# Unified Planning Work Program

# FY2017

Volume I Central Staff Activities



North Jersey Transportation Planning Authority, Inc.

# UNIFIED PLANNING WORK PROGRAM

# FY 2017

# TABLE OF CONTENTS

| VOLUME     | DESCRIPTION  |
|------------|--|
| BUDGET     | NJTPA BUDGET FOR VOLUMES I, II, III & IV           |
| VOLUME I   | CENTRAL STAFF ACTIVITIES                           |
| VOLUME II  | SUBREGIONAL TRANSPORTATION PLANNING<br>PROGRAM     |
| VOLUME III | SUBREGIONAL STUDY PROGRAM                          |
| VOLUME IV  | TRANSPORTATION MANAGEMENT ASSOCIATION PROGRAM      |
| VOLUME V   | STUDY & DEVELOPMENT PROGRAM                        |
| VOLUME VI  | OTHER REGIONAL TRANSPORTATION PLANNING INITIATIVES |
|            | GLOSSARY   |

# UNIFIED PLANNING WORK PROGRAM

# FY 2017

# **VOLUME I - CENTRAL STAFF ACTIVITIES**

# TABLE OF CONTENTS

#### **SECTION**

#### PAGE NUMBER

| INTRODUCTION |  | 1   |
|--------------|--|-----|
| UNIFIED P    | LANNING WORK PROGRAM                                     |     |
| Task 17/101  | UNIFIED PLANNING WORK PROGRAM                            | 15  |
| Task 17/102  | INTERAGENCY PLANNING COLLABORATION                       | 17  |
| SYSTEMS PL   | LANNING, MODELING AND DATA                               |     |
| Task 17/201  | PERFORMANCE BASED PLANNING - PROCESS<br>INTEGRATION      | 33  |
| Task 17/202  | REGIONAL CONGESTION MANAGEMENT<br>PROCESS STUDY          | 39  |
| Task 17/203  | AIR QUALITY PLANNING AND CONFORMITY ANALYSIS             | 45  |
| Task 17/204  | PERFORMANCE MEASURES ANALYSIS, DATA, AND<br>REPORTING    | 51  |
| Task 17/205  | TRAVEL DEMAND AND SOCIOECONOMIC MODELING AND FORECASTING | 58  |
| REGIONAL     | PLANNING   |     |
| Task 17/301  | REGIONAL TRANSPORTATION PLAN                             | 67  |
| Task 17/302  | CORRIDOR STUDIES AND PROJECT PLANNING                    | 72  |
| Task 17/303  | SAFETY PLANNING  | 83  |
| Task 17/304  | SUBREGIONAL TRANSPORTATION PLANNING                      | 91  |
| Task 17/305  | SUBREGIONAL STUDIES PROGRAM                              | 95  |
| Task 17/306  | MOBILITY PROGRAMS  | 98  |
| Task 17/307  | ENVIRONMENT AND CLIMATE CHANGE PLANNING                  | 106 |
| Task 17/308  | LIVABLE COMMUNITIES PLANNING                             | 112 |
| FREIGHT P    | LANNING  |     |

| Task 17/401    | FREIGHT PLANNING AND COORDINATION | 123 |
|----------------|-----------------------------------|-----|
| 1 a SK 1 / 101 |                                   | 145 |

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT

| Task 17/501 | TIP DEVELOPMENT   | 133          |
|-------------|---|--------------|
| Task 17/502 | TIP MANAGEMENT  | 188          |
| Task 17/503 | LOCAL CAPITAL PROJECT DELIVERY PROGAM                             | 142          |
| Task 17/504 | LOCAL SAFETY AND ASSET MANAGEMENT                                 | 1 <b>4</b> 7 |
| Task 17/505 | STUDY AND DEVELOPMENT PROGRAM                                     | 153          |
| Task 17/506 | TRANSPORTATION ALTERNATIVES AND SAFE<br>ROUTES TO SCHOOL PROGRAMS | 156          |

# **PUBLIC AFFAIRS**

| Task 17/601 | PUBLIC INVOLVEMENT/OUTREACH                         | 161 |
|-------------|---|-----|
| Task 17/602 | COMMITTEE SUPPORT                                   | 169 |
| Task 17/603 | INTERGOVERNMENTAL RELATIONS, POLICY AND LEGISLATION | 173 |

# ADMINISTRATION

| Task 17/701 | OFFICE ADMINISTRATION                       | 177 |
|-------------|---|-----|
| Task 17/702 | GRANTS AND CONTRACT ADMINISTRATION          | 186 |
| INFORMAT    | ION TECHNOLOGY                              |     |
| Task 17/801 | INFORMATION SYSTEMS SUPPORT AND DEVELOPMENT | 191 |

# APPENDIX A

RESPONSE TO FEDERAL AND STATE PLANNING PRIORITIES MATRIX

#### **INTRODUCTION**

#### **Background**

The North Jersey Transportation Planning Authority (NJTPA) is the Metropolitan Planning Organization, or MPO, for the thirteen counties in northern and central New Jersey. Federal law requires MPOs to conduct transportation planning and oversee transportation investments. This planning process ensures that transportation funding is invested wisely to improve mobility, promote economic activity and safeguard the environment. Ultimately, all projects that use federal transportation funding must be approved through the NJTPA's metropolitan transportation planning process.

The NJTPA conducts and sponsors various transportation and planning studies; evaluates, advances and approves highway, bridge, transit and other projects; and provides a forum for cooperative transportation planning involving counties, municipalities, stakeholders and government agencies. The NJTPA also assists county and city planning offices, and monitors the region's compliance with national air quality goals.

The NJTPA Board of Trustees oversees the agency's operations and makes the region's critical planning and investment decisions. The Board is comprised of elected officials from the region's thirteen counties (Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union and Warren) and two largest cities (Jersey City and Newark), which are known collectively as the NJTPA's "subregions," as well as representatives of the Governor's Office, the transportation operating agencies (New Jersey Department of Transportation, NJ TRANSIT and the Port Authority of New York & New Jersey) and a Citizens' Representative.

The NJTPA's Fiscal Year 2017 Unified Planning Work Program (UPWP) describes all transportation and related planning activities to be conducted by the NJTPA's central staff, subregions and member agencies during the fiscal year. All of these activities are intended to advance the priorities and decisions of the Board of Trustees, as reflected in Plan 2040, the Regional Transportation Plan (RTP) for northern and central New Jersey, the federally required long-range plan adopted in September 2013. Many activities will also help implement recommendations of the Together North Jersey (TNJ) Plan, in which the NJTPA played a leadership role in its development and continues to lead the implementation of many of its strategies.

In addition, the NJTPA Strategic Business Plan, adopted in November 2010, provides a multi-year framework for development of the UPWP. Traditionally, funding for MPO activities has been provided by the United States Department of Transportation (USDOT), specifically the Federal Highway and Federal Transit Administrations (FHWA and FTA, respectively), which include FHWA PL and flexed FTA Section 5303 planning funds, FHWA Surface Transportation Program (STP) funds, and FHWA Congestion Mitigation and Air Quality (CMAQ) funds. As guided by the Strategic Business Plan, staff has been seeking additional funding sources for UPWP activities. This year's work program continues to assume FHWA Highway Safety Improvement Program (HSIP) funds to support the Local Safety Engineering Assistance Program for the Local Safety and High Risk Rural Road Programs. In addition, U.S. Department of Commerce, Economic Development Strategy (CEDS) Support Program, which will advance the implementation of the Regional CEDS action plan with support from NJTPA partners, including NJTPA subregions.

In accordance with the federal planning emphasis areas identified by the USDOT, staff has emphasized the following: (1) MAP-21 Implementation - focused on Performance Based Planning and Programmin, including using performance measures, setting targets, reporting performance and programming transportation investment; (2) Regional Models of Cooperation - promoting cooperation and coordination across transit agency, MPO and State Boundaries, including coordinated approached to project delivery, congestion management, safety, freight, livability and commerce; and (3) Ladders of Opportunity - access to essential services for the traditionally underserved communities, including analytical methods to identify gaps in connectivity, effective public participation plans for engaging disadvantage communities in the transportation decision-making process, and updating the Coordinated Human Services Transportation Plans. There are several examples of note include - Performance Measures Applications and Data Collection (Task 17/204); MAP Forum (Task 17/102); and the Update to the Regional Coordinated Human Services Transportation Plan (Task 17/306). A correlation of all UPWP work tasks to the planning emphasis areas, federal and state, can be found in Appendx-A.

Staff recognizes that the federal surface transportation law governing MPOs, the Fixing America's Surface Transportation Act (FAST Act), has recently been reauthorized by Congress. In addition, regulations prepared by federal agencies relating to the work of MPOs are being finalized. Tasks in this UPWP will be modified, as necessary, to address any new laws enacted and any guidance and regulations issued by federal agencies.

#### Organization of the UPWP

The FY 2017 UPWP is organized into six volumes. Taken together, these six volumes provide a comprehensive look at all of the region's transportation planning activities as coordinated and monitored by the NJTPA. These activities will serve to implement the goals and achieve the vision of the RTP and Strategic Business Plan, as endorsed by the NJTPA Board of Trustees.

The work tasks in the FY 2017 UPWP largely consist of activities required by MPOs under federal law. In fact, more than three-quarters of the NJTPA's activities outlined here are mandated by the federal government. This work program fully reflects all relevant federal planning priorities and emphasis areas, as well as specific regulations. As noted, the tasks will be modified as needed to comply with newly enacted laws and guidance and regulations issued by federal agencies

**Volume I** of the UPWP outlines the extensive and varied work of the NJTPA's **central staff** as described in further detail below, under the Volume I Highlights.

Volumes II and III describe the federally funded planning and project development work being conducted by the subregions to support regional transportation planning and project development efforts. Approximately 43 percent of the NJTPA's federal allocation will be passed through or used to support this local planning work over the next two fiscal years. This also includes selected subregional support tasks in the UPWP, Volume I.

The **Subregional Transportation Planning Program** (STP), described in **Volume II**, provides funding based on a formula to each member subregion to carry out essential transportation related planning,

programming and administrative activities that support the NJTPA's regional transportation planning efforts. The NJTPA subregions are vital partners of NJTPA central staff in conducting critical planning work and serving as a conduit for public participation. Through the STP program, subregional planners and engineers help research and analyze critical issues, needs and strategies identified in the RTP and arising from state bridge, pavement, drainage, congestion and safety management systems. Subregional staff also provide important input that helps provide local perspectives on regional issues. The STP program addresses federal, state, and regional priorities.

**Volume III** contains details on the **Subregional Studies Program** (SSP), a competitive grant program that provides federal funds for planning studies conducted by the subregions. Each year the NJTPA selects candidate proposals for two-year studies designed to provide assistance to subregions to refine and develop transportation improvement strategies that address regional mobility and accessibility issues. Studies conducted under this program refine goals and strategies developed through the metropolitan transportation planning process and are data driven, involve a transparent and accessible feedback loop with stakeholders and the public, and involve implementation agencies at the municipal, regional, and state level. These studies may complement regional level planning by providing a subregional focus on issues such as growth management, travel demand management, transit-oriented development, walking and bicycling, safety, intermodal connections, incident management and others.

**Volume IV** contains the **Transportation Management Association (TMA)** work program. The NJTPA manages this work program which guides the activities of TMAs throughout New Jersey in their support of statewide transportation demand activities. This volume includes details on the work that the TMAs will be conducting during the fiscal year that serve to reduce traffic congestion, including promoting and supporting commuter vanpools and carpools; working with employers to employ flex-time, telecommuting and compressed work initiatives; managing shuttle services; and promoting walking and bicycling. The TMAs are also critical partners in relaying vital construction, special event, and emergency related travel information.

**Volume V** is a placeholder for the next **Study and Development Program**. The Study and Development Program is a schedule of project planning and development work resulting from the metropolitan transportation planning process conducted by NJTPA member agencies to carry out the goals and long-range strategy of the RTP. These project candidates come from a variety of sources, including State\_Management Systems (pavement, safety, drainage, congestion, bridge); the Performance-Based Planning and Congestion Management processes; and corridor subarea and related studies. Project concepts emerging from this process may be eligible for inclusion in the Transportation Improvement Program (TIP). The Study and Development Program is developed by obtaining agreement among the subregions, New Jersey Department of Transportation (NJDOT) and NJ TRANSIT on a final list of candidate projects.

Volume VI is a description of all non-NJTPA funded transportation and transportation-related planning work elements or activities (including transportation-related air quality planning) in the region, regardless of funding source. It includes related work by NJDOT, NJ TRANSIT, the New Jersey Turnpike Authority and the Port Authority of New York & New Jersey (PANYNJ), among others. Descriptions include the entity performing the work, completion schedules and final products. This information is included to ensure the coordination of all transportation planning in the region and to prevent duplication of planning and study efforts. This information, obtained from all transportation, planning and operating agencies that impact the region, reflects the complexity and wide range of metropolitan planning activities taking place throughout the region.

# Volume I Highlights

The FY 2017 UPWP continues and broadens many tasks important to fulfilling the NJTPA's mission and improving the region's transportation system. The text below highlights new and expanded activities for FY 2017. Many of the tasks relate to and will support the RTP and help implement recommendations of the TNJ Plan or build off efforts completed in prior years. These highlights are arranged principally by the NJTPA's central staff divisions, with select additional activities noted. The NJTPA will also continue to participate fully throughout the work program in the federal Every Day Counts series of initiatives designed to accelerate transportation innovation and streamline program delivery.

# Unified Planning Work Program

In FY 2017, a steering committee, with the assistance of a consultant, will continue to oversee the update of the NJTPA's Strategic Business Plan. The business plan, which was last updated in 2010, serves to evaluate progress to date and ascertain NJTPA's current regional and subregional resources and work activities. The 2017 update will once again look ahead to the next five years to discern how the agency can continue to leverage its financial and staff resources. It also will serve as a management tool for the NJTPA Board and staff.

# UPWP Interagency Planning Collaboration

- <u>Planning Tools Expo</u> In FY 2017, staff will host an exposition to showcase all the agency and partner agency planning resources and tools available. The upcoming theme will focus on community support applications. This will include resources such as the environmental justice, freight activity locator, coordinated human services, Open data portal etc.
- <u>Pilot Shared Transportation Services Mobile Application Data Support</u> Continuing into FY 2017, staff will seek to expand the availability real-time transportation service information can be ushered by the sharing of vital data and appropriate use of technology. When making a choice among transportation options, as with many things, knowledge is power. Commuters are empowered when there is the ability to know their options whether it estimating is amount of time incurred waiting for a transit bus, viewing a shuttle or private service route, or arranging for an on-demand ride. Having better knowledge about how to access shared transportation services changes the likelihood of viewing "driving alone" as the only viable option.
- <u>Environmental Resources Inventory</u> Beginning in FY 2017 with consultant support, the NJTPA will be conducting an Environmental Resources inventory in three pilot communities. The inventory will provide the current state of various environmental resources of a community, including information on the social characteristics of the community. Information that could be gathered are current land use/ land cover, wetlands locations, environmentally sensitive areas, brownfields, demographics, etc. The inventory will consist of maps, data, and documentation. The inventory will help support future planning initiatives within the community, as well as provide a baseline picture of its current state.
- <u>The Connected Corridor Advancement (ITS)</u> In FY 2017, with consultant support staff will advance The Connected Corridor. The Connected Corridor serves as the New Jersey Transportation Systems Management and Operations plan typically abbreviated as "TSM&O," also referred to as "operations. The advancement project will establish a forum for stakeholder coordination, and exchange to ensure policy consistency, as well as a tool to support a planning and operations

pipeline.

- <u>Outreach Activities/Event</u> Outreach activities will include sponsoring symposiums as part of the Transportation and Technology Symposium series, organizing working groups that encourage participation from a variety of stakeholders in the region, and holding technology workshops that explore innovation opportunities.
- <u>NY/NJ Integrated Corridor Management Projects</u> Staff will participate in a FHWA-supported New York-New Jersey-Connecticut Integrated Corridor Management efforts that are working to produce a concept for better management of corridors in the tri-state region. Transportation agencies from the three states are working together to develop an integrated managed corridor concept with the potential to show that focused operations and management of resources along a corridor can produce regional benefits that match or outpace traditional project investments. This program will include support by the regional MPOs, including the NJTPA, and operating agencies in the region, in collaboration with the FHWA and FTA.

# Systems Planning

- <u>Performance Based Planning and Programming Process Integration</u> The NJTPA will continue to build on the connections among various planning and programming processes to support a consistent, coordinated performance-based regional investment agenda. This will relate to the Regional Capital Investment Strategy (RCIS), the Congestion Management Process (CMP), Project Prioritization, Local Concept Development, The Connected Corridor, and problem intake pipelines. Process integration will involve ongoing participation in the NJDOT Complete Team/Congestion Management Committee, Smart Growth, The Connected Corridor and other working groups.
- <u>PRIME, Planning Recommendations Integration Management Engine</u> PRIME is being developed to house the findings produced by regional and subregional plans and studies and support their advancement toward project development. Continuing with consultant support, PRIME enhancement will engage subregional and partner agency staff to test and implement user protocols along with new analysis and reporting functions. This will be followed by roll-out of the system for initial use.
- <u>Regional Congestion Management Process Study</u> The NJTPA will continue to enhance the regional analysis at the heart of its federally required Congestion Management Process (CMP). Applying data, performance measures and technical tools, the CMP analysis connects needs and strategies to the origins and destinations of travel and hence to where people live, work, shop and play in the region. The CMP draws from studies across all transportation modes, as well as work on technology, resilience, and broader economic and land use issues. Analysis will continue to incorporate archived operations and other new data, address evolving federal policy requirements, incorporate priorities of the RPSD, and support the 2017 RTP update.
- <u>Assessment of System Connectivity</u> The NJTPA will continue to analyze the efficiency of the region's highway, public transit and non-motorized networks in connecting key regional origins and destinations. The study will identify and measure aspects of connectivity at regional and local levels, particularly related to transit-supportive highways and pedestrian/bicycle use. The findings of the study will inform the identification of needs and strategy suitability areas in the CMP, coordinated action planning among regional partners, and the updating of the RTP.
- <u>Air Quality Planning and Conformity Analysis</u> The NJTPA will conduct a conformity analysis on the 2017 RTP and the FY 2018 TIP, as well as any interim analyses that may be triggered by relevant TIP and regulatory changes.

- <u>Transportation Clean Air Measures (TCAMs)</u> The NJTPA will continue to work with partner agencies, subregions and TMAs to develop and advance innovative approaches to reduce transportation-related pollutant emissions, as appropriate drawing from studies and partnerships such as TNJ and the RPSD, Greenhouse Gas/Climate Change studies, and subregional studies. Contingent on available funding, a solicitation for CMAQ eligible initiatives will be conducted among local and regional partners in concert with that for Local Mobility Initiatives.
- <u>Performance Measures Analysis, Data, and Reporting</u> The NJTPA will continue to implement the
  performance-based planning provisions of MAP-21 and successor legislation. This task includes
  monitoring federal rulemaking and guidance. In addition to the required performance measures, the
  NJTPA will coordinate with regional, statewide, and subregional planning partners on supplemental
  multi-modal performance measures to support sound decision-making (drawing from those used in
  the RPSD and other previous NJTPA performance reporting). Measures will largely be based on
  existing data sources, but the NJTPA will also continue to explore new data capabilities. Formats
  will be developed for the required performance reports for the RTP and TIP, as well as for the
  CMAQ Performance Plan and other required performance-based planning documents, such as those
  addressing safety, highway performance and freight. The NJTPA will work with partners to identify
  reasonable performance targets as appropriate, considering foreseeable funding and the RCIS.
- <u>Update the Regional Capital Investment Strategy</u> In support of the RTP update and other NJTPA performance-based planning efforts, the RCIS will be updated to reflect current spending levels and Board of Trustees investment priorities, focusing on the impacts of various investment scenarios on key performance measures. Consistency with NJDOT/NJ TRANSIT State Capital Investment Strategy assumptions and policy will be emphasized, as will coordination with update of the NJTPA Project Prioritization Criteria.
- <u>Travel Demand and Socioeconomic Modeling and Forecasting</u> The NJTPA will continue the required revalidation of the Enhanced North Jersey Regional Transportation Model (NJRTM-E). The NJTPA will continue to support modeling and forecasting including assisting with federally required performance measure assessments, follow-up work for TNJ, RTP development, and updating the RCIS. New modeling tools will continue to be reviewed as appropriate to support planning, economic and land use analyses.
- <u>Small Area Land Use Impact Tool (SALUIT)</u> The NJTPA will support regional and local work with SALUIT for analyzing impacts of local land use changes on transportation, infrastructure and economic outcomes. This tool will support follow-up initiatives connected to RTP and RPSD implementation.

# Regional Planning

- <u>Plan 2045: Connecting North Jersey</u> The NJTPA will develop the federally mandated updates to Plan 2040 during FY 2017, for adoption by the Board of Trustees early in FY 2018. Plan 2045 will build upon the Together North Jersey (TNJ) Plan, including its transportation related strategies, and the themes and scenario planning in the TNJ Plan. It will contain a fiscally constrained financial element, outlining all transportation programs and projects in the region, and will be developed through an open, inclusive and collaborative process that includes stakeholders and the public. Consultant support will be used for the financial element, scenario planning, and public outreach for Plan 2045.
- <u>Corridor Studies</u> These studies allow for analysis, outreach, and the development of recommendations for regionally important local issues. A new study that will build upon an initial

effort undertaken by Together North Jersey will conduct a Coastal Flood Adaptation Benefit-Cost Analysis and Implementation Strategy for the City of Jersey City. In addition, several studies initiated in FY 2015 and FY 2016 will continue. These include an Inventory and Assessment of Waterborne Resources; a multi-modal access management plan for Route 9 in Toms River and Lakewood; and a Morris Canal Greenway Corridor Study. In addition, two transit related initiatives, in coordination with NJ TRANSIT, will continue. They are Assessment of Bicycle and Pedestrian Accessibility at Selected Transit Stations and a Bus Transit Signal Priority initiative.

- <u>Subregional Studies</u> -Volume III of the UPWP contains scopes of work and program information for the Subregional Studies Program (SSP), which provides funding and technical support to subregions for local studies that address regional needs. Four SSP studies initiated in FY 2016 will be completed in FY 2017, and three new studies will be initiated in FY 2017. The new studies will develop a Pedestrian Enhancement Plan for the City of Jersey City; a Green Infrastructure Plan in Passaic County; and an update to the Warren County Transportation Technical Study Strategic Growth Plan element of the Warren County Master Plan.
- <u>Safety Planning</u> The Street Smart NJ pedestrian safety education campaign, initiated in FY 2014, will continue into FY 2017 with pedestrian safety outreach campaigns conducted throughout the year, with a focused outreach effort in October 2016. The campaign is being coordinated with NJDOT, the Division of Highway Traffic Safety, NJ TRANSIT, Transportation Management Associations, NJTPA subregions, municipal leaders, and safety advocacy organizations. In addition a Crime Prevention Through Community Design (CPTED) program will be initiated. The CPTED planning approach involves training community teams to apply principles of access control, surveillance, maintenance, and territoriality to help reduce opportunities for crime. Also, in order to implement the New Jersey Strategic Highway Safety Plan (SHSP). These are: Drowsy and Distracted Drivers; Lane Departure; Aggressive Drivers; Intersections; Pedestrians and Bicyclists; Impaired Drivers; Mature Drivers; Unbelted Vehicle Occupants; Teen Drivers; and Motorcycles.
- <u>Transportation Management Associations</u> This task will continue to provide funding for the TMAs in order to increase mobility options for travelers, particularly in areas under-served by public transportation. The FY 2017 TMA Work Program includes additional supplemental funding for new and expanded environmental and safety activities beyond those to be undertaken under the core program goal area activities and a new optional task to support the Street Smart NJ campaign.
- <u>Update of the Coordinated Human Services Transportation Plan</u> The regional Coordinated Human Services Plan update, initiated in FY 2016, will be completed with consultant and TMA support. This effort will develop a mechanism to identify duplication and opportunities for coordination between providers of special transportation for people with disabilities, low-income residents, and the elderly. This effort addresses the "Ladders of Opportunity" FHWA emphasis area.
- <u>Planning for Climate Change</u> This task will focus on three primary efforts in FY 2017, all to be undertaken with consultant support. The first, initiated in FY 2016, is developing a Climate Resilience and Adaption Plan for the Passaic River Basin. This study applies the lessons learned from an FHWA-led Post Sandy Vulnerability Assessment and Adaptation Analysis, and uses real-time data and GIS modeling tools to identify vulnerable transportation infrastructure and recommend adaptation strategies for the eight-county Passaic River Basin area, which includes Rockland and Orange Counties in New York State. The second effort will be to facilitate the

growth of electric and alternative fueled vehicles in the region through development of municipal readiness plans for electric and alternate fuel vehicles in selected pilot locations. This study was initiated in FY 2016, and is a strategy identified in the NJTPA Greenhouse Gas Mitigation Plan completed in FY 2013. The third effort is an update to the NJTPA Greenhouse Gas Inventory, completed in 2011. This effort will update all sectors with recent data and support SALUIT and other NJTPA will user-friendly data platforms.

- <u>Together North Jersey Plan Implementation</u> The NJTPA will continue to work, as a core project team member, with TNJ to implement strategies and actions from the TNJ Plan. The NJTPA will support Rutgers University's continued leadership of the TNJ consortium, working to advance strategies with partner agencies as appropriate.
- <u>Regional Comprehensive Economic Development Strategy Implementation Plan</u> This consultant-supported effort will implement the recommended actions outlined in the Regional Comprehensive Economic Development Strategy (CEDS), which was developed in partnership with TNJ as part of the TNJ Plan process. This work will improve access to essential services, including housing, employment, health care, schools/education and recreation. This effort addresses the "Ladders of Opportunity" FHWA emphasis area.

# Freight Planning & Collaboration

- <u>Pilot Freight Concept Development Program</u> This consultant activity will continue work begun in FY 2015 to establish a process for advancing reasonable alternatives and strategies that address regional and local freight issues identified through NJTPA and Subregional planning studies. This effort also includes completing the Concept Development phase for two pilot projects.
- <u>Waterborne Facility Inventory Study</u> This study continues from FY 2016 and builds on the results of NJDOT's recent study of maritime support facilities and opportunity sites in New Jersey. The study will update the US Army Corps of Engineers' inventory of regional maritime facilities and examine these facilities' road and rail access, as well as their ability to handle various types of services, passenger and freight.
- <u>Freight Support Services</u> This consultant activity will continue from FY 2016 to support Central Staff work on regional freight issues. Potential work includes an update on the demand on the region's freight rail network, an examination of best practices for integrating freight into complete streets policies, a look at regional truck parking needs, an examination of best practices for off-peak deliveries, and regional freight planning analytical work as needed.
- <u>Freight Rail Industrial Opportunity (FRIO) Corridors Program</u> This is a new consultant initiative that will allow the NJTPA to develop a comprehensive inventory of constraints to national standard freight rail access as defined by the size (Plate "F" which is 17 feet high and 10.5 feet wide) and weight of a railcar (286,000 pounds or 286K loaded railcar) and the associated industrial development potential for the NJTPA region.

# Capital Programming and Project Development

- <u>Project Selection Criteria Update</u> This effort, which will be completed in FY 2017, will incorporate recommendations of the RTP, RPSD and other work, including performance measurement and climate change recommendations, into the NJTPA's criteria for project selection.
- <u>University Centers Coordination</u> Staff will coordinate with University Centers to conduct workshops on local program development and to provide technical assistance to the Subregions.
- <u>Addressing Certification Review Recommendations: Inflation Assumptions</u> Staff will work with

NJDOT, SJTPO and DVRPC to develop standard and agreed to inflation assumptions for projects scheduled beyond the annual element.

- <u>Addressing Certification Review Recommendations: Multi-Year Funded Projects</u> Staff will work with NJDOT, SJTPO and DVRPC to develop an agreed to percentage for constraining the amount of multi-year funded projects for the TIP/STIP.
- <u>Addressing Certification Review Recommendations: Third Party Payment Affirmation</u> Staff will work with NJDOT, SJTPO and DVRPC to develop a policy that request non- MPO Board to document their financial commitments (local match) for their projects that have been programmed with federal funds.
- <u>Local Concept Development Program Continuation</u> Staff will continue to work with subregions to co-manage the Local Concept Development (LCD) work phase of the Local Capital Project Delivery Program (LCPD).
- <u>Local Preliminary Engineering Continuation</u> Local projects graduating from the LCD work phase will continue into the second phase of the project pipeline, known as Local Preliminary Engineering. Staff will work with NJDOT and the subregions to further develop and refine projects to a level of detail necessary to secure environmental approvals and begin the final design work phase.
- <u>Local Safety Engineering Assistance Program Continuation</u> Staff will continue the Local Safety Engineering Assistance Program. This program sets aside federal funding for the use of a NJTPA-selected consultant to assist subregional engineers with the preparation of final plans, specifications and cost estimates required for federal authorization to construct projects advanced through the Local Safety and High Risk Rural Roads programs.
- <u>Transportation Alternatives and Safe Routes to School Programs</u> Staff will work with NJDOT and subregions to develop the third solicitation of the Transportation Alternatives Program (TAP) and Safe Routes to School program
- <u>Deployment of the Online Local Project Management System</u> This effort will deploy an online project management tool for all local programs. The NJTPA will collaborate with NJDOT Local Aid, Bureau of Environmental Program Resources and Subregional Project Managers to identify major milestones to be tracked through the state and federal processes of project development. This is a second phase building on work done in FY 2016 and for the internal management and tracking of local projects and programs.

# Public Affairs

- <u>Public Involvement/Outreach</u> In FY 2017, Central Staff will continue and enhance efforts to
  implement the communications and public involvement strategies identified in the Strategic Business
  Plan. Among the special focuses during FY 2017 will be: working in cooperation with other partners
  in Together North Jersey to address recommendations of the Regional Plan for Sustainable
  Development including organizing educational forums and events and supporting local planning
  initiatives; conducting outreach around the region to gather input for updating of the NJTPA
  Regional Transportation Plan (RTP); developing informational materials on the RTP including
  videos and web/social media postings; expanding use of social media outlets and use of interactive
  web features to promote public involvement in the planning process; and finalizing and
  implementing an updated Public Participation Plan which will guide both formal and informal public
  outreach activities.
- <u>Committee Support</u> Staff will continue to provide technical, clerical and logistical support for all NJTPA Board meetings, Standing Committee meetings and RTAC meetings. Staff will identify

nationally recognized keynote speakers for Board meetings and/or NJTPA conferences, who can provide presentations on technical issues of special importance to the NJTPA. The use of video conferencing technology will ýcontinue to be expanded ý(ýas necessaryý) ýfor meetings, consultations or ýdiscussionsý. During FY ý2017, staff will work with the Board of Trustees to revisit and update the Strategic Business Plan to address emerging needs and priorities. A consultant will be retained to assist in the update.

• <u>Intergovernmental Relations, Policy and Legislation</u> - Staff will monitor legislative and policy developments in Trenton and Washington. Federal policy affecting MPOs stemming from MAP-21 and its successor legislation the FAST Act will continue to evolve in FY 2017. Staff will inform Board members of issues with the potential to affect NJTPA planning activities.

#### Finance and Administration

- <u>Integration of the New Federal Guidance</u> In addition to its ongoing day-to-day work to support the efficient operation of the NJTPA and compliance with federal regulations, the Division of Finance and Administration will continue to integrate changes to its policies and procedures under 2 CFR 200 - *Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards.* The NJTPA will continue to inform staff and subregions of new federal guidance issued and strengthen its oversight of federal funds to ensure the continued compliance of UPWP activities and reduced risks of waste, fraud and abuse.
- <u>Integrated Program Management System</u> Staff will complete phase 1 of the implementation of a new integrated program management system by finalizing the configuration and deployment of an enterprise resource planning (ERP) system that was procured in FY 2016. The new integrated program management system is intended to replace and\or integrate with the existing Financial Management System and Management Information Systems currently used to more effectively manage and report work program activities and expenses; the new ERP system will also be integrated with a document management system to efficiently organize electronic files and streamline routine business processes for tracking MPO program administration documents and budget accounts.

#### Information Technology

- <u>Network Development, Administration and Security</u> The NJTPA will continue to maintain and administer IT infrastructure including internal phone system based on voice over IP (VOIP), Storage Area Networking (SAN), virtualization services, databases, data archival, e-mail, VPN, web applications, Enterprise GIS, videoconferencing, and web streaming services. Software and hardware components will be administered to work seamlessly with the network servers and client workstations. End-user technical support including client hardware and software support will be provided to central staff and subregions. The NJTPA will continue to provide maintenance, monitoring, and development of the agency off-site resources including third party data centers. Software licensing and compliance as well as software and hardware inventory and audits will be performed and maintained.
- <u>Continuity of Operations</u> Disaster recovery measures developed in FY 2016 will be implemented to ensure that the NJTPA's data will survive either man-made or natural disaster and provide high availability of agency resources. In addition, staff will develop a Continuity of Operations Plan (COOP) that provides information on administrative, communications and IT policies and

procedures related to disaster recovery, office closures, etc.

- <u>Application Development, Administration, and Support</u> This will provide programming solutions and software tools for the NJTPA staff and subregions. These solutions and software tools will address Central Staff and subregional communications, data sharing, and workflow needs based on the goals outlined in the Strategic Business Plan and the RTP. Microsoft SharePoint platform will continue to be enhanced to improve project collaboration both internally and with the subregions. This will provide support and enhancement of current applications including reporting, automation, and project information systems. This will include utilization and enhancements of the integrated project management system, MS SharePoint development, the subregional Cost Tracking System (CTS), Financial Management System (FMS) and Financial Reporting System (FRS).
- <u>Video Conferencing, Streaming, Recording, and Broadcasting</u> Video/audio equipment and teleconferencing upgrades, maintenance and support will be provided for internal and external meetings and conferences. NJTPA hosted webinar capabilities, live streaming, video recording and production will be supported and enhanced to improve the agency's public outreach.

Overall, the FY 2017 UPWP positions the NJTPA to meet its federally required responsibilities, address the strategic directions set by the Board of Trustees in the Strategic Business Plan and the RTP, and support the implementation of the TNJ Plan. The tasks in the UPWP will contribute to improved mobility, economic vitality and environmental quality throughout northern and central New Jersey.

#### 17/101 UNIFIED PLANNING WORK PROGRAM

#### **RELATIONSHIP TO MISSION OF THE AGENCY:**

The Unified Planning Work Program (UPWP) is the document that outlines all regional transportation planning and related activities Central Staff will undertake in any given fiscal year. As such, the UPWP is the implementation arm of: the long-range plan (http://www.njtpa.org/Planning/Plan-Update-to-2040.aspx), the four-year capital program (http://www.njtpa.org/Project-Programs/Transportation-Improvement-Program.aspx), and the Strategic Business Plan (http://www.njtpa.org/About-NJTPA/Who-We-Are/Staff-Organization.aspx). Particularly through the implementation of the Strategic Business Plan, this task continues to be responsive to the federal mandates of MAP-21, addresses the federal emphasis areas and serves as guide in the development of transportation planning in the northern New Jersey region. All activities outline in the UPWP support the mission of this agency, which has been prioritized by the Board of Trustees through the development of the Strategic Business Plan.

#### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

In FY 2012, the NJTPA began implementing the recommendations from the Five-Year Strategic Business Plan adopted by the NJTPA Board of Trustees in FY 2011. The Strategic Business Plan defines organizational long-range strategic needs and carves out a clear mission and vision for its future. The Strategic Business Plan serves as a management tool for the full Board of Trustees, Executive Committee, the NJTPA Central Staff and technical advisory committees; and provides short-term, mid-term and long-term action plans that will be integrated into the various UPWP task activities. In FY 2017, the NJTPA will continue the implementation of the recommendations emanating from the current plan, which outlines key goals and a specific agenda of actions for five broad strategic areas: Board development, facilitating growth, communications, improving internal operations and developing performance measures. The NJTPA will also update the Business Plan in FY 2017 by evaluating progress to date and current goals; the updated Business Plan will look ahead to the next five years to discern how the agency can continue to leverage its financial and staff resources (Task 17\602).

#### **DESCRIPTION:**

This task takes into account all activities in the development, maintenance and implementation of the NJTPA UPWP. Central Staff is responsible for presenting the Board of Trustees with a program that is responsive to the federal mandates of MAP-21 and addresses the Trustees' priorities.

Activities included in this task include: closeout of the FY 2016 UPWP; modification and amendments (as necessary) to the FY 2017 Work Program in response to evolving regional issues and any new federal regulations; quarterly reporting for FY 2017; development of the new work program for the FY 2018 UPWP; and preparation of the NJTPA's ongoing transportation planning process.

Also included in this task are the program management oversight requirements for monitoring the programming and financial aspects of all tasks included in Volumes I through VI. Central staff will provide continual monitoring of account balances and analyze available options to improve NJTPA internal controls and the financial management and budgeting processes. The NJTPA uses an on-line Management Information System (MIS) that is continually refined and automated to ensure quarterly progress reports are generated in a timely fashion and consistent format. The MIS was originally implemented as a tool for developing and reporting central staff program activities, and has been expanded to include the TMA pass-through program activities. Future expansions will include on-line reporting capabilities for the subregional pass-through program activities. A web-based Cost Tracking System (CTS) is also used to track and report the subregional and TMA pass-through programs' expenses (Volumes II, III and IV). In FY 2017, staff will continue to refine and update these systems in coordination with IT staff to ensure the efficiency of the quarterly reporting process of the UPWP (see Task 17/701 for further information). The grants and contracts administrative support functions performed by staff in coordination with NJTPA's host agency, the New Jersey

#### 17/101 UNIFIED PLANNING WORK PROGRAM (Cont.)

Institute of Technology (NJIT), are further explained in Tasks 17/701 - Office Administration and 17/702 - Grants and Contracts Administration.

NJTPA website updates relating to this task, including the UPWP webpage (http://www.njtpa.org/Planning/UPWP.aspx), will also be ongoing throughout the year.

#### **PRODUCTS:**

- FY 2016 UPWP final report, financial and programmatic (August, 2016), and FY 2017 UPWP quarterly progress reports for FHWA, FTA, NJDOT and NJIT compliance.
- Modifications and amendments to the FY 2017 UPWP, as necessary.
- Development of the FY 2018 UPWP work plan and budget.
- Continued monitoring of account balances and analyzing available options to improve NJTPA internal controls and the financial management and budgeting processes. Refinement and update of the web-based UPWP MIS and CTS programs, as necessary (ongoing activity).

#### **RELATIONSHIP TO PRIOR WORK:**

The FY 2017 Unified Planning Work Program builds upon previous work programs, expanding the technical proficiency of the Central Staff as the agency assumes increased responsibilities as recommended by the Strategic Business Plan, and seeks to implement the results of the various studies undertaken by the agency.

#### **OUTCOMES:**

Comprehensive and effective financial and programmatic work plan for implementation of the Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP), which responds to the FHWA/FTA requirements. The goal of task is to develop a metropolitan transportation planning processes that meets the requirements of 23 USC 134 and 23 CFR 450.334, and is successfully certified by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA).

#### **PROJECT COST:**

Task Activity Unified Planning Work Program

Central Staff salaries and fringe benefits costs are applied to Indirect Costs

#### **PROJECT MANAGER:**

Elizabeth Johnson 973-639-8417 ejohnson@njtpa.org Total FY 2017Budget Line ItemProgram BudgetIndirect Costs\$ 207,976

#### 17/102 INTERAGENCY PLANNING COLLABORATION

#### **RELATIONSHIP TO MISSION OF THE AGENCY:**

To strengthen the NJTPA's role as the transportation planning leader and technical and informational resource for the people of northern New Jersey, the agency will continue to enhance its partnering and collaboration activities with citizens, local governments, MPOs, transportation operating agencies and other transportation and planning agencies in the region. The Interagency Collaboration activity will continue to define, develop and effectuate these enhanced partnerships. This task will aid in developing technical tools that use available information to support asset management and performance- based transportation planning and their integration with issues of environment, livable communities, quality of life, equity and others social goal, all of which are vital components of and issues addressed in Regional Transportation Plan (RTP). Interagency Collaboration will emphasize consistency in policies, plans and programs, and coordination of transportation and land use, and strengthening the linkage between Planning and Operations.

#### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

Interagency Collaboration activities directly support each one of the five broad strategic areas identified in the Business Plan: Board development, facilitating growth, communications, improving internal operations and developing performance measures. Most noteworthy, however, are the contributions which Interagency Collaboration makes to the NJTPA in Facilitating Growth and in Developing Performance Measures. Interagency Collaboration relates to the Facilitating Growth goal through the Information and Outreach opportunities made available through symposia, conferences, task forces and working groups that address operations planning, multi-jurisdictional planning, visual and analytical Geographic Information Systems (GIS) resources, and incorporation of technology applications into the planning process. These activities will expand the NJTPA's mission to address critical, emerging regional issues, build relationships with new partners, and continue to reorient the organization's culture to achieve regional innovation and leadership. The Planning for Operations / Regional Transportation Systems Management subtask of Interagency Collaboration will assist the organization in Developing Performance Measures.

The update of the NJ Intelligent Transportation Systems (ITS) Architecture, continued enhancement and maintenance of the Enterprise Geographic Information Systems (EGIS), ViZtools and Asset Management Tool, as well as the activities around planning for operations will help NJTPA's mission to link transportation planning to economic growth, environmental protection and sustainable development throughout the region. Interagency Collaboration will work across all of the NJTPA's program areas to support the agency's goal of being a transportation leader providing comprehensive data resources.

#### **DESCRIPTION:**

This task provides direct support to the Executive Director and Executive staff. Some of the main activities associated with this task include maintaining relationships with various external organizations, councils, commissions, task forces and other MPOs. By representing the NJTPA Executive Director and the interests of the agency in working with these entities, the Interagency Collaboration activities will ensure that the NJTPA and its members are kept informed and can provide timely input related to external activities that have an impact on the transportation planning process in this region. This effort will also provide coordination with various university research centers in the region. Through the development of key professional and organizational relationships, the NJTPA will strive to accelerate information exchange concerning projects, plans, activities, problems and issues pertaining to transportation in the region, the products of which will be utilized as critical input into the metropolitan planning process in northern New Jersey. Also, included in this task is the delivery of professional development opportunities, training and symposia on a variety of transportation planning and land use topics. The NJTPA will continue substantially contributing to the development of the Regional Plan for Sustainable Development (RPSD). Many activities for this year will relate to informing the effort, particularly in terms of outreach, technology and policy issues, and planning for operations.

#### 17/102 INTERAGENCY PLANNING COLLABORATION (Cont.)

Concurrently, the NJTPA will work toward advancing Intelligent Transportation Systems initiatives through the work already completed with the update to New Jersey's ITS Architecture. This effort, which began in 2013, will continue to define integration opportunities among agencies and providers within the state and identify how cooperation among such agencies and providers in the deployment of ITS systems can be used to satisfy transportation needs. A well-developed statewide ITS Architecture will accurately represent a shared vision of how individual systems work together currently (or will work together in the future), sharing information and resources to provide a safer, more efficient, and more effective transportation system for all travelers within the NJTPA region and beyond.

