

UNIFIED PLANNING WORK PROGRAM

FY 2019

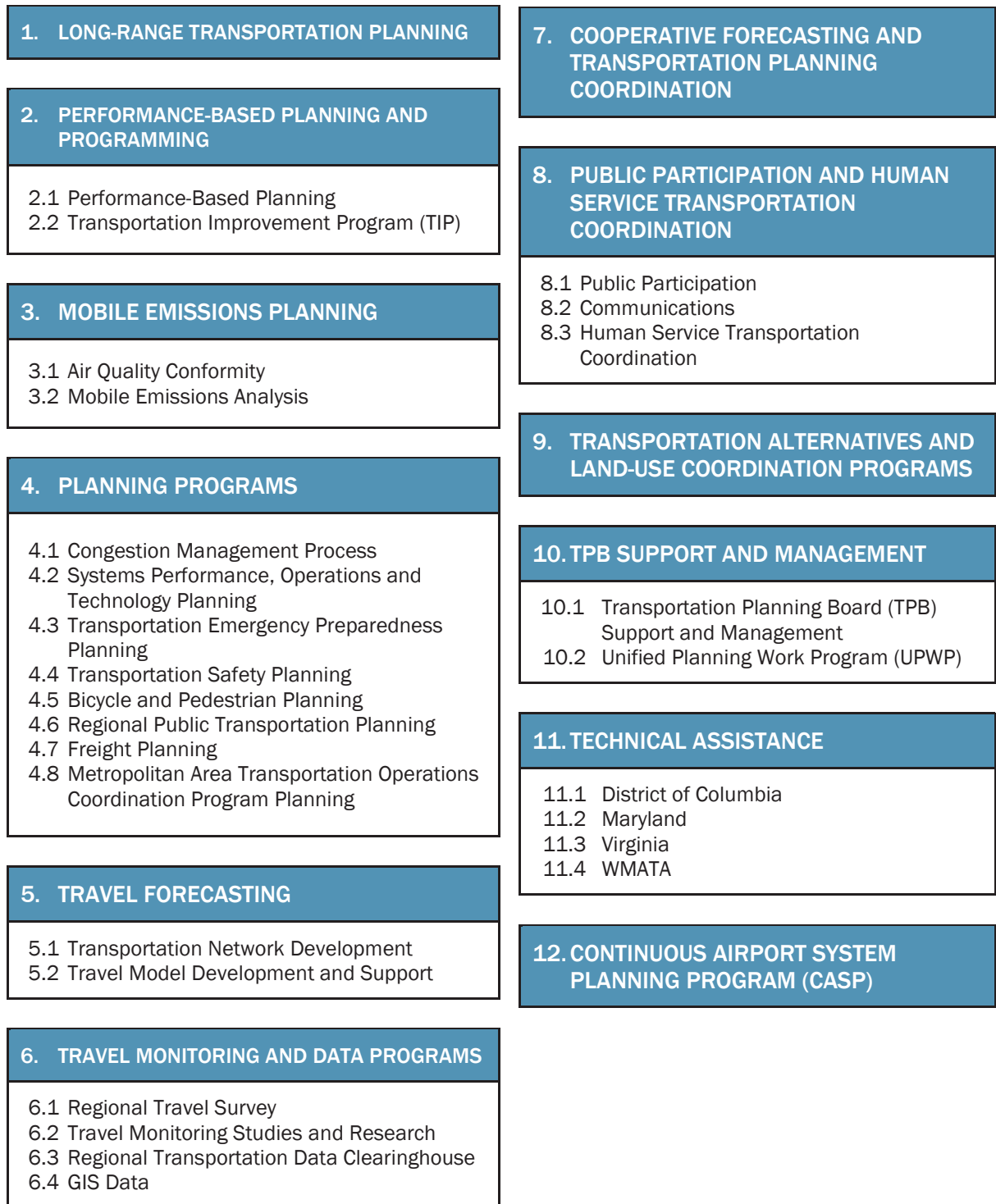
Unified Planning Work Program (UPWP) for Transportation Planning for the Washington Metropolitan Region for FY 2019

