicle crash during a calendar year) over a five-year trend from 119.4 to 119.0; reduce 3 fatalities per year; and a 50% reduction goal by 2035. The **D/KC MPO target is to reduce Kent County wide fatalities over a five-year trend from 24 to 23; reduce 1 fatality per year; and 50% reduction goal by 2035.**
- Reduce the Statewide **rate** of fatalities per 100 million vehicle miles traveled (VMT) (the ratio of total number of fatalities to the number of vehicle miles traveled (VMT expressed in 100 Million VMT) in a calendar year) over a five-year trend from 1.226 to 1.190. The **D/KC MPO does not have a specific target for this PM but continues to support the State target goals.**
- Reduce the Statewide **number** of serious injuries (the total number of persons suffering at least one serious injury in a motor vehicle crash during a calendar year) over a five-year trend from 577.4 to 507.4; reduce 15 serious injuries per year; and a 50% reduction goal by 2035. The **D/KC MPO target is to reduce the Countywide number of serious injuries over a five-year trend from 935.5 to 875.5; reduce 15 motor vehicle personal injuries by 15 per year; and a 50% reduction goal by 2035.**
- Reduce the Statewide **rate** of serious injuries per 100 million VMT (the ratio of total number of serious injuries to the number of VMT (VMT expressed in 100 Million VMT) in a calendar year) over a five-year trend from 5.950 to 5.078. The **D/KC MPO does not have a specific target for this PM but continues to support the State's target goals.**
- Reduce the Statewide **number** of non-motorized fatalities and the number of non-motorized serious injuries combined (the combined total number of non-motorized fatalities and non-motorized serious injuries involving a motor vehicle during a calendar year) over a five-year trend from 97.0 to 85.0 (12%). The **D/KC MPO target is to reduce the Countywide non-motorized (bike and pedestrian) fatalities and injuries (combined) over a five-year trend from 54 to 48.**

Goal #2: Integrate multi-modal transportation with local land-use decisions for healthier, stronger, and economically viable communities

(note: There are no established and approved Performance Measures which could be applied to Goal #2. However, the D/KC MPO is considering the following [Sustainable Communities PMs](#):

- % of new or improved roadways (by mile) that include sidewalks and/or bicycle infrastructure
- % of low-income households within a 30-minute commute of a major employment center

- % of new homes within ½ mile of a major employment center
- % of new homes that are well served by transit
- Reduce emissions produced by vehicles
- Increase percentage of transportation assets that use alternative energy sources

(note: The above highlighted in yellow performance measures are being evaluated through the D/KC MPO MTP update process. Final selected PMs for Goal #2 will be included in the Innovation 2045 MTP draft currently scheduled for publication during the September 2020 timeframe).

Goal #3: Support transportation system preservation through enhanced system operations, management and sound environmental practices.

(note: Bridge and Road infrastructure references found on page II-33 in DelDOTs [Innovation in Motion](#))

- Kent County Delaware has 41 Bridges; **20%** (as of 2017) are classified as being in good condition, **80%** in fair condition, and 0% in poor condition. State Target is no more than 5% bridges and the **D/KC MPO target is no more than 0% of bridges in poor condition.**
- Kent County Delaware has 289 Lane miles of Roads; **71%** (as of 2010) classified as having good pavement condition, **29%** have fair pavement condition, and 0% have poor pavement condition. State target is no more 15% road pavement rated as poor and the **D/KC MPO target is no more than 0% of roads rated as having a poor pavement condition.**
- **System Performance, Freight** (only on Interstate NHS Roads (NA in Kent County)), and **CMAQ** (not applicable to Kent County)- 2017 baseline is **≥75%** Person-Miles on non-interstate National Highway System (NHS) roads as being "**reliable**". Reliability calculated as the Annual Level of Travel Time Reliability (LOTR) for non-interstate NHS System **< 1.50** (metric determined using the average (50%) "normal" travel time on a road segment divided by delayed (80%) "congested" travel time for same road segment as measured during am and pm **peak** travel times). If travel time increases to **over 50%** of normal travel, that road segment is considered "unreliable."
- **Transit Asset Management (TAM)**- 2017 Transit Asset Management targets are **<10%** rolling Stock at or exceeding their Useful Life Benchmark (ULB); **<20%** equipment at or exceeding ULB; and no more than **20%** facilities/buildings at or exceeding ULB.

Innovation 2045 Overview

The D/KC MPO Innovation 2045 MTP Update is a culmination of public and partner participation, population and employment projections, transportation systems assessment, planning level cost estimation, and financial planning. The 12-month planning process resulted in recommendations for multi-modal transportation projects, programs, and policies for the D/KC

MPO area. Innovation 2045 MTP contains the following (note: currently draft) chapters and appendices:

- Chapter 1- Introduction
- Chapter 2- Study Area Characteristics and Projected Conditions
- Chapter 3- Public Participation
- Chapter 4- Operational and Management Strategies
- Chapter 5- Environmental and Air Quality
- Chapter 6- Financial Plan
- Appendix A- Financial Reasonable/Constrained Projects
- Appendix B- Unfunded Aspiration Projects
- Appendix C- TBD

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