The NJTPA fosters knowledge sharing between public sector and private partners with workshops and outreach to agencies under the name DO-IT: Developing Opportunities for Innovation in Transportation. The workshops offer an opportunity for participants to exchange their experience and expertise in communications and technology-based solutions for transportation.

A NJ Traveler Information Guide will be developed to identify up-to-date best practice information to effectively inform travelers using the transportation system. The guide will be developed to help operators of New Jersey's assets and facilities to more effectively communicate information to the public in a more accessible way. It will inform high level technical managers and experience personnel working directly or indirectly in a fusion center, or TMC. The best practice guide will identify the state-of-the practice in traveler information policy as it relates to system reliability, and the use of real-time data and travel time metrics.

A FHWA supported New York/New Jersey Gateway Corridor Active Transportation and Demand Management (ATDM) group is working together on a planning effort to explore an integrated systems management concept along the I-495 corridor. Agencies and MPOs will demonstrate the benefits of managing system capacity. The ongoing program includes regional TRANSCOM, MPOs, and operating agencies. The project concept focuses on modeling and deployment of Integrated Corridor Management (ICM) strategies along the corridor.

Archived operations data made available by TRANSCOM and other resources is used for planning analysis. With the MAP-21 national performance measures focus, use of archived operations data offers a great opportunity to support performance-based planning and programming efforts to inform use of federal transportation funds. Archived operations data is used to support performance based planning and programming, climate resiliency studies, and analyze the performance of the transportation system.

The focus areas for FY2017, which will be the major subtasks are: Transportation and Technology; Information Exchange and Outreach; Regional Transportation Systems Management and Operations (RTSMO) / Linking Planning and Operations; and Professional Development.

The NJTPA maintains a performance oriented planning process that relies heavily on comprehensive and accurate data on activity, conditions, infrastructure, and travel behavior in and around northern New Jersey. The agency's information foundation is a regional databank that assists staff, agency partners and subregions in planning initiatives by providing accurate, accessible transportation and related datasets necessary for informed analysis, decision-making and reporting. Much of the data that inform transportation decisions describe physical locations in the region and are thus maintained in a geographic information system (GIS). This task takes steps toward centrally locating the wealth of geographic and related data currently available within the NJTPA and among its partners, to make that data readily accessible, and to offer tools and analysis that apply the data in planning studies.

#### 17/102 INTERAGENCY PLANNING COLLABORATION (Cont.)

The NJTPA regional databank is a digital repository for all transportation and related data, stored and maintained on the NJTPA computer network. Examples of datasets that are maintained in the databank include census and demographic data, such as: journey-to-work data and demographic forecasts; land use data (including aerial photography); management systems data (NJCMS, NJDOT crash records, etc.); historic and current traffic counts; bicycle and pedestrian indices; outputs from the North Jersey Regional Transportation Model; Office of Smart Growth centers and economic data; and framework transportation layers, including road network, rail lines, ports, bus routes, airports, and NJDOT Straight-Line Diagrams. All of these various data sources are currently available in an enterprise-geographic information system database, or EGIS.

EGIS allows staff to more efficiently respond to data requests as well as reduce labor intensive requests overall by providing readily accessible information online. Some data originates at the NJTPA but much is generated by other national, state, regional, and local agencies. Through the NJTPA's ArcGIS Online organization, EGIS webpage, NJTPA staff, NJTPA subregions, partner agencies and the general public can learn about or access data housed at the NJTPA. All authorized users are able to produce tables, maps, and analyses to inform decision-makers within (and outside of) the NJTPA, allowing the databank to support numerous planning tasks. Thus, the NJTPA's sharing capacity of data sets and map layers with other agencies is enhanced. Data sets are made accessible to staff, partner agencies, subregions and the general public via intranet connection, publication on the Internet, and fulfillment of individual data requests. The NJTPA also shares various data sets and map layers with other agencies.

Staff will explore ways to leverage the EGIS database as an enhanced centralized resource. Standards of data maintenance and exchange will be established for participating staff, subregions and partner agencies. Web sharing applications will be investigated by staff as a vehicle for this task. As web applications and/or analysis tools are developed, the EGIS database will expand with the decision-making need. Work in this task may include: publication of selected data sets on the NJTPA website, and the enhancement of Internet mapping tools, such as the NJTPA Online Transportation Information System (NOTIS) Task 17/502. NOTIS contains information on state and federal projects scheduled or under study. To supplement this resource, a framework for inventorying data produced by Corridor and Subregional studies, known as PR!ME, will be refined in the Performance-Based Planning-Strategy Evaluation and Regional Capital Investment Strategy Task 17/201. The PR!ME system will serve as a resource to help NJTPA, partner planners and engineers identify and advance a consistent, coordinated, performance-based regional investment agenda. PR!ME will give regional, state and subregional users the ability to correlate diverse multimodal planning findings, connect findings to the congestion management process, and generate packages of related needs and potential improvements.

Another element of this task includes the maintenance of GIS layers that reflect various environmental features, such as wetlands, parks, and historic areas. These GIS layers are used, via overlay analyses, for the purposes of assessing potential project impacts as part of the development of plans, programs, and various planning studies at the NJTPA (in coordination with Local Capital Project Delivery Program Task 17/503).

The expansion of the EGIS will include the enhancement of a visualization library in order to better illustrate place-based strategies (for various types of communities and geographic levels) and evolving conditions. Conditions described may include potential impacts of strategies and projects, aspects of growth and redevelopment as well as considerations of performance-based needs and opportunities. Specific place-based strategies depicted may include images of walkability, mixed land use, environmental protection, and transit-friendly areas. These components will be used during the RTP outreach process to engage stakeholders in discussions about potential growth scenarios in the

#### 17/102 INTERAGENCY PLANNING COLLABORATION (Cont.)

region.

Along with the illustrative resources, management systems data acquired from NJDOT, including congestion, safety, pavement, bridge and other data, will continue to be an important part of the NJTPA's asset oriented approach. The data will continue to be applied within regional and corridor studies, performance measure analysis and project prioritization as well as long-range planning process in general.

To better inform long-range planning decisions and comply with federal regulations pertaining to Environmental Justice, staff will be undertaking three pilot Environmental Resource Inventory audits. The audits will include identification of environmental stressors in each of the three identified pilot communities within selected municipalities and counties. The inventory will provide the current state of various environmental resources of a community, including information on the social characteristics of the community. The inventory will help support future planning initiatives within the community, as well as provide a baseline picture of its current state.

Coordination with inter-agency planning partners is also an important element of this task. Staff will support the Freight Activity Locator tool which will enable users to view and understand freight activity in the NJTPA region. Staff will also support the implementation, use, and maintenance of Esri's ArcGIS Online, a data sharing platform. This platform will enable the NJTPA to share content, including applications and data, more efficiently and easily with the subregions and partner agencies. Staff will continue to foster partnerships between NJDOT and current planning partners of the NJTPA including the TMAs; expanding on the type of data available and shared via ArcGIS Online; and developing a framework for data exchanges. Staff will continue to organize and coordinate the Planning Tools Expo. The expo will showcase tools from the NJTPA being developed and deployed as well as solicit participation from the subregions and partner agencies. The primary mission of the expo is to create a sharing and collaboration platform for new and innovative tools.

#### SUBTASKS INCLUDE:

- DO-IT Developing Opportunities for Innovation in Transportation Workshops and outreach to agencies under the name DO-IT offers an opportunity for public sector and private partners to exchange their experience and expertise in communications technology-based solutions for transportation. Information gathered from the workshops will be used to develop a mobile application or technology product in support of NJTPA regional needs, particularly NJTPA Subregions.
- Incorporate the activities of NJTPA's Technology Working Group, and use the symposium series, guest lectures and other hosted events as NJTPA's source for incorporating technology applications into the transportation planning process, and supporting emerging technologies such as connected vehicles and alternative energy. Encourage development of applications that connect NJ 511 and emergency management systems, including climate vulnerability data, asset planning data and ITS through collaboration and coordination with internal and external stakeholders. Support other improvements to the NJ 511 system, including enhanced use of real time traveler information, and coordination with other 511 systems.

Support the ongoing Climate Resilience and Adaption Plan for the Passaic River Basin. The consulting effort will use real-time data and GIS modeling tools to identify vulnerabilities and adaptation strategies within the transportation network, develop a framework for incorporating adaptation opportunities into asset management, cost-benefit analysis, project prioritization methods, and develops a risk management plan for the six county Passaic River Basin area (Task 17/307).

• Information Exchange and Outreach -

#### 17/102 INTERAGENCY PLANNING COLLABORATION (Cont.)

Through the Metropolitan Area Planning Forum, continue to collaborate with the NY City and CT MPOs, as well as the NJ MPOs (DVRPC and SJTPO) on issues of shared interest. Include sections on multi-jurisdictional planning and coordination in UPWP, TIP and RTP documents.

Acquire, process, and upload new datasets into the regional databank as needed. Develop and enhance GIS transportation framework data layers (NJDOT road GIS, TIGER, geocoded model network, NJCMS network, bus, passenger rail, freight rail, intermodal facilities, bike/pedestrian facilities & volumes). Enhance other GIS datasets (demographics, land use, state planning areas/centers, aerial photography). These updates include easier access to NJDOT performance/management systems databases.

Compile visualization library to depict conditions necessary to considering performance-based needs, impacts of projects, and aspects of (re)development and growth.

Fulfill internal and external data and mapping requests on an as-needed basis, including preparation of maps, tables, and charts for NJTPA publications.

Facilitate increased interagency coordination among the NJTPA, subregions, NJDOT, NJ TRANSIT, PANYNJ and others, regarding GIS and data sharing through the NJTPA Data Resources Group, workshops, etc.

Maintenance and monitoring of a uniform platform for collection and analysis of asset data (pavement, bridges, sign management, etc.).

Enhance RTP asset management performance measures.

Coordinate with Capital Programming and Systems Planning divisions on transitioning or reverse engineering Map Information programming, particularly project prioritization scoring procedures.

The Planning Tools Expo will showcase tools from the NJTPA being developed and deployed as well as solicit participation from the subregions and partner agencies. The primary mission of the expo is to create a sharing and collaboration platform for new and innovative tools. This expo will enable further coordination and collaboration among central staff as well as partner agencies.

Refinement of the Freight Activity Locator. This will be a web-based application built on GIS (mapping tool) platform and leveraging NJTPA's existing infrastructure. The tool will be developed internally and will enable users to locate, via a web mapping application, freight facilities and freight activity in NJTPA Region. The tool will examine freight activity clusters including manufacturing, warehousing and distribution centers, port facilities, rail and air terminals as well as major truck and rail corridors important to the movement of goods in region. The tool will support work previously completed through the NJTPA's 2040 Freight Industry Level Forecasts and will be enhanced through the current NJTPA Regional Freight Commodity Profile study.

Refinement of ArcGIS Online as a data sharing platform and tool for creating web mapping services and applications. This platform will enable the NJTPA to share content more efficiently and easily with the subregions and partner agencies. Additionally, the use of ArcGIS Online will enhance the NJTPA's partner agencies and subregions use of data in a more effectual manner by streamlining existing workflows and data exchange.

As the NJTPA staff continues to explore and develop new GIS applications and services, as well as maintain and enhance existing tools and applications, the ability to have on-site technical assistance is critical. With on-site

#### 17/102 INTERAGENCY PLANNING COLLABORATION (Cont.)

ArcGIS expertise, the agency will be well positioned to support GIS services not only internally, but externally for the subregions.

• Linking Planning and Operations -

The NJTPA is leading a state-wide effort to advance New Jersey's ITS Architecture. This consultant-assisted effort will continue into FY 2017.

Establish stronger working relationships with local municipalities regarding response plans and incident management through regional task forces. Provide information regarding incident management, planning for operations, and data sharing considerations.

Identify opportunities to partner with NJTPA's Systems Planning Division on operational real time planning to better integrate performance measures and monitor results of Congestion Management Process (CMP) initiatives, such as TMA development/system reliability/Travel Demand Management (TDM). (Task 17/204 – Data Analysis and Forecasting)

#### PRODUCTS:

- NJ ITS Architecture Database Upkeep.
- Planning Tools Expo for showcasing new tool development and deployment at the NJTPA, Subregions, and partner agencies. (April 2017)
- Work with the Freight Division, Task 17/401, to refine a web-based application for locating freight activities in the NJTPA region.(ongoing through June 2017)
- Updates to the NJTPA Data Resource web page and NJTPA EGIS Geoportal. This includes identification of the types of data and other planning resources available on the NJTPA website, and how the public or interested parties can obtain this information. (ongoing)
- Maintaining and updating the ViZtools and the ViZtools Enhancement to reflect the most current and up-to-date data and information available. (ongoing)
- ArcGIS based project prioritization scoring procedure. (ongoing through June 2017)
- Enhancement of the Asset management data model structure to refine and implement a tool to assist in cost-effective decision making. (June 2017)
- Enhanced regional databank, with quarterly bulletins to staff, RTAC and other interested parties regarding new data acquisitions to the databank. (ongoing)
- Fulfillment of internal and external data, mapping, and analysis requests, employing GIS and other visualization techniques as appropriate. (ongoing)
- Hold workshops, and/or brown bag sessions informal information exchange on technology, policy, and/or best practices in transportation and land use planning. (ongoing)
- Continue to offer an opportunity for public sector and private partners to exchange their experience and expertise
  in communications technology-based solutions for transportation through the DO-IT Developing Opportunities
  for Innovation in Transportation- workshops. Information gathered from the workshops will be used to develop
  a mobile application or technology product in support of NJTPA regional needs, particularly NJTPA Subregions.
  (ongoing)

#### 17/102 INTERAGENCY PLANNING COLLABORATION (Cont.)

- Assist with delivery of other events including roundtables and colloquia, as needed. (ongoing)
- Pilot Shared Transportation Services Mobile Application Data Support. (ongoing through June 2017)
- The Connected Corridor Advancement (ongoing)
- Continue to support regional operating and planning partners in developing the two FHWA Integrated Corridor Management (ICM) planning grants for better managed corridors in the Tri-state region. Two regional ICM grants were awarded to NYCDOT (I-495 Corridor) and NJDOT (NJ Northeast Corridor) focus on Active Transportation and Demand Management (ATDM) to produce concepts for better management of corridors in the tri-state region. NY, NJ, CT transportation agencies are working together to develop a scope of work for deployment. This program will include support by the regional MPOs, including the NJTPA, and operating agencies in the region in collaboration with the FHWA and FTA.
- ITS Data Analysis efforts will continue for the quarterly exchange of real-time archived data with agencies like TRANSCOM, the I-95 Corridor Coalition, and other agencies and partners.
- Provide guidance and management for the Professional GIS On-Site Service Support consultant activity. (June 2017)
- Pilot Environmental Resource Inventory.(June 2017)

#### **RELATIONSHIP TO PRIOR WORK:**

This task will enhance the level of coordination embraced in other tasks in the UPWP. Although the subtasks build upon activities from prior years' work, they represent a consolidation of activities, which supports the Business Plan strategy of Improving Internal Operations.

#### **OUTCOMES:**

This task empowers planners and decision-makers with information and tools that support wise decisions, including comprehensive connections relating transportation to issues of environment, livable communities, quality of life, equity and other social goals. The direct outcome is availability - by NJTPA staff, partner subregions, other agencies, stakeholders and the public - of such meaningful and relevant information (considering the breadth, depth and quality of data). The ultimate outcome should be the use of these resources in beneficial and cost-effective, coordinated planning efforts. Examples of measurable outcomes will be in the form of products resulting from the Asset Management Model consultant activity. These measurable outcomes will include more efficient infrastructure maintenance and a capital investment decision-making tool for the NJTPA Board of Trustees.

The NJTPA endeavors to assess the outcomes of the meetings and forums produced through the Interagency Collaboration task - i.e., continue to expand participation by a wider cross-section of stakeholders and to influence regional decision-making - by surveying those who take part in the in meetings, conferences and symposia facilitated by the NJTPA. The NJTPA will review the diversity of participation (using event attendee lists) for such metrics as: number of MPOs represented, percent of subregions in attendance, and number of non-transportation agencies represented. Additionally, attendees and participants indicate a better understanding of the policy issues presented at the conferences and symposia provided, based on feedback requested from them through surveys. External stakeholder groups, including resource agencies, non-profits, citizen groups and other transportation / land use organizations acknowledge the planning assistance contributed by the NJTPA through the delivery of the conferences and symposia provided, based on feedback.

# CONSULTANT ACTIVITY:

Pilot Shared Transportation Services Mobile Application Data Support

# **DESCRIPTION:**

As the NJTPA supports the sharing of accurate information that helps with various transportation mode choices, having knowledge of transportation services in the region whether operated by a county, a municipality and/or major private provider is useful. Expansion of the availability real-time transportation service information can be ushered by the sharing of vital data and appropriate use of technology. When making a choice among transportation options, as with many things, knowledge is power. Commuters are empowered when there is the ability to know their options - whether it is estimating the amount of time incurred waiting for a transit bus, viewing a shuttle or private service route, or arranging for an on-demand ride. Having better knowledge about how to access shared transportation services changes the likelihood of viewing "driving alone" as the only viable option. Data and technology are key to knowing these shared transportation options.

Development of an established workflow for data exchange will leverage these key elements to support transportation choices. Mobile applications will be supported by compiling service inventory data, performing outreach to service providers, and supporting innovative solutions for communicating options.

This effort and subsequent outreach to agencies will offer an opportunity for public sector and private partners to exchange their experience and expertise in communications technology-based solutions for transportation. Information gathered and shared will be used to support mobile applications or technology products that will be mutually beneficial for all participants.

# **PRODUCTS:**

- Solicitation of consultant proposals for development of a data support workflow for shared transportation services.
- Facilitation of interagency Technical Advisory Committee (TAC) meetings.
- Inventory of shared transportation services (public and private).
- Data support application workflow for transportation options.

# STATUS:

This is a one year consultant effort, which is anticipated to begin in FY 2016.

# CONSULTANT ACTIVITY:

Professional GIS On-Site Services Support

# **DESCRIPTION:**

The NJTPA has already leveraged investments in ArcGIS software to support the agency's mission by developing the Enterprise GIS and visualization tools to advance the following priorities: data management, analysis, capital investment, performance monitorting, and outreach.

As the NJTPA staff continues to refine new GIS applications and planning tools, tailored on-site technical assistance is critical to efficient tool enhancement. With on-site ArcGIS expertise, the agency will be well positioned to support GIS services not only internally, as well as partner agencies. Internal staff, subregions, and partners will be better equipped to advance planning tools such as database management, decision-making and other performance monitoring tools, while having support to deploy new innovative initiatives. On-site professional services from Esri will enable the NJTPA staff to meet project goals in a more efficient and timely manner.

# **PRODUCTS:**

• Up to three separate contracts to be executed as needed for GIS service support at the NJTPA. GIS services may include but are not limited to:Web application design and implementation; Maintenance and upgrade of existing GIS infrastructure; ArcGIS Online organization refinement.

#### STATUS:

This is a one year consultant effort, which is anticipated to begin in FY 2016.

# **CONSULTANT ACTIVITY:**

Pilot Environmental Resource Inventory

# **DESCRIPTION:**

Under federal regulations pertaining to Environmental Justice, a Metropolitan Planning Organization (MPO) ensures that its Regional Transportation Plan (RTP) and Transportation Improvement Plan (TIP) are consistent with Title VI of the 1964 Civil Rights Act, identifies and assesses the transportation needs of low-income and minority populations, and acts to improve public involvement processes to eliminate participation barriers for low-income, minority persons, and other underrepresented communities.

As part of this effort to comply with the Title VI regulations, the NJTPA's will be undertaking three pilot Environmental Resource Inventory (ERI) audits. The audits will include identification of environmental stressors in each of the three identified pilot communities within selected municipalities and counties. The inventory will provide the current state of various environmental resources of a community, including information on the social characteristics of the community. Information that could be gathered are current land use/ land cover, wetlands locations, environmentally sensitive areas, brownfields, demographics, etc. Included within the Inventory will be natural resources maps and accompanying narrative that will provide the basis for inventorying the community's natural resource components and provide the basis for resource conservation. This will also be a key component for a Conservation Plan Element.

#### **PRODUCTS:**

- Solicitation of consultant proposals for development of an Environmental Resource Inventory (ERI).
- Facilitation of interagency Technical Advisory Committee (TAC) meetings.
- Identification and outreach of pilot ERI locations within selected municipalities and counties.
- Database of environmental resources including natural resources maps, accompanying narrative, and GIS layers (where applicable).

#### STATUS:

This is a new one year activity to be initiated in FY 2017.

# CONSULTANT ACTIVITY:

The Connected Corridor Advancement

# **DESCRIPTION:**

Consistent with the federally mandated NJ Intelligent Transportation Systems (ITS) Architecture Update and Strategic Deployment Plan project, the NJ ITS Architecture Advancement initiative will effectively support upkeep of associated Turbo architecture database and recommended implementations of operational strategies statewide. The Advancement project will serve as a forum for stakeholder coordination and exchange and policy consistency.

The NJ ITS Architecture initiative is branded as the "The Connected Corridor." The initiative serves as NJ's Transportation Systems Management and Operations (TSMO) plan with a shared vision of how to create a connected transportation system supported by technology. The effort is designed to ensure that stakeholder systems integrated in perpetuity, sharing information and resources to provide a safer, more efficient, and more effective transportation system for travelers in the region.

Maintenance of the Turbo architecture database will structure the overarching framework of participating agencies and organizations throughout the state and individual transportation projects. Maintaining the architecture will potentially identify transportation projects among partner agencies and continue to identify mutually beneficial solutions for ways to cost-effectively build an integrated transportation system. The architecture database is not static, but must be revised and updated as plans change.

# **PRODUCTS:**

- Policy Updates
- Stakeholder Coordination Framework
- Performance Measures and Monitoring Elements
- NJ Turbo Architecture Updates
- Mainstreaming Technology and Operations Recommendations

#### STATUS:

This is a continuing effort initiated in FY 2016. The project will carry over for an anticipated completion in second quarter FY 2017.

# **CONSULTANT ACTIVITY:**

Archived Operations Data Exchange

# **DESCRIPTION:**

As the NJTPA supports the exchange of transportation data for system analysis, many sources have become available that provide real-time archived data for planning. ITS enable archived operations data can be leveraged to better understand how incidents and disruptions affect the transportation system, identify vulnerabilities in the system given extreme weather events, and help to identify service gaps and deficiencies.

Since the passage of the Moving Ahead for Progress in the 21st Century Act (MAP-21, P.L. 112-141), the transportation and planning community has engaged in an extensive national discussion regarding the legislation's performance management provisions. Specific national performance measures for MAP-21 goal areas are forthcoming from USDOT. Varying archived operation data made available by TRANSCOM, the National Performance Management Research Data Set (NPMRDS)- HERE, the I-95 Corridor Coalition's data (from the Vehicle Probe Project), along with Geographic Information Systems (GIS) and other database tools offer a great opportunity to support performance-based planning and programming in order to make use of federal transportation funds.

To codify the ongoing data analysis activities at NJTPA, this consultant effort will help identify how best to take full advantage of these powerful analytical and data management tools needed for regional and statewide analysis.

# **PRODUCTS:**

- Coordination with Partner Agencies and Stakeholders
- Recommendations for Use of Archived Operations Data
- Data Interface with the NJTPA server for Data Exchange
- Maintenance Plan
- Final Report

#### STATUS:

This is a one year consultant effort, which is anticipated to begin in FY 2016.

# PROJECT COST:

| Task Activity   | Budget Line Item | 8 8        |
|---|------------------|------------|
| Interagency Planning Collaboration  | Central Staff    | \$ 805,756 |
| Pilot Shared Transportation Services Mobile Application Data Support <i>PL and CMAQ funding</i> | Consultant       | \$ 300,000 |
| Professional GIS On-Site Services Support<br>PL funding   | Consultant       | \$ 30,000  |
| Pilot Environmental Resource Inventory<br>PL funding  | Consultant       | \$ 250,000 |
| The Connected Corridor Advancement<br>PL and STP-NJ funding                                     | Consultant       | \$ 300,000 |
| Archived Operations Data Exchange<br>STP-NJ funding   | Consultant       | \$ 250,000 |

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### SYSTEMS PLANNING, MODELING AND DATA 17/201 PERFORMANCE BASED PLANNING - PROCESS INTEGRATION

#### **RELATIONSHIP TO MISSION OF THE AGENCY:**

Performance-based planning is federally required for MPOs, including use of a Congestion Management Process (CMP) and performance measures from MAP-21. In helping to interconnect performance-based analyses, policies, and planning and programming processes, this task supports the NJTPA's planning leadership, provides information on system performance for the regional vision and directly contributes to the Regional Transportation Plan (RTP) and other agency and partner plans. Process integration requires strong partnerships with subregional, state and federal entities. The development of a seamless planning process feeds directly into project prioritization and implementation that is grounded in regional policy. The comprehensive approach of NJTPA performance based planning significantly links and helps to balance transportation planning with economic growth, environmental protection, growth management, safety and security, and quality of life goals.

#### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

Work to be conducted under this task directly addresses the performance-based planning direction embodied throughout the Business Plan. Advancement of planning recommendations and related work implement comprehensive performance measures and, by highlighting the expected benefits of strategies and actions, explicitly "advance the value proposition based on tangible results of planning and studies."

#### **DESCRIPTION:**

Integration of performance-based planning elements within NJTPA and related coordination with partner agencies involves managing diverse information from plans and studies, drawing connections among agency processes, and supporting consistency in analyses and prioritization. With a strong focus established through MAP-21 on regional coordination and reporting of performance planning, the NJTPA will continue to work with partner agencies to enhance a cooperative and systematic regional process for identifying and advancing needs and priorities toward project development and implementation.

This task begins by drawing from current planning and programming work, especially those incorporating performance-based analyses. This includes elements that contribute to the entire range of decision making, from policy making to action. The NJTPA makes use of its Regional Capital Investment Strategy (RCIS) within the RTP as a policy guide for planning and programming, CMP study to identify accessibility and mobility needs and suitable improvement strategies, and Together North Jersey (TNJ) partnering and analysis to help draw in land use, environmental, social and other factors specific to diverse places in the region. Performance measures are utilized throughout the CMP, safety planning, asset management, intelligent transportation system development, local concept development, and a host of other planning efforts. Performance-based prioritization criteria are used in Transportation Improvement Program decision making. All of these are coupled with partner subregional, NJ TRANSIT, NJDOT, Port Authority, and other planning studies, project development, and prioritization initiatives.

Considering these elements, the task will focus on strengthening process connections in collaboration and coordination with partners and on further developing and deploying the Planning Recommendations Information Management Engine (PRIME).

Work with partners will focus on performance-based planning policies, processes and initiatives that identify regional needs and prioritize projects. This includes participation in interagency groups on planning/project development workflows (such as the NJDOT intake pipeline), and collaboration on TNJ action planning follow-up. Addressing MAP-21 performance provisions will also be involved. Ensuring that planning efforts can effectively complement one another will be key, given the different perspectives offered by the various partners in the process.

The PRIME system, developed in-house as a prototype in FY 2015 and refined through a consultant supported

#### 17/201 PERFORMANCE BASED PLANNING - PROCESS INTEGRATION (Cont.)

enhancement study in FY 2016 and FY 2017, will serve as a resource to help NJTPA and partner planners and engineers to identify and advance a consistent, coordinated performance-based regional investment agenda. Continuing development and deployment with consultant support, PRIME will give regional, state and subregional users the ability to correlate diverse multimodal planning findings, connect findings to the CMP, and generate packages of related needs and potential improvements that have been analyzed. This information base should provide a strong foundation for project development and other follow-up action.

#### **SUBTASKS INCLUDE:**

- Apply the results of the NJTPA CMP study to prepare recommendations for NJTPA and partner agency processes and programs. Incorporate and visualize CMP/Strategy Evaluation findings in PRIME and explore additional development of tools to support the use of the CMP. Support the use and refinement of CMP findings within other regional, subregional and partner agency planning activities.
- Conduct planning analyses that build upon the results of the TNJ study, including advancing Regional Plan for Sustainable Development (RPSD) actions and suitable follow-up on Local Demonstration and Local Government Capacity Grant study concepts. Develop specific recommendations and approaches to inform the RTP 2040 update.
- Support the update of the Regional Capital Investment Strategy and Project Prioritization Process.
- Formalize NJTPA CMP procedures as appropriate to help guide NJTPA and partner project planning and development work related to federal CMP compliance. Update documents that provide guidance as to process, compliance, and review of findings. Review and document consistency of NJTPA and partner agency findings, problem statements and proposed projects with CMP analysis findings.
- Participate in interagency working groups involving NJDOT, NJ TRANSIT and other New Jersey MPOs, including the NJDOT Complete Team / Congestion Management Committee, Together North Jersey, Smart Growth, The Connected Corridor, MAP-21 and others, with particular focus on system performance topics and continued refinement of the NJTPA-NJDOT project development pipeline process.
- As warranted, coordinate on system technology, operations, accessibility, reliability, resilience, mobility and congestion-related initiatives to support system level planning connections. Identify ways to reflect or incorporate asset and operations performance management systems and agency operations data within NJTPA planning processes as appropriate.
- Complete development of an enhanced PRIME system with consultant support. Deploy the enhanced system and support NJTPA staff, subregion and partner agency use. Develop analyses using features and tools of PRIME to support the performance-based planning process.

#### **PRODUCTS:**

- Collaboration with partners on performance planning, including enhancing consistency in analytical and project prioritization processes. Support for advancing CMP, TNJ and other performance-based planning findings for the RTP and toward project development and implementation. Formalized NJTPA CMP guidelines and documentation as appropriate. (June 2017)
- Enhanced Planning Recommendations Integration Management Engine (PRIME), with testing, deployment maintenance and administration elements. Coordination and support for partner training, use and applications of PRIME. Incorporate NJTPA CMP Strategy Evaluation findings into PRIME system and explore development of possible CMP user support tools. (June 2017)

#### 17/201 PERFORMANCE BASED PLANNING - PROCESS INTEGRATION (Cont.)

#### **RELATIONSHIP TO PRIOR WORK:**

This task is directly related to tasks in the previous years, including CMP, Strategy Evaluation and RCIS, as well as results of performance measures work. This task incorporates results of the RCIS Update (16/204) and CMP analysis (16/202) to provide resources to support Plan 2040 (Regional Transportation Plan). It references CMP elements previously included in the NJTPA's Local Capital Project Delivery Program (16/503) and applied in reviews of Transportation Improvement Program (16/501), and Study and Development program (16/505) projects.

#### **OUTCOMES:**

This task should result in improved integration and clear documentation of performance-based elements within the NJTPA planning and decision-making process, including the federally required congestion management process and a regional identification of beneficial transportation strategies for the RTP and TNJ/RPSD.

### SYSTEMS PLANNING, MODELING AND DATA 17/201 PERFORMANCE BASED PLANNING - PROCESS INTEGRATION (Cont.)

#### **CONSULTANT ACTIVITY:**

Congestion Management Process - Strategy Development Support

#### **DESCRIPTION:**

The NJTPA plays an important role in advancing the regional planning process through systematic data-driven performance-based assessments consistent with federal Congestion Management Process (CMP) requirements. The NJTPA CMP emphasizes accessibility by connecting needs and opportunities identified for places within the region to appropriate multimodal improvement strategies. Strategy evaluation is dynamic, refreshed and refined as new data, information and priorities emerge in NJTPA and partner planning, including through development of the Regional Transportation Plan and the Regional Plan for Sustainable Development. Strategy evaluation as a regional analysis is a CMP foundation, but it is coupled with more detailed planning study findings for particular areas or issues. Together, partner planning efforts are instrumental in reflecting and informing NJTPA policy including the Regional Capital Investment Strategy.

Integrated in the broader planning process, the NJTPA CMP must advance beneficial strategies toward implementation. Strategies are developed and refined based on the NJTPA long range plan, regional strategy evaluation, and findings that emerge from corridor, subregional, or focused issue studies (such as resilience, technology or freight studies). To aid in this function, the NJTPA is developing the Planning Recommendations Information Management Engine (PRIME), a planning information system to interconnect a broad range of legacy and ongoing planning study findings, information and recommendations, built upon the NJTPA Enterprise GIS. Consultant support will assist with integrating such information and expanding on the identification and refinement of strategy areas, locations within northern New Jersey where particular types and packages of transportation improvements are deemed appropriate. Such findings will be developed in suitable form for use in regional transportation plan development and outreach activities.

In FY 2013 and 2014, NJTPA initiated internal development of a prototype version of PRIME. The prototype system was completed, demonstrated and applied selectively in FY 2015. NJTPA staff will have completed procurement and substantially advanced a consultant supported study during FY 2016 designed to enhance the functionally and capabilities of the system. Work on the consultant enhancement effort will be completed during FY 2017, followed by testing, debugging and deployment with intended technical users. Built within the NJTPA relational database environment, PRIME is capable of correlating planning needs and recommendations through a query-capable relational database system. This consultant initiative provides technical development services needed to construct PRIME as a fully operational platform. The resulting PRIME will have effective user functionality, will incorporate agency Strategy Evaluation and Strategy Refinement products into the visualization and review capabilities, and will pilot a variety of analysis and reporting tools. Tools to be built into PRIME will help users associate plan and study findings by topic and geographic proximity. PRIME should also ultimately help planners follow the development of needs and recommendations from originating studies into problem statements and final projects, helping to demonstrate the success of a systematic northern New Jersey planning process.

#### **PRODUCTS:**

- Enhanced PRIME system featuring CMP analysis visualization features and analytical tools capable of identifying, relating, and packaging localized needs and recommended strategies as appropriate for further project development.
- Initial pilot set of PRIME tracking tools capable of reporting progress on the advancement of planning recommendations into problem statements or candidate project(s) as part of NJTPA CMP requirements.

#### STATUS:

### SYSTEMS PLANNING, MODELING AND DATA 17/201 PERFORMANCE BASED PLANNING - PROCESS INTEGRATION (Cont.)

This consultant activity initiated in FY 2016 and is scheduled to be completed in FY 2017.

### SYSTEMS PLANNING, MODELING AND DATA 17/201 PERFORMANCE BASED PLANNING - PROCESS INTEGRATION (Cont.)

#### **PROJECT COST:**

| Task Activity  | Budget Line Item | Total FY 2017<br>Program Budget |
|--|------------------|---------------------------------|
| Performance Based Planning - Process Integration             | Central Staff    | \$ 355,390                      |
| Congestion Management Process – Strategy Development Support | Consultant       | \$ 300,000                      |
| PL and STP-NJ funding  |                  |                                 |

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#### **RELATIONSHIP TO MISSION OF THE AGENCY:**

The federally mandated Congestion Management Process (CMP) is an important part of the NJTPA's performance-based planning process, contributing to the Regional Transportation Plan, the Transportation Improvement Program (TIP) and other key agency products. Analysis and decision support focused on performance helps to crystallize a vision for northern New Jersey's future and outline an agenda for transportation investment based on accessibility and mobility needs and the identification of specific improvements. The NJTPA approach to study of regional needs and strategies within the CMP effectively integrates land use, environmental, demographic, social and other factors, taking in account the diversity of places in the region.

#### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

Work in this task implements comprehensive performance measures, specifically those addressing accessibility and mobility for the region's residents. Evaluation of strategies in CMP analysis serves to "advance the value proposition based on tangible results of planning and studies."

#### **DESCRIPTION:**

This task conducts essential performance-based planning analysis to underpin the NJTPA Congestion Management Process and inform the metropolitan planning process. The task centers on elements of the CMP that (1) investigate the performance of the region's multi-modal transportation system in terms of the movement of persons and goods, particularly in terms of how effectively the system provides northern New Jersey people and businesses with accessibility to places throughout the region, and (2) identifies beneficial strategies which can be used to improve accessibility.

The CMP uses performance measures that reflect regional planning policies and Regional Capital Investment Strategy (RCIS) principles. These measures help to identify accessibility and mobility needs as they relate to the origins and destinations of travel, and hence to where people live, work, shop, and play in the region. Recognizing the diverse array of place types, from urban centers, to mature metropolitan to rural communities, CMP analysis defines and assesses potential transportation and land use improvement strategies that are both regionally and locally suitable. Coupled with actions generated in complementary processes, CMP findings will support livability and sustainability, technology, economic development, land use, regional equity, and quality of life. Results will support the long-range Regional Transportation Plan (RTP) and the project prioritization process used for the Transportation Improvement Program (TIP).

The task will build upon the earlier CMP/Strategy Evaluation (SE) (regional place-based strategy suitability analysis) and Strategy Refinement (SR) (localized study of detailed strategy applications). Analyses will be updated based on new data and performance measures, the Regional Plan for Sustainable Development (RPSD) and ongoing collaboration with agency partners. These include 1) use of improved roadway performance information such as archived operations data, updated NJDOT CMS-21 roadway volumes, baseline, strategy and action results from the RPSD and a consultant-supported System Connectivity study, 2) aligning needs identification measures to capture improved understanding of smart growth, equity, livability and sustainability, affordability, travel demand and traffic operations issues in context to regional accessibility and mobility, and 3) develop location-specific strategies with emphasis on low cost operational improvement strategies at the intersections, interchanges and bottlenecks and transportation network demand reduction strategies such as biking, bikeshare, public transit use and pedestrian friendly infrastructure. Alignment with other initiatives will be also important, including MAP-21 performance measures, the New Jersey State Development and Redevelopment Plan, Comprehensive Economic Development Strategy work, and The Connected Corridor/ITS Architecture.

#### 17/202 REGIONAL CONGESTION MANAGEMENT PROCESS STUDY (Cont.)

Resulting CMP analysis products will be incorporated into the PRIME system under Task 17/201, and this task will support tools to improve user access to and application of the CMP results. Strategy suitability and synergy findings will help to inform studies that may yield possible roadway capacity expansions. This should help ensure that required complementary strategies and follow-up monitoring actions are included as projects are developed.

This task relates to numerous other activities in the work program. Regional CMP study will be guided by and coordinated with Task 17/201 to ensure performance-based planning process integration, will be informed by performance measures and forecasts from Tasks 17/204 and 17/205, and will incorporate findings of Freight Planning (Task 17/401) and planning for operations in Interagency Planning Collaboration (Task 17/102) and use of datasets developed in that task. It will be conducted in close coordination with Task 17/301 RTP development and that of the Regional Plan for Sustainable Development. Its findings will be available to support Corridor Studies (Task 17/302), Subregional Studies (Task 17/305), and TMA work programs (17/306 Mobility Programs), Study and Development (Task 17/505) and Transportation Improvement Program Development (Task 17/501).

#### **SUBTASKS INCLUDE:**

- Identify and estimate location specific regional needs. Categorize need areas on the basis of performance measures.
- Emphasize low cost operational strategies for intersections, interchanges and bottlenecks and transportation network use reduction strategies such as biking, bikeshare, public transit and pedestrian friendly infrastructure strategies.
- Understand the connection of the strategies with improvement in the mobility and accessibility condition of the region.
- Connect needs with strategies primarily on the basis of the location of the need areas and the strategy suitability areas.
- Complete the consultant-supported System Connectivity study to support performance-based planning, analysis, processes and policies. As appropriate, incorporate research earlier NJDOT of Partial Interchanges study.
- Identify a diverse array of strategies for addressing needs. Identify suitability areas for each strategy on the basis of performance measures, and thresholds emphasizing socio-economic and environmentally vulnerable areas.
- Work closely with NJTPA staff, stakeholders, and implementing partner agencies to formally identify appropriate performance measures, suitable thresholds, strategies, strategy suitability areas and connections between needs and strategies.
- Support various NJTPA planning products, especially the RPSD, RTP and TIP. Define localized strategies consistent with the CMP update and support development of specific recommendations that inform the update of other planning documents.
- Continue to obtain input from and inform NJTPA partners about the work being conducted in this task. Collaborate with partner agencies on related activities through the established NJDOT Congestion Management Committee, NJTPA ITS Architecture Study and other working and study advisory groups.

#### **PRODUCTS:**

• Updated CMP analysis capable of supporting the RTP and other planning efforts. Development and documentation of products suitable for incorporation into the NJTPA PRIME system. Support for possible development of GIS-based NJTPA CMP information access and analysis tools (June 2017).

- Analysis and coordination efforts with NJTPA, subregion and partner agency staffs to facilitate use and application of CMP study results. Support use of NJTPA CMP and related tools in conjunction with planning and programming processes to enable NJTPA staff, subregions and partner agencies to develop new strategy refinements (ongoing).
- Management of the System Connectivity Study to support accessibility, mobility, reliability and resilience analyses of the region's transportation network and places. (June 2017).

#### **RELATIONSHIP TO PRIOR WORK:**

This task is directly related to tasks in the previous years, including Performance Based Planning – Congestion Management Process, as well as results of earlier performance measures work and the Regional Capital Investment Strategy. Earlier Strategy Evaluation and Refinement work generated transportation needs, strategies and project concepts for Plan 2040, providing a primary resource for the NJTPA's project development process.

#### **OUTCOMES:**

This task should result in a regional identification of beneficial transportation strategies that may be advanced through RTP, RPSD, and project development initiatives.

#### **CONSULTANT ACTIVITY:**

Assessment of System Connectivity in Northern New Jersey

#### **DESCRIPTION:**

The interconnectivity of the region's multi-modal transportation network is critical in serving regional accessibility and mobility, and doing so reliably, with resilience to extreme weather or other disruptive events. Although the network serves places throughout the region, how well it facilitates place-to-place movement varies. Shortcomings can present challenges for communities, citizens, businesses and visitors seeking effective transportation options, hindering the desired economic and social goals. Costs for development of new facilities face serious budget constraints, so multimodal performance-based planning approaches must be used to identify suitable cost effective transportation strategies that can appropriately solve connectivity challenges. The Assessment of System Connectivity will develop and apply a series of analytical methods to evaluate the region's transportation network and associated places for their level of transportation interconnection. The results of this study will help to inform selection and potential application of improvement strategies.

Limits to highway and public transit connectivity are important concerns, as are those affecting goods movements and non-motorized travel. Working with NJTRANSIT, NJDOT and other partners, priority dimensions of connectivity will be identified for this consultant-supported analysis. This may include measures such as modal capacity, ease of intermodal connection, system redundancy, available mode options, pedestrian/bike friendliness, service proximity, transit-supportive highways, comparative performance across modes, or route directness. This work will build on the methods and findings of earlier and current studies in the region, such as work for the Together North Jersey Regional Plan for Sustainable Development and an examination of potential park-and-ride issues. As appropriate, current federal, state and regional emphasis areas will be incorporated such as: transit oriented development, targeted economic growth, transportation choice, mobility of goods, resilience and climate change sustainability, operations, and emerging MAP-21 performance-based planning requirements.

In the collaborative NJTPA forum, the consultant will highlight connectivity issues, illustrate specific locations of possible deficiencies, and offer justifiable rationales for advancing particular types of improvements in those locations. The work will involve appropriate analytical tools and techniques available to be applied at the identified geographic scales of interest. These scales may reference the degree of connectivity at a regional scale (to understand the connection between the point of origins and destinations such as employment centers, regional cultural/entertainment centers and colleges / universities) as well as on a local scale (to understand the connection between the point of origin and destinations such as grocery stores, parks and open space, schools, entertainment and small shopping centers).

The results of the study will be suitable for incorporation as NJTPA CMP findings, part of the regional strategy evaluation and appropriate for inclusion in the NJTPA regional transportation plan. They will serve as a source of candidate recommendations for project concepts, capable of being refined in later NJTPA and partner project planning efforts.