March 2018



National Capital Region
Transportation Planning Board

Figure 5: Major Components of UPWP Work Activities



4. Planning Programs

OVERSIGHT	Various (see below)
MAJOR PRODUCTS	See program-specific products below
TOTAL COST ESTIMATE	\$1,859,037

4.1 CONGESTION MANAGEMENT PROCESS

OVERSIGHT	Systems Performance, Operations, and Technology Subcommittee (SPOTS)
MAJOR PRODUCTS	<ul style="list-style-type: none">• Updated CMP portions of Visualize 2045• Congestion Management Plan• VPDUG website reference materials• Documentation for FAST Act performance and target reporting requirements

Under this task, the regional Congestion Management Process (CMP) informs Visualize 2045 on current congestion on the region's roadways by analyzing congestion data as well as identifying potential multi-modal congestion management strategies.

The CMP addresses FAST Act requirements for performance-based planning congestion reduction and system reliability measurements, on both recurring and non-recurring congestion.

This task includes:

- CMP components of Visualize 2045 that specifically address CMP and its subtopics, fully incorporated as elements of Visualize 2045 publication.
- CMP Documentation Form information addresses federally-required CMP considerations associated with individual major projects, to be included with overall project information submitted by implementing agencies to the "Visualize 2045: Technical Inputs Solicitation for the Constrained Element and Air Quality Conformity Analysis" document, and thereby incorporated into the regional CMP.
- National Capital Region Congestion Report, released quarterly on the TPB website, reviewing recent information on congestion and reliability on the region's transportation system and featured CMP strategies, with a "dashboard" of key performance indicators.
- Obtain data from cost-effective public-sector and private-sector sources, including the I-95 Corridor Coalition Vehicle Probe Project (VPP), the Regional Integrated Transportation Information System (RITIS) of the Metropolitan Area Transportation Operations Coordination (MATOC) Program, the FHWA National Performance Management Research Data Set (NPMRDS),

and, if needed, specialized data collection efforts. Compile, format, and review transportation systems performance data from these sources.

- Analyze congestion on the region’s freeway networks, non-freeway arterials, the transit-significant roadways, and the freight-significant roadway network.
- Provide CMP technical input to the Performance-Based Planning and Programming (PBPP) task.
- Produce related analyses, such as following a major event, on an as-needed basis.
- In conjunction with the CMP, support the Vehicle Probe Data Users Group (VPDUG) in its role to foster technical and methodological coordination in the application of vehicle probe data by member agencies and jurisdictions, including conducting regular Users Group meetings and maintaining reference materials on the TPB website.

4.2 SYSTEMS PERFORMANCE, OPERATIONS, AND TECHNOLOGY PLANNING

OVERSIGHT

Systems Performance, Operations, and Technology Subcommittee (SPOTS)

MAJOR PRODUCTS

- **Technology, operations, and systems performance documentation for Visualize 2045**
- **Regional ITS architecture update**
- **Regional surveys on traffic signal timing and power back-up systems**
- **Documentation for FAST Act performance and target reporting requirements**

The performance outcomes of the existing and planned regional transportation system rely on systems management, operations, and deployment of technologies. This task addresses these considerations in metropolitan transportation planning, in conjunction with the federal requirements for regional transportation systems management and operations (RTSMO).

This task includes:

- Address FAST Act requirements related to technology and RTSMO.
- Provide opportunities for consideration, coordination, and collaborative enhancement of planning for systems performance, operations, and technology applications in the region, and encourage these in TIP development and Visualize 2045.
- Address emerging connected and autonomous vehicle technology and shared mobility developments as they relate to regional transportation planning and RTSMO, and related aspects of the Regional Intelligent Transportation Systems (ITS) Architecture.
- Conduct planning for operations including systems monitoring, traffic incident management and response, multi-modal coordination, traffic signal coordination, public traveler information, and related strategies that address regional transportation systems management, including coordination with the COG Traffic Incident Management Enhancement initiative.