#### **PRODUCTS:**

• A transportation system connectivity assessment report that evaluates the mode-specific and multimodal performance of place-to-place connectivity throughout the region and identifies key challenges and issues relating to accessibility for these places. The report will highlight specific linkage deficiencies and locations along with information that can help to prioritize need. In support of the NJTPA Congestion Management Process and Strategy Evaluation analysis, identification of location-specific, place-appropriate strategies capable of improving

connectivity.

#### STATUS:

This consultant activity initiated in FY 2016 and is scheduled to be completed in FY 2017.

#### PROJECT COST:

| Task Activity  | Budget Line Item | Total FY 2017<br>Program Budget |
|--|------------------|---------------------------------|
| Regional Congestion Management Process Study                               | Central Staff    | \$ 288,668                      |
| Assessment of System Connectivity in Northern New Jersey<br>STP-NJ funding | Consultant       | \$ 200,000                      |

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### SYSTEMS PLANNING, MODELING AND DATA 17/203 AIR QUALITY PLANNING AND CONFORMITY ANALYSIS

#### **RELATIONSHIP TO MISSION OF THE AGENCY:**

This task directly "links transportation planning with environmental protection," explicitly called for in the NJTPA mission statement. In addition to being a fundamental federal mandate for the NJTPA, air quality conformity analysis also enables the application of federal funds for transportation improvements in the region. Furthermore it supports other key initiatives such

as climate change, environmental justice and sustainable communities.

#### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

Assessing the consistency of the Regional Transportation Plan (RTP) and Transportation Improvement Plan (TIP) with environmental objectives in the Air Quality Conformity process and identifying environmentally beneficial actions with Transportation Clean Air Measures both link plans with environment goals. Analytical techniques in this task serve to leverage information technology to support regional transportation planning, and coordination functions serve to expand customers' and partners' involvement in the NJTPA process. In doing so this task directly supports the USDOT emphasis areas of interagency coordination, public involvement and environmental justice.

#### **DESCRIPTION:**

A critical federally mandated activity, this task assesses the air quality impacts of projects in the Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP). The NJTPA analyzes projected travel and associated vehicular pollutant emissions against specific targets/budgets defined in New Jersey State Implementation Plans. This ongoing conformity process involves significant interagency partnership and a detailed technical understanding of proposed investments—all aimed at a common goal for a healthier environment within and beyond the northern New Jersey region. The emissions analysis must be performed for the following pollutants: carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NOx), and fine particulate matter (PM 2.5).

Conformity determination requires a comprehensive analysis, addressing all potential regionally significant mobile source impacts on air quality, whether specifically funded through NJTPA led processes or not. With this in mind, this task will enhance, as much as possible, information sharing on project development with agencies such as adjacent MPOs, the Meadowlands Commission, the NJ Turnpike Authority, NJ TRANSIT, the Port Authority of NY & NJ, Amtrak, and others.

The air quality conformity process relies on close coordination among transportation and partner agencies. The NJTPA maintains an active Interagency Consultation Group (ICG), comprised of members of the USEPA, NJDOT, NJ TRANSIT, NJDEP, FHWA, and FTA, along with neighboring MPOs. The NJTPA convenes a formal meeting of this group usually three times in each conformity cycle. In addition, there is close coordination between the NJTPA and this group throughout the year. The ICG reviews any correspondence, interim analyses, and TIP modifications and amendments that could trigger a conformity determination, any SIP modifications made by NJDEP and approved by USEPA as well as any federal regulatory changes that may occur.

In order to increase efficiencies and the ability to respond to potential changes in the TIP delivery schedule, consultant support for this task will cover FY 2017 and FY

#### 17/203 AIR QUALITY PLANNING AND CONFORMITY ANALYSIS (Cont.)

2018 technical analyses needed for the conformity determination(s).

Complementing the conformity process, the NJTPA will continue to work with partner planning and implementing agencies in the region to develop and implement Transportation Clean Air Measures (TCAMs)—innovative approaches to reducing transportation-related emissions. The NJTPA will continue to support the implementation of regional TCAMs recommended for funding using federal Congestion Mitigation and Air Quality (CMAQ) funds by the NJTPA Board of Trustees in FFY 2014 and FFY 2016-17. The NJTPA will also continue to monitor ongoing projects to enhance institutional knowledge about implementation issues. This will involve regular status reporting and the use of a project tracking database. As required (including by MAP-21) and appropriate, the NJTPA will support reporting on the impacts of TCAM projects and the overall CMAQ program.

TCAMs are geared toward making effective use of Congestion Mitigation and Air Quality (CMAQ) funding to reduce congestion and improve air quality (although they are not exclusively tied to this funding source). In addition, this task coordinates with Tasks

17/306 (Mobility Programs), 17/501 (TIP Development), 17/307 Environment and Climate Change Planning and the use of shared ride services and other environmental activities with measurable clean air benefits performed by the Transportation Management Associations (TMAs).

Contingent on available funding, this task offers a competitive program for NJTPA regional partners, subregions and TMAs to implement projects that improve air quality and reduce congestion at the local level. This is in addition to core programs regularly conducted by the subregions and TMAs. This work involves outreach with the

established TCAM working group, along with potential new partners (e.g., surrounding MPOs, operational agencies, the NJTPA subregions and the TMAs). Projects and programs eligible for the intake process include strategies identified through prior NJTPA TCAM

study and priorities identified in the federal CMAQ guidelines. CMAQ guidance in MAP-21 will also continue to be taken into account.

To further the TCAM approach, this task will update the identification of innovative, air quality beneficial actions that might be implemented in the region. Working in partnership with other regional and local agencies, it willconsolidate the range of measures identified in recent years through efforts such as Together North Jersey, the

NJTPA Regional Greenhouse Gas Mitigation Plan, and other plans, programs and studies. It will also draw from new and intensified priorities such as extreme weather resilience, environmental justics, and health-in-all-policies (including active transportation/walking/bicycling with associated health implications). Specific

#### 17/203 AIR QUALITY PLANNING AND CONFORMITY ANALYSIS (Cont.)

attention will be paid to MAP-21 CMAQ guidance, which covers areas such as: Extreme Low-Temperature Cold Start Programs; Alternative Fuels; Congestion Relief and Traffic Flow Improvements; Transit Improvements; Bicycle and Pedestrian Facilities and Programs; Travel Demand Management; Public Education and Outreach Activities; Transportation Management Associations; Carpooling and Vanpooling; Freight/Intermodal; Diesel Engine Retrofits; Idle Reduction; Training; Inspection/Maintenance Programs; Transportation Systems Management and Experimental Pilot Projects. The task will also look at new and innovative technologies nationally and internationally that may be replicated in the NJTPA region. The latest USEPA emissions standards for on-road and non-road vehicles will be considered.

The NJTPA will conduct a comprehensive solicitation for new projects in FY 2017 to augment the TCAM program as past projects are completed and new projects are sought for intake and implementation. As part of this solicitation, the NJTPA will offer potential sponsors guidance to support analysis of reduction of emissions and congestion at the project level.

Technical analysis for this task is dependent on forecasting and modeling applications, Task 17/205. Results will serve the Regional Capital Investment Strategy (RCIS), RTP, Climate Change and TIP development. Work under this task will continue to support the NJTPA's Greenhouse Gas Emissions Mitigation Plan and related Environment and Climate Change Planning (Task 17/307), the Regional Plan for Sustainable Development and Performance Based Planning Process Integration (Task 17/201).

#### **SUBTASKS INCLUDE:**

- Review internally, classify where appropriate and vet through the ICG all TIP amendments to ensure that federal air quality conformity regulations are followed for all projects in the TIP.
- Support reporting on the impacts of TCAM projects and on the NJTPA's overall CMAQ program.
- Coordinate efforts with the NJTPA's climate change planning work where appropriate, particularly the NJTPA's Alternate Fuel Vehicle study undertaken in FY 2016.
- Work with to conduct a joint solicitation for CMAQ funded initiatives to the broadest possible audience of local and regional partners. Regional Planning will focus on Local Mobility Initiatives (LMI) while Systems Planning will focus on Transportation Clean Air Measures (TCAMs).
- Develop and solicit a Request for Proposals to engage the best consultant team possible to support the NJTPA's conformity work on the FY 2018 TIP and RTP. Identify and convene a multi-agency Technical Advisory Committee to support this effort, which includes reviewing, scoring and ranking all proposals to select the appropriate consultant team.
- Conduct air quality emissions analyses of transportation plans and programs and develop the resultant conformity determination.
- Coordinate and support local and regional partners as they implement NJTPA Board approved TCAM projects. Maintain regular status reporting, including the use of a project tracking database.

#### 17/203 AIR QUALITY PLANNING AND CONFORMITY ANALYSIS (Cont.)

- Continue to work with existing partners and engage new partners to identify TCAMs and environmentally beneficial transportation projects.
- Convene the ICG to coordinate the conformity process which includes confirming the latest planning assumptions, socioeconomic data, scenario years, SIPs, project classifications, final project list, emissions results and the final conformity document.

#### **PRODUCTS:**

- Conformity determination (typically delivered in fourth quarter of every other fiscal year, and other times as required.
- Management of the TCAM program. Internal and interagency coordination on implementing existing as well as newly-identified FY 2018-19 regional and local TCAM projects/programs. (ongoing)

#### **RELATIONSHIP TO PRIOR WORK:**

This task continues and builds upon Task 16/203 (Air Quality Planning and Conformity), Task 16/307 (Environment and Climate Change) as well as conformity, air quality, TCAM, and climate change work from earlier years.

#### **OUTCOMES:**

The ultimate outcome of air quality planning should be a healthier environment within and beyond the northern New Jersey region, including cleaner air and the attainment of the National Ambient Air Quality Standards as required for the maintenance and non-attainment areas in the NJTPA region. Direct results of this task would be projects and programs advanced by the NJTPA that support or encourage reduced pollutant emissions and congestion mitigation. As a fundamental federal requirement for northern New Jersey, a continuing successful conformity process, wherein the NJTPA RTP and TIP meet conformity requirements, enables the application of federal dollars for transportation improvements in the region.

#### **CONSULTANT ACTIVITY:**

Air Quality Conformity Determination

#### **DESCRIPTION:**

The consultant will perform the air quality emissions analyses in support of NJTPA conformity determination(s). This involves attending key interagency meetings and public workshops, collecting required socioeconomic and demographic information, coding regionally significant projects into the model, running the NJRTM-E travel demand model, the pre- and post-processing models and USEPA's required emissions model, and generating emissions results for the required criterion-pollutants for each horizon year and each required county. The emissions analyses must be performed for the following pollutants: carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NOx), and fine particulate matter (PM2.5). This consultant activity will cover any and all required conformity analyses, including the conformity determination for TIP adoption, the RTP update and any others as needed (such as for TIP amendments or regulatory changes).

#### **PRODUCTS:**

• Preparation of North Jersey Regional Transportation Model-Enhanced (NJRTM-E) inputs (collecting socioeconomic and demographic data, coding regionally significant projects) and performance of NJRTM-E runs for required analysis years. Pre- and post-processing of NJRTM-E output (e.g., using PP-SUITE software) to

#### 17/203 AIR QUALITY PLANNING AND CONFORMITY ANALYSIS (Cont.)

assemble model data in USEPA required MOVES formats, and running of the MOVES emissions model as appropriate to estimate emissions for each scenario year, for ozone precursors, fine particulate matter and carbon monoxide.

Products include technical memoranda documenting all model inputs and runs, emissions results contrasted with all SIP budgets for all pollutants by scenario year and by required county and transmission of all MOVES files and runs to USEPA for verification and replication.

- Document the technical process and the network modeling output, and summarize emissions by pollutant for appropriate time periods.
- Meeting support and on-call training.

#### STATUS:

Ongoing, federally mandated core function of the agency.

### SYSTEMS PLANNING, MODELING AND DATA 17/203 AIR QUALITY PLANNING AND CONFORMITY ANALYSIS (Cont.)

#### PROJECT COST:

| Task Activity                                | Budget Line Item | Total FY 2017<br>Program Budget |
|--|------------------|---------------------------------|
| Air Quality Planning and Conformity Analysis | Central Staff    | \$ 268,417                      |
| Air Quality Conformity Determination         | Consultant       | \$ 616,715                      |
| PL and CMAQ funding                          |                  |                                 |

#### **PROJECT MANAGER:**

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### SYSTEMS PLANNING, MODELING AND DATA 17/204 PERFORMANCE MEASURES ANALYSIS, DATA, AND REPORTING

#### **RELATIONSHIP TO MISSION OF THE AGENCY:**

Performance measures concretely characterize the goals valued by the region and a capital investment strategy identifies the preferred mechanism for achieving those goals. Together, they provide a specific framework for wise decision-making and help create a regional vision, develop a regional plan, and link transportation planning to broader societal issues (such as land use, environment, economic growth, and livability). It is important for the agency to effectively analyze data, illuminate critical issues, evaluate the implications of possible futures, and communicate relevant information to decision-makers, planning partners, and the public in a timely and efficient manner. As an emerging federal requirement and a federal emphasis area, establishment and application of regional performance measures and targets helps to enable the application of federal funds for transportation improvements in the region. In an era of diminishing resources, this becomes even more critical for regional issues and priorities, including transportation, travel behavior, housing, environment, climate change, economic development, land use, and demographics.

#### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

Comprehensive analysis and reporting of regional performance measures and the update of the capital investment strategy provide a sound information foundation for strengthening the agency's "regional leadership position for transportation and comprehensive planning." The breadth of performance measures in this task seeks to "link plans with economic growth, environment, and quality of life," and assists the Board in expanding and advancing a vision for improved mobility. Application of operations data for planning helps to address critical, emerging regional issues of system reliability and livability.

#### **DESCRIPTION:**

The objective of this task is to develop and employ a comprehensive set of data, information, and analytical tools to inform NJTPA decision-making. It builds on the long established vision, goals, objectives and measures developed for the Regional Transportation Plan (RTP) and Regional Plan for Sustainable Development (RPSD); RPSD scenario planning; the investment principles established within the current Regional Capital Investment Strategy (RCIS); and other performance indicator reporting. It will also work toward maintaining and updating the RCIS investment principles and allocations by incorporating current and anticipated regional fiscal conditions and new performance measures.

The NJTPA will continue to establish, refine, implement, and expand upon the performance-based planning provisions of MAP-21 to assess and support the region's progress toward achieving planning goals. This task involves educating, connecting, and engaging partner agencies, subregions, non-profit organizations and the public about future impacts of current decisions. This activity will examine present and future infrastructure, land use, social, environmental, and demographic contexts for identifying transportation needs and improvement strategies at the regional, subregional, and local levels. This effort is consistent with the federal, state, and regional priorities for performance based planning, data collection, real-time data for planning, analytical tools, and simplified presentations for public consumption.

This task includes monitoring federal rulemaking and guidance on MPO use of performance measures. A primary focus of this task will be meeting the emerging MAP-21 requirements for MPOs to formally establish regional targets for specific national performance measures, and report on progress toward meeting those targets. Adapting the MAP-21 performance measures, setting regional targets, and developing concise reports will require substantial coordination with NJDOT and NJ TRANSIT to ensure consistency with complementary requirements for state performance targets and reporting. Input from subregional partners will also help to ensure appropriate choices of targets.

### SYSTEMS PLANNING, MODELING AND DATA 17/204 PERFORMANCE MEASURES ANALYSIS, DATA, AND REPORTING (Cont.)

In addition to the required MAP-21 measures, staff will continue to explore other multimodal performance measures to support sound decision-making for northern New Jersey (drawing, for example, from measures used in the RPSD). This will also involve coordination with regional, statewide, and subregional planning partners, use of existing data (such as accident data, archived operations data, and asset management data), and use of archived operations data management and workflow in Task 17/102. As appropriate, the NJTPA will also continue to explore and develop capabilities to apply new data sources.

Setting specific targets for performance measures and developing reports will require coordination with subject matter experts within NJTPA and with state and regional planning partners. For example, targets for safety performance measures (e.g., crash rates), will require coordination with NJTPA safety planners (Task 17/303), while freight performance measures will require coordination with the Freight Division (Task 17/401).

To meet MAP-21 performance measure reporting requirements, the NJTPA will continue to develop and enhance suitable report formats. Among others, MAP-21 will require performance assessment for the RTP and TIP; a CMAQ Performance Plan assessing baseline congestion and emission levels, progress and project benefits; and performance reports to support NHPP, HSIP, Freight Plan, and other plan and program initiatives. For the NHPP reporting, this task will draw from NJDOT's and NJTPA's Asset Management Systems and New Jersey State Capital Investment Strategy work to assist with appropriate reporting regarding NHS highway and bridge performance and condition. For the National Freight Program/State Freight Plan, the task will, as appropriate, assist with identifying appropriate freight movement performance measures and targets (in conjunction with Task 17/401). And for the Highway Safety Improvement Program (HSIP), this task will, as appropriate, assist with identifying appropriate safety performance measures and targets (in conjunction with Task 17/401).

This task will also continue to develop performance reports that meet other agency needs. Agency needs may include reports, dashboards, or other communications mechanisms on regional context and trends, and may support various NJTPA planning efforts, including but not limited to: performance monitoring, strategy evaluation, freight planning, regional long-range planning/RTP, environmental justice analysis, and scenario planning.

Performance measures reports will provide information regarding the progress of the region in terms of the selected measures and, where established, regional targets. Based on the performance measures reports, recommendations will be developed (as appropriate) regarding adjustments to goals and objectives or capital investment levels.

Importantly, the content for performance measure reports may draw significantly from other tasks (e.g., the Congestion Management Process, Air Quality Conformity Determination analysis, Asset Management, and Freight Planning). However, this task will concentrate on ensuring measure consistency and that each element contributes to the overall integrity of the NJTPA's performance-based planning and programming process. Internal and partner coordination will be an important part of this task, either in new venues or building on existing outreach efforts for related products such as the RTP or the Highway Safety Improvement Program (HSIP).

In tandem with the performance target setting process, consideration of transportation funding availability and allocation will be essential. The Regional Capital Investment Strategy (RCIS) is the NJTPA's established policy document regarding funding allocation priorities, underpinning the Regional Transportation Plan and Transportation Improvement Program. The NJTPA will work with partners in this task to update the RCIS, reflecting current spending levels and investment priorities. The RCIS update will focus on the impacts of various investment scenarios

#### 17/204 PERFORMANCE MEASURES ANALYSIS, DATA, AND REPORTING (Cont.)

on key performance measures and how funding availability affects the ability to meet specific performance targets. The RCIS effort will be closely tied to ongoing RTP development within Task 17/301, capital programming activities in Task 17/501, and coordination with partner agency Asset Management systems.

During FY 2015, the NJTPA completed the Regional Household Travel Survey (RHTS) project in partnership with NYMTC. During FY 2013 and 2014, the NJTPA conducted the Trans-Hudson Bus and Trans-Hudson Ferry surveys in partnership with NJ TRANSIT and the Port Authority of New York and New Jersey. During FY 2016, NYMTC commenced data collection on a Regional Establishment Survey (including the entire NJTPA region). The datasets resulting from these efforts represent a rich source of travel characteristics and trends throughout the NJTPA region. Efforts will continue on exploring these datasets for trends and results that could help identify and evaluate the public's transportation needs. Potential applications of these survey analyses include regional modeling; performance measurement; NJTPA's congestion management process; regional, corridor, and local planning studies; environmental justice (service to low income/minority communities) analysis; and RTP efforts.

Particular attention will be paid in this task to assisting the NJTPA Board, staff, general public, and partner agencies in interpreting analytical findings. This will entail the development and use of easy-to-understand creative techniques to document and illustrate relevant data, including presentations, charts, graphics, publications, dashboards, interactive web pages, and maps (as possible, making use of and complementing visualization tools developed under task 17/102). Importantly, user-friendly analyses and presentation tools will be used in the development and communication of the Regional Transportation Plan and other planning studies as needed.

Taken together, the activities of this task demonstrate the NJTPA's continuing commitment to performance-based planning and support extensive integration of performance measures within NJTPA decision-making processes. They further assist in quantitatively and qualitatively demonstrating how NJTPA's planned and programmed investments should ultimately serve the region in meeting national, state, and regional goals.

#### **SUBTASKS INCLUDE:**

- Monitor federal performance-based planning and programming (PBPP) regulations and guidance, providing commentary as appropriate. Coordinate with partner state agencies, subregions and other stakeholders to evaluate performance measures selected by USDOT.
- Use GIS, spreadsheets, and various other tools to integrate land use and environment, demographics and housing, economic and community development, and transportation-related data.
- Collect and analyze data to calculate, track, and forecast performance measures. Research and identify emerging data sources.
- Support integration of performance measures and targets in planning, project prioritization, and development and policy.
- Continue work to update the RCIS.
- Collect and develop capabilities to apply new data, including archived operations data.
- Update Systems Planning Division website pages.
- Drawing from existing regional performance measures (MAP-21, Together North Jersey, Congestion Management Process, The Connected Corridor, Strategic Highway Safety Plan, Asset Management Model, etc.), work closely with NJTPA staff, stakeholders, and implementing partner agencies to formally identify appropriate supplemental performance measures.

### SYSTEMS PLANNING, MODELING AND DATA 17/204 PERFORMANCE MEASURES ANALYSIS, DATA, AND REPORTING (Cont.)

- Coordinate with partners on setting targets for both MAP-21 and supplemental performance measures, as appropriate.
- Research and develop techniques for forecasting regional performance indicators.
- Manage consultant effort to analyze MAP-21 performance measures, set appropriate thresholds, set regional targets, and develop reports.
- Coordinate on NYMTC Regional Establishment Survey.
- Continue analysis of various surveys (including Regional Household Travel Survey and Trans-Hudson Bus and Ferry Surveys) to support other NJTPA performance-based planning efforts, developing reports as appropriate.
- Continue to explore and develop creative ways to more effectively communicate technical analysis and performance scenario work, including dashboards, web portals, publications, and other communication materials.

#### **PRODUCTS:**

- MAP-21 and complementary performance measures, regional performance targets (coordinated with state targets), performance reports, and input to revised Metropolitan Planning Agreements (June 2017)
- Updated Regional Capital Investment Strategy (June 2017)
- Ad-hoc data analysis and System Planning website updates (ongoing)

#### **RELATIONSHIP TO PRIOR WORK:**

This task directly builds on and continues performance planning work undertaken in Tasks 16/201, 16/202, 16/204, and earlier tasks.

#### **OUTCOMES:**

This task should result in meaningful regional performance measures, targets, and reporting for use within NJTPA planning processes. Performance measures help to quantify success, empowering planners and decision-makers with information, analysis, and tools that should support better-informed decisions, helping to focusing resources wisely.

By incorporating connections that transportation to issues of environment, livable communities, quality of life, equity, and other social goals, performance measures should help evaluate the appropriateness of NJTPA's investment decisions in the context of national goals and planning priorities established for the region and of importance to member and partner agencies.

The direct outcome of this task is availability of information and analyses in the form of reports, web applications, charts, and maps by NJTPA staff, partner subregions, other agencies, stakeholders, and the public.

### SYSTEMS PLANNING, MODELING AND DATA 17/204 PERFORMANCE MEASURES ANALYSIS, DATA, AND REPORTING (Cont.)

#### **CONSULTANT ACTIVITY:**

Performance Measures Applications and Data Collection

#### **DESCRIPTION:**

This consultant effort will support NJTPA in establishing, refining, and implementing the performance-based planning provisions of MAP-21 (as they are finalized by FHWA and FTA), including analysis, target setting, and reporting for nationally established performance measures. A primary focus of this project will be meeting the emerging MAP-21 requirements for MPOs (in collaboration with the state DOT and transit agencies) to formally establish regional performance targets for specific performance measures (to be identified by USDOT in rulemakings), and report on the impacts of the TIP and RTP on meeting these targets. While USDOT has yet to identify the specific performance measures, the NJTPA anticipates that there may be additional work to appropriately adapt the MAP-21 required performance measures to the NJTPA region. Specifically, some performance measures may require the NJTPA to set localized parameters (e.g., delay and/or reliability thresholds). The consultant will assist the NJTPA in determining the implications of various localized parameter selections, and provide guidance in selecting appropriate values.

Work on adapting the MAP-21 performance measures, and setting regional targets, will require input from the subregional partners to ensure consistent and appropriate choices. Subregional feedback and recommendations will need to be supported by appropriate data (either already available or collected for the purpose), plans, and/or policy documents. Subregions will also participate in the process of target setting for selected measures. The consultant team will facilitate this subregional input.

As part of a robust performance-based planning process, the consultant will work with NJTPA and its partners to identify reasonable performance targets for the MAP-21 measures, considering foreseeable funding. (Note that in tandem with this consultant effort, the NJTPA will conduct a separate (but coordinated) effort to update the Regional Capital Investment Strategy (RCIS) to reflect current spending levels and investment priorities, focusing on the impacts of various investment scenarios on key performance measures, and how funding availability affects the ability to meet specific performance targets.)

To meet the MAP-21 performance measure reporting requirements, the consultant will assist the NJTPA with developing formats for the required performance reports. MAP-21 will require, among others: performance assessment for the RTP and TIP; a CMAQ Performance Plan assessing baseline congestion and emission levels, progress and project benefits; and performance reports to support NHPP, HSIP, Freight Plan, and other plan and program initiatives. For the NHPP reporting, this task will draw from NJDOT's and NJTPA's Asset Management Systems and New Jersey State Capital Investment Strategy work to assist with appropriate reporting regarding NHS highway and bridge performance and condition. For the National Freight Program/State Freight Plan, the task will, as appropriate, assist with identifying appropriate freight movement performance measures and targets. For the Highway Safety Improvement Program (HSIP), this task will, as appropriate, assist with identifying appropriate safety performance measures and targets.

Importantly, the content for performance measure reports may draw significantly from other tasks (e.g., Interagency Planning Collaboration, the Congestion Management Process, Air Quality Conformity Determination analysis, Asset Management, and Freight Planning). However, this task will concentrate on ensuring measure consistency and that each element contributes to the overall integrity of the NJTPA's performance-based planning and programming process. Internal and partner coordination will be an important part of this task, either in new venues or building on existing outreach efforts for related products such as the RTP or the Highway Safety Improvement Program (HSIP).

#### 17/204 PERFORMANCE MEASURES ANALYSIS, DATA, AND REPORTING (Cont.)

The FY 2014 "New Jersey Pilot Study: Testing Potential MAP-21 System Performance Measures" will provide an important foundation; associated NJDOT collaboration and the national relevance of the study are expected to continue.

#### **PRODUCTS:**

- Technical Advisory Committee
- MAP-21 performance measure calculation methods and thresholds (if needed), data requirements, collected/assembled data, and analyzed data to calculate measures
- Evaluate and establish target-setting process, and establish target for each measure
- Evaluate and establish reporting mechanisms
- Documentation/Final Report

#### STATUS:

Initiation of this consultant effort is contingent upon federal rulemaking.

### SYSTEMS PLANNING, MODELING AND DATA 17/204 PERFORMANCE MEASURES ANALYSIS, DATA, AND REPORTING (Cont.)

#### PROJECT COST:

| Task Activity  | Budget Line Item | Total FY 2017<br>Program Budget |
|--|------------------|---------------------------------|
| Performance Measures Analysis, Data and Reporting                    | Central Staff    | \$ 352,578                      |
| Performance Measures Applications and Data Collection STP-NJ funding | Consultant       | \$ 250,000                      |

#### **PROJECT MANAGER:**

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#### **PROJECT MANAGER:**

Keith Miller 973-639-8444 kmiller@njtpa.org

#### **RELATIONSHIP TO MISSION OF THE AGENCY:**

Due to the complex dynamics of transportation and related activities, computer models (ranging from demographic/employment forecasting to travel demand models) are crucial to understanding current travel patterns and anticipating future conditions. Modeling and related analytical tools serve as fundamental, comprehensive informational and technical resources to aid the Board as it creates a vision to meet transportation needs and develops a plan to fulfill that vision. By explicitly incorporating the factors that drive growth and travel demand, modeling also helps to link transportation planning with economic growth and land use and its outputs help to investigate environmental, quality of life and other goals for the region.

#### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

Providing a solid technical underpinning for decision making, modeling and forecasting strengthen the NJTPA's regional leadership position for transportation and comprehensive planning. Applying technical planning tools, including for small area analysis, leverages information technology to support regional transportation planning and addresses critical, emerging regional economic and livability issues. In addition, this task expands the use of data driven tools to inform investment decisions, and helps to apply performance measures and targets in the planning process.

#### **DESCRIPTION:**

Computer modeling is a cornerstone of transportation planning at the NJTPA. The agency maintains various types of models, including a regional travel demand model, a small area land use impact model and a regional demographic forecasting allocation model, and coordinates with NYMTC on the development and application of regional socioeconomic (demographic and employment) forecasting models. This task involves managing, applying, and enhancing transportation modeling capabilities as well as educating and promoting the use of the transportation model throughout the region (particularly with partner agencies and subregions). This task also involves coordinating with partners for the maintenance and update of demographic and employment forecasts. In addition to coordination with planning partners within the state (including NJDOT, NJ TRANSIT, NJ Office for Planning Advocacy, and NJTPA member subregions), this involves coordinating with regional planning partners (such as the Port Authority, NYMTC, DVRPC, and SJTPO) and others on maintaining consistent forecasts for the entire New York/New Jersey metropolitan area.

The NJTPA's travel demand model, the Enhanced North Jersey Regional Transportation Model (NJRTM E), was developed over time and incorporates elements from earlier NJTPA/NJDOT and NJ TRANSIT models. Previous work included validation of the model to a 2008 base year, which maintained the model as a comprehensive up to date multimodal transportation planning tool and refinement of the model to enhance its reporting on public transit trips. The NJTPA uses the regional transportation model to support the Board of Trustees decision making including providing input to activities such as:

- analysis and advancement of CMP priorities, including Strategy Evaluation and Refinement access and mobility needs and strategies (Task 17/202),

- support for the System Connectivity Study (17/202),
- support for analyses related to the Regional Capital Investment Strategy (Task 17/204),
- support for project prioritization (Task 17/501),
- modeling analyses for corridor and subregional studies (Task 17/302, 17/306),
- conformity analysis and air quality modeling (Task 17/203),
- modeling analysis for the Regional Transportation Plan (Task 17/301), and
- analysis and support for developing MAP-21 performance measures and targets (Task 17/204).

This task will include a new validation of the NJRTM-E as required for conformity purposes. The validation year must be no more than ten years prior to the conformity year, so the validation needs to be updated by the end of calendar year 2017 (to be ready for the conformity analysis performed in 2018). A variety of updates will be incorporated. New data including the 2010 census, the 2006-2010 Census Transportation Planning Package (CTPP), and the 2010-2011 Regional Household Travel Survey are available to ensure that the NJRTM-E is consistent with the most currently available data. A new Traffic Analysis Zone (TAZ) structure will result in additional changes to incorporate. To ensure consistency with NJ TRANSIT travel demand model, the programs that estimate the modes used for trip-making will be changed to use the better supported "C" programming language. Work began during FY 2016 with preliminary data collection. During FY 2017 the majority of the data collection effort will take place along with highway and transit network development. This effort involves consultant support and will continue into FY 2018.

Along with using the NJRTM E for analytical purposes, the NJTPA maintains the model in partnership with NJDOT and NJ TRANSIT. This includes hosting periodic NJRTM E Users Group meetings to discuss maintenance and usage issues among agencies in the NJTPA region and surrounding MPOs. Subregional planners and modelers participate as well.

The NJTPA continues to work with NYMTC and other regional agencies to regularly update and extend regional demographic and employment forecasts and to ensure that consistent forecasts are used for the entire NY/NJ metropolitan region. Preparation of forecasts may involve identifying alternate scenarios based on differing economic growth assumptions. In FY 2016, work for creating demographic and employment forecasts for use in the next 2017 Regional Transportation Plan (RTP) was completed. In FY 2017 additional analysis of the forecasts will occur to support the RTP efforts including possible scenario creation and testing impacts on regional performance indicators. NJTPA subregional partners will continue to be consulted during this process.

The NJTPA also adds to available transportation modeling resources as needed and feasible. Addressing emerging MAP 21 requirements will require exploring how best to calculate performance measurements using the NJRTM-E and socioeconomic models. This task will include application of current models and consideration of alternative methods as required (in coordination with Task 17/204). The NJTPA will continue to assess future modeling needs, for addressing newly emerging planning issues (e.g. the need for further economic modeling capabilities).

During FY 2016, the NJTPA completed the development of a model for estimating small area impacts of land use and development in terms of transportation, infrastructure, economic and environmental measures. This tool, called SALUIT (Small Area Land Use Impact Tool) provides the ability to visualize these impacts for broader use in planning and outreach. During FY 2017 the NJTPA will support partner agencies and subregional staff as they learn to use this new tool. As part of the effort, NJTPA and member agencies received a one-year maintenance agreement from the consultant for CommunityVIZ (the underlying software used for SALUIT), which continues into FY 2017.

#### **SUBTASKS INCLUDE:**

- Support efforts related to RTP (Plan 2045) development including scenario forecast analysis
- Coordinate with partner agencies and subregions on the best uses of the newly developed SALUIT model in the region and on using models for calculating performance measures.
- Support efforts related to MAP 21 requirements for calculating present and future performance measures.
- Coordinate with partner agencies and subregions on modeling issues, tools, application, training, documentation and other modeling needs to enable broad application as needed.

#### 17/205 TRAVEL DEMAND AND SOCIOECONOMIC MODELING AND FORECASTING (Cont.)

- Work with NJTPA subregions, NYMTC and other regional transportation agencies on the development of regional, county and municipal/TAZ-level demographic and employment forecasts as needed.
- Support efforts related to update of the Regional Capital Investment Strategy (RCIS).
- Support the NJTPA subregional studies program including the Monmouth County Transportation Model project development.
- Perform model runs and report on findings for selected issues, subarea corridors, or transportation studies as needed.

#### **PRODUCTS:**

- Model updates, analysis and reporting for efforts including: RCIS/CMP/RTP planning, performance indicator monitoring and forecasting, visualization tools, project development, corridor studies, subregional studies, and other appropriate studies as needed. Guidance on use of models for performance measures for MAP 21 and RTP related purposes. (ongoing)
- Coordination with regional agencies and subregional partners in the updating and refinement of county and TAZ level demographic and employment forecasts as needed. (ongoing)
- Management of and support for the NJRTM-E Revalidation project including creation of highway and transit networks. (ongoing)

#### **RELATIONSHIP TO PRIOR WORK:**

This task applies the travel demand model (NJRTM E) developed under Tasks 08/206 and 07/207, revalidated under Tasks 10/205 and 11/205, and refined under Task 15/205 to support analytical needs and transportation studies for the NJTPA and subregions. The NJRTM E provides the ability to do comprehensive multimodal analyses.

In addition, this task continues the small scale model efforts and NJRTM-E revalidation work begun last year under task 16/205. This task also uses forecast results and measures developed last year under Task 16/205.

#### **OUTCOMES:**

Outcomes of this task should include improved capabilities for analyzing local impacts resulting from neighborhood size development and growth scenarios along with continued model support for agency initiatives including MAP-21, RCIS, Subregional Studies and RTP efforts.

#### **CONSULTANT ACTIVITY:**

Small Area Land Use Transportation Analysis

#### **DESCRIPTION:**

The NJTPA currently uses many technical tools to provide regional transportation analyses for regional planners including the NJTPA's travel demand model (the NJRTM E), the NJTPA's demographic and employment forecast allocation model (the DEFM), and the RTP visualization tools (ViZtools). While these tools provide an excellent resource for answering broad questions related to growth and travel characteristics in the region, they are not intended to provide detailed analysis of localized issues such as the impact of a specific major development on local traffic, the comparability of alternative land use development patterns in a locale, or the local impact of transportation system enhancements which may relate to housing availability, livability or economic changes. To analyze and visualize development impacts on a smaller area (e.g., a downtown district), the NJTPA will add to the available tools to include those that provide the impacts of changes on a small area (sub traffic analysis zone) level.

To further analytical capabilities, NJTPA began a project in FY 2014 to create/customize a model for analyzing impacts of changes to local land use characteristics. This model, called the Small Area Land Use Impact Tool (SALUIT) estimates impacts such as those involving transportation (e.g., VMT changes, mode shifts), infrastructure (e.g., water supply, waste water), economic (e.g., revenue) and environmental (e.g., air quality). SALUIT was completed during the first half of FY 2016 and training was provided to NJTPA staff and interested agency staff. SALUIT was developed as an add-on to the CommunityViz software package. CommunityViz is an extension to ESRI's ArcGIS software and is maintained by Placeways LLC. CommunityViz provides the capability of analyzing and visualizing the impacts of changes to the land use of a local site. SALUIT augments CommunityViz with additional analyses developed specifically for the NJTPA region.

As part of the consultant contract, NJTPA and its subregions were provided a one-year maintenance agreement for the CommunityViz software package. This one-year agreement ends on October 2016.

This task is the continuation of a previous task started under task 14/205, continued under task 15/205 and where development work ended with task 16/205.

#### **PRODUCTS:**

• Support provided from extended CommunityViz product maintenance agreement (October 2016)

#### STATUS:

This is a continuation of a task started in FY 2014, continued during FY 2015 and FY 2016 and to be completed during FY 2017.

#### **CONSULTANT ACTIVITY:**

NJRTM-E Model Validation

#### **DESCRIPTION:**

The NJTPA uses the Enhanced North Jersey Regional Transportation Model (NJRTM E) to perform regional analyses including air quality, project oriented and scenario planning analyses. The NJRTM-E was last validated during FY 2011 using a 2008 base year. For conformity purposes, the validation year of the model must be no more than ten years from the conformity year; therefore, NJTPA will need to complete a revalidation by the end of calendar year 2017 (before the 2018 conformity analysis).

Since the last validation, data from the 2010 census, the 2006-2010 CTPP, and the 2010/11 Regional Household Travel Survey have become available and will need to be incorporated into the next model validation. By incorporating the 2010 census information, the Traffic Analysis Zone (TAZ) geometry will change which will impact all inputs and require network refinements. Also, to improve validation analysis, NJTPA will be looking toward enhancing traffic count data collection for vital roads in the regional network. With the newly available data, the new TAZ geometry and the anticipated traffic count needs, we anticipate this validation effort will require more effort and analysis than the previous effort that ended in FY 2011.

This effort began during the latter half of FY 2016 with preliminary schedule and data collection; however much of the major effort will take place during FY 2017. During FY 2017, the work expected to be completed for this project includes the following:

- most data collection, including any necessary updated traffic count data
- data adjustments necessary for incorporating the new TAZ structure.
- changes to the highway and transit networks due to changes in the TAZ structure

• replacement of the FORTRAN based mode choice programs with C-based programs developed by NJ TRANSIT to provide consistency between our two models

Calibration work will also begin during FY 2017 especially for some of the preliminary stages of the 4-step model (e.g. trip generation). Calibration and validation work will continue into the first half of FY 2018.

#### **PRODUCTS:**

- NJRTM-E data collection and completed highway and transit networks. (June 2017)
- Replacement of the FORTRAN-based mode choice programs with C-based programs developed by NJ TRANSIT (June 2017)

#### STATUS:

This is a continuation of a task started in FY 2016, continued during FY 2017 and to be completed during FY 2018.

#### PROJECT COST:

| Task Activity   | Budget Line Item | Total FY 2017<br>Program Budget |
|---|------------------|---------------------------------|
| Travel Demand and Socioeconomic Modeling and Forecasting      | Central Staff    | \$ 235,812                      |
| Small Area Land Use Transportation Analysis <i>PL funding</i> | Consultant       | \$ 52,549                       |
| NJRTM-E Model Validation<br>PL funding                        | Consultant       | \$ 350,000                      |

#### **PROJECT MANAGER:**

Bob Diogo 973-639-8409 diogo@njtpa.org

## **REGIONAL PLANNING**

### 17/301 REGIONAL TRANSPORTATION PLAN

## **RELATIONSHIP TO MISSION OF THE AGENCY:**

As the MPO for the Northern New Jersey region, the NJTPA is required to update the RTP every four years. The RTP provides transportation planning policy guidance and directs project programming for the region.

### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

Creating an RTP is a collaborative effort between Board and RTAC members, stakeholders, partner agencies, and the general public. The UPWP tasks undertaken to develop Plan 2045 - Connecting North Jersey directly supports all aspects of the NJTPA Strategic Business Plan.

### **DESCRIPTION:**

This task will focus on development of "Plan 2045 – Connecting North Jersey" as the Regional Transportation Plan (RTP) update scheduled for 2017. Plan 2045 – Connecting North Jersey will build upon and aid in implementation of the Together North Jersey (TNJ)Plan, completed in 2015. Efforts will include continuing to examine transportation issues, examining transportation funding options in New Jersey and managing interim updates and/or amendment to Plan 2040 as needed. Staff will manage a consultant effort to prepare the Financial Plan and explore transportation funding options. This task will include ongoing collaboration with a broad range of agency partners, subregions, and stakeholders to coordinate on emerging issues and to build on themes and findings of the TNJ Plan.

This task may also include white papers that may focus on integrating ITS technologies into plans and projects, effective Travel Demand Strategies in use in the region, autonomous vehicles, or on identification of strategies to integrate complete streets concepts into planning and project development.

Staff efforts will include regional coordination, cooperation and collaboration (3-C) for planning for the broader region, including coordination related to operations (in collaboration with Task 17/102, Interagency Collaboration). An example of regional 3-C for planning for the broader region includes staff participation in the Central Jersey Transportation Forum (CJTF), which is done in collaboration with the Delaware Valley Regional Planning Commission. The NJTPA Executive Director serves as a co-chair of CJTF meetings, and staff participates as a Steering Committee member, offering guidance on the agenda and analysis and coordination and other support for CJTF issues. Additionally, staff may participate in subregional and inter-agency task forces or forums.

Staff will continue to explore future needs and potential strategies for addressing future demand on the transportation network, including accessibility to key job centers such as the Port of New York and New Jersey and New York City. Central to this is the need to address Trans Hudson travel needs. This will include coordination with NJ TRANSIT, the Port Authority of NY & NJ, Amtrak, and New York Metropolitan Transportation Council and other planning and operating agencies from both New Jersey and New York. Special attention will be paid to identifying realistic strategies to address anticipated growth in demand for trans Hudson travel by mass transit.

Plan 2040 addresses all federal regulations. It contains projects, policies and programs that set the direction for investment of federal transportation funds. It is fiscally constrained and complies with all federal requirements. New federal guidance addresses MAP-21 Implementation, Models of Regional Cooperation, and Ladders of Opportunity. Staff will incorporate the new federal guidance as it develops Plan 2045 – Connecting North Jersey.

The NJTPA will continue its collaboration, both formal and informal, with federal, state, regional and local agencies as well as with other MPOs through Task 16/102, Interagency Planning Collaboration. This task will also seek early coordination on the inputs and results of major planning efforts in the region, such as the draft State Strategic Plan; NJ Energy Master Plan; neighboring MPO long range plans, and the capital planning efforts of other transportation

#### 17/301 REGIONAL TRANSPORTATION PLAN (Cont.)

agencies such as Amtrak, NJDOT, NJ TRANSIT, the Port Authority of NY and NJ, and the New Jersey Turnpike Authority. Staff will coordinate with the Office for Planning Advocacy and NJDOT in development of the NJDOT Strategic Plan, ensuring that the metropolitan planning process is a key element of aligning NJDOT operations with the State Strategic Plan. Coordination will also involve the New Jersey Highlands Council, New Jersey Meadowlands Commission and the New Jersey Pinelands Commission. Areas of coordination are anticipated to include demographics, transportation facility needs, and related land use/transportation issues.

This task will focus on development of "Plan 2045 – Connecting North Jersey" as the Regional Transportation Plan (RTP) update scheduled for 2017. Following completion of the TNJ Plan in 2015, "Plan 2045 – Connecting North Jersey" will build upon and aid in implementation of the TNJ Plan. Efforts will include continuing to examine transportation issues, examining transportation funding options in New Jersey and managing interim updates and/or amendment to Plan 2040 as needed. Staff will manage a consultant effort to prepare the Financial Plan and explore transportation funding options. This task will include ongoing collaboration with a broad range of agency partners, subregions, and stakeholders to coordinate on emerging issues and to build on themes and findings of the TNJ Plan.

This task may also include white papers that may focus on integrating ITS technologies into plans and projects, effective Travel Demand Strategies in use in the region, autonomous vehicles, or on identification of strategies to better integrate complete streets concepts into planning and project development.

Staff efforts will include regional coordination, cooperation and collaboration (3-C) for incident management for transportation system resiliency, and planning for the broader region. An example of regional 3-C for planning for the broader region includes staff participation in the Central Jersey Transportation Forum (CJTF), which is done in collaboration with the Delaware Valley Regional Planning Commission. The NJTPA Executive Director serves as a co-chair of CJTF meetings, and staff participates as a Steering Committee member, offering guidance on the agenda and analysis and coordination and other support for CJTF issues. Additionally, staff may participate in subregional and inter-agency task forces or forums.

New federal guidance addresses MAP-21 Implementation, Models of Regional Cooperation, and Ladders of Opportunity. Staff will incorporate the new federal guidance as it develops "Plan 2045 – Connecting North Jersey." Implicit in this task, staff will continue to explore future needs and potential strategies for addressing future demand on the transportation network, including accessibility to key job centers such as the Port of New York and New Jersey and New York City. Central to this is the need to address Trans Hudson travel needs. This will include coordination with NJ TRANSIT, the Port Authority of NY & NJ, Amtrak, and New York Metropolitan Transportation Council and other planning and operating agencies from both New Jersey and New York. Special attention will be paid to identifying realistic strategies to address anticipated growth in demand for trans Hudson travel by mass transit.

The NJTPA will continue its collaboration, both formal and informal, with federal, state, regional and local agencies as well as with other MPOs through Task 17/102, Interagency Planning Collaboration. This task will also seek early coordination on the inputs and results of major planning efforts in the region, such as the draft State Strategic Plan; NJ Energy Master Plan; neighboring MPO long range plans, and the capital planning efforts of other transportation agencies such as Amtrak, NJDOT, NJ TRANSIT, the Port Authority of NY and NJ, and the New Jersey Turnpike Authority. Staff will coordinate with the Office for Planning Advocacy and NJDOT in development of the NJDOT Strategic Plan, ensuring that the metropolitan planning process is a key element of aligning NJDOT operations with the State Strategic Plan. Coordination will also involve the New Jersey Highlands Council, New Jersey Meadowlands Commission and the New Jersey Pinelands Commission. Areas of coordination are anticipated to include demographics, transportation facility needs, and related land use/transportation issues.

# REGIONAL PLANNING 17/301 REGIONAL TRANSPORTATION PLAN (Cont.)

# **SUBTASKS INCLUDE:**

- Prepare and present Plan 2040 modifications and amendments to the Board of Trustees for consideration of adoption, as needed.
- Develop of elements of Plan 2045 Connecting North Jersey, including synthesis of recommendations from studies undertaken by NJTPA, subregions, and partnering agencies. Conduct data gathering and data analysis efforts, in coordination with Task 17/204, Data Analysis and Forecasting, NJDOT, NJ TRANSIT, and others. Prepare white papers on current transportation issues. (Ongoing through June, 2017).
- Coordinate plans and planning efforts so that the RTP and other agencies' plans in the region (in coordination with the 16/102 Interagency Planning Collaboration) share assumptions and consistent methodologies to the extent possible. This includes, but is not limited to, county and municipal plans, partner agency capital plans, the proposed State Strategic Plan, and state agency strategic plans.
- Direct and manage a consultant effort to develop the Financial Plan for Plan 2045 Connecting North Jersey.
- Participate in inter-agency and regional planning and collaboration to address broad and emerging planning issues such as Trans Hudson rail capacity.

# PRODUCTS:

- Participation in inter-agency and stakeholder coordination to integrate the TNJ Plan into the RTP, and to address emerging issues such as inter-regional planning, such as through the Central Jersey Transportation Forum or to identify strategies to address anticipated growth in demand for trans Hudson travel. This will include coordination with NJ TRANSIT, the Port Authority of NY & NJ, and other public and private entities.
- Update website information as needed.
- Development of elements of Plan 2045 Connecting North Jersey that includes synthesis of recommendations from studies undertaken by NJTPA, subregions, and partnering agencies. Integrate the relevant TNJ Plan components and conduct data gathering and analysis for Plan 2045 Connecting North Jersey (Ongoing through June, 2017).
- Direction and managemement of a consultant effort to prepare the Financial Plan for Plan 2045 Connecting North Jersey.

# **RELATIONSHIP TO PRIOR WORK:**

NJTPA is required to develope an updated RTP every four years. Plan 2040, the most recent RTP, was adopted in September 2013. Staff and consultant efforts in the FY 2017 UPWP will build on the completed TNJ Plan and develop Plan 2045 - Connecting North Jersey scheduled for 2017.

# **OUTCOMES:**

Plan 2045 – Connecting North Jersey is developed through a collaborative inclusive effort that addresses regional and local goals and that meets all federal requirements.

# REGIONAL PLANNING 17/301 REGIONAL TRANSPORTATION PLAN (Cont.)

# **CONSULTANT ACTIVITY:**

Financial Element for Plan 2045

# **DESCRIPTION:**

A fiscally constrained financial plan that identifies reasonably anticipated resources and expenses is a required and central element of the Regional Transportation Plan. The financial plan will include reasonably expected sources of revenue and anticipated capital and operating expenses in compliance with federal requirements. It will be developed in collaboration with New Jersey operating agencies and the Port Authority of New York and New Jersey.

The financial plan will build upon and utilize scenario planning efforts conducted for Plan 2045 as appropriate. Scenarios developed as part of this consultant supported effort will build upon scenarios from the Together North Jersey (TNJ) plan. The scenarios will include different levels of funding and transportation investment to demonstrate how these funding and investment levels would iadvance the Regional Transportation Plan's goals and objectives. The kinds of investments made as well as the varying levels of investment intensity will be explored, to the extent possible, with a focus on advancing sustainability and resiliency, as well as maintiaining multi-modal transportation systems in a state of good repair. System operational needs and opportunities will also be considered.

In addition, in recent years, there has been increased interest on the federal and state level in exploring innovative financing options for transportation investments, including the feasibility of public private partnerships. This effort will prepare the financial plan for Plan 2045 – Connecting North Jersey, and evaluate potential innovative transportation funding sources for the NJTPA region in support of the financial plan. The examination of innovative funding options will include an examination of potential revenue sources, using case studies and examples from around the country and internationally; an estimated level of effort for implementation; order of magnitude potential revenues that could be realized; and close coordination with other MPOs, NJDOT, NJ TRANSIT, PANYNJ, New Jersey Turnpike Authority, and other authorities and stakeholders.

# **PRODUCTS:**

- A fiscally constrained financial plan for Plan 2045 Connecting North Jersey that is compliant with federal requirements and includes analysis of transportation funding options.
- Scenarios for the Regional Transportation Plan.

# STATUS:

This is a new, one year consultant effort anticipated to begin in FY 2017.

# REGIONAL PLANNING 17/301 REGIONAL TRANSPORTATION PLAN (Cont.)

# PROJECT COST:

| Task Activity  | Budget Line Item | Total FY 2017<br>Program Budget |
|--|------------------|---------------------------------|
| Regional Transportation Plan                             | Central Staff    | \$ 387,566                      |
| Financial Element for Plan 2045<br>PL and STP-NJ funding | Consultant       | \$ 375,000                      |

# **PROJECT MANAGER:**

Lois Goldman 973-639-8413 lgoldman@njtpa.org

# **PROJECT MANAGER:**

Doug Greenfeld 973-639-8434 dgreenfeld@njtpa.org

## **RELATIONSHIP TO MISSION OF THE AGENCY:**

Corridor and sub-area studies enable the NJTPA to provide leadership in regional transportation planning and investment decision making. Each study identifies needs, explores possible solutions(within the framework of the planning phase), and identifies potential policies and projects that may be advanced towards implementation.

### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

Support of and cooperation in corridor studies across the region meets the NJTPA Strategic Business Plan goals of "Facilitating Growth" in a sustainable manner while "Communicating the NJTPA" to project stakeholders and the general public.

### **DESCRIPTION:**

This task uses needs and strategies identified in the Regional Transportation Plan (RTP) and strategies and actions identified in the Together North Jersey Plan (TNJ Plan), as well as related regional needs assessment work that identifies regional systemic needs as a guide for advancing specific corridor and sub-area studies. The purpose of these studies is to define and to clarify specific transportation and transportation-related needs and opportunities that can lead to targeted policies and transportation investments consistent with the state and federal emphasis areas and RTP, TNJ Plan, and Regional Capital Investment Strategy (RCIS) goals. Studies are selected from prioritized transportation issues and needs identified in the RTP and from coordination with subregional and agency planning partners. Stakeholder and general public involvement is an integral part of these studies.

During the course of the year, specific corridors and/or sub-areas will be selected for study. Emanating from the RTP, the areas to be studied represent regional access and mobility needs that require focused planning and needs assessment work. This effort will help to fulfill a range of goals and objectives at the MPO, federal and state levels, including those identified in NJTPA's RTP, the proposed State Strategic Plan, the TNJ Plan, or other regional or subregional planning efforts; those that address the National Goal Areas outlined in MAP-21, including safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays. In addition, this task addresses numerous NJDOT transportation planning priorities for MPOs for FY 2017, including the following: a focus on local safety planning efforts particularly relating to intersections, lane departures and pedestrians traffic; improve traffic operations through Intelligent Transportation System (ITS) upgrades and enhanced coordination; pursuit low-cost operational improvements at intersections, interchanges, and identified bottlenecks as a congestion relief strategy; pursuit of Transportation Demand Management (TDM) to help maximize the efficiency of the existing transportation system from the demand side, encouraging greater use of alternatives to single occupant vehicles as a congestion relief strategy; maximize opportunities for Complete Streets implementation; supporting greater coordination with other MPOS, NIDOT transit agencies, TMAs and subregions in mobility and land use planning; working with NIDOT and other partners on risk management strategies for improving the resilience of transportation infrastructure against the impacts of extreme weather; and engagement with the public to strengthen public confidence and participation in the planning process through the use of web tools/technology, social media, outreach, education and public forums/meetings. This task also explores the use of technology in the planning process, and expanded use of management systems and data driven tools to inform investment decisions.

This task also provides for work associated with the further refinement of recommendations and concepts emanating from ongoing or completed corridor and sub-area studies, as well as Local Government Capacity Grant program and Local Demonstration Project studies conducted in support of the TNJ Plan. To promote study results that can be advanced into appropriate project pipelines, staff will work with planning partners so that recommendations are presented in a format and in sufficient detail to be "handed off" for further consideration by appropriate

## 17/302 CORRIDOR STUDIES AND PROJECT PLANNING (Cont.)

implementation agencies. One key aspect of this is coordination with the Systems Planning Division on the development and implementation of PRIME and coordination with the Capital Programming and Project Development Division on the NJTPA Study and Development program. PRIME is an innovative methodology for documenting, cataloging, and tracking recommendations resulting from NJTPA sponsored corridor studies, studies completed through the Subregional Studies Program (17/305), and studies completed by partner agencies.

This effort involves the management of transportation planning and needs assessment work. This includes addressing highway, transit and non-motorized travel needs. The purpose of this process is to conduct planning studies and needs assessments that will lead to the identification of potential project concepts and policy recommendations for advancement into an appropriate project development pipeline. This task will provide for NJTPA Central Staff management of internal and consultant project teams, coordination with modal operating agencies, and the conduct of public and community outreach and the overall administration of the program. This task also coordinates with corridor studies that impact the borders of the NJTPA region or are addressing needs and issues important to the greater metropolitan region. Staff will work with other MPOs, partner agencies, and other divisions within the NJTPA to coordinate other planning and implementation efforts.

This task benefits from input and technical support from Tasks 17/102, Interagency Planning Collaboration, 76/201, Performance-Based Planning – Process Integration, 17/401, Freight Planning and Coordination, 17/503, Local Capital Project Delivery Program, 17/601, Public Outreach as well as Volume II Subregional Transportation Planning (STP) Program and Volume IV Transportation Management Association (TMA) Program.

More information on NJTPA corridor studies and sub-area studies can be found on the Corridor Planning page on the NJTPA website at: http://www.njtpa.org/Planning/Regional-Studies/Studies.aspx.

#### **SUBTASKS INCLUDE:**

- Work with other NJTPA divisions, NJTPA member subregions and partner agencies to advance plan recommendations into an appropriate project development pipeline. This includes coordination with the Systems Planning Division on the development and implementation of PRIME and coordination with the Capital Programming and Project Development Division on the NJTPA Study and Development program (ongoing through June 2017).
- Select, guide, and manage corridor and subarea studies that address regional needs.
- Coordinate with other MPOs, partner agencies, and stakeholders on issues and studies at the corridor and subarea level that impact the broader region beyond the NJTPA region.
- Selection, management, participation in, development of documents, and/or coordination with technical corridor or sub-area studies led by NJTPA, NJTPA-member subregions, or other partner agencies initiated during the current or a previous fiscal year program.

#### **PRODUCTS:**

- Management, coordination and/or participation in new corridor and sub-area and related studies sponsored and/or jointly managed by NJTPA and initiated during the current year FY 2017 program. (Ongoing through June 2017).
- Management, coordination and/or participation in corridor and sub-area and related studies sponsored and/or jointly managed by NJTPA and initiated during a previous year's program and continued into FY 2017. (Ongoing

## 17/302 CORRIDOR STUDIES AND PROJECT PLANNING (Cont.)

through June 2017).

- Participation in and/or coordination with technical studies sponsored, managed and or led by NJ TRANSIT, New Jersey Department of Transportation, the Port Authority of New York and New Jersey and other agencies as appropriate. (Ongoing through June 2017).
- Update of information on the NJTPA website relating to this task. (Ongoing through June 2017).
- Advancement of plan recommendations into an appropriate project pipeline, including coordination of implementation of PRIME and on the development of the NJTPA Study and Development program. (Ongoing through June 2017).
- Planning, coordination, preparation and/or development of documents for anticipated future studies. (Ongoing through June 2017).

#### **RELATIONSHIP TO PRIOR WORK:**

Products produced through this task build upon the priorities established in the RTP, the TNJ Plan, and previously completed planning studies. Extensive internal and external coordination strengthens the NJTPA's leadership role in directing transportation investment in the region and integrating the NJTPA's work with partner agencies.

#### **OUTCOMES:**

Recommendations resulting from corridor and sub-area studies that can be advanced to project implementation.

### **CONSULTANT ACTIVITY:**

Morris Canal Greenway Corridor Study

#### **DESCRIPTION:**

The purpose of the Morris Canal Greenway Corridor study is to build upon efforts developed through the Morris Canal Working Group, which is a stakeholder group comprised of local, county, state, and federal governmental representatives, as well as stakeholders from the non-profit and private sectors. This study will identify opportunities and challenges related to creating a continuous greenway, to the greatest extent possible, stretching along the 102 mile Morris Canal Greenway corridor from Phillipsburg to Jersey City. The effort will include a robust outreach process, of (in coordination with the Morris Canal Working Group), inventory and mapping of existing Morris Canal Greenway segments, identification of physical and institutional challenges and opportunities, and the development of a strategic action plan for connecting existing sections into a continuous greenway. Short-term and long-term alignments will be identified. Potential funding options, order of magnitude costs, and implementing agencies will also be identified.

This study will advance the findings of two recent NJTPA sponsored Subregional Studies (Warren County and the Jersey City), as well as a study by Passaic County that was funded by the subregion, in support of creation of a greenway. In addition, this effort builds upon and supports multiple efforts by subregions, municipalities, state agencies and non-profit organizations to promote preservation of the Morris Canal, including the creation of Greenway segments and interpretive parks (such as those in Passaic County) and other activities. Connectivity to other regional greenways will be explored, in addition to opportunities for linking greenway development with local economic development and heritage tourism.

### **PRODUCTS:**

• Develop a strategic action plan for a continuous Morris Canal Greenway, with short-term and long-term

## 17/302 CORRIDOR STUDIES AND PROJECT PLANNING (Cont.)

alignments, and including recommendations related to funding options, stakeholder engagement, and an inventory of existing Morris Canal Greenway segments and planned greenway segments.

• Updated GIS layer(s) for the historic alignment of the Morris Canal and ancillary features.

#### STATUS:

This is a continuation of an 18 month effort anticipated to be initiated in FY 2016.

# CONSULTANT ACTIVITY:

Assessment of Bicycle and Pedestrian Accessibility at Selected Transit Stations

# **DESCRIPTION:**

The Assessment of Bike and Pedestrian Accessibility at Selected Transit Stations Study is a joint effort with NJ TRANSIT. Initiated in FY 2015, the study seeks to expand upon a 2012 NJ TRANSIT pilot project that developed a bicycle and pedestrian design tool for all NJ TRANSIT rail, bus and light rail facilities. The study will include an inventory of existing conditions surrounding the station, the quality of access for cyclists and pedestrians, and will develop a set of recommendations for improving access in the future. The recommendations will include potential improvements that could be implemented over time as other improvements in the area are being planned. Stations will be selected throughout the region based on identified need and focus on the same principles as depicted in NJDOT's Complete Streets Policy.

This effort builds upon work piloted by NJ TRANSIT in FY2012 and FY 2013, which assessed bicycle and pedestrian opportunities and constraints at three stations in Monmouth County. Key benefits of bicycle and pedestrian accessibility are a reduction in parking demand and congestion at transit stations, improved air quality, and improved mobility for transit users of all ages and abilities, including those who do not drive.

# **PRODUCTS:**

• An assessment of bicycle and pedestrian accessibility for a minimum of six (6) rail, light-rail or bus stations in the NJTPA region.

## STATUS:

This consultant effort is anticipated to be initiated in FY 2016 and continue into FY 2017.

# **CONSULTANT ACTIVITY:**

Inventory and Assessment of Waterborne Transportation Resources

# **DESCRIPTION:**

The NJTPA will conduct an inventory and assessment of waterborne transportation-related facilities and potential uses along the region's eastern shoreline, as well as its inland navigable waterways. This assessment will attempt to identify waterborne transportation potential based on an inventory of existing infrastructure, land and water access, and availability of, or opportunities for, parking.

This work will utilize (as well as complement) efforts by other agencies, including, but not limited to the Port Authority of New York & New Jersey, NJDOT, NJ TRANSIT, the U.S. Army Corps of Engineers, as well as the Systems Planning and Freight Planning Divisions at the NJTPA. This assessment will aid in the future plans for improving transportation capacities, capabilities, and network redundancy in the region.

NJTPA staff and consultants will reach out to key public and private stakeholders to gain a better understanding of existing conditions and needs of the region's waterborne transportation infrastructure. The inventory of these assets will include mapping, a database of assets, and lists of key stakeholders and other entities that can facilitate implementation of improvements. The assessment will include a list critical facility improvements needed to maintain existing waterborne transportation services as well as opportunities for strategic investment to increase capacity of these and other marine-related services.

Opportunity sites identified by function through the study process may include passenger, freight, and vessel support activities. Potential sites will undergo a screening process including an environmental scan, access to highways and rail, access by water (given limiting entry/departure criteria), ownership, remediation status if applicable and any noted or anticipated community concerns. Locations identified will be listed in a matrix form as to functionality, ranked for type of maritime use- passenger and freight, repair facilities, or as hubs for multiple functions.

# **PRODUCTS:**

• An inventory and assessment of waterborne transportation facilities in the region that includes mapped databases and points of contact for pursuing potential future opportunities for new or expanded waterborne transit.

# STATUS:

This consultant effort initiated in FY 2016 and is scheduled to be completed in FY 2017.

# **CONSULTANT ACTIVITY:**

Route 9 Corridor Study

# **DESCRIPTION:**

U.S. Route 9 between Lakewood and Toms River in Ocean County is a critical north south state highway corridor that also serves as an important parallel facility to the Garden State Parkway. Due to significant growth and land use development that has occurred over the years, the roadway today consistently experiences high levels of traffic congestion. This segment of the highway has been included in Plan 2040.

This study evaluates current and future traffic levels and operating issues between mileposts 94.8 (just south of CR 571) in Toms River Township and 101.7 (NJ 88) in Lakewood Township in a manner consistent with the federal Congestion Management Process (CMP) and builds upon a Smart Growth and Mobility Study completed by NJDOT in 2009. The critical element of this study is an Access Management Plan developed in coordination with NJDOT, Ocean County, and the two townships, pursuant to the State Highway Access Management Act. Through the use of engineering based traffic and safety assessments and possible use of roadway simulation models, the study also seeks to identify appropriate facility based alternative improvements capable of reducing roadway congestion within the corridor. The study is examining opportunities for increasing transit vehicle speeds and improving safety and convenience for pedestrians and bicyclists pursuant to Complete Streets principles. The study is estimated to take 9 – 12 months and will identify alternative improvements to the widening of the highway that could be recommended for advancement.

# **PRODUCTS:**

• A corridor study that examines current and future traffic levels, identifies transportation improvement alternatives to help reduce traffic congestion, and develops an Access Management Plan for the U.S. Route 9 corridor in Lakewood and Toms River Townships.

# STATUS:

This is a continuation of a consultant supported project initiated in FY 2015, which is expected to be completed in late FY 2016 or early FY 2017.

# **CONSULTANT ACTIVITY:**

Planning and Needs Assessment Studies

## **DESCRIPTION:**

Consultant support will be commissioned to conduct transportation and transportation-related planning and needs assessment studies for selected highway, transit, freight, and non-motorized corridors and subareas. The purpose of this activity is to assess corridor or sub-area specific accessibility and mobility needs, issues, and opportunities, including refinement of those identified in the Regional Transportation Plan and Together North Jersey Plan, leading to policy and potential project concepts that can be advanced through the appropriate project development pipeline at the NJDOT, NJ TRANSIT, or other entities. Study candidates can be strategies identified through previous studies and catalogued through efforts outlined under Task 16/201, Performance-Based Planning Accessibility/Congestion Management Process (CMP) or needs that emerge through emergency management and response efforts or other emerging needs. Findings will be brought into the PRIME tool being developed under Task 17/201.

Corridor/subarea studies have a public involvement component that will likely involve the establishment of an advisory committee or task force and close coordination with subregions. Typical corridor/sub-area studies will include the following or similar components including: early community/public involvement; data collection and analysis of current and projected physical deficiencies; identification of structural, environmental and safety conditions; and an assessment of multi modal conditions and services, needs, and enhancement opportunities. Corridor/sub-area studies also include an examination and a focus on integrating smart growth initiatives; consideration of land use and growth management; and needs assessment. Corridor studies/sub-area studies to be performed will be selected during the course of the year by the NJTPA Board of Trustees, through its committees. Asset management analysis and other analysis consistent with the requirements of the NJDOT pipeline process will be included in studies that result in concepts that could advance through the NJDOT project pipeline.

This task may also provide for the further refinements of transit improvement recommendations and concepts emanating from bus, bus rapid transit, and rail studies that have been concluded. This refinement may include additional analysis of physical needs; environmental or other constraints; capital and operating funding needs and potential funding sources; phasing; and more detailed market analysis. Land use recommendations to maximize walking, bicycling and transit ridership potential over time can also be advanced as part of this work in support of the Together North Jersey Plan.

# **PRODUCTS:**

• Completed corridor studies/sub-area and related studies that identify specific needs and include policy and potential project concepts that can be advanced through the appropriate project development pipeline. Full documentation of the technical work conducted will be included in a report that will facilitate the next phase of policy or project advancement. Concepts that may address highway, transit or non-motorized needs. Further refinements of recommendations and concepts emanating from transit studies may be produced.

### **STATUS:**

This annual ongoing component of the UPWP addresses emerging needs determined by the Board of Trustees.

# **CONSULTANT ACTIVITY:**

Bus Transit Signal Priority

# **DESCRIPTION:**

The purpose of this study is to identify potential opportunities for implementing transit signal priority (TSP) along defined transit corridors, based on existing transit services. This effort will be conducted jointly with NJ TRANSIT. It will focus on corridors with frequent bus service and/or multiple bus routes. The study will seek to identify signalized locations where TSP would be beneficial and feasible. The benefits of TSP implementation at recommended locations, such as travel time savings and lower operating costs, will be quantified, as will the costs of implementing TSP and site specific challenges will be identified. This effort will benefit from close coordination with NJDOT, county and other road departments and roadway owners.

As appropriate, this effort will also identify opportunities for additional transit enhancements such as bus pull outs, bus shelters, striping, or other improvements to support better service operations and customer convenience. This effort advances the findings of a study of Bus Rapid Transit (BRT) opportunities in the region that was completed in FY2014, and other studies, and provides guidance for recently completed BRT opportunity studies completed under the Subregional Studies Program.

# **PRODUCTS:**

• Recommendations for Transit Signal Priorities along selected high frequency transit corridors. (June 2017).

## STATUS:

This is a continuation of a two year effort anticipated to be initiated in FY 2016.

# CONSULTANT ACTIVITY:

Jersey City Coastal Flood Adaptation Benefit-Cost Analysis and Implementation Strategy

# **DESCRIPTION:**

The purpose of this activity is to prepare a comprehensive benefit-cost analysis of priority coastal flooding adaptation strategies in Jersey City, which will inform decision makers on how to focus resources and target funding opportunities. The goal of this study is to prepare a benefit-cost analysis for a select number of highest priority flood adaptation measures. During Superstorm Sandy, coastal storm surge on waterfronts on both sides of Jersey City resulted in millions of dollars in damage to property and local and regional transportation infrastructure, destroying homes, interrupting economic activity, and, ultimately, diverting resources to the long and costly recovery process.

This study advances the findings and recommendations of two related studies that were completed in 2015: "Collaborative Design and Dynamic Modeling for Urban Coastal Flood Adaptation" funded by the National Oceanic and Atmospheric Administration and conducted by The New Jersey Institute of Technology and the City of Jersey City, and "Visualizations of Adaptation Scenarios and Next Steps White Paper" funded by Together North Jersey and conducted by the City of Jersey City and the NJTPA. These studies identified and examined a number of measures, many of which utilize and protect transportation infrastructure and other assets.

The methodology for this study shall include the prioritization of potential coastal flooding adaptation measures identified by the previously completed studies, identification of potential funding sources for advancement of priority flood adaptation measures and data collection and analysis that support preparation of a benefit-cost analysis. In order to build consensus, this study shall involve robust stakeholder participation. Outreach efforts associated with prior work began a public dialogue on how to mitigate coastal flooding caused by storm surge, and this study will continue that conversation.

This study will be conducted in partnership with the NJTPA Planning for Emerging Centers (PEC)Program conducted under task 17/308. The PEC Program promotes the critical relationship between land use and transportation planning, as well as seeks to promote projects that create connections between sustainable land use patterns and multi-modal transportation opportunities. Through this program, the NJTPA provides consultant and staff technical support to municipalities to conduct land use or redevelopment planning, zoning, and other regulatory initiatives to support transit- and pedestrian-oriented development. The PEC program includes collaboration with NJ TRANSIT, NJDOT, NJIT, and other planning partners.

# **PRODUCTS:**

- A report on data collection, prioritization, benefit-cost analyses, implementation strategy, and potential funding sources for potential coastal flooding adaptation measures in Jersey City.
- Robust stakeholder participation in the prioritization process.

# STATUS:

This is a new 18 month effort, to be initiated in FY 2017.

# PROJECT COST:

|  |                  | Total FY 2017            |
|--|------------------|--------------------------|
| Task Activity  | Budget Line Item | Program Budget           |
| Corridor Studies and Project Planning  | Central Staff    | \$ 231,720               |
|  |                  | <b>*</b> • • • • • • • • |
| Morris Canal Greenway Corridor Study   | Consultant       | \$ 300,000               |
| STP-NJ funding   |                  |                          |
| Assessment of Bicycle and Pedestrian Accessibility at Selected Transit Stations        | Consultant       | \$ 150,000               |
| STP-NJ funding   |                  |                          |
| Inventory and Assessment of Waterborne Transportation Resources                        | Consultant       | \$ 200,000               |
| PL funding   |                  |                          |
| Route 9 Corridor Study   | Consultant       | \$ 324,647               |
| PL funding   |                  |                          |
| Planning and Needs Assessment Studies  | Consultant       | \$ 250,000               |
| PL and STP-NJ funding  |                  |                          |
| Bus Transit Signal Priority  | Consultant       | \$ 300,000               |
| PL and CMAQ funding  |                  |                          |
| Jersey City Coastal Flood Adaptation Benefit-Cost Analysis and Implementation Strategy | Consultant       | \$ 300,000               |
| PL funding   |                  |                          |

# **PROJECT MANAGER:**

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## **RELATIONSHIP TO MISSION OF THE AGENCY:**

Achieving a significant reduction in traffic fatalities and serious injuries on all public roads is one of seven goals outlined in the national transportation funding legislation, MAP-21 (Moving Ahead for Progress in the 21st Century Act). NJDOT is committed to meeting the requirements outlined in the Act and is partnering with the MPOs to operate, maintain and improve a safe, efficient and reliable multi-modal transportation network that leverages the agency's Safety First Initiative with a particular focus on hazardous locations (i.e., intersections) and pedestrian safety. The NJTPA, through its Regional Capital Investment Strategy, has made investment in safety a priority. The agency has demonstrated its leadership in planning and programming new safety improvements that address the most pressing safety needs in the region based on crash data analysis. This task will continue to build upon the gains made in addressing safety throughout the NJTPA region, as well as seek to identify new opportunities to advance safety using the four E's (education, enforcement, engineering, and emergency services). Partnerships are key to this task as the NJTPA looks to strengthen its long-term relationship with the NJDOT, NJDHTS, neighboring MPOs, TMAs, and academic, enforcement, and local planning and safety partners to successfully implement infrastructure projects and outreach initiatives that reduce crashes and injuries and save lives.

## LINK TO NJTPA STRATEGIC BUSINESS PLAN:

Safety planning supports the goals articulated in the NJTPA Strategic Business Plan by strengthening the agency's relationship with key partners (i.e., NJDOT, NJDHTS, Rutgers, TMAs) and identifying new opportunities for collaboration with a broader range of organizations (i.e. public health, law enforcement, community-based agencies). The task raises public awareness of the NJTPA and helps to position the MPO as a leader in safety through participation at statewide and regional forums, workshops and meetings as well as outreach initiatives that engage Board members in promoting the agency's commitment to safety. It employs performance measures to assess the NJTPA Local Safety Program and Pedestrian Safety Education Campaign, monitors and evaluates new and emerging issues impacting roadway safety to foster innovation, and leverages the four Es (engineering, education, enforcement, and emergency services) of traffic safety to ensure long-term success and sustainability.

### **DESCRIPTION:**

This task responds to the safety goal outlined in MAP-21 to significantly reduce traffic fatalities and serious injuries on all public roads. The intent is also to address infrastructure condition and system reliability. This task furthers more than a decade of leadership at the NJTPA in improving safety for all roadway users in its 13-county region. It will also address personal safety issues through a consultant supported effort to conduct Crime Prevention Through Environmental Design (CPTED) workshops.

A comprehensive statewide Strategic Highway Safety Plan (SHSP) was adopted by NJDOT in September 2015 and includes a "Towards Zero Deaths" emphasis. NJTPA acted as project manager for the plan. The NJTPA continue to identify and address safety issues through a data-driven safety planning process, in keeping with the emphasis areas and strategies in the SHSP. Addressing multi-modal travel safety needs may result in location specific or systemic infrastructure improvements, educational and enforcement efforts, and/or advancement of studies or projects to meet those needs.

The SHSP identified strategies and tactics that are cost-effective and research-based. For FY 2017, NJTPA will continue to coordinate with enforcement, education and emergency services and operations management personnel, in addition to the "traditional" MPO partners (i.e., NJDOT, NJ TRANSIT, NJDHTS), all of whom were critical partners in developing the plan. NJTPA will undertake a regional comprehensive safety plan, implementing a recommendation of the SHSP. The regional plan will identify hot spot locations for the ten SHSP emphasis areas on local roads. This will enable county planners and engineers to make infrastructure improvements and to conduct education as well as

### 17/303 SAFETY PLANNING (Cont.)

enforcement programs to address the most pressing safety needs. The ten SHSP emphasis areas are Lane Departures; Intersections; Drowsy and Distracted Drivers; Aggressive Drivers; Bicycles and Pedestrians; Older Drivers; Impaired Drivers; Teen Drivers; Unbelted Vehicle Occupants; and Motorcycles.

Under this task, the NJTPA will complete the implementation and evaluation of a phase II of NJTPA's Street Smart NJ pedestrian safety education and enforcement campaign. The goal of the plan is to change pedestrian and motorist behaviors resulting in a reduction in pedestrian crashes, injuries and fatalities. The phase I campaign, implemented in FY2014 and FY2015, was refined and expanded in FY2016. Street Smart NJ expands upon the four "E's" of traffic safety by focusing on the education and enforcement components of safety planning. Emphasis was also given to combining engineering with education by incorporating the Street Smart NJ campaign into the NJTPA's Local Safety Program (LSP) (see Task 17/504). This task also supports continued staff engagement with any community that wants to conduct a Street Smart NJ education campaign.

Key efforts during FY2017 will include coordination on a data driven approach in regards to performance measures and assistance with the candidate improvement selection processes. This provides support to the administration of the Local Safety Program (LSP), High Risk Rural Roads Program (HRRRP), Local Preliminary Enginnering program, Transportation Alternatives, and Safe Routes to School Program (Task 17/504, Local Safety and Asset Management and 17/506, Transportation Alternatives and Safe Routes to School Programs). Central to this task is review and analysis of critical safety issues identified through collaborative safety planning and research.

In addition, building off Together North Jersey efforts, and in coordination with Task 17/308, Livable Communities Planning, and as piloted in the City of Paterson's Local Government Capacity Grant, a consultant effort will identify opportunities for advancing initiatives that combine Crime Prevention Through Environmental Design (CPTED) and Data Driven Approaches to Crime and Traffic Safety (DDACTS). Activities will include building interagency partnerships and coordination efforts, and coordinating educational opportunities on these approaches such as information workshops or outreach materials.

For more information on NJTPA's safety initiatives visit: http://www.njtpa.org/Planning/Regional-Studies/Safety.aspx

#### **SUBTASKS INCLUDE:**

- Provide planning support for the federally funded NJTPA Local Safety and High Risk Rural Roads Programs, as well as the Safe Routes to School and Transportation Alternatives Program, and other programs to advance safety.
- Support continued implementation of countermeasures and programs to advance MPO and partner agency identified safety priorities. This includes recommendations from previous and ongoing safety planning studies and programs including the Pedestrian Safety at and Near Bus Stops study and Street Smart NJ.
- Coordinate with state agencies, subregions, and others on safety data development and analysis issues, including those outlined in the state's Comprehensive Strategic Highway Safety Plan (CSHSP). As appropriate, encourage expanded use of Plan4Safety crash data analysis software at the regional and subregional level to help inform priority identification and decision making.
- Management of a Crime Prevention Through Community Design (CPTED) program and management of pilot consultant supported CPTED efforts.
- Initiate or participate in meetings, task forces, stakeholder groups, and with transportation agencies and subregions to address traffic safety for all roadway users with a particular focus on vulnerable populations (i.e., pedestrians, bicyclists, older drivers, new immigrants). As appropriate, initiate and participate in partnerships with

# 17/303 SAFETY PLANNING (Cont.)

non-profit organizations, TMAs and the private sector to promote traffic safety regardless of transportation mode.

## **PRODUCTS:**

- Coordination, consultation and collaboration with NJTPA planning partners, particularly subregional planners and engineers, NJDOT, FHWA, NJDHTS, NJ TRANSIT, neighboring MPOs, NJ State and local police, and the Transportation Safety Resource Center at Rutgers University to implement the strategies and goals of the statewide Comprehensive Strategic Highway Safety Plan (SHSP). Conduct and support multi-modal data-driven safety analyses and evaluations at the regional, subregional and local levels.(ongoing through June 2017).
- Guidance and technical support as requested by subregions to help implement strategies that address critical safety issues and support the SHSP.(ongoing through June 2017).
- Updates to information on the NJTPA website relating to this task (ongoing as appropriate through June 2017).
- Planning and coordination regarding safety funding programs such as the NJTPA Local Safety and High Risk Rural Roads Programs, Safe Routes to School and Transportation Alternatives Program as needed. (ongoing through June 2017).
- Completion a phase II Street Smart NJ campaign in partnership with the NJTPA board and subregions, NJDOT, NJDHTS, NJ TRANSIT, the TMAs, local safety advocates, law enforcement and other partners and ongoing support for communities using the Street Smart NJ campaign(ongoing through June 2017).
- Development and management of a Crime Prevention Through Environmental Design (CPTED) consultant activity, building interagency partnerships and coordination efforts, and developing related educational products such as information workshops or outreach materials (Ongoing through June 2017).
- HIGHLIGHTS
- BUDGET NOTES

# **RELATIONSHIP TO PRIOR WORK:**

This task builds upon the update to the 2015 Comprehensive Strategic Highway Safety Plan, Street Smart NJ pedestrian safety education campaign, FY2011 Pedestrian Safety at and Near Bus Stops Study, and other safety planning and funding efforts and supports the Local Safety and High Risk Rural Roads Programs. It continues a decade of NJTPA leadership in improving safety for all travelers.

### **OUTCOMES:**

Between 2011 and 2014, 2,158 people were killed and more than 244,000 injured in motor vehicle crashes in New Jersey. More than 60% of the fatalities occurred in the NJTPA region. Additionally, between 2011 and 2014, more than 74% of the pedestrian injuries in New Jersey occurred in the NJTPA region. These outcomes will be monitored over a multi-year horizon, with a particular emphasis on evaluating the impact of safety improvements and programs (i.e., Local Safety and High Risk Rural Roads Programs, Street Smart NJ) on reducing crashes and the resulting injuries and fatalities involving all roadway users.

## **CONSULTANT ACTIVITY:**

Pedestrian Safety Education Campaign Phase II

## **DESCRIPTION:**

Phase II of the Pedestrian Safety Education Campaign will expand upon the investments that the NJTPA and its partners have made to improve pedestrian infrastructure on local, county and state roads. By focusing on the educational and enforcement components of the four "E's" (engineering, education, enforcement, and emergency services) of traffic safety, attention will be given to addressing unsafe behaviors (speeding, failure to stop for pedestrians in crosswalk as prescribed by law, jaywalking, walking against the signal) that account for nearly 90 percent of motor vehicle crashes. Crash data analysis shows that engineering improvements alone will not reduce the incidence of pedestrian injuries and fatalities. Sustained education, coupled with enforcement, has proven over time to be highly effective in changing behaviors that result in a safety gain.

In FY2014 and FY2015, the NJTPA piloted the Street Smart NJ public education, awareness and behavioral change campaign in five geographically and demographically diverse communities in November 2013, summer of 2014, and October 2014. Based on crash data and demographic analysis, four key tips/laws were identified that, if followed, could significantly reduce the number of pedestrian-motor vehicle crashes in the pilot communities. These tips/laws correlate to existing traffic signage -- speed limit and stop signs, traffic signals and crosswalks. The campaign calls upon motorists and pedestrians to "check your vital signs" by paying attention and adhering to these posted signs, which will make travel safer for all roadway users.

The campaign used advertising (transit, outdoor and social media) and grassroots public awareness to convey this message to the target demographic. The campaign message also included a reminder that police are enforcing pedestrian laws for the safety of all roadway users with a focus not only on issuing citations, but educating roadway users. Police agencies in the pilot communities conducted details at crash hot spots that focused on motorists adhering to New Jersey's stop for pedestrians in the crosswalk law and pedestrians who jaywalk. Police officers also addressed speeding, illegal turns and distracted and inattentive driving and walking, which contribute to pedestrian-motor vehicle crashes.

The campaign also included an evaluation component with two approaches to measure the performance of the November 2013 campaign in Hackettstown, Jersey City, Newark, and Woodbridge. As observational evaluation, using video cameras, was conducted at four key intersections in the pilot communities to identify specific proxy behaviors (both safe and unsafe) that impact pedestrian safety and the campaign's impact on those behaviors. Pre- and post-surveys were used to measure awareness and attitudes among drivers and pedestrians, as well as recognition of the Street Smart NJ campaign, message and graphic images. Both the observational and on-line evaluation showed overall positive results in regards to awareness of the campaign, the pedestrian safety message, and improvements in pedestrian and motorist behaviors at the key hot spot pedestrian intersections included in the observational evaluation.

Based on the success of the first phase of the campaign, Phase II of Street Smart NJ will build upon what was learned during the initial pilot and evaluation of the campaign in the five communities. The consultant will work with the NJTPA and its partners -- FHWA, NJDOT and NJDHTS -- to refine and retool, as necessary, the campaign message and materials, and outreach and enforcement tactics. The consultant will also work with the NJTPA to identify new and diverse pilot communities within its region to expand the campaign's reach. These new communities, along with the original five, will build upon what was learned to educate and engage more pedestrians and motorists in the NJTPA region, with a goal of preventing crashes and saving lives. Phase II will also include working with NJDHTS to encourage its grantees who are addressing pedestrian safety to adopt the campaign message and tactics broadening the

phase II reach even more.

Emphasis will also be given to combining engineering with education by incorporating the Street Smart NJ campaign into the NJTPA's Local Safety Program (LSP). The LSP takes a data-driven approach to identifying and addressing local roadways with high incidence of crashes, including those involving pedestrians. Opportunities exist, following completion of pedestrian safety infrastructure improvements, to promote the campaign safety messages through signage and other grassroots outreach tactics at those locations, and to increase enforcement of pedestrian safety laws.

Evaluation will again be conducted in the new pilot sites to assess the campaign's impact on pedestrian and motorist behavior and awareness of the effort. The consultant will be tasked with reviewing the evaluation tools and refining them, as needed, to ensure consistency with the Phase I research.

### **PRODUCTS:**

- Complete implementation and evaluation of phase II of the pedestrian safety education campaign.
- Develop social media and collateral materials, as well as maintain a stand alone website, in support of the campaign.
- HIGHLIGHTS
- STATUS

### STATUS:

This is a continuation of the Pedestrian Safety Education Campaign initiated FY 2016, which is expected to be completed FY 2017.