- Conduct resiliency and reliability planning, focusing on outcomes-based applications of technology and operations strategies. Consider the resiliency of the region’s transportation systems to operate during and recover in a timely fashion from major disruptive events, such as climate/extreme weather events, as well as its everyday reliability considering non-recurring congestion. Conduct related operations performance analyses. Resiliency and reliability are defined as metropolitan transportation planning factors in FAST Act.
- Advise the metropolitan transportation planning process regarding emerging technologies, including understanding and planning for connected and autonomous vehicles (CAVs) and related emerging “shared economy” aspects of transportation.
- Support and update the long-standing regional Intelligent Transportation Systems (ITS) Architecture.
- In conjunction with FAST Act performance-based planning requirements advise on congestion and reliability-related aspects of the FAST Act requirements.
- Support the regional Systems Performance, Operations, and Technology Subcommittee (SPOTS) (successor to the Management, Operations, and Intelligent Transportation Systems (MOITS) Technical Subcommittee). Also coordinate SPOTS activities with the Metropolitan Area Transportation Operations Coordination (MATOC) Program, including SPOTS’ defined advisory role for the MATOC Program on long-range planning topics.
- Maintain coordination with related member agency activities, and related COG and TPB committees including the Regional Emergency Support Function 1 (RESF-1) Transportation Emergency Preparedness Committee.

4.3 TRANSPORTATION EMERGENCY PREPAREDNESS PLANNING

OVERSIGHT

**Regional Emergency Support Function #1
Transportation Emergency Preparedness Committee in
coordination with the Technology, Operations, and
Performance Subcommittee**

MAJOR PRODUCTS

- Documentation pursuant to DHS and UASI requirements

This task provides support and coordination for the transportation sector’s role in overall regional emergency preparedness planning, in conjunction with the Metropolitan Washington Council of Governments (COG) Board of Directors and its public safety programs. This is a component of a much larger regional set of emergency preparedness activities funded primarily outside the UPWP by U.S. Department of Homeland Security (DHS) and COG local funding. The Regional Emergency Support Function #1 (RESF-1) Transportation Emergency Preparedness Committee, within the COG public safety committee structure, advises these efforts and coordinates with emergency management agencies, police, fire, and other emergency response (RESF) committees. Regular meetings of the RESF-1 Committee as well as subject matter-specific special events will be supported.

This task includes:

- Provide support for incorporating emergency preparedness considerations into Visualize 2045.
- Plan for the role of transportation as a support agency to emergency management in catastrophic or declared emergencies.
- Undertake emergency coordination and response planning through the emergency management and Homeland Security Urban Area Security Initiative (UASI) processes.
- Coordinate planning for transportation-related emergency communications, technical interoperability, and related capabilities.
- Plan for transportation aspects of public outreach for emergency preparedness.
- Coordinate with regional critical infrastructure protection and related security planning.
- Advise emergency preparedness training and exercises.
- Advise conformance with U.S. Department of Homeland Security directives and requirements.
- Advise applications for and management of UASI and other federal Homeland Security funding.
- Support the RESF-1 Transportation Emergency Preparedness Committee.

4.4 TRANSPORTATION SAFETY PLANNING

OVERSIGHT

Transportation Safety Subcommittee

MAJOR PRODUCTS

- Safety element of Visualize 2045
- Documentation for FAST Act performance and target reporting requirements

The Washington metropolitan area is a diverse and rapidly growing region, a major tourist destination, and a gateway for immigrants from all over the world. Growing numbers of pedestrians and bicyclists are using the region's multimodal transportation system, especially in suburban areas where they were not as common as in years past, thereby increasing the exposure of these vulnerable road users to collisions with vehicle traffic. The FAST Act emphasizes safety as part of the metropolitan planning process and requires MPOs to set safety performance targets for non-motorized as well as motorized users. These and other factors, along with heightened awareness of the importance of safety planning, continue to demonstrate the need for the regional transportation safety planning program.

This task includes:

- Support engineering, education, enforcement, and emergency medical services strategies in the metropolitan planning process to reduce fatalities, serious injuries, and crashes in the region. This includes planning for safety aspects of the region's transportation system and coordinating with the Strategic Highway Safety Plan development and implementation efforts of the District of Columbia, Maryland, and Virginia, as well as other state, regional, and local efforts.
- Provide opportunities for consideration, coordination, and collaborative enhancement of transportation safety in the region.