# **CONSULTANT ACTIVITY:**

Crime Prevention Through Environmental Design Pilot

# **DESCRIPTION:**

As part of Together North Jersey's (TNJ) Local Government Capacity Grant (LGCG) Program, the city of Paterson was awarded a grant to undertake a Crime Prevention Through Environmental Design (CPTED) audit project. The focus of this was to assemble and train community stakeholder teams to develop and carry forward a program to reduce opportunities for criminal behavior using CPTED principles. During the project period, the NJTPA also coordinated with the Paterson Police Department to attend a National Highway and Traffic Safety Administration (NHTSA) training session on Data Driven Approaches to Crime and Traffic Safety (DDACTS) training workshop. This NHTSA initiative uses data to identify traffic safety checkpoint locations where crash hotspots overlap with high crime rates. Building off the Regional Plan for Sustainable Development (RPSD) project, this effort will identify opportunities for advancing initiatives that combine CPTED and DDACTS to strategically merge resources to improve crime and traffic safety conditions in select communities.

Activities will include building interagency partnerships and coordination efforts, and developing related educational products such as information workshops or outreach materials. The CPTED planning approach begins with outreach, training and coordinating community teams to apply principles of access control, surveillance, maintenance, and territoriality to help reduce opportunities for crime at the local level.

# **PRODUCTS:**

- Identification of pilot CPTED locations within selected municipalities, outreach to identify and train community stakeholder teams, training and facilitation of CPTED teams to audit, analyze and identify solutions for target locations, and production of a report with recommendations from the CPTED audit.
- HIGHLIGHTS
- STATUS

# **STATUS:**

This is a new one year effort.

# **CONSULTANT ACTIVITY:**

NJTPA Regional Safety Plan

# **DESCRIPTION:**

An updated statewide Strategic Highway Safety Plan (SHSP) was approved by NJDOT in September, 2015. This plan, for which NJTPA provided project management support, identifies safety emphasis areas and recommends infrastructure, education, enforcement, and emergency services countermeasures. The ten SHSP emphasis areas are Lane Departures; Intersections; Drowsy and Distracted Drivers; Aggressive Drivers; Bicycles and Pedestrians; Older Drivers; Impaired Drivers; Teen Drivers; Unbelted Vehicle Occupants; and Motorcycles.

The consultant effort will implement a recommended strategy in the SHSP, which is to develop county level safety plans that use the emphasis areas and strategies in the SHSP. This effort will conduct data analysis (using Plan4Safety, a data analysis tool maintained by the Transportation Safety Resource Center at Rutgers University) to identify hot spot locations on local roads for crashes in the SHSP emphasis areas. It will also conduct stakeholder outreach in each county to discuss safety concerns that may not arise strictly from data analysis, but are emerging as concerns for the county. Stakeholders will include county planners and engineers, Transportation Management Associations, and non-profit safety advocates.

## **PRODUCTS:**

• A safety plan for the NJTPA region that builds on the emphasis areas and strategies in the statewide Strategic Highway Safety Plan and identifies safety needs on local roads.

## STATUS:

This effort is anticipated to be initiated in FY 2016 and continue into FY 2017.

# PROJECT COST:

| Task Activity   | Budget Line Item | Total FY 2017<br>Program Budget |
|---|------------------|---------------------------------|
| Safety Planning   | Central Staff    | \$ 237,173                      |
| Pedestrian Safety Education Campaign Phase II<br>STP-NJ funding | Consultant       | \$ 500,000                      |
| Crime Prevention Through Environmental Design Pilot             | Consultant       | \$ 200,000                      |
| PL funding  |                  |                                 |
| NJTPA Regional Safety Plan                                      | Consultant       | \$ 300,000                      |
| STP-NJ funding  |                  |                                 |

# **PROJECT MANAGER:**

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### 17/304 SUBREGIONAL TRANSPORTATION PLANNING

### **RELATIONSHIP TO MISSION OF THE AGENCY:**

The Subregional Transportation Planning (STP) program provides federal funding assistance to member subregions to carry out specific transportation planning activities that advance the implementation of the RTP and help fulfill the NJTPA's vision for northern New Jersey. These programs explicitly link transportation planning to safety and security, sustainability, livability, economic development, environmental protection, and growth management goals for the region.

### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

This task increases visibility and effectiveness at the subregional level; strengthens relationships with planning partners; expands the NJTPA's mission to advance critical, emerging regional issues; engages Board members and raises public awareness. The Subregional Transportation Program supports member county and city planners and engineers so that they are an effective technical resource for the Board.

#### **DESCRIPTION:**

This task provides for administration of the federally funded subregional pass-through

program. Providing direction and funding to the 15 subregions of the NJTPA helps gain the support, commitment and expertise necessary to accomplish the NJTPA's regional goals. The Subregional Transportation Planning (STP) program calls upon each subregion to carry out essential transportation planning, programming and administrative activities that support the goals and objectives of the Regional Transportation Plan, the Together North Jersey Plan (TNJ Plan) and the regional metropolitan transportation planning process. The STP program also addresses federal and state emphasis areas.

The FY 2017 STP Program includes the mandatory core program in which all NJTPA subregions participate. All 15 subregions develop and carry out individualized work programs while conducting basic core activities. The total STP Program budget for FY 2017 is allocated among the 15 subregions using a population driven formula.

The format of the FY 2017 STP program consists of two main tasks: Program Administration and Transportation Planning and Coordination. Administration includes all activities required to manage the program and is limited to ten percent of the total budget. The Transportation Planning and Coordination task includes three subtasks: Supporting the NJTPA's Regional Planning Process; Integration of public participation in the 3-C planning process; and assisting in the development of the Transportation Capital Program (TCP) and the Transportation Improvement Program (TIP). Within the Transportation Planning and Coordination task all subregions participate in the three core tasks as well as select elective activities that are both of high importance to their subregions and support the metropolitan planning process.

In FY 2017, the STP Program will focus on implementation of the Strategic Business Plan and implementation of the Together North Jersey Plan (TNJ Plan), as well as respond to MAP-21 Guidance and FHWA and NJDOT emphasis areas. In response to MAP-21 guidance, the STP Program will incorporate MAP-21 Implementation, Regional Models of Cooperation, and Ladders of Opportunity. Central staff will work with the subregions to streamline reporting functions and to enhance reporting as needed to meet revised federal guidance related to performance measurement and in keeping with 2 CFR 200 (also known as the OMB Super Circular). In addition to support provided for subregional staff, the Subregional Support Program also provides each subregion with funding for interns, technology or individual training to support the guidelines and intent of the STP program.

## 17/304 SUBREGIONAL TRANSPORTATION PLANNING (Cont.)

Further information about the STP program can be accessed online by clicking on the link for Volume II at http://www.njtpa.org/Planning/UPWP.aspx.

### **SUBTASKS INCLUDE:**

- Support subregions in planning activities to address the priorities and policies of the Regional Transportation Plan and the TNJ Plan. The specifics of the subregional planning activities are found in Volume II of the UPWP. Review, summarize and approve progress reports on technical work conducted by the subregions that are submitted on a quarterly basis.
- Encourage and assist subregions to participate in the Subregional Support Program. In collaboration with other NJTPA divisions, review Technology Library, Internship, Subregional Training, and Public Outreach Foreign Language Translation requests.
- Conduct outreach to subregions on a requested or as needed basis, seeking to forge a stronger working relationship between central staff and subregional staff. For example, central staff may conduct site visits to each subregion to monitor the program and identify issues. Such visits may involve staff from several NJTPA divisions.
- Update program solicitation guidelines, manage program solicitation process, and review submissions for the FY 2018 STP program.

### **PRODUCTS:**

- Management of the FY 2017 STP UPWP program (Volume II of the UPWP) including updating program solicitation guidelines, managing the solicitation process, and reviewing, summarizing and approving quarterly reports from subregions. Provide guidance to subregions and participate in subregional site visits as needed to identify issues and explore solutions and provide additional subregional collaboration as requested (ongoing through June 2017).
- Facilitation of subregional participation in the Subregional Support Program for FY 2017. (ongoing through June 2017).
- Updated information on the NJTPA website related to this task (ongoing through June 2017).

### **RELATIONSHIP TO PRIOR WORK:**

This task is ongoing.

### **OUTCOMES:**

Outcomes for this program include outreach meetings by subregions to support NJTPA planning activities (such as the development of Plan 2045 -- Connecting North Jersey) technical support provided by each subregion to its Trustee (such as issue briefings) and to central staff (such as data updates and participation on technical advisory committees for regional planning work efforts); and specific actions that advance regionally important issues. The Subregional Support Program outcomes are the number of subregional staff trained in new programs, processes or techniques; efficiency gains resulting from the purchase of information technology software; intern work products; and improved outreach as a result of foreign language translation.

# REGIONAL PLANNING 17/304 SUBREGIONAL TRANSPORTATION PLANNING (Cont.)

# CONSULTANT ACTIVITY:

Subregional Support Program

# **DESCRIPTION:**

NJTPA provides the support to subregions in regionally significant transportation planning work that furthers the goals and objectives of the Subregional Transportation Planning Program (STP, Task 17/304) and Subregional Studies Program (SSP, Task 17/305). The Subregional Support Program is an elective program consisting of five distinct components: the Technology Library; the Internship Program; Subregional Training; Public Outreach Language Translations; and Reproduction of Subregional Study Reports. All subregions are encouraged to take advantage of this program.

The Technology Library provides subregions with the technical resources needed to create regionally significant products for use in regional transportation planning. The Internship Program was developed to support subregional efforts on a short-term basis; it also provides a valuable training opportunity for planning students in New Jersey. Subregional Training allows for individual training that supports the goals of the subregional transportation planning program. Public Outreach Foreign Language Translations provides support to the subregion's public outreach and involvement efforts in regionally significant planning initiatives, where required. Requests for funding for the Reproduction of Subregional Study Reports supports the continued use of older but still relevant planning study results.

The Subregional Support Program is structured to allow greater flexibility to the subregions in the use of these funds to support regional planning. Funds for the Technology Library, Internship Program, Subregional Training and Public Outreach Foreign Language Translations, and Reproduction of Subregional Study Reports are merged into one pool, which can be applied for by the subregions for support that meets individual subregional needs.

Further information about the program can be accessed online by clicking on the link for Volume II at http://www.njtpa.org/Planning/UPWP.aspx.

# **PRODUCTS:**

• A proposed work plan that includes, as applicable, a list of technology resources to be procured, a summary of work to be performed by interns along with products to be completed, individual staff training to be conducted, and/or public outreach language translations to be completed throughout FY 2017.

### STATUS:

This is an ongoing effort.

# REGIONAL PLANNING 17/304 SUBREGIONAL TRANSPORTATION PLANNING (Cont.)

# PROJECT COST:

| <b>Task Activity</b><br>Subregional Transportation Planning, Central Staff Program<br>Activities | <b>Budget Line Item</b><br>Central Staff | Total FY 2017<br>Program Budget<br>\$ 399,594 |
|--|--|---|
| Subregional Support Program<br>PL <i>funding</i>   | Contractual                              | \$ 225,000                                    |

# **PROJECT MANAGER:**

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# REGIONAL PLANNING 17/305 SUBREGIONAL STUDIES PROGRAM

## **RELATIONSHIP TO MISSION OF THE AGENCY:**

The Subregional Studies Program provides technical and financial assistance to subregions through collaborative planning activities that lead to the advancement of projects that address needs, issues and strategies identified in the RTP. These studies explicitly link transportation planning to safety and security, livability, sustainability, economic development, environmental protection, and growth management goals for the region, as described in the NJTPA's mission statement.

## LINK TO NJTPA STRATEGIC BUSINESS PLAN:

The Subregional Studies Program plays an important role in implementing the NJTPA Strategic Business Plan. It expands the NJTPA's mission to address critical, emerging regional issues, strengthens the agency's regional leadership position for transportation and comprehensive planning, links plans with economic development, environment and quality of life, involves legislators and public policymakers, establishes stakeholder committees to increase public awareness of regional planning issues, engages Board members, improves the visibility and effectiveness of the NJTPA at the subregional level, and builds relationships with new partners.

### **DESCRIPTION:**

The Subregional Studies Program (SSP) is a critical element of the NJTPA's continuous, cooperative, and comprehensive (3C) metropolitan planning process. Products developed through this program address issues of significance to the entire region and must be consistent with plans at the state and regional level. The purpose of the SSP is to provide technical and financial assistance to subregions and subregional teams, on a competitive basis, to produce studies of important regional mobility and accessibility issues. These studies produce recommendations consistent with the Regional Transportation Plan (RTP) and the goals of the Together North Jersey Plan (TNJ Plan). Studies conducted through this program refine goals and strategies developed through the metropolitan transportation planning process and are reflected in the RTP and the federally-mandated Congestion Management Process (CMP). These studies should be data driven, involve a transparent and accessible feedback loop with stakeholders and the public, involve implementation agencies at the municipal, regional, and state level, and include an analysis of existing and future conditions that can lead to the identification of potential transportation and/or transportation-related solutions for a particular system or study area.

Studies proposed through this program focus on issues of importance to, or that impact, transportation and land use issues that currently, or have the potential to, impact critical transportation network within a county or beyond the borders of a specific county or municipality. Subregions are encouraged to propose studies that complement other planning and strategy development work in the NJTPA region. Proposals that aim to address a perceived problem should include a transparent, rational course of action for gathering and analyzing data and drawing conclusions from that analysis, including the potential that critical analysis of the perceived problem may result in a finding that an assumed operational or asset deficiency may not exist as originally predicted. Issues proposed to be addressed through SSP studies should be quantifiable; current problems should be reflected by recent and ongoing data-gathering, such as NJDOT asset management systems or alignment to the NJTPA and project sponsors to track the implementation and success of plan recommendations. Studies should provide and capitalize upon opportunities to develop and strengthen relationships between municipalities, counties, and regional and state agencies that lead to coordinated land use planning and transportation project implementation.

Studies approved under this program must be performed within a two year period, with an 18 month maximum duration of consultant support effort. SSP studies precede the Concept Development Phase and the Preliminary Engineering phase of the Transportation Improvement Program (TIP). Study recommendations should be developed

## 17/305 SUBREGIONAL STUDIES PROGRAM (Cont.)

to a level where they may advance to implementation phases involving appropriate implementing agencies (such as NJDOT, NJ TRANSIT, TMAs, subregions, or municipalities). Recommendations that require further development, or that require additional review through the National Environmental Policy Act (NEPA) may be eligible to graduate to the Concept Development stage.

Previous studies undertaken under this task have developed Transportation Master Plans; specific corridor studies to address multi-modal needs; and developed Complete Streets guidance, among other issues addressed. Subregional studies have also developed local travel demand models, such as the one recently developed in Ocean County (during the FY 2014-2015 cycle) and under development in Monmouth County (during the FY 2016-2017 cycle), both of which account for seasonal travel in these shore counties.

Starting in FY 2014, the Subregional Studies Program became an annual solicitation, while remaining on a two year project cycle. Studies are solicited annually so that cycles overlap. Only NJTPA-member subregions are eligible to serve as the project lead and submit proposals through this program. Proposals can be submitted by subregions individually, or as joint lead with another subregion. Non-member municipalities may partner with a member subregion on a project, but may not serve as a project lead.

NJTPA staff continues to update project intake procedures, eligible activities, and solicitation requirements to meet emerging needs, such as federal emphasis on MAP-21 Implementation, Ladders of Opportunity, and Models of Regional Cooperation. Staff will continue to refine project management guidelines and requirements to facilitate efficient and effective use of federal transportation funds and staff will work internally and with subregional and partner agencies under Task 17/302, Corridor Studies and Project Planning, to identify opportunities through to implement plans and recommendations generated through this program and to work to develop recommendations that can be tracked through the PRIME program, being developed under Task 17/201, Performance Based Planning -Process Integration.

The funding available under this solicitation will be made available through a U.S. Department of Transportation (US DOT) pass-through grant, utilizing Federal Highway Administration (FHWA) funds and/or flexed Federal Transit Administration (FTA) funds (CFDA number is 20.205). In order to be eligible for this program, participants must provide at least a 20% local match. The local match can include in-kind staff time and/or cash.

#### **SUBTASKS INCLUDE:**

- Manage and coordinate the FY 2017 FY 2018 cycle of SSP studies, including, but not limited to: tracking progress and budget, participating in technical advisory committees, reviewing and commenting on written products and other deliverables, interagency coordination, approving interim deliverables and final products and providing ongoing technical assistance to guide the progress of studies.
- Conduct a solicitation for the FY 2018 FY 2019 cycle of SSP studies, including coordinating a proposal selection committee that conducts a technical review, scoring study proposals, and recommending studies for inclusion in the FY 2018 UPWP Volume III.
- Add or update information on the NJTPA website relating to this program. Assist in the preparation of a summary of completed studies publication.
- Manage and direct the overall program, including the development, update, and implementation of guidelines, procedures, and requirements, as needed, as well as scheduling and conducting program coordination meetings.
- Manage and coordinate the FY 2016 FY 2017 cycle of SSP studies, including, but not limited to: tracking progress and budget, participating in technical advisory committees, reviewing and commenting on written

## 17/305 SUBREGIONAL STUDIES PROGRAM (Cont.)

products and other deliverables, interagency coordination, approving interim deliverables and final products and providing ongoing technical assistance to guide the progress of studies.

### **PRODUCTS:**

- Conduct the FY 2018 FY 2019 program solicitation, including coordinating a proposal selection committee, scoring study proposals, and presenting recommendation of studies for inclusion in the FY 2018 UPWP, Volume III. (Ongoing through December 2016)
- Updated information on the NJTPA website relating to this task, including development of summary information on completed studies for the website or for a stand-alone publication.(Ongoing through June 2017)
- Management and coordination of the FY 2016 FY 2017 cycle of SSP studies, including, but not limited to the following: tracking progress and budget, participation in technical advisory committees, review and comment on written products, compilation of quarterly reports, interagency coordination, approval of interim deliverables and final products and ongoing technical assistance to guide the progress of studies. (Ongoing through June 2017)
- Management and coordination of the FY 2017 FY 2018 cycle of SSP studies, including, but not limited to the following: tracking progress and budget, participation in technical advisory committees, review and comment on written products, compilation of quarterly reports, interagency coordination, approval of interim deliverables and final products and ongoing technical assistance to guide the progress of studies. (Ongoing through June, 2017)

### **RELATIONSHIP TO PRIOR WORK:**

This is an ongoing task of the NJTPA, which addresses regional needs and strategies included in the current RTP at the subregional level. This program is intended to conduct studies that will identify additional needs and opportunities, and potential concepts and policies that can be delivered to the implementing agencies for advancement.

#### **OUTCOMES:**

Regional transportation issues are evaluated and solutions recommended through studies conducted collaboratively by NJTPA and subregional staff.

#### **PROJECT COST:**

Task Activity Subregional Studies Program, Central Staff Program Activities Total FY 2017Budget Line ItemProgram BudgetCentral Staff\$ 205,988

#### **PROJECT MANAGER:**

Blythe Eaman 973-735-6356 beaman@njtpa.org

# REGIONAL PLANNING 17/306 MOBILITY PROGRAMS

# **RELATIONSHIP TO MISSION OF THE AGENCY:**

Management of Transportation Management Associations (TMAs) and planning for specialized transportation is related to the NJTPA's mission of creating a vision for improved mobility, developing a plan for transportation improvement and management to fulfill that vision, and demonstrates the linking of the transportation plan to quality of life goals for the region.

## LINK TO NJTPA STRATEGIC BUSINESS PLAN:

Management of the TMAs and mobility planning links to the strategic business plan with economic growth, environmental stewardship, and quality of life; expands and advances the vision for improved mobility in the region; and expands the NJTPA's mission to address critical emerging regional issues. One important element of this is working with the TMAs to expand mobility choices such as carpool and shuttle options, particularly during unanticipated emergencies or during scheduled construction or special events. This work also strengthens the NJTPA's leadership position for transportation and comprehensive planning and raises public awareness of the organization's mission and purpose as improving mobility options has an immediate positive impact on residents, commuters, and businesses in the region.

### **DESCRIPTION:**

This task addresses the Regional Transportation Plan's (RTP) policy guidance and the statewide Congestion Management Process (CMP) direction to reduce air pollution and increase regional mobility options through Travel Demand Management (TDM) strategies, and to increase mobility options for low income, elderly, and disabled residents. These objectives are accomplished through NJTPA management, guidance, and oversight of the Transportation Management Association (TMA) work programs and through coordination and participation in state and federal programs that fund human services transportation programs. The NJTPA has been managing and supervising all eight federally funded New Jersey TMA programs since FY 2012. The NJTPA has oversight for the development of annual work programs and coordination of activities among the TMAs, the subregions, NJ TRANSIT, NJDOT and other partners involved in regional mobility.

The actions undertaken in this task are guided by several documents and policies. The federal emphasis on Ladders of Opportunity, Models of Regional Coordination, and MAP-21 Implementation and Performance Measures are integral to the TMA related and other activities accomplished under this task. The RTP sets the vision for a coordinated, intermodal regional transportation system over the next 25 years and serves as an investment guide for the region. The CMP is implemented in the NJTPA region through a data driven analysis of SOV capacity increasing alternatives. Statewide policy exists to guide TDM investment. The NJTPA Transportation Clean Air Measures (TCAM) study, completed in FY 2006, defines and recommends air quality beneficial and livability strategies in the region, which are being advanced by TMAs and other transportation agencies. The Regional Coordinated Human Services Transportation Plan (CHSTP), which incorporates the goals of United We Ride (a federal initiative), promotes mobility for special populations by recommending decreasing service fragmentation and duplication and increasing simplicity and usability.

This task provides funding for continued critical work by TMAs to increase mobility options to SOV travel for the region's commuting public, particularly in areas under-served by public transportation. The FY 2017 TMA Work Program consists of two parts, the Core and Supplemental programs areas. The TMA Work Program's Core program area is consistent with previous years' work program. It consists of the required Goal Area Activities of Accessibility, Economic Development, and Reliability; and the encouraged Goal Area Activities of Environmental and Safety, which are optional but strongly encouraged. Supplemental funding was first made available to the TMAs in FY 2015 to provide additional services and participation in the Environmental and Safety goal areas and is included in TMA

#### 17/306 MOBILITY PROGRAMS (Cont.)

budget for FY 2017. This supplemental funding provides for new and expanded environmental and safety activities beyond those to be undertaken under the encouraged Core program goal area activities. An additional optional supplemental task to support the conduct of the "Be Street Smart NJ" pedestrian safety education program is also included. This pilot program will provide the TMAs with additional funding specifically for this NJTPA pedestrian safety education program. See Task 17/303 for additional information or visit http://bestreetsmartnj.org/.

The management and supervision of the TMAs will include the development and monitoring of MAP-21 compliant performance measures (as promulgated in 2 CFR 200, the combined "super" circular), which will serve to evaluate the effectiveness of TDM-related strategies implemented by the TMAs. This task will be done in coordination with Task 17/201 (Performance Based Planning) and Task 17/702 (Grants and Contract Administration).

The TMAs work closely with employers and residents and offer ride sharing match services, vanpool programs, and information on other single-occupancy vehicle (SOV) reducing commuting options. They also assist communities and schools in promoting walking and biking and other air quality beneficial activities. A continuing element of the TMA work programs from FY 2016 (detailed in Volume IV of the FY 2017 UPWP) is an emphasis on developing Ladders of Opportunity. The TMAs may accomplish this by identifying and promoting access to jobs, job training, and basic services for people who are transportation disadvantaged.

There are eight TMAs in New Jersey. Six are completely in the NJTPA region, while one (Greater Mercer TMA) is in both the DVRPC and NJTPA regions, and one (Cross County Connections) is in both the DVRPC and SJTPO regions. In order to maintain statewide consistency and program efficiency, the NJTPA provides program management and oversight for all eight TMAs in close coordination with other MPOs as appropriate. In addition, a TMA Working Group, (comprised of MPO staff, TMA staff, subregional staff, and representatives of NJDOT and NJ TRANSIT) meets on a biannual basis and provides a forum for exploring issues related to TMA activities, including greater participation with the CMP, inter-agency collaboration, and operational efficiencies where possible. Staff will continue to coordinate with the Information Technology department on the implementation of improvements to the ridematching system that the TMAs use to implement the statewide ridematching program.

This task will also include oversight of, and coordination with, the Transportation Management Association's (TMAs) pedestrian and bicycle safety initiatives and safety initiatives related to construction mitigation activities. The TMAs provide critical pedestrian and bicycle education programs, working with towns, school districts and employers. They have been instrumental in the successful application for and implementation of many Safe Routes to School grants.

A consultant supported effort to investigate park and ride opportunities in the region is also included in this task. This study will evaluate non-rail related park and ride needs, particularly in heavily traveled bus corridors. This study will involve close coordination with the TMAs, NJ TRANSIT, and NJDOT, as well as private bus carriers.

The NJTPA will also complete the update to the regional Coordinated Human Services Transportation Plan (CHSTP) in FY2017. The study, with consultant and TMA support, will update the vision for comprehensive and coordinated delivery of services for specialized transportation for elderly, disabled and low income residents that would otherwise lack access to jobs and other necessary services in urban, suburban, and rural areas.

In coordination with NJ TRANSIT, this task will also continue to select and promote transportation services for the elderly and people with developmental and physical disabilities as well as low income residents. NJTPA staff serves on proposal review committees for the 5310 Program, which provides capital and operating funds for the purchase of

## 17/306 MOBILITY PROGRAMS (Cont.)

vehicles, operation of services, or provision of mobility management services; and NJ-JARC (Job Access and Reverse Commute), which provides operating funds for services that provide access to jobs that not accessible by existing transit services.

This task includes the CMAQ Funded Local Mobility Initiatives (LMI) program. The LMI program is part of a joint effort with Systems Planning's Transportation Clean Air Measures(TCAM) program (Task 17/203). The purpose of this competitive program is to advance readily implementable and innovative projects and services that improve air quality and reduce congestion in the NJTPA's air quality maintenance and non-attainment areas. The LMI program provides both captial and operating support for shuttle services, while the TCAM program supports a range of air quality beneficial strategies. The program offers operating funds for new or expanded services, or capital support (as vehicle replacement) for existing successful services. Shuttle services supported by this program (operational or capital) are intended to develop financially sustainable and innovative services, reduce single occupancy vehicle trips and congestion, improve air quality, and encourage and increase transit use. All applications should adopt best practices to help applicants develop strong proposals. The program, administered by NJ TRANSIT, provides funds for three operating years that may be utilized for up to five years from the commencement of operations.

These tasks and activities will all be communicated to the public through updates to the NJTPA website, as appropriate.

http://www.njtpa.org/Project-Programs/Mobility-Programs.aspx

### **SUBTASKS INCLUDE:**

- In coordination with NJ TRANSIT, participate in proposal selection and guidance for human services transportation programs.
- Direction and management of a consultant effort to conduct a Park and Ride Lot Assessment and Planning study.
- Direction and management of a consultant and TMA supported effort to update the Regional Coordination Human Services Transportation Plan (CHSTP). Begin planning, development, and implementation of the Coordinated Human Services Transportation Plan, including optimization of the transportation services visualization tool.
- Development of a joint CMAQ Funded Local Mobility Initiatives and Transportation Clean Air Measures program.
- Program management and oversight of the TMAs, including review of monthly invoices and quarterly reports, solicitation for and approval of work programs, development and monitoring of TDM-related MAP-21 compliant performance measures, coordination of TMA and regional and subregional planning and activities as appropriate, coordination with the Information Technology department on rideshare system implementation, attendance at TMA boards and other TMA-related meetings, and other day to day tasks to ensure the efficient operation of the TMAs. (Ongoing).

## PRODUCTS:

• Program management and oversight of the TMAs, including review of monthly invoices and quarterly reports, solicitation for and approval of work programs, development and monitoring of TDM-related MAP-21 compliant performance measures, coordination of TMA and regional and subregional planning and activities as appropriate, coordination with the Information Technology department on rideshare system implementation,

### 17/306 MOBILITY PROGRAMS (Cont.)

attendance at TMA boards and other TMA-related meetings, and other day to day tasks to ensure the efficient operation of the TMAs. (June, 2017).

- Management and completion of a consultant effort to update the regional Coordinated Human Services Transportation Plan. Participation in interagency coordination to promote effective coordination of services (June, 2017).
- Participate in funding efforts for NJ-JARC, 5310, and other human services transportation programs in coordination with NJ TRANSIT. Monitoring of approved and operating CMAQ funded and human services transportation services (Ongoing through June, 2017).
- Update website information related to this task (Ongoing through June, 2017).
- Development of a joint CMAQ Funded Local Mobility Initiatives and Transportation Clean Air Measures program. (June, 2017)
- Direction and management of a consultant supported effort to investigate shared services (park and ride) opportunities (June 2017).

### **RELATIONSHIP TO PRIOR WORK:**

This task builds on past activities including working with the TMAs and NJDOT on the TMA Work Program and TCAMs, the 2008 Coordinated Human Services Transportation Plan, and mobility grant programs.

#### **OUTCOMES:**

Outcomes resulting from oversight of the TMA program will be enhanced coordination between the TMAs, Subregions, and the NJTPA; sustained participation region-wide in pedestrian and bicycle education and encouragement activities (such as Walk to School Days); and provision of other services to reduce congestion and improve air quality and livability in the region.

Outcomes resulting from the management of the update to the Regional Coordinated Human Services Transportation Plan and the accompanying visualization tool will be an increased emphasis on existing and emerging issues related to special transportation, and a long term reduction in duplication of services and gaps in service.

# REGIONAL PLANNING 17/306 MOBILITY PROGRAMS (Cont.)

# **CONSULTANT ACTIVITY:**

Update to the Regional Coordinated Human Services Transportation Plan

# **DESCRIPTION:**

This task updates the regional Coordinated Human Services Plan, incorporating current State and Federal policy and legislation. This effort will develop a mechanism to reduce duplication and to maximize coordination between providers of special transportation. This policy update and coordination mechanism will ensure that resources in the region are used efficiently to offer mobility choices for people with disabilities, low income residents, and the elderly. This effort was initiated in FY 2016 and addresses the "Ladders of Opportunity" FHWA emphasis area.

The regional CHSTP update includes of a review of county Human Services Transportation Plans and policies and involves extensive outreach with human services transportation providers, such as local and county human services providers, the TMAs, and organizations serving disadvantaged or "Environmental Justice" communities. The TMAs are helping to facilitate extensive outreach and are contributing to the development of data and tools to advance service coordination. The updated plan will contain updated information and will propose a framework for sharing data and information about services available. This may be done through a database or using GIS applications that are easily maintained as services change or as new ones begin. The mechanism for coordination will give transportation providers a method for cataloging, updating available services, and contacting other providers for the purposes of efficient coordination. This system will also enable program administrators and grant makers to ensure that resources are directed in a manner consistent with the ideals of minimal duplication and maximum coordination. The effort will be guided by a Technical Advisory Committee consisting of subregional planners, subregional paratransit providers, subregional and state department of human services staff, and staff from related agencies including but not limited to the TMAs, NJ TRANSIT, and NJDOT.

# **PRODUCTS:**

- An update to the Regional Coordinated Human Services Plan for northern New Jersey that contains a coordination framework for agencies and stakeholders that will guide the region in coordinating transportation services for disabled, elderly, and low income residents (June 2017).
- A mechanism for the cataloging and coordination of resources and services for transportation services for disabled, elderly, and low income residents in northern New Jersey. This may be in the form of a map or other readily accessible database format (June 2017).

### STATUS:

This consultant and TMA supported effort initiated in FY 2016 and is expected to be completed in FY 2017.

# REGIONAL PLANNING 17/306 MOBILITY PROGRAMS (Cont.)

## **CONSULTANT ACTIVITY:**

TMA Support

## **DESCRIPTION:**

This task is to support maintenance, updates, and improvements to the ride matching system used by the Transportation Management Associations to develop car and van pools. The ridematching system will be transitioned to reside on the NJTPA server in FY 2017.

#### **PRODUCTS:**

• Maintenance, updates, and improvements to the ride matching system.

#### STATUS:

TMA Support is an ongoing function.

# REGIONAL PLANNING 17/306 MOBILITY PROGRAMS (Cont.)

## **CONSULTANT ACTIVITY:**

Parking Assessment and Planning

## **DESCRIPTION:**

This consultant activity will identify current and anticipated future demand for non-rail related park and ride facilities around the region and will identify potential sites for new or shared facilities for shared ride commuters. It will focus on identifying current and anticipated future demand for park and ride facilities around the region and will identify potential sites for new or shared facilities. This task will inventory existing facilities and will identify the various roles in planning for, building, and maintaining park and ride facilities and develop recommendations for these institutional relationships. This work will compliment any ongoing work being done by NJ TRANSIT as part of its ongoing planning for access to public transit, including parking, shuttles, pedestrian and bicycle modes. The TMAs will be integral to this effort, as will NJ TRANSIT, NJDOT, RTAC members, private bus carriers and other stakeholders.

Lack of convenient access to commuter parking can discourage transit or shared ride travel. There are over two hundred officially recognized park and ride lots in the region, along with dozens of smaller, informal lots and "shared" parking facilities at shopping centers, houses of worship, or at other businesses or institutions. Most private carrier bus service, which serves largely rural and suburban settings, depends on park and ride locations in order to effectively serve their passengers. Park and Ride lots range in size from a few parking spaces to the larger lots with hundreds of parking spaces. Park and ride lots can be stand-alone facilities with waiting rooms and other facilities specifically for commuters, available parking space at shopping centers, houses of worship, or other places that have excess capacity during the work week, or can be little more than a paved area that is formally or informally recognized as a place to connect to car or van pools. They can be owned by NJ TRANSIT, NJDOT, or be privately owned; and there are many variations on agreements that exist as to their maintenance and use.

Products of this effort will include an inventory and GIS-based map that contains information on non-rail park and ride facilities throughout the NJTPA region; a "tiered" list of park and ride corridors that should be prioritized for facility enhancements, including those that would address critical transit needs and those that may have a longer-term strategic importance to the region;

an evaluation of a single pilot corridor, including public input resulting in a list of ecommendations for park and ride facility enhancements; and a final report that documents the process of the study and provides general recommendations for park and ride facility enhancements throughout the NJTPA region.

## **PRODUCTS:**

• Inventory of non-rail related park and ride locations and analysis of current and anticipated future demand for park and ride facilities.

#### STATUS:

This is a one year effort to be initiated in FY 2016.

# REGIONAL PLANNING 17/306 MOBILITY PROGRAMS (Cont.)

## PROJECT COST:

| Task Activity  | Budget Line Item | Total FY 2017<br>Program Budget |
|--|------------------|---------------------------------|
| Mobility Programs  | Central Staff    | \$ 258,399                      |
| Update to the Regional Coordinated Human Services Transportation<br>Plan | Consultant       | \$ 515,000                      |
| PL and STP-NJ funding  |                  |                                 |
| TMA Support<br>STP-NJ and STP-SU funding                                 | Consultant       | \$ 30,000                       |
| Parking Assessment and Planning<br>PL funding                            | Consultant       | \$ 250,000                      |

## **PROJECT MANAGER:**

David Schmetterer 973-639-8450 dSchmetterer@njtpa.org

#### 17/307 ENVIRONMENT AND CLIMATE CHANGE PLANNING

#### **RELATIONSHIP TO MISSION OF THE AGENCY:**

This task supports NJTPA's mission to be the regional transportation planning leader by developing technical and informational resources for the people of northern New Jersey. This task seeks to connect the relationships between the

environment and a changing climate to the transportation system. Among other activities, NJTPA seeks to link transportation planning with safety and security, economic growth, environmental protection, growth management, and

quality of life goals for the region, each of which is affected to some degree by the issue of climate and energy uncertainty.

This task is coordinated with Air Quality Planning and Conformance Analysis (Task 17/203) and Livable Communities

Planning (Task 17/308) and with Interagency Collaboration (Task 17/102), which encompasses operations and emergency

management. In addition, addressing how a changing climate threatens the region's transportation infrastructure will also

serve the NJTPA's goal of providing a more livable and sustainable region.

#### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

This task advances the goals of the NJTPA Strategic Business Plan by taking a leadership role on adapting to and mitigating the regional impacts of climate change, including the continued updates to the greenhouse gas emission inventory and forecast, implementation of the Greenhouse Gas (GHG) Mitigation Plan, and identification and implementation of strategies that adapt our transportation system to a changing climate. This task will continue to foster innovation and position the NJTPA for change in the field of climate change mitigation and adaptation.

#### **DESCRIPTION:**

The New Jersey State Legislature passed the Global Warming Response Act (GWRA) in 2007, setting a goal to reduce greenhouse gas (GHG) emissions by 80 percent of 2006 levels by 2050. In FY2017, the NJTPA will continue to advance climate change planning and apply the lessons learned from recent weather events and the results from prior studies. To assist the state in achieving this goal, the NJTPA first completed a regional GHG emissions inventory in FY 2011 and will be updating the inventory in FY 2017. This inventory identified where GHG emissions were occurring in the region and developed a web based tool for subregions to obtain their own GHG emissions.

Reaching the GHG reduction targets in the GWRA act will require continued monitoring of GHG emissions in the region and implementation of the NJTPA GHG Mitigation Plan, completed in FY 2013, and many activities within this task implement the plan. This task will update the GHG Inventory with the most recent data available. In addition, a consultant supported effort, begun in FY 2016, is developing case studies and a guidebook to assist with the adoption of alternative fuel options for multiple types of vehicles and engines, such as electric vehicles, in NJTPA communities. Staff will also continue formal and informal collaboration with inter-agency partners and utility companies and stakeholders to assist with alternative fuel vehicle adoption.

Climate change also influences the design, construction, safety, operations, and maintenance of transportation infrastructure and systems. Recently, extreme weather events such as Hurricane Irene and Superstorm Sandy have illustrated how vulnerable the region's transportation infrastructure is to violent storms. As global temperatures increase, sea levels rise and weather patterns change, the risk to the region's transportation system will only increase. The stewards of the region's infrastructure will be challenged to consider how these

## 17/307 ENVIRONMENT AND CLIMATE CHANGE PLANNING (Cont.)

changes may affect the region's roads, airports, rail, transit systems, and ports.

The NJTPA took the first step in addressing this challenge by completing a Vulnerability and Risk Assessment Study of transportation infrastructure in selected regions of New Jersey in FY 2012. This project, funded through a competitive grant from USDOT, was conducted by utilizing the Federal Highway Administration's (FHWA's) pilot conceptual model, in partnership with the DVRPC, SJTPO, NJDEP, NJDOT, and NJ TRANSIT. Building on this prior work, staff will continue to participate in the FHWA funded and managed Post Superstorm Sandy Follow-up Vulnerability Assessment and Adaptation Analysis. This study is being conducted by FHWA and in collaboration with NJTPA, NYMTC, SWRPA, The Greater Bridgeport Regional Council, NJDOT, NYSDOT, and CTDOT. This research project was initiated by FHWA and uses Superstorm Sandy (and lesser extent Hurricane Irene) to identify and analyze vulnerable transportation infrastructure and to develop adaptation options for select transportation assets.

In addition, the NJTPA will continue to develop a Climate Resilience and Adaptation Plan for the Passaic River Basin. The Passaic River Basin is prone to severe flooding and impacts eight counties, including two in New York State. The area affected is densely populated and contains many major roads and rail lines. This effort requires collaboration with NJTPA subregions, NJDOT, NJ TRANSIT, NJDEP, the NJ State Office of Homeland Security, as well as the Planning Collaboration functions (Task 17/102) of the NJTPA. In addition, a benefit-cost analysis of flood resiliency measures in Jersey City is being undertaken under Task 17/302 (Corridor Studies) and will be coordinated with this task.

#### **SUBTASKS INCLUDE:**

- Management of a consultant to develop a Climate Resilience and Adaptation Plan for the Passaic River Basin.
- Update the Greenhouse Gas Inventory and Forecast and implementation of the GHG Mitigation Plan.
- Management and guidance of a study of Interagency Collaboration and Coordination on Alternative Fuels
- Update information on the NJTPA website related to this task.
- Interagency collaboration on environmental and climate change planning, including working with Sustainable Jersey, the New Jersey Climate Adaptation Alliance, NJDEP, NJDOT, DVRPC, and other partner agencies (ongoing)

#### **PRODUCTS:**

- Manage and guide a consultant effort to update the Greenhouse Gas Inventory and Forecast (June 2017).
- Interagency collaboration on environmental and climate change planning, including working with Sustainable Jersey, the New Jersey Climate Adaptation Alliance, NJDEP, NJDOT, DVRPC, and other partner agencies. Seek opportunities and assist with implementation of the GHG Mitigation Plan (ongoing).
- Management and guidance of a study to develop a Climate Resilience and Adaptation Plan for the Passaic River Basin. (June 2017)
- Updated information on the NJTPA website related to these tasks (ongoing).
- Management and guidance of a consultant effort for the Interagency Collaboration and Coordination on Alternative Fuels study (June 2017).

#### **RELATIONSHIP TO PRIOR WORK:**

## 17/307 ENVIRONMENT AND CLIMATE CHANGE PLANNING (Cont.)

This task builds on prior coordination and research conducted under Tasks 17/103, 17/203, 17/303, and 17/308.

#### **OUTCOMES:**

Continue to advance the understanding of how extreme weather and a changing climate will impact the transportation system. Work with funding partners and subregions to develop adaptation strategies for transportation assets vulnerable to the impacts of climate change. Monitor progress in reducing region-wide GHG emissions by periodic updates to the GHG Inventory. Advance environmentally beneficial strategies that reduce GHG emissions, improve mobility and air quality through funding studies to advance electric vehicle adoption and parking demand management at the subregional level.

#### **CONSULTANT ACTIVITY:**

Interagency Collaboration and Coordination on Alternative Fuels

#### **DESCRIPTION:**

The growth of electric and alternative fueled vehicles is an important strategy in reducing GHG emissions from the transportation sector and important for promoting a sustainable energy future in the region. In FY2013, NJTPA participated as a stakeholder in the 11-state Regional Electric Vehicle Network, a multi-state consortium spanning from Vermont to Washington, DC. The Network received a grant from the US Department of Energy to investigate the infrastructure necessary to promote and support alternatively fueled vehicles, such as natural gas, bio-fuel, and electric vehicles in the Northeast and Mid-Atlantic states. This effort analyzed the challenges to implementing electric vehicles while providing model guidelines for zoning, siting, and other state policies necessary for electric vehicle infrastructure in the eleven state region. The NJ Department of Environmental Protection and many other interagency stakeholders participated in this 11 state effort.

The results of the study, conducted by the Regional Electric Vehicle Network, has raised the attention of electricity and natural gas utility companies within the NJTPA region as to potential opportunities for developing alternative fuel infrastructure. The NJTPA will collaborate with utility companies, state agency partners, neighboring MPOs and others to promote the implementation of electric vehicles in New Jersey.

This effort, begun in FY2016, will continue in FY 2017 and develop local electric and alternative fueled vehicles readiness plans in selected pilot locations. These studies include analyzing where electric vehicle infrastructure investment has the greatest potential for use. The products of this effort will build on the work done by the Regional Electric Vehicle Network and refine its findings for the NJTPA region and will advance the region's understanding of and readiness for widespread alternatively fueled vehicles.

#### **PRODUCTS:**

• Develop three pilot municipal electric and alternative fueled vehicle readiness plans and a general guidance document in order to facilitate adoption of these vehicles within the region.

#### STATUS:

This project, started in FY 2016, is anticipated to be completed in FY 2017

# REGIONAL PLANNING 17/307 ENVIRONMENT AND CLIMATE CHANGE PLANNING (Cont.)

## **CONSULTANT ACTIVITY:**

Climate Resilience and Adaptation Plan for the Passaic River Basin

## **DESCRIPTION:**

In August of 2011, Hurricane Irene caused record-level flooding in large portions of the Passaic River Basin. The intense storm flooded highway and transit infrastructure, affecting the mobility of many residents in a six county region. As global temperatures increase, sea levels rise and weather patterns change, the risk to the region's transportation system will only increase. Similar impacts were seen during Hurricane Sandy in October 2012 along the New Jersey shoreline and in low lying areas such as Hoboken and parts of New York City. The NJTPA began to address this challenge by completing a Vulnerability and Risk Assessment Study of transportation infrastructure in selected regions of New Jersey in FY 2012. This project, funded through a competitive grant from USDOT, was conducted by utilizing the Federal Highway Administration's pilot conceptual model, and resulted in the formation of a partnership among the DVRPC, SJTPO, NJDEP, NJDOT and NJ TRANSIT. Knowledge gained from this 2012 study is assisting a similar FHWA led study in which NJTPA is a participant in 2013-2014.

In FY 2017, the NJTPA will continue to apply the lessons learned from recent weather events as well as results from the FHWA-led Post Sandy Vulnerability Assessment and Adaptation Analysis Study by developing a Climate Resilience and Adaptation Plan for the Passaic River Basin. The Climate Resilience and Adaptation Plan will use real-time data and GIS modeling tools to identify vulnerable transportation infrastructure and recommend adaptation strategies within the transportation network, develop a framework for incorporating adaptation meeds and opportunities into asset management practices, cost-benefit analysis and project prioritization methods, and develop an emergency and risk management plan for the six county Passaic River Basin area. This study will also incorporate climate change and extreme weather considerations into agency practices including; asset management, emergency and risk management, transportation planning and project selection criteria, and operations and maintenance. This effort will require collaboration with NJTPA subregions, NJDOT, NJ TRANSIT, NJDEP, the NJ State Office of Homeland Security, as well as the Interagency Planning Collaboration Task (Task 17/102) and the Local Capital Project Delivery Program (Task 17/503).

#### **PRODUCTS:**

• Develop a Climate Resilience and Adaptation Plan for the Passaic River Basin that will identify vulnerabilities and adaptation strategies within the transportation network, develop a framework for incorporating adaptation needs and opportunities into asset management, cost-benefit analysis and project prioritization methods, and develop an emergency and risk management plan for the Passaic River Basin area (June 2017).

#### STATUS:

This consultant activity is a anticipated to start in FY 2016 and continue into FY 2017.

# REGIONAL PLANNING 17/307 ENVIRONMENT AND CLIMATE CHANGE PLANNING (Cont.)

## **CONSULTANT ACTIVITY:**

Greenhouse Gas Inventory and Forecast Update

## **DESCRIPTION:**

The NJTPA completed a GHG Inventory & Forecast study (GHG I&F) for the 13-county NJTPA region to quantify the amount and kinds of climate change gases that are emitted in the region in FY 2011. This GHG inventory and forecast assists the subregions and the NJTPA understand the sources of GHG emissions so that well-informed policy decisions can be made to reduce these emissions. A GHG Management web‐based tool was also developed by NJTPA to facilitate the sharing of GHG emissions data with county and municipal planners. The web tool contains information for the 13 counties of the NJTPA region. The tool allows users to query the database in a quick and simple manner to obtain municipal and county level carbon footprints necessary for effective GHG mitigation planning.

This new effort will update the regional greenhouse gas inventory, building on work conducted since the initial inventory was completed. The updated GHG inventory will be performed consistent with the inventories recently completed by DVRPC and SJTPO. incorporate advancements in the GHG inventory methodologies from recent GHG inventories. The updated GHG inventory will estimate emission from all major sectors, including:

• fuel consumption and electricity use in the residential, commercial, and industrial sectors;

• transportation-related emissions from on-road, non-road, aviation, marine, and rail transportation sectors including freight;

- industrial processes;
- agricultural sources, including soils, manure and livestock;
- waste management; and
- land use, land use changes, and forestry.

The inventory update will produce GHG emission estimates for the six primary GHG gases; Carbon Dioxide (CO2), Methane (CH4), Nitrous Oxide (N2O), Sulfur Hexafluoride (SF6), Hydroflourocarbons (HFCs), and Perflourocarbons (PFCs). The inventory update will estimate GHG emissions utilizing direct, consumption, and energy cycle methodologies.

#### **PRODUCTS:**

• Develop updated data for all subregions in the inventory and analyze change in emissions in terms of change over time and by sector.

#### STATUS:

This project is anticipated to begin in FY 2017.

# REGIONAL PLANNING 17/307 ENVIRONMENT AND CLIMATE CHANGE PLANNING (Cont.)

## PROJECT COST:

| Task Activity  | Budget Line Item | Total FY 2017<br>Program Budget |
|--|------------------|---------------------------------|
| Environmental and Climate Change Planning  | Central Staff    | \$ 230,281                      |
| Interagency Collaboration and Coordination on Alternative Fuels<br>PL and CMAQ funding | Consultant       | \$ 300,000                      |
| Climate Resilience and Adaptation Plan for the Passaic River Basin STP-NJ funding      | Consultant       | \$ 350,000                      |
| Greenhouse Gas Inventory and Forecast Update<br>CMAQ funding                           | Consultant       | \$ 200,000                      |

## **PROJECT MANAGER:**

Jennifer Fogliano 973-639-8403 jfogliano@njtpa.org

## **RELATIONSHIP TO MISSION OF THE AGENCY:**

Promoting livable and sustainable community planning is an activity that directly relates to the mission of the NJTPA by connecting transportation investment decisions with land use planning in ways that protect the environment, improve quality of life, and connect all residents to employment and other opportunities in the region. Implementing the principles underlying livable and sustainable communities address several points of the Regional Capital Investment Strategy, as well as several of the regional planning goals outlined in the Regional Transportation Plan. This task will allow NJTPA staff to initiate planning activities that leverage the existing transportation infrastructure and the benefits of walkable, transit-friendly communities to facilitate a more livable and sustainable future. This task will continue to offer guidance and support for Together North Jersey, a consortium that includes Rutgers University, state agencies, subregions, and non-profit organizations that has developed a Regional Plan for Sustainable Development through the HUD Sustainable Communities Regional Planning Grant Program.

#### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

The Livable Communities Planning task involves a broad range of stakeholders in developing a shared vision for the region, including municipal and community partners as well as state agencies, subregions, universities and non-profit organizations. It broadens the set of stakeholders in the regional planning process, including those traditionally underrepresented. It strengthens the NTJPA's leadership position for comprehensive planning by addressing the root causes of congestion, pollution, and climate change and provides an expanded vision for improved mobility through planning for increased transportation choices. This task will continue to raise public awareness of the NJTPA's mission and purpose by engaging new audiences and new stakeholders in the regional planning process. This effort, which includes The Planning for Emerging Centers Program and CEDS implementation, expands the NJTPA's mission to address the critical issue of the region's livability and sustainability, and allows the NJTPA to address these important regional issues in a highly visible and effective manner. This task also supports several ongoing partner agency programs, including Together North Jersey, NJDOT's Transit Village Initiative and NJ TRANSIT's Transit-Friendly Planning Program.

#### **DESCRIPTION:**

In March of 2009, the Partnership for Sustainable Communities, consisting of the federal Departments of Housing and Urban Development and Transportation and the Environmental Protection Agency, was formed to promote the development of more livable, sustainable communities. The Partnership detailed six livability principles as part of a commitment to focus on land use and community building at the federal level. These livability principles are:

- providing more transportation choices,
- promoting equitable, affordable housing,
- enhancing economic competitiveness,
- supporting existing communities,
- coordinating policies and leveraging investment, and
- valuing communities and neighborhoods.

The NJTPA's Regional Transportation Plan seeks to promote smart growth and greater integration of transportation and land use planning in the region. The principles of smart growth include promotion of mixed use communities with population densities sufficient to support transit, walking, and biking as well as the incorporation of "Complete Streets" concepts into roadway design. Smart growth supports the USDOT emphasis areas of MAP-21 Implementation, Regional Models of Cooperation, and Ladders of Opportunity while also addressing the NJDOT MPO planning priorities.

Through this task, the NJTPA will continue to participate in Together North Jersey, an unprecedented collaborative

#### 17/308 LIVABLE COMMUNITIES PLANNING (Cont.)

regional planning effort to implement the TNJ Plan, which was completed in FY 2016. The NJTPA is a core member of the Together North Jersey Project Team, along with the Edward J. Bloustein School for Planning and Public Policy at Rutgers University, NJ TRANSIT, the Housing and Community Development Network of New Jersey (HCDN-NJ), The Sustainability Institute at The College of New Jersey, NJ Future, Building One New Jersey, PlanSmart NJ, Regional Plan Association (RPA), and the New Jersey Office for Planning Advocacy (NJOPA). The NJTPA sits on the Together North Jersey Executive Committee, Steering Committee, and Standing Committees, and managed the Economic Competitiveness and Workforce Development Committee.

NJTPA also took the lead to develop a Regional Comprehensive Economic Development Strategy (CEDS) for the NJTPA region, as well as led the Local Government Capacity Grant Program (LGCGP) which produced 14 local initiatives in keeping with TNJ goals. There are several consultant efforts under this task that continue the work of Together North Jersey, the Regional CEDS, the LGCGP, and build on the TNJ Plan to realize the strategies and direction of the plan. Support will be provided to Rutgers University to continue to manage the TNJ coalition and to track implementation of the TNJ Plan.

NJTPA will continue its Planning for Emerging Centers program, which provide assistance to municipalities, and will conduct at least one Transit Supportive Development roundtable discussion with municipalities implementing Transit Supportive Development projects and policies. The Planning for Emerging Centers Program promotes the critical relationship between land use and transportation planning, as well as seeks to promote projects that create connections between sustainable land use patterns and multi-modal transportation opportunities. Through this program, the NJTPA provides consultant and staff technical support to municipalities to conduct land use or redevelopment planning, zoning, and other regulatory initiatives to support transit- and pedestrian-oriented development. This program includes collaboration with NJ TRANSIT, NJDOT, NJIT, and other planning partners. Pilot projects were initiated in FY 2013 and successfully completed in FY 2015. A solicitation was held in FY2015 for additional studies that are anticipated to be completed in FY 2017.

Another effort will address "Ladders of Oppportunity", a USDOT emphasis area, by enhancing access to jobs, job training, and human services for under-represented communities. This will be done through CEDS implementation (with consultant support) and through staff efforts such as the creation of symposia that address economic issues such as workforce needs.

One important component of the Livable Communities principles is planning for non-motorized modes of travel, including the integration of safe bicycle and pedestrian facilities into the regional planning process. Promoting non-motorized travel such as bicycle and pedestrian facilities can be a viable alternative to driving in automobiles in many communities, thus relieving traffic congestion, reducing air pollution, and contributing to the economic vitality and physical health of the region's residents. Pedestrian and bicycle safety planning will be of paramount importance to this task work and is coordinated with work undertaken under Task 17/303, Safety Planning, and 17/504, Local Safety and Asset Management.

Tasks will include coordination with the state and subregions to support bicycle and pedestrian facilities planning and implementation, data collection and planning related to disaster recovery, assistance to subregions in applying for anticipated new funding opportunities related to livability and complete streets; participation on study TACs that consider livability issues; and other activities as appropriate. This includes support for the Morris Canal Working Group and its Committees, which is also supported under the Public Affairs Division tasks.

## 17/308 LIVABLE COMMUNITIES PLANNING (Cont.)

For more information on NJTPA's bicycle and pedestrian initiatives visit: http://www.njtpa.org/Plan/Element/BikePed/default.aspx.

For more information on NJTPA Livability activities, see http://njtpa.org/Plan/Element/SmartGr/default.aspx.

For more information on Together North Jersey, see http://www.togethernorthjersey.com

#### **SUBTASKS INCLUDE:**

- Participate and support planning activities for bicycle and pedestrian travel initiated by subregions, municipalities and agency planning partners, including support for the Morris Canal Working Group. Notification of subregions of potential bicycle and pedestrian funding opportunities and provide technical guidance as requested. Incorporation of bicycle and pedestrian facilities planning and implementation into plans and programs.
- Management of the Planning for Emerging Centers Program consultant led municipal studies and conduct of at least one Transit Supportive Development roundtable.
- In coordination with internal and interagency partners, identify applicable federal and state grant programs that promote livable communities and work with potential applicants, including the subregions, to develop grant applications.
- Participation in implementation of the Together North Jersey's Plan.
- Continuation of a collaborative process, with Rutgers University, to continue the Together North Jersey collaborative planning and implementation of the Together North Jersey Plan strategies.
- Working with subregional and TMA partners, and others agencies, create and implement a "Ladders of Opportunity" initiative that enhances access to jobs and job training in disadvantaged communities.

#### **PRODUCTS:**

- Management of the Planning for Emerging Centers Program and coordination and support for Transit Supportive Development outreach.
- Add or update information contained on the NJTPA website relating to this task.
- Participation in Together North Jersey's implementation of the Regional Plan for Sustainable Development. Continuation of a collaborative process, with Rutgers University, to continue the Together North Jersey collaborative planning and implementation of the TNJ Plan strategies.(ongoing through June 2017).
- Participate and support planning activities for bicycle and pedestrian travel initiated by subregions, municipalities and agency planning partners, including suport for the Morris Canal Working Group. Notification of subregions of potential bicycle and pedestrian funding opportunities and provide technical guidance as requested. Incorporation of bicycle and pedestrian facilities planning and implementation into plans and programs.
- In coordination with internal and interagency partners, identify applicable federal and state grant programs that promote livable communities and work with potential applicants, including the subregions, to develop grant applications.
- Management and guidance for a "Ladders of Opportunity" initiative that increases access to jobs and job training in disadvantaged communities (ongoing through June 2017).

#### 17/308 LIVABLE COMMUNITIES PLANNING (Cont.)

#### **RELATIONSHIP TO PRIOR WORK:**

This task builds upon the effort of Together North Jersey and the completed Regional Plan for Sustainable Development.

#### **OUTCOMES:**

Staff will continue to work with its partners in Together North Jersey to implement the TNJ Plan. Staff will develop and disseminate information about Livable Communities. Staff will support local, county, and regional livability, sustainability, bicycle and pedestrian planning efforts.

#### **CONSULTANT ACTIVITY:**

Advancement of TNJ Initiatives

#### **DESCRIPTION:**

On January 15, 2012, the NJTPA, NJ TRANSIT, The Alan M. Voorhees Transportation Center at Rutgers University, the New Jersey Office for Planning Advocacy, NJTPA subregions and core cities, and a variety of other public, institutional, and nonprofit entities began work, under the aegis of TOGETHER NORTH JERSEY, on the development of a Regional Plan for Sustainable Development (RPSD). This project was funded largely through a grant from the U.S. Department of Housing and Urban Development's Sustainable Communities Regional Planning Grant Program. The HUD grant period concluded in May of 2015.

The NJTPA, in consultation with Rutgers-Bloustein (Rutgers) as the technical lead on scope development, will advance TOGETHER NORTH JERSEY(TNJ) initiatives and the implementation of the TNJ Plan. Advancements include investigation of a modified management structure, post-HUD grant; progression of actions identified in the Plan; and execution of implementation agreements with partners to assist with the plan.

The outcome of plan implementation will be a more sustainable future for the region that invests in existing communities where housing, jobs, educational, cultural, and recreational opportunities are made more easily accessible to most residents of the region by providing more transportation choices.

The outcomes and subsequent actions of the RPSD are organized around the following sustainability themes:

- 1. Competitive
- 2. Efficient
- 3. Livable
- 4. Resilient

#### **PRODUCTS:**

- Investigation of a modified management structure, post-HUD grant and execution of implementation agreements with partners to assist with the plan. (June, 2017).
- Progression of actions identified in the RPSD. (June, 2017).

#### STATUS:

This is a one year effort initiated in FY 2016.

## **CONSULTANT ACTIVITY:**

Regional CEDS Implementation Plan

## **DESCRIPTION:**

In support of the federal emphasis area, Ladders of Opportunity, access to essential services will be increased as part of the transportation planning process. Essential services include housing, employment, health care, schools/education, and recreation. This emphasis area could include MPO and State identification of performance measures and analytical methods to measure the transportation system's connectivity to essential services and the use of this information to identify gaps in transportation system connectivity that preclude access of the public, including traditionally underrepresented populations, to essential services.

In FY 2013, the NJTPA, in partnership with TOGETHER NORTH JERSEY consortium, embarked on the creation of a Regional Comprehensive Economic Development Strategy (CEDS) for the North Jersey region. This document, developed in accordance with the provisions outlined by the U.S. Department of Commerce, Economic Development Administration (USEDA), lays the groundwork for an economic roadmap to diversify and strengthen regional economies. The CEDS serves as a regional plan of action for increasing access to opportunity.

This effort will advance the implementation of the Regional CEDS action plan. Advancement task will include coordinating CEDS advisory committees; establish an Economic Development District; and advance other identified actions in the Regional CEDS.

Categories of actions identified in the Regional CEDS are as follows: 1. SUPPORT THE GROWTH OF REGIONAL INNOVATION CLUSTERS. 2. ENHANCE NORTH JERSEY'S INNOVATION AND ENTREPRENEURSHIP ECOSYSTEM. 3. BUILD ON THE REGION'S INFRASTRUCTURE ASSETS. 4. ALIGN WORKFORCE TRAINING WITH INDUSTRY NEEDS.

## **PRODUCTS:**

- Coordination of CEDS advisory committees.
- Explore framework for establishing an Economic Development District.
- Advancement of identified actions in the Regional CEDS.

## STATUS:

This is a one year effort initiated in FY 2016.

## **CONSULTANT ACTIVITY:**

Planning for Emerging Centers Program

## **DESCRIPTION:**

The purpose of the NJTPA's Planning for Emerging Centers Program is to provide technical and financial assistance to a municipality or municipal teams, on a competitive basis, for strategic planning studies focused on areas or corridors associated with established or anticipated transit services and/or facilities. This program is intended to promote the integration of land use and transportation planning, and seeks to promote plans and projects that create connections between sustainable land use patterns and multimodal transportation opportunities. Through this activity, the NJTPA provides consultant technical support to local initiatives to conduct land use or redevelopment planning, zoning, resiliency strategies and other regulatory initiatives to support transit- and pedestrian-oriented development. These studies should be data driven, involve meaningful and robust participation from stakeholders and the public, and involve implementation agencies at the municipal, regional, and state level (such as NJDOT, NJ TRANSIT, Transportation Management Associations, and counties). Recommendations produced from these studies shall be consistent with the NJTPA Regional Transportation Plan (RTP) and the goals, strategies, and actions in the Regional Plan for Sustainable Development (RPSD).

In FY 2013, a set of pilot projects were initiated to implement the program. These pilots in Morristown and Bound Brook were completed in FY 2015. A solicitation for the next round of the program was conducted and additional municipalities were selected in FY 2015. The Town of Boonton, the Borough of Freehold, the Township of Green Brook, and the City of Hoboken have been selected to participate in the program.

In FY 2014, the North Jersey Transportation Planning Authority (NJTPA) contracted and coordinated with the New Jersey Institute of Technology (NJIT) to conduct a series of three Transit Supportive Development (TSD) Educational Workshops to offer select communities a generic overview on the benefits and best practices of TSD planning. The workshops targeted communities that are just beginning to consider TSD as an economic development strategy. The success of the workshops in Hillsborough, Pompton Lakes, and Dunellen generated interest in carrying out a second round of workshops in FY 2015 with increased focus on TSD concepts within the context of New Jersey. Municipalities involved in the second round of workshops will be identified in a solicitation during FY 2016 and be completed in FY 2017. In addition, two round table workshops will be held educational workshops will continue in FY 2016 to inform target communities about the components and potential benefits of successful TSD implementation in New Jersey.

## **PRODUCTS:**

- Completion of the consultant-supported municipal planning studies (June, 2017)
- Completion of three (3) consultant-led TSD educational workshops initiated in FY 2015 for target communities in New Jersey to learn about the components, best practices, and potential benefits of implementing TSD at the community level. (December, 2016)

## STATUS:

This is an ongoing program.

## **CONSULTANT ACTIVITY:**

Regional Land Use Resources Pilot

## **DESCRIPTION:**

Over the past three years, the NJTPA carried out extensive interagency coordination and public outreach efforts as part of the Together North Jersey (TNJ) Plan. The resulting plan provided a better understanding of growth and development patterns in the region. The RPSD also established critical links between a range of planning topics, including economic growth, land-use, the environment, and transportation.

To continue with the work developed through the TNJ Plan, this effort will engage a consultant to collect, standardize, and provide a mechanism for maintenance of a regional land use resources. The effort will be initiated with a pilot, in partnership with NJ TRANSIT as the lead. The pilot will focus on compiling available land use information that will be used to depict a comprehensive set of resources along the Hudson Bergen Light Rail (HBLR) corridor. This information will supplement statewide land use data with additional local resource information. This will be a valuable resource for informing future comprehensive planning efforts and understanding the current and emerging land –use patterns in the area, and will be invaluable in planning for mulit-modal transportation to meet future demand.

## **PRODUCTS:**

- Land use database with attribute table schema that can be expanded upon.
- An online GIS-based application for reviewing, editing, and downloading land use data
- Coordination framework for developing and maintaining the regional land use data.
- Documentation, maintenance plan and schedule.

## **STATUS:**

This is a two year effort initiated in FY 2015.

## **CONSULTANT ACTIVITY:**

Regional CEDS Support Program

## **DESCRIPTION:**

In support of the federal emphasis area, Ladders of Opportunity, access to essential services will be increased as part of the transportation planning process. Essential services include housing, employment, health care, schools/education, and recreation. This emphasis area could include MPO and State identification of performance measures and analytical methods to measure the transportation system's connectivity to essential services and the use of this information to identify gaps in transportation system connectivity that preclude access of the public, including traditionally underrepresented populations, to essential services.

In FY 2013, the NJTPA, in partnership with TOGETHER NORTH JERSEY consortium, embarked on the creation of a Regional Comprehensive Economic Development Strategy (CEDS) for the North Jersey region. This document, developed in accordance with the provisions outlined by the U.S. Department of Commerce, Economic Development Administration (USEDA), lays the groundwork for an economic roadmap to diversify and strengthen Regional economies. The CEDS serves as a Regional plan of action for increasing access to opportunity.

This effort will advance the implementation of the Regional CEDS action plan with support from NJTPA partners, including NJTPA subregions. Advancement task will include participating in CEDS advisory committees and advance other identified actions in the Regional CEDS.

Categories of actions identified in the Regional CEDS are as follows:

1. SUPPORT THE GROWTH OF REGIONAL INNOVATION CLUSTERS.

- 2. ENHANCE NORTH JERSEY'S INNOVATION AND ENTREPRENEURSHIP ECOSYSTEM.
- 3. BUILD ON THE REGION'S INFRASTRUCTURE ASSETS.

4. ALIGN WORKFORCE TRAINING WITH INDUSTRY NEEDS.

## PRODUCTS:

- Participation in CEDS advisory committees.
- Advancement of identified actions in the Regional CEDS.

## STATUS:

This is a new FY 2017 one year effort.

## PROJECT COST:

| Task Activity  | Budget Line Item | Total FY 2017<br>Program Budget |
|--|------------------|---------------------------------|
| Livable Communities Planning                               | Central Staff    | \$ 329,675                      |
| Advancement of TNJ Initiatives<br>PL and STP-NJ funding    | Contractual      | \$ 150,000                      |
| Regional CEDS Implementation Plan<br>PL funding            | Contractual      | \$ 300,000                      |
| Planning for Emerging Centers Program<br>PL <i>funding</i> | Consultant       | \$ 510,000                      |
| Regional Land Use Resources Pilot<br>PL <i>funding</i>     | Consultant       | \$ 350,000                      |
| Regional CEDS Support Program<br>USEDA grant funding       | Consultant       | \$ 300,000                      |

## **PROJECT MANAGER:**

Lois Goldman 973-639-8413 lgoldman@njtpa.org

## **PROJECT MANAGER:**

Jeffrey Perlman 973-639-8445 jperlman@njtpa.org

#### 17/401 FREIGHT PLANNING AND COORDINATION

#### **RELATIONSHIP TO MISSION OF THE AGENCY:**

The efficient and effective movement of freight in the NJTPA region is supportive of initiatives designed to improve economic growth, smart growth programs, environmental and climate change initiatives, congestion management and livable community goals for the region.

#### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

The Freight Planning & Coordination element supports these objectives of the Strategic Business Plan: facilitating growth, communicating the NJTPA, and guiding the development of performance measures that address regional freight transportation system goals. This task also furthers several key objectives of the Business Plan including: strengthen our regional leadership position for transportation and comprehensive planning, engage Board members and the public, establish a comprehensive subregional outreach, expand our mission to address critical emerging issues, raise public awareness of our mission and link plans with economic growth, environment, and quality of life.

#### **DESCRIPTION:**

Northern New Jersey is the center of freight distribution for the northeastern United States. The NJTPA region serves as a gateway to North American and international markets and increasingly serves as a platform for export. Goods movement is essential to the well being of the citizens and economy of New Jersey. It hosts the largest seaport on the east coast, the nation's ninth largest international airport, and close to 1 billion square feet of warehousing and distribution space. These facilities process high-value, time sensitive commodities that are distributed to the huge metropolitan consumer market, and to other markets nationally and abroad. The region also hosts the largest intermodal rail terminals east of Chicago. These intermodal terminals serve as the eastern terminus of the trans-continental land bridge from ports on the west coast and, increasingly, as the origin for reverse intermodal moves from the east to the midwest as shipping patterns change globally. Its highway infrastructure moves huge volumes of truck traffic serving the New York/New Jersey metropolitan market as well as large scale warehousing and distribution centers. In addition to Newark Liberty International, the region is home to Teterboro Airport and more than 20 general aviation airports.

This task allows for coordination internally with all divisions to ensure that the needs of the goods movement industry are reflected in all NJTPA planning efforts, and that goods movement planning, in turn, reflects NJTPA goals of sustainable communities, livability, transportation choices, economic competitiveness, and leverages federal policies and investment, especially with regard to the update to the Regional Transportation Plan and the Regional Plan for Sustainable Development.

This task provides for comprehensive outreach with our public partners - the subregions, NJDOT, NJ TRANSIT, PANYNJ - and with the private sector, to identify and address the goods movement needs of the 13-county NJTPA region. This task activity continues to build upon previous coordination with statewide and regional initiatives. It further calls for continued coordination with neighboring MPOs (NYMTC,DVRPC,SJTPO). This coordinated approach will rely on the direction and extensive contacts of the NJTPA Freight Initiatives Committee (FIC). Additional activities in this task include follow up on previous NJTPA efforts and will recommend, specify, and where appropriate, pursue implementation of solutions to problems and opportunities identified in previous and on-going NJTPA studies on issues such as the truck parking shortage and rail grade crossing improvements.

#### **SUBTASKS INCLUDE:**

 Serve as liaison to other partner agencies (NJDOT, NJ TRANSIT, PANYNJ, etc.); NJTPA subregions; other MPO's (NYMTC, DVRPC, SJTPO); and inter-regional groups such as the I-95 Corridor Coalition. Continue to increase NJTPA interaction with private sector organizations (e.g., New Jersey Shortline Railroad Association,

#### 17/401 FREIGHT PLANNING AND COORDINATION (Cont.)

New Jersey Motor Truck Association, Association of Bi-State Carriers, Newark International Airport Air Cargo Council, etc.).

- Coordinate with subregions, partner agencies, other MPOs and the private sector to identify freight needs, evaluate options, and obtain desired freight input as needed.
- Provide staff support to the Chairman and Vice-Chairman of the NJTPA Freight Initiatives Committee (FIC) on significant issues facing the region's freight system.
- Provide goods movement input in the implementation of the Regional Plan for Sustainable Development and efforts to address the freight provisions of MAP-21.

#### **PRODUCTS:**

- Provide freight support in the implementation of the Regional Plan for Sustainable Development and the development of the next Regional Transportation Plan. Develop a guidebook that incorporates goods movement into complete streets including off peak operations and truck parking needs.(ongoing through June, 2017)
- Provide regular (bi-monthly) briefings for the Chairman and Vice-chairman of the Freight Initiatives Committee (FIC) on staff activities and freight issues of regional significance. Work with the Chairman and Vice-Chairman to develop agendas for FIC meetings. (ongoing through June, 2017)
- Serve as NJTPA representatives to Technical Advisory Committees for intra-agency studies and other partner agency and subregional studies impacting the NJTPA region as appropriate. (ongoing through June, 2017)
- Maintain and enhance an active outreach program including key regional planning events, meetings of other MPO freight committees, subregional field visits and meetings, meetings with private sector businesses and organizations, and meetings of state and national freight committees. Work with partner agencies to plan and implement a New Jersey Freight Academy Program. (ongoing through June, 2017)
- Develop and/or disseminate relevant information on important issues concerning goods movement to stakeholders and NJTPA staff. Procure freight data as needed.(ongoing through June, 2017)
- Update the freight component of the NJTPA website. (ongoing through June, 2017)
- Provide technical support for six FIC meetings. Arrange for appropriate speakers, develop agendas and coordinate with Task 17/602. (ongoing through June, 2017)
- Work with Interagency Planning Collaboration staff to develop and maintain the Freight Activity Locator, a web-based GIS platform designed to examine freight activity clusters, as described in Task 17/102. (ongoing through June, 2017)
- Provide guidance for the development of the Pilot Freight Concept Development Program. (ongoing through June, 2017)
- Work with public and private sector partners to advance the Freight Rail Industrial Opportunity (FRIO) Corridors Program. (ongoing through June, 2017)

#### **RELATIONSHIP TO PRIOR WORK:**

This freight planning and coordination program builds on and supports the ongoing NJTPA development and assessment of the goods movement agenda for the entire NJTPA region, including the Port District. It addresses, updates and follows up on issues contained in past and current studies (e.g., Rail Capacity and Needs Assessment Study, Truck Rest Stop Study, Regional Transportation Plan - Plan 2040, Freight Industry Level Forcasts Study) by working with stakeholders to move appropriate study recommendations to the Local Capital Project Development

#### 17/401 FREIGHT PLANNING AND COORDINATION (Cont.)

Program and NJDOT Project Pipeline, and identifying initiatives supportive of the Plan 2040 vision. This effort further serves as the basis for the freight planning aspects of the Update to the Regional Transportation Plan and implementation of the Regional Plan for Sustainable Development.

The freight planning program continues the NJTPA's ongoing collaborative work with NJDOT, the Port Authority and other partner agencies on various plans and initiatives.

Efforts to update resources such as the NJTPA website will continue to ensure availability and relevance of freight related information to stakeholders.

#### **OUTCOMES:**

The ultimate outcomes of the freight planning and coordination efforts are as follows:

-Newly fostered and improved relationships with the private sector and other public agencies through expansion of the stakeholder distribution list and increased attendance at FIC meetings.

-A better understanding of the needs of the private sector and the transportation networks they utilize.

-Educate the public and their representatives on the importance of freight issues to the regional economy through periodic updates and dissemination of information (FIC meetings, e-mailings, upates to freight related information on the NJTPA website).

-Ensure inclusion of freight as a part of all appropriate NJTPA and subregional planning efforts.

-A planned approach to goods movement investment needs through the use of freight-related data and analyses in the planning and capital project selection process.

-Better educate the private sector on public sector requirements and processes (e.g land use decisions, sustainable practices, transportation issues, etc.).

#### **CONSULTANT ACTIVITY:**

Pilot Freight Concept Development Program

#### **DESCRIPTION:**

The Pilot Freight Concept Development Program is a new initiative that will allow the NJTPA to establish a process for advancing reasonable alternatives and strategies that address regional and local freight issues. These potential projects will be identified through NJTPA and Subregional planning studies.

The first year of this program will be a consultant activity that develops the process of how needs and planning level recommendations advance through this new initiative that results in a preliminary preferred alternative. This process will provide the required information to determine whether or not the study will progress to the next phase of the project delivery process. This new program will assist in implementing freight projects, particularly freight rail. The Program design will be completed by utilizing two Pilot Projects to illustrate the Program intake process - including compiling, developing a criteria for and prioritizing a list of freight related recommendations. The complete process will also include an alternatives analysis for implementation and the investigation of funding options.

The two candidate projects selected as pilot projects for this initial Program Development and Pilot Phase were identified via NJTPA and Subregional Planning Studies. The first Pilot will be the Dover and Rockaway Rail Realignment Project identified in the Morris County Freight Infrastructure and Land Use Analysis effort. The second Pilot will be the Phillipsburg South Main Street Bridge Clearance Project identified in the NJTPA Morris/Warren County Rail Corridor Study.

#### **PRODUCTS:**

## 17/401 FREIGHT PLANNING AND COORDINATION (Cont.)

- Develop the guidelines for the Freight Concept Development Program including project intake, the specific steps to complete the process, and final deliverables.
- Complete the Concept Development for Pilot 1: Dover and Rockaway Realignment Project.
- Complete the Concept Development for Pilot 2: Phillipsburg South Main Street Bridge Clearance Project.

#### STATUS:

This is a three year effort anticipated to begin in FY 2016 and continue into FY 2017.

# FREIGHT PLANNING 17/401 FREIGHT PLANNING AND COORDINATION (Cont.)

## **CONSULTANT ACTIVITY:**

Freight Support Services

## **DESCRIPTION:**

This new activity is intended to provide staff with consultant support on regional freight issues. Potential items to be examined include but are not limited to: an update on the demand on the region's freight rail network; an examination of best practices for integrating freight into complete streets policies; a look at the regional truck parking needs; an examination of best practices for off peak deliveries; and regional freight planning analytical work as needed. Specific scopes of work will be developed that address the particular regional freight issues of interest as identified in coordination with the Freight Initiatives Committee and our planning partners. Up to three contracts are anticipated as part of this effort.

#### **PRODUCTS:**

• Up to three separate contracts to be executed as needed for Freight Planning at the NJTPA.

#### **STATUS:**

This effort is scheduled to begin FY 2016 and continue into FY 2017.

# FREIGHT PLANNING 17/401 FREIGHT PLANNING AND COORDINATION (Cont.)

## **CONSULTANT ACTIVITY:**

Freight Rail Industrial Opportunity Corridors Program

## **DESCRIPTION:**

The Freight Rail Industrial Opportunity (FRIO) Corridors Program is a new consultant initiative that will allow the NJTPA to develop a comprehensive inventory of constraints to national standard freight rail access as defined by the size (Plate "F" which is 17 feet high and 10.5 feet wide) and weight of a railcar (286,000 pounds or 286K loaded railcar) and the associated industrial development potential for the NJTPA region.

This effort builds on the NJTPA Morris/Warren County Rail Corridor Study and advances key goals of the New Jersey Freight Rail Strategic Plan and the New Jersey State Rail Plan. These documents identified the need to address such restrictions to retain and attract industrial businesses to the State of New Jersey.

The NJTPA, working with partner public agencies and the railroads, has identified those rail lines where 286K and Plate "F" access is restricted yet needed. The consultant will evaluate the specific physical restriction on each identified line including potential solutions and planning-level cost estimates.

The NJTPA has developed an initial inventory of industrial properties along these corridors. The consultant effort will aid in the refinement and application of this inventory to prioritize the needed improvements on the rail lines.

#### **PRODUCTS:**

- Inventory of constraints to 286K and Plate "F" rail access, including potential solutions and planning level cost estimates.
- Land use analysis of industrial development potential along the rail corridors.

## STATUS:

This is a new FY 2017 effort.

# FREIGHT PLANNING 17/401 FREIGHT PLANNING AND COORDINATION (Cont.)

## PROJECT COST:

| Task Activity<br>Freight Planning and Coordination                      | <b>Budget Line Item</b><br>Central Staff | Total FY 2017<br>Program Budget<br>\$ 601,624 |
|---|--|---|
| Pilot Freight Concept Development Program<br>PL funding                 | Consultant                               | \$ 1,500,000                                  |
| Freight Support Services PL funding                                     | Consultant                               | \$ 50,000                                     |
| Freight Rail Industrial Opportunity Corridors Program<br>STP-NJ funding | Consultant                               | \$ 425,000                                    |

## **PROJECT MANAGER:**

Jakub Rowinski 973-639-8443 jrowinski@njtpa.org

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT

## **RELATIONSHIP TO MISSION OF THE AGENCY:**

By developing the Transportation Improvement Program (TIP), the NJTPA advances the goals of the Regional Transportation Plan (RTP) through the implementation of specific projects that will improve the regional transportation system. As such, the TIP is central to the NJTPA mission, reflecting the outcome of its efforts to identify and prioritize needed investments in the region. Criteria Development and Project Scoring provides the means for the NJTPA to prioritize federal and state funding assistance which is an explicit element of the NJTPA mission.

## LINK TO NJTPA STRATEGIC BUSINESS PLAN:

The TIP Development supports the Business Plan by strengthening the role of NJTPA Board and providing decision-making tools to determine regional priorities.

## **DESCRIPTION:**

As set forth in Moving Ahead for Progress in the 21st Century (MAP-21), the TIP reflects a four-year list of transportation projects and programs that have been developed through a continuing, comprehensive and cooperative planning process. The TIP includes descriptions, costs, funding sources, phases of work, and project schedules of all transportation investments, including, for example: installation of new traffic signals, rehabilitation of bridges, acquisition of new transit equipment, repair and maintenance of highways, and development of intermodal facilities. MAP-21 was enacted in 2012. Therefore, there may be a need to make adjustments to the Transportation Improvement Program (TIP) as new federal regulations are issued.

During FY 2015 FHWA and FTA made recommendations to enhance the TIP development process. Staff will initiate several steps in addressing the recommendations during this fiscal year.

## SUBTASKS INCLUDE:

- Staff will work SJTPO, DVRPC and NJDOT to discuss and reach a consensus on how to address the multi-year funded projects' federal recommendation.
- Staff will score new projects contained in the project pool, and will continue to coordinate with the Systems Planning division to assess consistency of ranked projects with the Congestion Management Process.
- Staff will continue to engage a consultant to update the project prioritization criteria to incorporate the outcomes of the plan including criteria such as: regional performance measures, climate change, livability, sustainability, homeland security, the Regional Plan for Sustainable Development (RPSD), asset management and to consider potential changes in policy or legislation.

Staff will provide technical support to NJDOT to improve the project prioritization process, and to ensure that the criteria meets the 'ladders of opportunity.'

- Staff will collaborate with NJDOT in developing financial plans and annual updates for projects with costs over \$80 million in federal funding. Further, NJTPA Board of Trustees will review and approve the financial plans.
- Staff will work with SJTPO, DVRPC and NJDOT to develop inflation assumptions for projects.
- After the recommendations are made for Regional Capital Investment Strategy (RCIS), staff will include a RCIS analysis in the next TIP Introduction. (4th Qtr FY 2018)

## **PRODUCTS:**

- Collaborate with NJDOT to prepare/revise financial plans for projects with costs over \$80 million in federal funding. The plans will be approved by the Project Prioritization Committee and/or Board of Trustees. (as needed)
- Provide detailed project level information for projects and programs contained in the project pool data. Assemble and evaluate the FY 2018 Project Pool, score and rank new projects for Board of Trustee approval. (January 2017)
- Prepare and distribute the FY 2018 Transportation Capital Program reports to the subregion. (February 2017)
- Prepare and distribute the draft FY 2018 Transportation Improvement Program. (June 2017) The final approved FY 2018-2021 TIP will be available on the NJTPA website in October 2017.
- Staff will work with SJTPO, DVRPC and NJDOT to develop inflation assumptions for projects. (4th Qtr FY 2017)
- Staff will work SJTPO, DVRPC and NJDOT to discuss and reach a consensus on how to address the multi-year funded projects' federal recommendation. (as needed)

## **RELATIONSHIP TO PRIOR WORK:**

This task is directly related to tasks in the previous years, including CMP, Strategy Evaluation and RCIS, as well as results of performance measures work. RCIS and CMP work have provided resources for Plan 2040 (Regional Transportation Plan) and contributed to the NJTPA's Local Capital Project Delivery Program (16/503), Transportation Improvement Program (16/501), and Study and Development program (16/505).

## **OUTCOMES:**

The outcome of this task is the NJTPA Board-approved, fiscally constrained TIP.

## **CONSULTANT ACTIVITY:**

Criteria Development and Project Scoring

#### **DESCRIPTION:**

A consultant will assist staff to evaluate the current project prioritzation criteria and provide objective, systematic decision analysis support. The consultant will also facilitate decision-making sessions with committees and Board members and recommend rules for implementing future Criteria changes as appropriate, consistent with good decision analysis practice.

The consultant will coordinate with the 2040 Regional Transportation Plan and Regional Plan for Sustainable Development (RPSD) to ensure that Regional Goals and Priorities of the plan connect transportation planning and capital investment with a vision for a sustainable future for the region. The consultant will collaborate with the NJDOT and NJ TRANSIT to assess how changes in their pavement, congestion, bridge, and drainage management systems might affect the NJTPA's project prioritization process. The consultant will assess changes to performance measures or scoring methodologies, as necessary, for incorporation in the criteria. They will incorporate the outcomes of current NJTPA studies of climate change, Comprehensive Economic Development Strategy (CEDS), livability, sustainability, homeland security, asset management and potential changes in policy or legislation to update project selection criteria.

The consultant will evaluate the project prioritization criteria for updates that are necessary due to changes in policy, legislation or data since 2007. In particular, the consultant will incorporate the Moving Ahead for Progress in the 21st Century (MAP-21) emphasis on Performance Based Planning and Programming (PBPP) requirements for incorporation in the development of prioritization criteria. To meet the requirements of the MAP-21 transportation law, the NJTPA, in cooperation with the NJDOT and NJ TRANSIT, are establishing regional performance measures and targets aligned with seven identified national goals (Safety; Infrastructure Condition; Congestion Reduction; System Reliability; Freight Movement and Economic Vitality; Environmental Sustainability; Reduced Project Delivery Delays). The system for scoring and ranking candidate projects for funding will be updated reflecting the priorities of Plan 2040 and performance measures.

Based upon an analysis of the current criteria, the consultant will recommend an array of possible changes to the NJTPA's project prioritization criteria, and a develop a manual of the criteria that can be utilized to help stakeholders make decisions regarding project selection. The consultant will work with Central Staff, the Project Prioritization Committee and the RTAC to test alternate criteria configurations.

The consultant will utilize the NJTPA's selected Decision-Support Software (DSS) to provide the alternatives for trade-offs, prioritization and/or resource allocation decisions. The consultant will conduct decision-making sessions using the DSS software tool with the TAC to facilitate collaborative group decision making and recommend criteria weights, consistent with good decision analysis practice. The TAC will utilize the DSS tool to develop weighted criteria and voting, prioritization and resource allocation. Finally, the consultant should also develop prioritization strategies and steps in the Criteria Rule Book that prioritize projects in the following steps: initial screening for fatal flaws; preliminary ranking with points; a "challenge round" which enables the subregions to review and negotiate with central staff; revisions to project scores; and the final listing with all other considerations. The consultant will recommend changes to the criteria as appropriate. The consultant will then make recommendations concerning how future changes in the Project Prioritization Criteria could be handled, and provide a manual to guide future changes in the criteria consistent with good decision analysis practice.

## PRODUCTS:

- Review alternative criteria configurations and recommend possible changes to the NJTPA's project prioritization criteria, as appropriate. (ongoing)
- Facilitate Technical Advisory Committee (TAC) sessions utilizing the Expert Choice decision support software tool to collaboratively decide on criteria selection and overall goal area weights. Develop a technical memorandum identifying TAC recommended criteria with weights and defining a measurable scoring system, creating rating scales and developing qualitative/quantitative assessments based on readily available data sources. (1Q2017)
- Score sample projects selected by Central Staff with the updated criteria and compare the scores with those of the current system. The NJTPA will recommend to the TAC and PPC the updated set of criteria and seek PPC recommendation for Board Approval to adopt the updated Project Prioritization Criteria and Scoring Update. (2Q2017)
- Provide a manual that can be utilized to help stakeholders make decisions concerning project selection. (3Q2017)

## STATUS:

This is a continuation of the FY 2016 consultant effort that is scheduled to be completed in FY 2017.

## PROJECT COST:

| Task Activity                                  | Budget Line Item | Total FY 2017<br>Program Budget |
|--|------------------|---------------------------------|
| Transportation Improvement Program Development | Central Staff    | \$ 412,168                      |
| Criteria Development and Project Scoring       | Consultant       | \$ 399,000                      |

PL and STP-NJ funding

## **PROJECT MANAGER:**

Ann Ludwig 973-639-8411 aludwig@njtpa.org

## **PROJECT MANAGER:**

Richard Stoolman 973-639-6354 rstoolman@njtpa.org

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT 17/502 TRANSPORTATION IMPROVEMENT PROGRAM MANAGEMENT

## **RELATIONSHIP TO MISSION OF THE AGENCY:**

This task insures that the NJTPA carries out its mission with flexibility, including adapting to changing conditions and needs by modifying and updating its investment agenda. It also provides a measure of accountability to the NJTPA mission by continually monitoring the status and progress of investments. By disseminating information about the NJTPA's investment and planning decisions via the web, this task enhances the partnership with the public and other agencies, which is central to the NJTPA mission.

## LINK TO NJTPA STRATEGIC BUSINESS PLAN:

TIP Management supports the Business Plan objectives by Developing Performance Measures and Improving Internal Operations by regularly reporting on the status of projects intended for implementation in the TIP and continuing to assess the consistency of RCIS target investment allocations.

#### **DESCRIPTION:**

Due to continuing changes in project scheduling and costs, the Transportation Improvement Program (TIP) is not a static document. A modification and amendment process and a reporting mechanism functions to keep Board members and the public apprised of all revisions to the TIP. Board members must also be given early warning when a project may be accelerated, delayed or removed from the TIP. TIP management consists of five subtasks: TIP revisions (modifications and amendments), status reporting including on-line project information dissemination, year-end authorization/obligation reporting, project monitoring, and congressional designated funded project development, management and reporting.

As part of project monitoring, staff will continue to participate in NJDOT's Capital Programming Committee (CPC) and Capital Programming Screening Committee (CPSC) meetings. These meetings are attended in order to participate in NJDOT's project management decision-making process, which determines whether a project advances to the next phase, is re-scoped, or is terminated. These NJDOT CPC and CPSC meetings are generally held three times each month. Based on input from the subregions, staff conveys further information as well as the position of the local governments and attempts to influence the decisions made at these meetings.

For FY 2017, staff will continue to collaborate with NJDOT, NJ TRANSIT, and the Port Authority of New York and New Jersey (PANYNJ) in implementing the TIP revision application known as the eSTIP. This application is also used by DVRPC and SJTPO to provide statewide consistency.

#### The NJTPA Online Transportation Information System (NOTIS)

(http://www.njtpa.org/Project/NOTIS/Default.aspx) was developed to serve as a project monitoring system to help the NJTPA manage and analyze the TIP. NOTIS is a customized program designed to develop a comprehensive NJTPA system for reporting and sharing project data for internal and external use.

NOTIS gives staff the ability to query data and maps for projects included in the current Study and Development program (S&D) and TIP, as modified or amended. NOTIS is a web based application designed for use by the Board of Trustees as well as Subregional staff and the general public. During this fiscal year, NOTIS will be maintained continually, and the project databases and maps on which it is based will be updated at least on a monthly basis. Recent enhancements added to NOTIS include a more specific query interface, allowing searches for projects by information such as fiscal year, funding source, projected project cost, status, and projected completion date, and the utilization of ArcGIS mapping. NOTIS will be updated to include technical advances as they become available. Upon the completion of the NOTIS GIS migration project, staff will begin to populate the status of NJTPA's local projects. This is an interim solution prior to the rollout of NJDOT's Executive Information System.

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT 17/502 TRANSPORTATION IMPROVEMENT PROGRAM MANAGEMENT (Cont.)

Staff will assist in the advancement of congressional designated funded projects by providing increased oversight of congressional designated funded projects, and monitoring and reporting the status of these projects to the Board of Trustees and the general public.

Finally, as part of the metropolitan transportation planning and project development process, the NJTPA Central Staff fulfills the multiple roles of organizing project information sessions for the public and elected officials; tracking and preparing status reports on important projects; reporting on the projects subject to federal regulations for projects with costs of \$80 million or more; and identifying and educating the designated recipients of congressional designated funded projects.

During FY 2015 FHWA and FTA made recommendations to enhance the TIP management process. Staff will initiate several steps in addressing the recommendations during this fiscal year.

### **SUBTASKS INCLUDE:**

- The NJTPA will provide a status of the projects with costs over \$80 million in federal funding as defined in federal regulations. This status is included in Appendix A of the TIP.
- The annual element of the TIP represents the best estimate of the projects and programs and funding levels that are planned for advancement during the first two years. While the process is dynamic and some changes are inevitable, it is the NJTPA's obligation to report on changes to the document. These changes are subject to formal procedures that must be consistent with federal regulations. Depending on the nature of the revisions being made, changes to the TIP may be subject to public review, as well as EPA, FHWA, and FTA approval. Fiscal constraint must be maintained and demonstrated, and air quality and Congestion Management Process impacts must be evaluated, considered, and reported. The procedures set forth in an approved Memorandum of Understanding (MOU) among NJ TRANSIT, NJDOT and the NJTPA require that all NJTPA Board members and affected parties be made aware of changes that may alter the overall scheduling and funding for all projects. As such, TIP revisions are an ongoing activity.

In October 2010, NJDOT activated an eSTIP module. This module includes electronic processing of STIP modifications and amendments. For FY 2017, staff will continue to administer this application as part of the modification and amendment process, and explore other product outputs of the eSTIP such as extracting and publishing the annual obligation report for the region.

- In addition to the status reports, a year-end obligation report of annual element items is produced by the NJTPA. As required by federal regulations, NJTPA will evaluate the current TIP relative to planned project costs versus actual federal funding authorizations/obligations and how it aligns with the NJTPA Regional Capital Investment Strategy (RCIS).
- Staff will work SJTPO, DVRPC, NJDOT and NJ TRASIT to develop a policy to obtain a funding commitment from non-NJTPA Board members who receive federal funds and must provide matching resources.
- Staff has participated in the NJDOT Capital Project Screening Committee (CPSC) meetings since December 2007. Upon receipt of the agenda, staff prepares county-specific documentation of the requested changes to the project schedule and/or funding and advises the affected subregional planner and engineer of the pending NJDOT action. The feedback from the county is then addressed at the relevant CPSC and Capital Programming Committee meetings. As necessary, the NJTPA staff will facilitate meetings with the subregions and NJDOT project managers to discuss projects that are of particular importance to the subregions. An analysis of impacted projects will be included in the annual fiscal year end Amendment and Modification Summary.

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT 17/502 TRANSPORTATION IMPROVEMENT PROGRAM MANAGEMENT (Cont.)

- Project Status Reports are produced by the NJTPA to provide an effective tool for tracking the progress of TIP projects and programs as they move through the four-year cycle of the TIP. The NJDOT reports are updated monthly. The NJ TRANSIT, the local project status, and the Construction reports are issued quarterly. These reports are available via the NOTIS website.
- Staff will compile project status information on congressional designated funded projects. Staff will provide increased oversight of congressional designated funded projects by conducting follow-up meetings to assess the status and progress made to date and to confirm involvement with NJDOT Local Aid District Offices and all other necessary agencies.
- Staff will work SJTPO, DVRPC, NJDOT and NJ TRANSIT to revise the Memorandum of Understanding to reflect non-federally funded projects.

# **PRODUCTS:**

- Process, maintain, and update modifications and amendments for the FY 2016-2019 TIP, as revised (ongoing activity) and work with NJDOT for training and assistance on the eSTIP software application (ongoing activity). TIP modification and amendment reports, distributed quarterly, will include a summary of the modifications. An annual TIP revision report will compare the number of TIP modifications with those of prior years. (December 2016)
- Participate in the bi-weekly Capital Project Screening Committee (CPSC) meetings and monthly Capital Program Committee (CPC) meetings. As necessary, staff will coordinate meetings for those projects which the subregions deem critical. These meetings will focus on providing the latest project status with the goal of expediting project development. An analysis of the impacted projects will be included in the annual fiscal year end Amendment and Modification Summary. (December 2016)
- Continue to work with NJDOT and NJ TRANSIT to obtain the necessary project status data that will give NJTPA member agencies the most timely and accurate status of all projects listed in the TIP and S&D program. (ongoing activity)
- Maintain an accurate and timely NOTIS database, and continually investigate and identify innovations that will improve NOTIS. (ongoing activity)
- A year-end obligation report of annual element items will be prepared, showing alignment with the RCIS. (January 2017)
- A NJTPA Board of Trustee approved resolution that states the policy on what non-NJTPA Board members must provide for non-federal funding committments. (4th Qtr FY 2017)
- A revised Memorandum of Understanding Among NJDOT, NJ TRANSIT, and the three MPOs on TIP/STIP revisions involving non-federal projects. (4th Qtr FY 2018)

# **RELATIONSHIP TO PRIOR WORK:**

This task is a primary and mandated function which allows the agency to maintain eligibility for federal capital transportation improvement funds. In addition, Central Staff has maintained a reporting format and an automated reporting system that generates Project and Program Status Reports based on information provided by NJDOT and NJ TRANSIT. Staff has also published and distributed the year-end obligation report of the annual element for the TIP.

# **OUTCOMES:**

### 17/502 TRANSPORTATION IMPROVEMENT PROGRAM MANAGEMENT (Cont.)

As operating agencies provide more detailed status on projects under construction, it will be reflected on the NOTIS webpage. By the end of 2017, the status of at least half of the projects under construction for NJ TRANSIT and NJDOT will be listed. The information will be maintained in a database.

#### **PROJECT COST:**

Task Activity Transportation Improvement Program Management Budget Line ItemTotal FY 2017Budget Line ItemProgram BudgetCentral Staff\$ 374,071

### **PROJECT MANAGER:**

Ann Ludwig 973-639-8411 aludwig@njtpa.org

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT 17/503 LOCAL CAPITAL PROJECT DELIVERY PROGRAM

# **RELATIONSHIP TO MISSION OF THE AGENCY:**

The NJTPA assists member subregions in carrying out specific transportation planning activities that help advance the goals, objectives, principles, policies, plans and projects as set forth in Plan 2040, the Regional Transportation Plan (RTP) for northern New Jersey. The Local Capital Project Delivery Program (LPD) will help advance the mission of the NJTPA by linking transportation planning with economic growth, environmental protection, and quality of life goals for the region.

### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

The Local Capital Project Delivery Program (LPD) supports the Business Plan by addressing the Facilitating Growth objective. In particular, LPD will provide Subregions with the opportunity to fund local transportation improvements from project conception through construction

### **DESCRIPTION:**

Plan 2040 identifies several principles that govern NJTPA's approach to regional transportation planning. These principles include giving the highest funding priority to maintaining and repairing existing infrastructure.

The Local Capital Project Delivery Program is a program that allows subregions to advance local "fix-it-first" type projects through NJDOT/FHWA project delivery process. This program has replaced the former Local Scoping and Local Lead Programs. Sponsors will identify problems and needs within their respective subregions and if selected, would have an opportunity to develop projects through the Local Concept Development (LCD), Local Preliminary Engineering (LPE), Final Design/Right of Way, and Construction phases of this program. The program will include the following phases of work for selected projects:

Concept Development Phase: project sponsors will identify and compare reasonable alternatives and strategies that address the purpose and need statement and select a preliminary preferred alternative (PPA). Once a concept development report is completed, the Inter-agency Review Committee (IRC) will determine whether or not the project can be advanced to the next phase.

Preliminary Engineering Phase: projects will be further developed and refined to a level of detail necessary to secure the approval of the environmental document, also known as the National Environmental Policy Act (NEPA) document. Once the project obtains NEPA approval and is accepted by the IRC, the project advances to the next phase.

Final Design/Right-of-Way Acquisition Phase: this phase will produce construction contract documents (i.e., Final Plans, Specifications, and Cost Estimates (PSE), and if necessary, acquire right-of-way). Once the PSE package is approved by NJDOT and authorized for construction by FHWA, the project is eligible to advance to the fifth and final phase.

Construction Phase: the project will be advertised, awarded, construction management systems and processes will be established, and construction will commence. The project is considered completed when the final phase is closed out with NJDOT and FHWA.

### **SUBTASKS INCLUDE:**

• Staff will continue to work towards successful completion of Local Scoping program projects including attendance at Subregions' meetings with NJDOT, FHWA, NJDEP and the public; providing guidance on technical matters and reviewing/commenting on technical reports.

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT 17/503 LOCAL CAPITAL PROJECT DELIVERY PROGRAM (Cont.)

- Staff will continue to work with its subregional partners to successfully transition graduates of the LCD program to Local Preliminary Engineering (LPE). Staff will monitor the LPE projects as they advance through the project delivery process to secure the appropriate environmental document as required. Staff will also monitor project costs for all phases of work to ensure accurate funding is programmed in the TIP for future phases of work.
- Staff will continue to co-manage with Subregions the Local Concept Development (LCD) phase of the Local Capital Project Delivery Program (LPD).
- Staff will work with NJDOT Local Aid and the Bureau of Environmental Program Resources to determine whether or not a successful graduate from Local Concept Development should advance through the EO 215 New Jersey State environmental process or continue through the federal process to complete NEPA. This determination will be made on a project by project basis by the Interagency Review Committee.
- Staff will develop an online project management tool for all local programs. The NJTPA will collaborate with NJDOT LA, BEPR and subregional PMs to identify major milestones to be tracked through the state and federal processes of project development. This is phase two and will build on the effort begun in FY 2016 for the internal management and tracking of local projects and programs.
- Staff will continue to monitor all local projects regardless of funding source to ensure accurate, year of expenditure estimates are being programmed in the TIP. Staff will maintain an up to date working sheet (excel) of each projects' estimate for each phases of work.

# **PRODUCTS:**

- Completion of all LCD project deliverables which include, but are not limited to: Project Purpose and Need Statements, reasonable alternatives and strategies that address the Purpose and Need, selection of a Preliminary Preferred Alternative (PPA), and NEPA classification. (Ongoing Activity)
- Produce detailed quarterly status reports for projects in the LCD and LPE phases and other projects to track the progress of deliverables. (Quarterly)
- Monitor Local TTF funds as projects advance through the project delivery process. Coordinate with NJDOT LA Trenton division to provide detailed tracking of TTF funds expended since FY 2014. (Ongoing Activity)
- Continued advancement of former Local Scoping Program projects through the NEPA process. (Ongoing Activity
- Staff will coordinate with consultants and subregions to successfully complete all LPE deliverables including but not limited to the following: performing engineering tasks and technical environmental studies in order to obtain formal community consensus (through a public information center) of the study; the approval of the environmental document (NEPA document) from FHWA; agency consultation and design level mapping and design; and development of property acquisition cost estimates and project cost estimates. (March 2017)
- Staff will coordinate with University Centers and other partners to develop workshops to support and provide training to the subregions for local programs as appropriate.
- Staff will continue to develop an online project management tool for all local programs which will track major milestones of the state and federal projects through the project development process.(Ongoing Activity)
- Staff will continue to improve upon processes, procedures as well as identify best practices for the management and oversight of TTF funding for local projects. (Ongoing Activity)

# **RELATIONSHIP TO PRIOR WORK:**

### 17/503 LOCAL CAPITAL PROJECT DELIVERY PROGRAM (Cont.)

Staff continues to work with NJDOT to implement FHWA's requirements for a successful project pipeline. In FY 2015, Staff will continue development of the Local Capital Project Delivery Program which includes four phases, as well as a new project intake process. This new program replaces the Local Scoping and Local Lead Programs. These projects will be monitored so that all remaining projects graduate and are authorized for construction.

#### **OUTCOMES:**

Local projects will be advanced in the project pipeline. Therefore, projects will graduate into the Local Preliminary Engineering work phase, and the projects graduating from LCD or that have already recieved an approved CED will be programmed for Final Design and all other subsequent phases of work.

### **CONSULTANT ACTIVITY:**

Local Concept Development Program

### **DESCRIPTION:**

The Local Concept Development (LCD) phase of work involves the establishment of the purpose and need, and the initial environmental screening, which will result in a preliminary preferred alternative.

In FY 2017, work will be completed on the two remaining projects which were started in FY 2014 of the Local Concept Development Program. Work will continue on the five projects funded in FY 2016. Due to the lack of funding resources in FY 2016, effort on the three FY 2016 "B" list projects will begin in FY 2017.

The selected consultants are supporting the NJTPA and the selected subregions in managing the LCD phase of work for the projects. Upon completion and approval of the Concept Development Report by the Interagency Coordinating Committee these projects will then advance to Local preliminary Engineering.

The consultant efforts for the next round of studies are anticipated to start in FY 2018.

Completion of project deliverables for all new projects will include, but are not limited to: a Project Purpose and Need Statement, reasonable alternatives and strategies that address the Purpose and Need, selection of a Preliminary Preferred Alternative (PPA), and NEPA classification.

### **PRODUCTS:**

- FY 2014 Hudson County and Union County Local Concept Development studies: the Consultant will complete the following project deliverables for the selected projects of the LCD phases including but is not limited to the following: a Project Purpose and Need Statements, reasonable alternatives and strategies that address the Purpose and Need, selection of Preliminary Preferred Alternatives (PPA), and NEPA classifications (This is a continuing activity from FY 2016 with a completion date of 2nd Quarter FY 2017).
- The FY 2016 Local Concept Development studies consisting of Monmouth County Bridge S-31, Bergen County Kingsland Avenue Bridge, Essex County Bridge Street Bridge, Passaic County Sixth Avenue Bridge and City of Newark Central Avenue Bridge: Three Consultants will complete the following project deliverables for the selected project of the LCD phase including but is not limited to the following: a Project Purpose and Need Statements, reasonable alternatives and strategies that address the Purpose and Need, selection of Preliminary Preferred Alternatives (PPA), and NEPA classifications (This is a continuing activity from FY 2016 with a completion date of 3rd Quarter FY 2018).
- The FY 2016 Hudson, Morris and Somerset Counties Local Concept Development studies Consultant will

# 17/503 LOCAL CAPITAL PROJECT DELIVERY PROGRAM (Cont.)

complete the following project deliverables for the selected project of the LCD phase including but is not limited to the following: a Project Purpose and Need Statements, reasonable alternatives and strategies that address the Purpose and Need, selection of Preliminary Preferred Alternatives (PPA), and NEPA classifications (This activity begins 1st Quarter FY 2017 with a completion date of 3rd Quarter FY 2018).

### STATUS:

This is an ongoing program activity.

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT 17/503 LOCAL CAPITAL PROJECT DELIVERY PROGRAM (Cont.)

# PROJECT COST:

| Task Activity  | Budget Line Item | Total FY 2017<br>Program Budget |
|--|------------------|---------------------------------|
| Local Capital Project Delivery Program                     | Central Staff    | \$ 426,536                      |
| Local Concept Development Program<br>PL and STP-NJ funding | Consultant       | \$ 6,625,000                    |

# **PROJECT MANAGER:**

Sascha Frimpong 973-639-8422 sfrimpong@njtpa.org

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT 17/504 LOCAL SAFETY AND ASSET MANAGEMENT

# **RELATIONSHIP TO MISSION OF THE AGENCY:**

Enhancing travel safety is critical to the NJTPA's mission to meet the travel needs of the region's residents. Through the Regional Capital Investment Strategy, the Board of Trustees stated that safety investments should increase in future investment plans. The NJTPA Board of Trustees has demonstrated its leadership in planning and programming new safety improvements that address some of the regions' most pressing safety needs

# LINK TO NJTPA STRATEGIC BUSINESS PLAN:

The Local Safety and Asset Management task supports the Business Plan by addressing the Facilitating Growth objective. In particular, this task provides federal funding for subregional participation in the federal project development process. This task will also help to develop suitable education and outreach information for the subregions that communicates specific USDOT compliance regulations.

# **DESCRIPTION:**

This task helps to further NJTPA's goal of "Maintaining a safe and reliable transportation system in a state of good repair". The programs under this task support many of the guiding principles in Plan 2040, the Regional Transportation Plan for northern New Jersey, by making travel safer and more secure, maintaining and repairing existing infrastructure, improving existing roads, applying new transportation technologies, and supporting walking and bicycling. Furthermore, these programs support MAP-21 by providing Highway Safety Improvement Program (HSIP) funding for safety projects towards the goal of reducing traffic fatalities and serious injuries on all public roadways.

Local Safety and High Risk Rural Roads Programs:

The NJTPA, in conjunction with NJDOT, awards federally funded safety grants annually to address documented safety problems and advance safety improvements, as well as to develop new ones to support the Board's leadership in improving safety in the region. This task involves a partnership with USDOT, NJDOT, and local engineering and planning partners to successfully implement safety improvements at priority locations.

The Local Safety Program (LSP) advances quick-fix safety initiatives on county and local roadway facilities in the NJTPA region. The High Risk Rural Roads Program (HRRRP) provides funding to advance quick-fix safety improvements along rural roadways that have been functionally classified as a rural major, rural minor collector or rural local roads and have a crash rate that exceeds the region's average for those functional classes of roadways. Both programs focus on crash prone locations identified using crash data with the selection of projects through an annual solicitation. Applicants are evaluated by a technical review committee (which includes NJTPA and NJDOT staff members) and then submitted to the NJTPA Board of Trustees for approval. Projects selected for both programs must receive construction authorization within a short period of time.

This task provides for the administration and oversight of the Local Safety and High Risk Rural Roads Programs including the solicitation and selection process, and project oversight to ensure timely federal authorization to construct these projects. Staff will continue performance management on completed projects utilizing 3 years of available post-construction crash data to measure the effectiveness of specific safety improvements. Staff will also continue to align these programs with FHWA initiatives and goals including systemic approach on safety projects, use of Road Safety Audits to select suitable project locations, incorporation of FHWA Proven Safety Countermeasures into projects, and use of the Highway Safety Manual.

Staff initiated the Local Preliminary Engineering Assistance Program (formerly the Final Design Assistance Program)

### 17/504 LOCAL SAFETY AND ASSET MANAGEMENT (Cont.)

in FY 2013. This program will continue to provide subregional assistance (through the use of NJTPA selected consultants) with preparation of final plans, specifications and cost estimates (PSEs documents) required for Federal Authorization to construct for projects advanced through the Local Safety and High Risk Rural Roads programs. This program will be made available to all subregions with projects selected for FY 2016 and FY 2017 LS & HRRR Programs.

Road Safety Audits:

Since 2011, Staff has been partnering with Rutgers Transportation Resource Center CAIT to conduct Road Safety Audits (RSA) within the NJTPA region. Many of the RSAs have been used for develop projects for the Local Safety Program. Staff will continue to work with Rutgers CAIT and the subregions to identify crash prone locations that would benefit from a RSA.

Road Safety Audits: Pedestrian

As a new initiative, staff will coordinate with Regional Planning to conduct RSAs at locations along the high crash pedestrian corridors identified in our region. These RSAs will follow the format of RSAs conducted by Rutgers.

MUTCD Retroreflectivity and Advance Warning Signs Compliance:

In FY 2012 the NJTPA provided funding to the subregions to inventory signs and create or upgrade existing sign management systems. These systems can now be used to determine sign replacement needs throughout the NJTPA region. Staff will monitor and possible development of activities to address needs.

The MUTCD also calls for updates or removal of Advance Warning signs before curves on roadways. In coordination with the Subregions, NJDOT Traffic Data and Safety, FHWA and the MPOs for the state, an approach to ensuring subregional compliance will be identified.

Roundabout Program:

New Jersey has been designated as an Intersection Focus State where crashes at intersections are higher than the national average. In an effort to reduce these types of crashes and remove the intersection focus state designation, NJDOT, in coordination with the NJDOT, FHWA and MPOs, have developed a Pilot Roundabout Program to identify candidate projects and construct the Roundabout.

### **SUBTASKS INCLUDE:**

- Safety Performance Measures: Staff will continue to analyze completed projects with 3 years of available post-construction crash data to measure the effectiveness of specific safety improvements and as a way to help gauge the success of the program
- MUTCD Traffic Sign Inventory and Retroreflectivity Program: Staff will monitor and possibly development future activities to address needs.
- In coordination with Regional Planning, staff will conduct pedestrian focused RSAs using a similar format to that of Rutgers. They will be conducted on an as needed basis.
- Management and administration of the FY 2015-2016 and 2016 2017 LSP & HRRRP: Throughout FY 2017, Staff will continue to maintain oversight of all projects in the program to ensure timely submission of CED and PSE documents to NJDOT Local Aid and BEPR in order to receive federal authorization to construct. During

### 17/504 LOCAL SAFETY AND ASSET MANAGEMENT (Cont.)

the 1st quarter of FY 2017, projects will be under Local Aid review. Staff will ensure comments are addressed and prompt resubmissions are made for all projects. Staff will participate on consultant selection committees for projects request HSIP funding for construction inspection services

- FY 2017 Local Safety Preliminary Engineering Assistance Program (LPEAP): Staff will solicit design consultants to develop PSEs for subregions requesting assistance with projects in the FY 2017-2018 program. Staff will manage these consultants through the development and submission of CED and PSE documents to NJDOT Local Aid and BEPR.
- Management and administration of the FY 2015-2016 and FY 2016-2017 LSP & HRRRP: Staff will attend project kick-off meetings, review engineering and environmental documents, and maintain oversight of projects via contact with subregional project managers, design consultants, NJDOT Local Aid and BEPR, and FHWA. Staff will ensure timely submission of CED and PSE documents to NJDOT Local Aid and BEPR in order to receive federal authorization to construct.
- Road Safety Audits (RSA): Staff will continue to participate in RSAs to be conducted in the summer and fall of 2016 (1st and 2nd quarters of FY 2017). Staff will continue to work with Rutgers CAIT to identify suitable locations for 2017 RSAs and participate in RSAs conducted in the spring of 2017
- Staff will identify and advance through the project delivery process intersections with high crash locations best suited for roundabout installation.
- Solicitation of projects for the FY 2018-2019 LSP & HRRRP: Staff will develop the solicitation package, maintain oversight of the solicitation and technical review committee which will evaluate proposals and present a program to the NJTPA Committees and Board of Trustees for endorsement.
- FY 2017 Local Safety Preliminary Engineering Assistance Program (LPEAP): In FY 2015 Staff selected design consultants to develop PSEs for subregions that requested assistance with projects in the FY 2015-2016 program. In FY 2016, Staff selected design consultants to develop PSEs for subregions that requested assistance with projects in the FY 2016-2017 program. Staff will continue to manage these consultants until federal authorization to construction has been obtained and design-related questions have been addressed during construction

### **PRODUCTS:**

- Federal authorization of FY 2015-2016 and FY 2016-2017 LSP&HRRRP projects (September 2016);
- Road Safety Audits: Participation in Road Safety Audits with Rutgers CAIT, including the selection of suitable locations (Fall 2016; Spring and Summer 2017)
- MUTCD Traffic Sign Inventory Replacement Program: Program monitoring and possible development of activities to address needs. (Ongoing)
- Approval of the FY 2017-2018 LSP&HRRRP by the NJTPA Board of Trustees (October 2016)
- Solicitation of FY 2018-2019 LSP & HRRRP projects (January 2017)
- Preparation of CED and PSE documents for submission to NJDOT Local Aid for authorization to construct for FY 2017-2018 LSP&HRRP (May 2017)
- Performance results for past LSP&HRRRP projects as post-construction data becomes available through Plan4Safety (ongoing)
- Federal authorization for the Construction of roundabouts at high crash intersections in FY 2017(September 2017)

### 17/504 LOCAL SAFETY AND ASSET MANAGEMENT (Cont.)

• Coordinate with Regional Planning to conduct pedestrian focused road safety audits. They will be conducted on an as needed basis. (New activity. Ongoing)

### **RELATIONSHIP TO PRIOR WORK:**

This task builds directly upon the work of the Regional Safety Priorities Update Study completed in FY 2009, in addition to other safety planning and funding efforts. The Local Safety and High Risk Rural Roads Programs is an annual program. Final Design Assistance Program builds on the LS&HRRR programs. The MUTCD Traffic Signs Retroreflectivity Program is a building upon a program developed in FY 2011-2012.

### **OUTCOMES:**

Reduction in traffic fatalities and serious injuries;

• Construction of projects consistent with numerous RTP Plan 2040 guiding principles, making streets accessible and safer for residents and travelers, including pedestrians and bicyclists;

- Performance measures for local safety projects;
- Compliance with MUTCD sign retroreflectivity requirements; Compliance with MUTCD Advance Warning Sign of curves requirements;
- System preservation and improvement through program completion;

Reduction of intersection crashes in the region because of the installation of roundabouts at high crash locations

### **CONSULTANT ACTIVITY:**

Local Safety Engineering Assistance Program

# **DESCRIPTION:**

The Local Safety Program (LSP) advances quick-fix safety initiatives on county and local roadway facilities in the NJTPA region. The High Risk Rural Roads Program (HRRRP) provides the NJTPA region with funds to advance quick-fix safety improvements located only along rural roadways that have been identified as high risk rural roads. These roadways are functionally classified as a rural major or minor collector or as a rural local road and have a crash rate that exceeds the statewide average for those functional classes of roadways.

Both programs fund only the construction of the projects. Subregions must produce final plans, specifications and cost estimates (PSE documents) required for federal authorization to construction using their own funds and Staff time.

The NJTPA will continue the Local Safety Engineering Assistance Program (LSEAP) that began in FY 2013 and retain consultants to provide assistance to subregions with projects selected for the FY 2016-2017 LSP and HRRRP for the development of final PSE documents.

### PRODUCTS:

- FY 2015 and FY 2016 LSEAP: Submission of quarterly reports by the consultants selected for this program (ongoing)
- FY 2015 and FY 2016 LSEAP: Revisions and resubmission of final PSE documents for FY 2015-2016 and FY 2016 -2017 LSP and HRRRP projects to NJDOT Local Aid and BEPR for projects seeking FY 2015 authorization to construct (4th Quarter 2017)
- FY 2015 LSEAP: Development and submission of CED and PSEs to NJDOT Local Aid and BEPR for FY

### 17/504 LOCAL SAFETY AND ASSET MANAGEMENT (Cont.)

2015-2016 and FY 2016-2017 LSP and HRRRP projects seeking FY 2017 authorization to construct (4th Quarter 2017)

- FY 2017 LSEAP: Submission of quarterly reports by the consultants selected for this program (ongoing)
- FY 2016 LSEAP: Development and submission of CED and PSEs to NJDOT Local Aid and BEPR for FY 2016-2017 LSP and HRRRP projects seeking FY 2016 authorization to construct (4th quarter 2018)

### STATUS:

This is an ongoing program activity.

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT 17/504 LOCAL SAFETY AND ASSET MANAGEMENT (Cont.)

# PROJECT COST:

| Task Activity   | Budget Line Item | Total FY 2017<br>Program Budget |
|---|------------------|---------------------------------|
| Local Safety and Asset Management                           | Central Staff    | \$ 318,239                      |
| Local Safety Engineering Assistance Program<br>HSIP funding | Consultant       | \$ 10,182,675                   |

# **PROJECT MANAGER:**

Sascha Frimpong 973-639-8422 sfrimpong@njtpa.org

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT 17/505 STUDY AND DEVELOPMENT PROGRAM

# **RELATIONSHIP TO MISSION OF THE AGENCY:**

The NJTPA provides regional leadership in transportation planning. This task will ensure that the NJTPA will advance the highest priority issues and needs through the project pipeline and subsequently the capital program. This task encompasses a major program that serves to advance concepts emerging from the Regional Transportation Plan (RTP).

### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

The Study and Development Program (S&D) supports the NJTPA Strategic Business Plan by Improving Internal Operations, Communicating the NJTPA, and Developing Performance Measures by NJTPA's role in all aspects of S&D project selection qualitatively assessed to be strengthened through a cooperative process with the subregions and other agencies, and strengthening the role of NJTPA in the selection and advancement of new projects through active involvement with the subregions, NJDOT and other partners. This work also engages Board members and the public.

### **DESCRIPTION:**

The Study and Development Program (S&D) is a schedule of project planning and development work resulting from the metropolitan transportation planning process and conducted by NJTPA member agencies to carry out the goals and long-range strategy of the RTP. This includes projects that are candidates for funding from a variety of sources including: the management systems (pavement, safety, drainage, congestion, bridge); NJTPA Board of Trustee and subregional priorities; the Strategy Evaluation and Refinement processes; Local Capital Project Delivery (LPD) Program; and corridor subarea and related studies. This task includes identification and advancement of priority projects through obtaining agreement between the subregions, NJDOT and NJ TRANSIT on adopting a final list of candidate projects that will undergo this pre-TIP study and development process.

The FY 2017 UPWP represents the second year of the two-year FY 2016 - FY 2017 S&D Program and will continue to advance the highest priority candidate projects with NJTPA Board approval through the project development pipeline. The limited capacity to incorporate new projects into the NJDOT Project pipeline has led the NJTPA to constrain the S&D to projects already in progress and to add a limited number of new projects into the project pool each year. The NJDOT Project Delivery process consists of the Problem Statement/Screening Phase, Concept Development, Preliminary Engineering, Final Design, Right of Way, and Construction Phase. The Problem Screening Phase is the beginning of the delivery process for any potential project. The purpose is to investigate a potential transportation deficiency identified through a Problem Statement may include the NJDOT Management Systems, Planning Studies, a Metropolitan Planning Organization, or internal and external stakeholders. This phase involves a Tier 1 Screening, Tier 2 Screening, and Review and Approval by the Capital Program Screening Committee (CPSC) and the Capital Program Committee (CPC) to enter into the Concept Development Phase.

The Concept Development (CD) phase is where the purpose and need statement are developed, determination of NEPA classification is made, and selection of the Preliminary Preferred Alternative (PPA) occurs. After completion of the CD phase, projects advance to the Preliminary Engineering (PE) phase, which is now included in the TIP. S&D is essentially a pre-TIP process that includes concepts coming out of the NJTPA Regional Planning process and also relies heavily on NJDOT's Asset Management policy which emphasizes fix it first infrastructure projects that emerge from management systems before they may be considered as candidates for implementation through the TIP.

This task includes the preparation of a list of candidate capital projects that are located on NJDOT or NJ TRANSIT facilities, and will be considered for entry into or advancement in the project pipeline. The development of the program of projects is based on the NJTPA's RTP goals, plans and programs and involves extensive dialogue and

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT 17/505 STUDY AND DEVELOPMENT PROGRAM (Cont.)

consensus among the Board of Trustees, NJDOT, NJ TRANSIT and the member subregions.

The S&D Program is contained in the UPWP, Volume V. S&D is NJTPA's vehicle for programming the development and advancement of candidate projects. Volume V of the UPWP includes all phases of project development work currently underway or to be handed off to implementing agencies in the region. Significant additions, deletions or changes to Volume VI require action by the NJTPA Board of Trustees. The management of Volume V is also conducted under this task which involves the monitoring and tracking of projects and the processing of amendments to the S&D Program. It also includes participating in project meetings as deemed appropriate.

The NJTPA will coordinate the holding of project status meetings between NJDOT and affected subregions as necessary. The NJTPA will participate in project meetings and on advisory committees that are established by implementing agencies to provide input into projects that are included in the S&D Program to the degree deemed appropriate and as resources permit. The NJTPA will also track the progress of all projects contained in the S&D Program through the receipt of progress reports from NJDOT and other sponsoring member agencies.

This effort will result in the development of the FY 2016 - FY 2017 Year 2 S&D Program for central and northern New Jersey, refer to:

http://www.njtpa.org/Project-Programs/Project-Development/Study-and-Development-Program.aspx.

# SUBTASKS INCLUDE:

- Review actions proposed by the Capital Programming Screening Committee (CPSC) of NJDOT that impacts S&D projects and coordinate with the affected subregions in preparing a response to these proposed actions.
- Develop and maintain database of all problem statements submitted to NJDOT. Track disposition of each problem statement and provide semi-annual report on problem statement status.
- Amend the FY 2016 FY 2017 Year 1 S&D Program as required, maintain a Modification and Amendments database to track S&D changes, monitor the progress of these projects, coordinate with affected subregions, report their status on the NOTIS system, and produce semi-annual status reports. Central Staff will continue to utilize NJDOT's Project Reporting System (PRS).
- Produce comparison reports and conduct consultation meetings with subregions on the development of the Year 2 FY 2016 FY 2017 S&D program that compare the Year 2 S&D program to the operating agencies' status reports in order to monitor S&D project progress. Conduct negotiations beteen the operating agencies and the subregions to develop a draft S&D Program to present to the RTAC and PEDC committees for recommendation to advance to the Board for approval.
- Participate in project meetings as appropriate and as resources permit and coordinate with subregions as appropriate.
- Submit candidate Problem Statement to NJDOT Capital Programming area for Tier 1 screening, Tier 2 screening, and review and approval by the Capital Program Screening Committee (CPSC) and the Capital Program Committee (CPC) in order for the candidate concept development projects to enter into the pipeline process.
- Compile, score and prioritize new candidate projects from the NJTPA-led studies and analyses, NJDOT, NJ TRANSIT and Subregional studies that are consistent with the goals and objectives of the RTP.

# **PRODUCTS:**

• Prepare draft FY 2016 - FY 2017 Year 2 S&D Program and prepare final S&D Program updates for Board

### 17/505 STUDY AND DEVELOPMENT PROGRAM (Cont.)

adoption. This includes the review and evaluation of S&D Program candidates using established criteria and processes that reflect Plan 2040 priorities, the preparation of comparison reports, inter-agency and subregional consultation and negotiation efforts. (July 2016)

- Amend and modify the FY 2016 FY 2017 Year 1 S&D Program as required. (ongoing)
- Participate in project meetings, monitor and provide guidance on critical S&D projects/studies, including ITS projects, and coordinate with subregions accordingly. (ongoing)
- Update information on the NJTPA website and on NOTIS relating to this task. (August 2016)
- Track disposition of problem statements (ongoing) and provide semi-annual report on problem statement status. (December 2016; June 2017)

#### **RELATIONSHIP TO PRIOR WORK:**

This is an ongoing program, formerly known as the Project Development Work Program or PDWP. This task will ensure consistency with the previous year's program. The program will build upon work conducted in FY 2016 and will advance new projects emanating from the RTP as well as those resulting from the various analyses conducted in-house and through consultant efforts during previous years. This task also incorporates capital program project information support necessary to prepare the S&D Program.

#### **OUTCOMES:**

Recommendations and concepts arising from corridor studies, subregional studies, and other MPO planning studies and priorities are programmed in the S&D Program, and advanced through the NJDOT project pipeline.

### **PROJECT COST:**

Task Activity Study and Development Program

### **PROJECT MANAGER:**

Richard Stoolman 973-639-6354 rstoolman@njtpa.org

|                  | Total FY 2017  |  |
|------------------|----------------|--|
| Budget Line Item | Program Budget |  |
| Central Staff    | \$ 46,576      |  |

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT 17/506 TRANSPORTATION ALTERNATIVES AND SAFE ROUTES TO SCHOOL PROGRAMS

# **RELATIONSHIP TO MISSION OF THE AGENCY:**

The NJTPA assists member subregions in carrying out specific non-traditional transportation planning activities that also helps the goals, objectives, principles, policies, plans and projects as set forth in Plan 2040, the Regional Transportation Plan (RTP) for northern New Jersey. The Transportation Alternatives Program (TAP) will help advance the mission of the NJTPA by providing funding to the subregions for non-motorized transportation and enhancement projects thereby linking transportation planning with environmental protection, and quality of life goals for the region

# LINK TO NJTPA STRATEGIC BUSINESS PLAN:

The Transportation Alternatives Program (TAP) supports the Business Plan by addressing the Facilitating Growth objective. In particular, TAP will provide Subregions with the opportunity to fund local non-traditional transportation improvements from project conception through construction

### **DESCRIPTION:**

The Moving America for Progress for the 21st Century (MAP-21) creates a new program that includes trail and bike/pedestrian funding. The new program, Transportation Alternatives Program (TAP), replaces the Transportation Enhancements and Safe Routes to School programs and consolidates the current twelve eligible activities under six new headings. The funding categories include the following:

- On and off road trail facilities
- Safe routes for non-drivers
- Abandon railroad corridors for trails
- Turnouts, overlooks and viewing areas
- Community improvement activities
- Environmental mitigation

Under the bill, states will sub-allocate 50% of their TAP funds. For New Jersey, the 50% will be proportionately split between the three Metropolitan Planning Organizations (MPOs). The NJTPA will develop a competitive program for Subregions to fund projects based on the above-named categories.

Regional Transportation Enhancements Program

NJDOT in partnership with the MPOs identified unspent SAFETEA-LU funds previously identified for the Transportation Enhancements Program. The NJTPA has reviewed completed planning efforts at the agency and subregional level to identify projects that are eligible for this funding; which can also advance to a Construction authorization by FY 2019. This is a short term program that will conclude once all funds have been expended.

# **SUBTASKS INCLUDE:**

• Staff working with NJDOT will conduct a solicitation for projects to be considered for inclusion in these programs. An inter-agency evaluation and selection committee will review each application and recommend projects for inclusion in the programs

# CAPITAL PROGRAMMING AND PROJECT DEVELOPMENT 17/506 TRANSPORTATION ALTERNATIVES AND SAFE ROUTES TO SCHOOL PROGRAMS (Cont.)

- Staff will continue to coordinate with the NJDOT to monitor and refine as needed the Transportation Alternatives and Safe Routes to Schools programs.
- Staff will work with NJDOT, and subregional project managers to ensure all TAP and RTEP projects successfully advance through the appropriate phases of work in the project development process. This includes attending all project status meetings, working with subregional project managers to troubleshoot issues as they arise; identifying projects with changes to funding needs or scheduling to ensure timely revisions to the Transportation Improvement Program as well as assist recipients in attaining eligibility to receive federal funds.

# PRODUCTS:

- Refined programmatic guidance (March 2017)
- Solicit for projects to be considered for inclusion in the TAP and SR2S programs. (Ongoing Activity)
- In coordination with NJDOT develop and conduct workshops for successful program applicants. (Ongoing Activity)
- Continue to monitor the advancement of regional TE projects through the project delivery process until Construction authorization. (Ongoing Activity)

### **RELATIONSHIP TO PRIOR WORK:**

Staff will work with NJDOT and the Subregions to develop a pilot program for TAP. This new program replaces the Transportation Enhancements and Safe Routes to School programs. Staff will work with NJDOT and Subregional managers to ensure timely and successful completion of the pilot projects

### **OUTCOMES:**

Construction of non-traditional transportation projects consistent with numerous RTP Plan 2035 guiding principles, making bike/pedestrian trails, streetscapes and streets accessible and safer for commuters, residents and travelers.

# PROJECT COST:

**Task Activity** Transportation Alternatives and Safe Routes to School Programs Budget Line ItemTotal FY 2017Program BudgetCentral Staff\$ 257,964

# **PROJECT MANAGER:**

Sascha Frimpong 973-639-8422 sfrimpong@njtpa.org

# PUBLIC AFFAIRS 17/601 PUBLIC INVOLVEMENT/OUTREACH

# **RELATIONSHIP TO MISSION OF THE AGENCY:**

This work task focuses on proactively educating, informing and involving the public, elected officials, regional stakeholders and others in the regional transportation planning process. A robust public outreach and education program improves the quality of decision making and allows the NJTPA to enhance its role as a regional leader and resource on transportation issues, as called for in the mission statement and intended by Congress.

### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

One of the five key strategic directions called for in the NJTPA Strategic Business Plan is Strategic Direction #3: Communicating the NJTPA. This task speaks directly to that strategic direction. It also speaks to the major purpose to "Improve Recognition and Awareness through an Issue-Driven Orientation.") This task helps fulfill this purpose through a wide range of public communication, outreach and involvement activities – outreach meetings, media contacts, web postings, participation at conferences, publications, social media updates, etc. Guidance for all these efforts is provided by the NJTPA Communications Action Plan which was developed directly in response to the Strategic Business Plan.

### **DESCRIPTION:**

Efforts to involve the public in the transportation planning process are enhanced by public recognition of the NJTPA and the agency's role. Increased awareness of the NJTPA can strengthen the agency's ability to reach members of the public who may be interested in a particular decision or aspect of the planning process. The major mechanisms for Public Involvement and Outreach include attending and holding meetings, organizing special events, attending conferences, targeting informational efforts at print and electronic media, maintaining an up-to-date website, posting updates about issues and activities on social media and issuing publications and reports that provide accessible and non-technical explanations of the Authority's responsibilities and activities.

In FY 2017, Central Staff will continue and enhance efforts to implement the communications and public involvement strategies identified in the Strategic Business Plan. As described in Task 17/602, staff will work with the Board of Trustees to revisit and update the Strategic Business Plan, as needed, to address emerging needs and priorities. Among the plan's objectives are to enable the NJTPA to become a "go to" source for useful, objective and authoritative information about transportation; assist Board members to become ambassadors for improved regional transportation; use creative outlets – web, social media, mobile apps, video, webinars, cable TV, presentations, etc. – to expand the reach of communications; continue to pursue grant opportunities from public and private sources; and regularly evaluate the success public involvement efforts

A new focus during FY 2017 will be addressing the recommendations of the Regional Plan for Sustainable Development (RPSD) completed in FY 2016. NJTPA was a key partner in Together North Jersey consortium which developed the RPSD. The Plan is structured around four themes – Competitive, Efficient, Livable and Resilient – and five goals – grow a strong regional economy; create great places; increase access to opportunity; protect the environment; and work together. It contains 70 recommended action strategies. In cooperation with other partners in Together North Jersey, the NJTPA will continue to engage the public in responding to RSPD recommendations. This will include cooperation in organizing educational forums and events, supporting implementation of the regional Comprehensive Economic Development Strategy (CEDS and supporting local planning initiatives.

The RPSD goals and action strategies will also be reflected in the development of the update of the NJTPA Regional Transportation Plan, entitled "Connecting North Jersey." Preparation of the updated plan will be a major staff effort during FY 2017. It will include conducting outreach around the region, testing future scenarios, developing new investment guidelines and creating interactive online forums. Preparation of the book-length plan will require

### 17/601 PUBLIC INVOLVEMENT/OUTREACH (Cont.)

extensive design and editing. Supporting materials will include videos and web/social media postings. The plan update will include involvement of Board members and the subregions to relate the plan to community needs and concerns. It will include special efforts to gain input from a broad range of communities, including those traditionally underserved.

In all these activities, staff will also expand use of social media, building on the agency's growing following on Facebook and Twitter by taking advantage of additional social media outlets and strategies. The agency will continue to explore new communications approaches to better convey information such as improved access from mobile devices, infographics, short videos, surveys and email updates. Interactive web forums such as My Sidewalk will be explored. The agency's varied approach to engaging the public will be described in an updated Public Participation Plan completed during the year which will guide both formal and informal public outreach activities.

Aspects of these new or expanded activities are referenced below in the context of ongoing public participation and outreach activities:

Public Comment - NJTPA Public Participation Plan requires the agency to provide information about transportation issues pending before the NJTPA and promote early and continuing involvement in the development of NJTPA plans and programs. During FY 2016, staff began updating the procedures; they will be finalized and implemented in FY 2017. Among other provisions, the procedures call for conducting a formal 30-day comment period and a public meeting on major plans and amendments to those plans prior to their consideration by the NJTPA Board. Implementing these procedures requires considerable staff effort including arranging meetings, distributing documents, and summarizing and responding to comments. In addition, the procedures identify a range of public outreach and involvement activities the NJTPA will pursue to promote public participation.

Public Outreach – Staff will enhance and expand efforts to promote public involvement in and recognition of the work of the NJTPA. During FY 2017, as noted, this will include public outreach to support the implementation of recommendations of the RPSD and as part of the development of an updated NJTPA RTP. Public outreach will include presentations to outside organizations and agencies, symposiums and workshops on issues facing the region and opportunities for direct citizen input into decisions through public comment periods. It will also include enhancing public information and involvement through the agency website, social media, email lists, and innovative forums such as My Sidewalk .

Coordinated Outreach - The NJTPA strives to coordinate its own outreach efforts with those of the subregions to ensure that the concerns of communities and the public are adequately represented in the regional planning process. As part of the "Core Tasks" of the Subregional Transportation Planning (STP) Program (UPWP, Volume II, discussed in 17/101), NJTPA subregions must provide a mechanism for local citizen participation in transportation issues. NJTPA staff attends and participates in these meetings with the public, reporting back relevant findings and policy recommendations to the NJTPA. During FY 2017, the NJTPA will seek to enhance subregional outreach based on the revised Public Participation Plan.

Special Events - Conferences, seminars, issue oriented briefings, open houses, press conferences and other special events are employed as mechanisms for public outreach by the NJTPA. Events have been organized to meet an identified need for information or coalition building, or to respond to specific opportunities or current issues. The NJTPA participates in transportation related conferences, including TransAction (New Jersey's annual statewide transportation conference, for which the NJTPA serves a significant organizational and support function), the annual

### 17/601 PUBLIC INVOLVEMENT/OUTREACH (Cont.)

conference of the New Jersey Association of Counties, the annual conference of the Transportation Research Board, meetings sponsored by the Association of Metropolitan Planning Organizations and Intelligent Transportation Society of New Jersey (ITS-NJ) and others. In many cases, it has been effective for the NJTPA to co-host an event with other organizations or universities, to increase education regarding the agency, as well as to expand the list of potential participants. In FY 2017, at least two major events will be held to help define issues and develop options for regional transportation, with participation by experts from academia, government, the private sector and stakeholder groups as part of the Planning Collaboration task (17/102).

Media Relations - The NJTPA will undertake systematic efforts to increase its profile in the public eye, principally by targeting informational efforts at print and electronic media in coordination with subregional Public Information Officers. These efforts will include issuing press releases and, when appropriate, organizing information events on significant actions at its meetings, the findings of its study efforts and significant developments involving its member subregions. A matrix of media contacts and outlets will be maintained and expanded to guide media outreach. As discussed above, during FY 2017, special efforts will continue to be made to enhance the NJTPA's social media presence.

Publications - The NJTPA will continue to prepare and distribute brochures, publications and other materials related to the NJTPA planning process. The NJTPA Update news and information blog will be updated frequently and distributed in digest form periodically via email. In addition, the agency will continue to publish the semi annual magazine, InTransition (described below). In addition, special informational materials will be produced as needed to highlight NJTPA sponsored events or topics of special interest. During 2017, the NJTPA will implement a Digital Asset Management system to organize and enhance the accessibility of the agency's extensive archive of photos and other digitalized materials. Staff will investigate various software and cloud subscription options for the system. The NJTPA will continue to develop technical reports and white papers.

InTransition magazine (http://www.intransitionmag.org) – A semiannual national circulation magazine will continue to be produced with collaboration from NJTPA's host agency NJIT. The magazine has built a solid reputation for timely and informative general interest features on transportation and planning issues, examining regional, national and international transportation trends and issues that hold relevance to transportation professionals and policymakers in the NJTPA region and beyond. During FY 2017, development of the magazine will focus on cultivating new contributors, hosting feature articles related to issues facing the NJTPA region, enhancing the website and electronic distribution, and continuing to build upon the magazine's success.

Editorial Support - Staff will ensure that all publications, technical reports, white papers and other public documents meet high standards in terms of content, readability and design. In addition, staff will continue to enhance the agency's capabilities in the area of grants writing and development. As noted above, writing and editing for the updated Regional Transportation Plan will be a key task during FY 2017.

Multi-Media Technology - The NJTPA will continue to use new multi media tools for educating the public and disseminating information. During FY 2017, staff will continue to expand the use of in-house video capabilities producing videos on the planning process and transportation issues facing the region. These may highlight symposia or other events sponsored at the NJTPA. Videos will be distributed via the web, social media and other outlets.

Website Content - The NJTPA website will continue to be expanded to promote greater public understanding and involvement with the agency. The goal is to present information in an engaging format that is current and will attract

### 17/601 PUBLIC INVOLVEMENT/OUTREACH (Cont.)

an ongoing following in the transportation planning community and the public. Content on the homepage will be updated on a daily basis to make it a timely resource for citizens and the transportation community. This will include posting daily transportation-related news articles as part of the "In The News" feature as well as video and multimedia content (as discussed above), and connections to social media. Staff will continue to provide weekly "In The News" digests to subscribers via the NJTPA Elist. Consultant support will be retained to assist staff in maintaining and updating the website.

Social Media - Staff will continue to update the agency Facebook page and its Twitter feed and post to other social media outlets on a daily basis and seek to present new resources and information that will engage the public.

Outreach Presentations - The NJTPA makes staff and Board leadership available for presentations to local government bodies and private sector organizations. These presentations highlight the planning process and demonstrate state of the art transportation planning practices and their application in the region. To enhance the communications strategies discussed above, staff will continue to pursue appropriate speaking opportunities with organizations throughout the region.

Mailing List - The NJTPA actively identifies and maintains lists of regional stakeholders and interested parties to receive publications and other materials, notices of upcoming meetings, and invitations to special events. Efforts to improve and expand the mailing list will continue throughout FY 2017. The agency also maintains an "E list" for distribution of agendas and other materials electronically.

Targeting Underserved Communities - The NJTPA will continue to encourage participation by low income and minority communities in northern New Jersey that have been traditionally underserved by the transportation planning process. This will include translation of key materials and publications into Spanish. During FY 2017, the outreach and activities conducted to address recommendations of RPSD and update the Regional Transportation Plan, as discussed above, will include efforts targeted to the region's underserved communities.

### **PRODUCTS:**

- Public meetings and comment periods conducted for amendments to the RTP and TIP, as well as other programs in accordance with public participation procedures. Also includes development and implementation of updated procedures (ongoing as needed).
- Presentations to local and regional organizations and participation in transportation related conferences, including Transaction (New Jersey's annual statewide transportation conference), the annual conference of the New Jersey Association of Counties and conferences/events by the League of Municipalities, TRB, NARC, AMPO, ITS-NJ and others (as required and appropriate).
- Informational materials and media advisories distributed to media outlets in the region (ongoing).
- Events, forums, social media messaging and other activities to engage stakeholders and the public in addressing RSPD recommendations. (ongoing).
- Regular print and/or electronic publications reporting on the activities of the NJTPA and on regional transportation issues, including through the NJTPA Update blog (posted on the website and distributed as a digest every two months via the E-list). Explore and implement a Digital Asset Management system.
- Agency reports, brochures, hand-outs and other informational materials (as required).
- Two issues of InTransition magazine published and distributed (Spring and Fall) as well as maintaining a magazine website and developing new articles/features of importance to the NJTPA region.

# 17/601 PUBLIC INVOLVEMENT/OUTREACH (Cont.)

- Editorial support provided for agency reports, documents and correspondence, as well as for grants and development activities (as required)
- Enhanced information available through the NJTPA website including dynamic and timely information of interest to a wide segment of the public. Includes development of new interactive features and improved website management (ongoing).
- Agency Facebook page, Twitter feed and other social media outlets regularly updated; exploration of new social media strategies (ongoing).
- Preparation of videos on transportation issues and the metropolitan planning process. (ongoing).
- Strategies to better target underserved communities including translation of selected materials into other languages (ongoing)
- Evaluate progress of public outreach and participation through objective measures such as website traffic, media mentions, social media followers, etc.
- Public outreach and education conducted for updating the NJTPA Regional Transportation Plan, entitled "Connecting North Jersey"; writing, editing and design of the draft document; preparation of collateral print and multimedia materials.

# **RELATIONSHIP TO PRIOR WORK:**

This is an ongoing work task. All activities are completed as necessary.

### **OUTCOMES:**

Greater public awareness and involvement in the work of the NJTPA as measured by meeting attendance, comments received during public comment periods, media coverage and inquiries, website visitors, traffic to social media, requests for presentations and information on planning activities, among others.

### **CONSULTANT ACTIVITY:**

Public Outreach Technical Support

### **DESCRIPTION:**

This effort will include technical consultant support needed to conduct public outreach activities, including producing and disseminating multimedia presentation materials on a variety of topics that will enhance public understanding of and involvement in the transportation planning process. In FY 2017 this will include the continuation of on-call technical support for staff in updating the Kentico Content Management System (CMS) used for the NJTPA website. The consultant will assist in the development and deployment of interactive features by creating customized CMS elements. Other activities may include development of interactive web features and applications, multimedia presentations, etc.

### **PRODUCTS:**

- On-call website technical support
- Development and deployment of interactive features, multimedia presentations, etc.

### STATUS:

This is an ongoing task activity.

# PUBLIC AFFAIRS 17/601 PUBLIC INVOLVEMENT/OUTREACH (Cont.)

# **CONSULTANT ACTIVITY:**

Increasing Public Awareness, Involvement and Education

# **DESCRIPTION:**

Guided by the NJTPA Strategic Business Plan and the Communications Action Plan, the NJTPA will engage in various consultant-supported efforts related to improving public involvement activities.

In FY 2017, the NJTPA, with consultant support, will finalize and implement an updated public participation plan to reflect new communications technologies, new planning requirements at the state and federal level and ensure the public is afforded ready access to the decision making process at the NJTPA.

Consultant support will also required for foreign language translations to encourage broader involvement in the planning process, selected publications and outreach materials, will be translated into other languages as required. Translation services for NJTPA subregions will be made available through the Subregional Transportation Planning's Subregional Support Program (Task 17/101)

This is an ongoing consultant supported activity.

# PRODUCTS:

- Finalize and implement an updated public participation plan
- Foreign language translations

# STATUS:

This is an ongoing task activity.

# PUBLIC AFFAIRS 17/601 PUBLIC INVOLVEMENT/OUTREACH (Cont.)

# **CONSULTANT ACTIVITY:**

Regional Transportation Plan Public Outreach

# **DESCRIPTION:**

Guided by the NJTPA Public Participation Plan, NJTPA staff with consultant support will conduct outreach and gather public input for the 2045 Regional Transportation Plan, Connecting North Jersey. Consultant support will be required to help organize and conduct outreach including public meetings and workshops around the region, presentations to outside organizations and agencies and symposiums and forums on issues facing the region. It will also include enhancing public information and involvement in plan development through the agency website, social media, email lists, and innovative forums such as My Sidewalk.

# **PRODUCTS:**

• Organize, assist and conduct outreach for the 2045 Regional Transportation Plan

### STATUS:

This is a new consultant to be initiated in FY 2017.

# PUBLIC AFFAIRS 17/601 PUBLIC INVOLVEMENT/OUTREACH (Cont.)

# PROJECT COST:

| <u>rkojeci cosi:</u>  |                  | Total FY 2017 |
|---|------------------|---------------|
| Task Activity   | Budget Line Item |               |
| Public Involvement\Outreach   | Central Staff    | \$ 870,231    |
| Public Outreach Technical Support<br>PL funding                                 | Consultant       | \$ 50,000     |
| Increasing Public Awareness, Involvement and Education<br>PL and STP-NJ funding | Consultant       | \$ 295,000    |
| Regional Transportation Plan Public Outreach<br>PL funding                      | Consultant       | \$ 250,000    |

# **PROJECT MANAGER:**

Ted Ritter 973-639-8447 tritter@njtpa.org

# **PROJECT MANAGER:**

Mark Solof 973-639-8415 solof@njtpa.org

# PUBLIC AFFAIRS 17/602 COMMITTEE SUPPORT

# **RELATIONSHIP TO MISSION OF THE AGENCY:**

The Committee and Board meetings serve as the forums for deliberations and decision making by the NJTPA Board of Trustees. They also serve as forums for public input and the exchange of information about transportation issues. By providing for Board ownership of the planning and programming processes, this work task supports a key mechanism by which the NJTPA fulfills its mission of transportation planning and represents the key process for providing local officials with a voice in the decision making process for federal transportation investment.

### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

This task speaks directly to the high-priority area of "Board Development" in the Strategic Business Plan by creating high-quality Board and Committee agendas and working to bring speakers to meetings who will inform the Board on key topics. This task enhances Board governance, as called for in the Business Plan, by providing the information and opportunities for ensuring that meetings are a productive means for Board members to carry out their decision making responsibility on key issues. It also speaks to "Improving Internal Operations" through ongoing efforts to streamline distribution of materials through electronic means.

### **DESCRIPTION:**

Committee support for FY 2017 will continue its important role in providing the technical, clerical and logistical support necessary to accommodate meetings addressing the transportation, environmental, business and goods movement interests of the NJTPA. As such, staff will provide logistical support for all NJTPA Board meetings, Standing Committee meetings and RTAC meetings; develop and distribute agendas and supporting documentation (e.g. resolutions, policy papers, etc.); draft formal speeches for the NJTPA Chairman and other Board members; prepare and disseminate minutes in accordance with the NJTPA by laws; arrange for keynote speakers; and provide administrative follow up services on behalf of the NJTPA and its various committees. Videos of Board meetings are streamed live over the Internet and archived video is posted on the NJTPA meetings calendar.

The NJTPA will continue to attempt to identify nationally recognized keynote speakers for Board meetings and/or NJTPA conferences who can provide presentations on technical issues of special importance to the NJTPA and citizens in the region, including economic trends, social issues affected by transportation, environmental quality, etc. The speakers may be noted academics or experts in their field. Staff will prepare and distribute the NJTPA calendar of events, maintain current mailing lists, prepare position papers, issue press releases and disseminate all necessary notices as per the Open Public Meetings Act Compliance Law. The NJTPA handbook explaining the "3C" planning process and federal mandates will be updated as necessary for all NJTPA members.

Support will continue to be provided to standing committees: Executive Committee, Project Prioritization Committee, Planning and Economic Development Committee, Freight Committee, and any ad hoc task forces that may be appointed from time to time. The Standing Committees normally meet bi-monthly to discuss all facets of the transportation planning process under their respective jurisdiction as well as screen all action items for Board consideration. Staff also supports the Regional Transportation Advisory Committee (RTAC). RTAC, consisting of the professional engineering and planning staffs of the NJTPA member agencies, reviews and provides input into appropriate technical items. In addition to regular meetings, the RTAC structure allows for specific issues to be analyzed and for recommendations to be generated in smaller subcommittees or working groups.

During FY 2017 staff will work with the Board of Trustees to revisit and update the Strategic Business Plan, as needed, to address emerging needs and priorities. A consultant will be retained to assist in the update. Options for creating a Citizens/Stakeholder committee will be explored with the Board as part of the Strategic Business Plan update.

# PUBLIC AFFAIRS 17/602 COMMITTEE SUPPORT (Cont.)

# **PRODUCTS:**

- Staff support provided for meetings of the Executive Committee, Standing Committees, the Regional Transportation Advisory Committee and ad hoc committees/meetings, as required including preparation of meeting schedules, agendas, key discussion issues, reports for NJTPA Chairman and committee chairman, information items, resolutions, supporting documentation, minutes etc.
- Presentations arranged for meetings and special events by experts on transportation topics for the benefit of Board members, staff, subregions and citizens (at least four during the year).
- Live webcasting of Board meetings and posting of video of meetings on the NJTPA website.
- Strategic Business Plan updated at the direction of the Board of Trustees to address emerging needs and priorities.

### **RELATIONSHIP TO PRIOR WORK:**

This is an ongoing work task. All activities completed as necessary.

### **OUTCOMES:**

Informed and involved committees, leading to greater Trustee involvement and more informed decision-making. Agendas, resolutions, supporting documents and all other necessary materials provided for committee meetings. Greater exposure of NJTPA Trustees to policymakers and legislators to enhance awareness of the agency and build its effectiveness. Measurements will include: meetings held, meeting attendance, and qualitative assessments gained through feedback from Board/Committee members.

#### **CONSULTANT ACTIVITY:**

Strategic Business Plan Update

### **DESCRIPTION:**

Building on work begun in FY 2016, Central Staff, under the guidance of the Executive Committee, will update the NJTPA's Strategic Business Plan. This effort will include evaluation of progress in implementing the previous Strategic Business Plan, as well as development of a new plan. The updated plan document will include an examination of the NJTPA's current regional and subregional resources and work activities. It will look ahead to the next five years to determine strategic directions and provide guidance on how the agency can best leverage its financial and staff resources to grow further as the region's transportation planning leader. The plan will provide direction, guidance and management tools for use by the NJTPA Board and Central Staff.

#### **PRODUCTS:**

• An updated Strategic Business Plan

#### STATUS:

This activity is continuing from FY 2016 and is expected to be completed in FY 2017.

# PUBLIC AFFAIRS 17/602 COMMITTEE SUPPORT (Cont.)

# CONSULTANT ACTIVITY:

Guest Speaker Presentations

# **DESCRIPTION:**

Guest speaker presentations and participation on panels at Board meetings, symposiums, etc. play a key role in involving the public and informing decision-makers about important information relevant to the MPO's activities, allowing the NJTPA to enhance its role as the transportation planning leader for the region, in keeping with its mission. This effort will provide for fees and reimbursement of travel expenses to academics and recognized subject matter experts on key transportation topics who participate in NJTPA meetings, forums and events as quest speakers and/or panelists.

# **PRODUCTS:**

Guest Speaker Presentations

### STATUS:

This is an ongoing task activity.

# PUBLIC AFFAIRS 17/602 COMMITTEE SUPPORT (Cont.)

# PROJECT COST:

| Task Activity                                | Budget Line Item | Total FY 2017<br>Program Budget |
|--|------------------|---------------------------------|
| Committee Support                            | Central Staff    | \$ 574,648                      |
| Strategic Business Plan Update<br>PL funding | Consultant       | \$ 250,000                      |
| Guest Speaker Presentations                  | Consultant       | \$ 20,000                       |
| PL funding                                   |                  |                                 |

# **PROJECT MANAGER:**

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# **PROJECT MANAGER:**

Amy Magnuson 973-639-8433 amagnuson@njtpa.org

# PUBLIC AFFAIRS 17/603 INTERGOVERNMENTAL RELATIONS, POLICY AND LEGISLATION

# **RELATIONSHIP TO MISSION OF THE AGENCY:**

n keeping with the goals of the NJTPA Strategic Business Plan, this activity seeks to strengthen the NJTPA's leadership position by informing NJTPA Trustees, RTAC and Central Staff on key federal and state legislative, regulatory, policy and funding developments that affect the agency's mission to conduct regional transportation planning and advance projects to improve regional mobility and economic development. It also seeks to enhance the NJTPA's regional leadership by informing legislators and policymakers about the NJTPA's work and activities and positioning the agency as an authoritative information resource. All activities undertaken will be conducted in keeping with applicable lobbying restrictions.

### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

This task speaks directly to the highest priorities of the NJTPA Strategic Business Plan. It serves the goal of "Communicating the NJTPA" by informing elected officials, policymakers and others about the NJTPA's work and information resources available through the NJTPA. It also informs Board members about legislative and policy issues, contributing to "Board Development."

### **DESCRIPTION:**

Federal policy affecting MPOs stemming from the Moving Ahead for Progress in the 21st Century Act (MAP-21) and successor legislation will continue to evolve into FY 2017.

Staff will continue to monitor regulatory and policy developments related to federal transportation authorization, providing information to executive level staff and Board members on key issues.

Staff also will monitor other legislative and policy developments in Washington and Trenton and inform Board members and staff of issues with the potential to affect NJTPA planning activities. This will include monitoring activities of relevant committees in the U.S. Congress and New Jersey Legislature. The NJTPA will attend these committee meetings and provide testimony at hearings as warranted.

Outreach and ongoing communication with the New Jersey Office of Planning Advocacy, Association of Metropolitan Planning organizations, National Association of Regional Councils, and other groups will provide additional context and information to be used in informing staff and Board of relevant developments. NJTPA Board members and staff will participate in the activities of AMPO and NARC as appropriate.

Policy and legislative areas of interest likely will include transportation funding, infrastructure resiliency, disaster recovery, climate change, land use/livable communities and emerging federal and state planning regulations.

The NJTPA also monitors development of federal and state regulations and offers input when appropriate. In addition, staff follows the annual transportation appropriations actions, which drive the annual budget process. In coordination with Task 17/102 (Planning Collaboration), staff will actively seek to coordinate with other MPOs particularly through the national Association of Metropolitan Planning Organizations and the Metropolitan Area Planning (MAP) forum.

Staff will continue to regularly monitor state level deliberations involving transportation through communication with relevant committees in the state legislature, both in the Assembly and Senate. The NJTPA will attend these committee meetings and provide testimony at hearings as warranted.

Staff will research issues for discussion, inform the committee of legislative and policy developments, and arrange

### 17/603 INTERGOVERNMENTAL RELATIONS, POLICY AND LEGISLATION (Cont.)

committee meetings. Much of this work would be conducted in coordination with the Committee Support task, which would include ongoing administrative support and other duties related to the committee.

#### **PRODUCTS:**

- Monitoring and analysis of federal and state legislation, regulations, policy developments and related issues (ongoing).
- Conducting policy research and developing policy briefings/reports as needed (ongoing).
- Prepare reports, resolutions, and related materials for use by Central Staff, other committees and/or the Board of Trustees (ongoing).
- Provision of information and briefings to federal and state elected officials and/or their staffs as appropriate (ongoing).
- Provision of information on federal and state issues to NJTPA Board members through committee meetings, individual briefings, written materials, and other means (ongoing).
- Coordination and support for the activities of the NJTPA Board of Trustees' working group/committee on policy and legislation.

#### **RELATIONSHIP TO PRIOR WORK:**

### **OUTCOMES:**

#### **PROJECT COST:**

Task Activity Intergovernmental Relations, Policy and Legislation

#### **PROJECT MANAGER:**

David Behrend 973-639-8423 dbehrend@njtpa.org Total FY 2017Budget Line ItemProgram BudgetCentral Staff\$ 141,855

# **RELATIONSHIP TO MISSION OF THE AGENCY:**

Administration serves as the foundation for all agency work. The work in this task also ensures that the daily activities of Central Staff are executed in a timely and efficient manner to complete the mission of the agency, and are in compliance with federal and state regulations.

### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

The Business Plans Strategic Direction, Improving Internal Operations, will continue to be the focus of this task in FY 2017. The following action items will be applied: Improve visibility and effectiveness at the subregional level; Streamline internal processes/structures to achieve operational efficiencies; Leverage information technology to support regional transportation planning and select projects that support this approach; and Institute staff retention and development training initiatives.

### **DESCRIPTION:**

Staff supports the work and decision making of the NJTPA Board of Trustees. This task provides for all the management and oversight of the staff on Volume I work program activities performed by central staff, while ensuring compliance with all applicable federal and state regulations. Additionally, this task encompasses a full range of internal activities necessary to sustain operations. Activities include: personnel recruitment, salary and payroll administration, preparation of performance evaluations, internal accounting and business process procedures, execution of purchasing agreements, and the monitoring of lease agreements and building maintenance contracts.

As the New Jersey Institute of Technology (NJIT) serves as the host agency for the NJTPA, the administration of all necessary accounting and auditing is coordinated between the two organizations (for further information, go to: http://www.njtpa.org/About-NJTPA/Host-Agency.aspx). Pursuant to the agreement between the NJDOT, NJIT and NJTPA, NJIT is eligible for funding and reimbursement of indirect costs for administrative costs for providing personnel, payroll and related administrative support to the NJTPA, including but not limited to: purchasing, grants accounting, human resource management, payroll, accounts payable, and accounts receivable in the furtherance of the annual NJTPA Unified Planning Work Program (UPWP) activities. In FY 2016, a new basic agreement was executed, which is effective with the FY 2017 work program.

A Single Audit of NJIT's Federal grants, including a program specific audit of the FHWA and FTA grants for the NJTPA work program, will be performed annually by independent auditors or public accountants who meet the independence standards specified in generally accepted government auditing standards, in conformity with the State Audit Policy and federal requirements.

This task also provides for the continuation of General Counsel on an annual basis for the purpose of contract negotiations, risk management activities, Open Public Meetings Act compliance and legal guidance as required by the NJTPA Board members and executive staff. It also provides for additional services (through UPWP budget amendments) as needed, in the event of litigation.

Appropriate training sessions and seminars continue to be sought to enable Board Members, Central staff, Subregional Staff, and partnering agencies to further develop their professional skills and knowledge of federal requirements. This is expected to be accomplished with a mix of classes taught by staff and sessions delivered by outside providers. For FY 2017, central and subregional training on federal grant administration and management, and on project management and delivery, will continue to be a priority.

The NJTPA is also continuing in its effort to streamline the development, management, and reporting functions of its

UPWP. The goal of this project is to standardize program reporting, centralize storage of program and project level data, and integrate program accounting and financial processes. The main objectives in pursuing this goal is to improve business process operations and enhance communications, internally and externally, through a web-based, enterprise platform program management system that leverages project, financial and human resource data for efficient management and reporting of the agency's work program and allocation of it resources. Continuing efforts from FY 2016, the solution will consist of a set of interrelated system applications including an enterprise resource planning (ERP) system, configured to suit the agencies specific needs for detailed program and project level management and reporting. An integrated program management system can enable prompt and efficient access to reliable project and financial data, and help strengthen program and financial controls, improving the provision of NJTPA services, raising the budget process to higher levels of transparency and accountability, and expediting NJTPA operations.

The solution must have the capability to allow staff to plan, prepare, and manage budgets; provide internal controls ensuring audit compliance; enable directors and project managers to manage projects and generate reports on a per program and project level basis; and executive management to view and analyze program information and performance on an enterprise level. The solution will allow users to enter project information and report on project progress, expenses and time spent on each project or task via a web interface. It must allow for document management and sharing, and development of routine and ad-hoc reports. To accommodate the projects in the RTP, TIP and LCPD where more detailed project controls and scheduling is required, the solution must also interface and allow for the exchange of data with other detailed web-based project scheduling systems (i.e. Primavera or MS Projects).

In addition to supporting financial analysis and complex decision-making, the financial management component of the system will be designed to include a sufficient level of project information to help staff and managers better assess the performance and progress of the various programs and projects. Moreover, inter-departmental and inter-agency communication will be enhanced considerably by allowing the integration of information from and to various divisions of the NJTPA staff, the Board of Trustees and subregions, as well as with NJIT, NJDOT, NJ TRANSIT, FHWA and FTA, leading to better coordination and improved transparency (information sharing) within the organization as a whole and with its partner agencies. Work on this task will include the evaluation and documentation of current related business processes at the NJTPA, NJIT and NJDOT, as well as recommendations, if any, to improve the process flow and better ensure compliance to federal regulations in the administration of the grant.

Project planning, including an initial needs assessment and the exploration of potential solutions, was completed in FY 2015. In FY 2016, this effort continued with a detailed system analysis and the design of the system requirements. Staff also initiated the procurement, testing and deployment of an ERP system, the core component of the integrated program management system, which will be completed in FY 2017. Integration with other systems and ancillary components will also continue to be explored and developed in future program years. The system will be modular so it may be developed in phases, and expanded in capacity and functionality to meet expanding requirements. The choice of a phased approach also offers the best chances for successful implementation as the project can be carefully tested, monitored and reviewed regularly. Given the investment into the system, it is important to aim first for a sound "entry level" system, which, once functioning effectively, can then be extended to support additional functions.

Evaluation of potential applications for a document management system compatible with the selected ERP system was also conducted in FY 2016. Final selection, procurement and implementation is expected to be completed in FY 2017. SharePoint, which has already been procured by NJTPA and is being developed as a project collaboration tool

# 17/701 OFFICE ADMINISTRATION (Cont.)

that will interface with the ERP system, is one of the applications being investigated for the document management system.

In addition, the Finance and Administrative staff will be working in collaboration with the Information Technology and other NJTPA divisions, to develop a Continuity of Operations Plan (COOP) that documents administrative, communications and IT procedures for agency continuity during disasters, closures, etc.

#### **SUBTASKS INCLUDE:**

- Processing UPWP Task Order Agreements and Task Order Modifications.
- Establishing and maintaining NJTPA (NJIT) internal accounts in accordance with for the FY 2017 budget.
- Maintaining lease compliance and building maintenance.
- Conducting annual staff performance evaluations.
- Identification and scheduling of training opportunities to augment the technical proficiency of Board members, central staff and subregional staff members as appropriate. See consultant activities for additional information.
- Providing updates to the NJTPA website relating to this task.
- Implementation of an customized enterprise platform system for program management and a new Financial Management System (and/or Enterprise Resource Management System) that will comply with Government Auditing Standards.
- Creating and processing purchase agreements/requests.
- Recruitment of personnel for part-time positions and to fill full-time central staff vacancies.
- Providing administrative support services, including purchasing, grants accounting, human resource management, payroll, accounts payable, and accounts receivable (NJIT Administrative Support Services).
- Conducting single annual audit, including program specific audit for the NJTPA's UPWP.
- Implementation of new electronic file/document management system, which will more efficiently organize electronic files and streamline routine business processes for tracking MPO program administration documents and budget accounts.
- Ensuring the NJTPA's work program is in compliance with the federal OMB's guidance for administration of grants and agreements, including procurement, cost principles and audit requirements, as stipulated in 2 CFR Section 200.

#### **PRODUCTS:**

- Execution of the UPWP's Task Order Agreements and Task Order Modifications (ongoing, as needed).
- Personnel/Payroll Administration and recruitment of personnel for part-time positions and to fill full-time central staff vacancies (ongoing throughout FY 2017, as needed).
- Implementation of an enterprise platform system for program management and a new Financial Management System that will comply with Government Auditing Standards (GAS) (phase I expected to be completed in FY 2017).
- Implementation of a new electronic file/document management system, which will more efficiently organize electronic files and streamline routine business processes for tracking MPO program administration and

#### 17/701 OFFICE ADMINISTRATION (Cont.)

management documents(expected to be completed in FY 2017).

#### **RELATIONSHIP TO PRIOR WORK:**

The role of Central Staff office administration is to ensure that the back office processes of the agency run seamlessly from year to year. The functions remain essentially the same from program year to program year.

#### **OUTCOMES:**

The goal of this task is to provide timely and efficient support and execution of daily activities of Central Staff in compliance with the federal funding agreements and NJDOT Task Orders.

#### **CONSULTANT ACTIVITY:**

Legal Services and Risk Management

#### **DESCRIPTION:**

In Fiscal Year 1994, the North Jersey Transportation Planning Authority, Inc. (NJTPA) was established as a not-for-profit corporation. At that time, the services of general counsel were also secured to provide legal guidance for all Board Members related activities in the conduct of the NJTPA's planning and programming responsibilities. In addition, the Open Public Meetings Act Compliance, contract negotiations and risk management activities of the NJTPA require the presence of Legal Counsel. This task provides for the continuation of General Counsel on an annual, as needed, basis and provides for additional services, as needed, in the event of litigation.

#### **PRODUCTS:**

- Attendance by general counsel at all bi-monthly NJTPA Board of Trustees meetings.
- Legal advice and guidance in the conduct of day-to-day NJTPA affairs, including contract negotiation by general counsel (as needed).
- Legal representation in the event of litigation (as needed, to be billed on an hourly basis, subject to NJTPA concurrence).
- Professional Liability, General Commercial Liability, and Director's and Officer's insurance for the NJTPA Board members, central staff and NJIT on NJTPA related matters.
- Independent legal counsel review and update of NJTPA standard contract agreement's terms and conditions, including its insurance provisions and NJTPA insurance policies (to be coordinated with NJIT legal and risk management staff).

#### STATUS:

This is an ongoing task activity.

# CONSULTANT ACTIVITY:

Training and Professional Development

# **DESCRIPTION:**

This effort provides for training seminars, sessions and workshops, course materials, reference manuals, and expert assistance in a variety of transportation technical areas, designed to meet the needs of central staff, subregional Staff, Board members, and partnering agencies to further develop their professional skills and knowledge of the federal requirements, and to ensure proper administration and oversight of the grant program. Training courses will be provided at many differing levels for appropriate skill sets. Many of the sessions may be facilitated and taught by staff, but it is envisioned that the majority will be outsourced. Where applicable, open, competitive selection processes will be utilized. Training in FY 2017 will include, but not be limited to: various APA, TRB, NHI, and NTI professional transportation and land use planning courses, including refresher and emerging technology courses and webinars; Technology Symposiums and workshops; Board Governance Training; Management and Leadership Training for central staff directors and managers; Project Management and Administration Training; Grant Writing; IT professional development; and GIS, MS Word, Excel, Access, MS Projects, SharePoint, Office 365, and other various computer software training.

# **PRODUCTS:**

• Training and Professional Development for Central Staff, Subregional Staff, Board of Trustees and Partnering Agencies (ongoing throughout FY 2017).

#### STATUS:

This is an ongoing task activity.

# **CONSULTANT ACTIVITY:**

Unified Planning Work Program Audit

# **DESCRIPTION:**

A Single Audit of NJIT's Federal grants, including a program specific audit of the FHWA and FTA grants for the NJTPA, shall be performed annually by independent auditors or public accountants who meet the independence standards specified in generally accepted government auditing standards in conformity with the State Audit Policy and federal requirements. The budget for this task also includes funds to cover any adjustments in the work program's provisional Indirect Costs budget to reflect actual audited indirect costs eligible for reimbursement.

### **PRODUCTS:**

• Annual Program Specific Audit and Audit Report of the UPWP.

### **STATUS:**

This is an annual program activity. The FY 2016 work program audit is expected to be completed in the third quarter of FY 2017.

# **CONSULTANT ACTIVITY:**

Office/Facility Improvements

# **DESCRIPTION:**

In FY 2014 central staff began an assessment of its office space and lease options in preparation for the negotiation of a new lease agreement, which became effective in FY 2016. In FY 2016, the NJTPA retained professional architectural/engineering services and began construction work for the office renovation and expansion project's construction work, which was substantially completed by the end of FY 2016. The work consisted of central staff's office facility and Board Conference Room renovations and improvements - including the improvement or replacement of permanent fixtures, furniture and office service equipment, telephone/data wiring, security, audio visual systems, signage and the move of staff and office furniture and equipment.

In FY 2017 this effort continues with the completion of the post-construction and warranty phase services, and closeout of all office renovation services and construction work administered by the vendors for the NJTPA.

# **PRODUCTS:**

• Post construction and warranty services, and project closeout of the office renovations and improvements.

### STATUS:

This project started in FY 2015 and will be completed in FY 2017.

# **CONSULTANT ACTIVITY:**

Enterprise Resource Planning and Program Management System

# **DESCRIPTION:**

Consultant support will be used to procure, develop and implement a comprehensive Enterprise Resource Planning (ERP) system configured to suit the agencies specific needs for detailed program and project level management and reporting. The system will provide for integrated program accounting and financial processes, efficient access to reliable project and financial data, and enhanced program and financial/internal controls and business processes to ensure audit compliance.

Concurrently staff will investigate, procure and, with consultant assistance as needed, implement a customized electronic file/document management system, which will more efficiently organize electronic record files and streamline routine business processes for tracking MPO program administration and management documents. The document management application selected will be compatible with the ERP system, so they can be integrated. SharePoint, which was procured by NJTPA and is being developed to be used as a project collaboration tool, is one of the applications being investigated for the document management component.

# **PRODUCTS:**

- Implementation of an Enterprise Resource Planning system that provides a comprehensive/integrated enterprise platform system for program management and financial management, which complies with Government Auditing Standards (expected to be completed in FY 2017).
- Implementation of an electronic file/document management system, which will efficiently organize electronic files and streamline routine business processes for tracking MPO program administration and management documents (expected to be completed in FY 2017).

# STATUS:

Multi-year project initiating in FY 2015 and continuing into FY 2017 for its initial phase of deployment.

# PROJECT COST:

| <u>PROJECT COST:</u>   |                  | Total FY 2017 |
|--|------------------|---------------|
| Task Activity  | Budget Line Item |               |
| Office Administration  | Indirect Costs   | \$ 601,914    |
| Central Staff salaries and fringe benefits costs are applied to Indirect Costs |                  |               |
| Legal Services and Risk Management   | Consultant       | \$ 350,000    |
| PL funding   |                  |               |
| Training and Professional Development  | Consultant       | \$ 300,000    |
| PL funding   |                  |               |
| Unified Planning Work Program Audit  | Consultant       | \$ 350,000    |
| PL funding   |                  |               |
| Office/Facility Improvements   | Consultant       | \$ 258,567    |
| PL and STP-NJ funding  |                  |               |
| Enterprise Resource Planning and Program Management System                     | Consultant       | \$ 1,175,000  |
| PL and STP-NJ funding  |                  |               |

# **PROJECT MANAGER:**

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# **PROJECT MANAGER:**

Angellita Young 973-639-8434 young@njtpa.org

# ADMINISTRATION 17/702 GRANTS AND CONTRACTS ADMINISTRATION

# **RELATIONSHIP TO MISSION OF THE AGENCY:**

This task provides administration, oversight and management of all agency consultant effort contracts and pass-through program grants to the NJTPA's 15 subregions and New Jersey's eight TMAs. It also ensures that all pass-through program activities and all NJTPA consultant efforts adhere to established federal guidelines required for continued receipt of federal funding and support the regional transportation plan. The products from the pass-through programs and agency consultant efforts support the regional planning process, provide for local input and coordination, and advance mobility solutions as reflected in the mission statement. All products from these agreements complete the mission of the agency.

### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

The Business Plans Strategic Direction, Improving Internal Operations, will continue to be the focus of this task in FY 2017. The following action items will be applied: Improve visibility and effectiveness at the subregional level; Streamline internal processes/structures to achieve operational efficiencies; Leverage information technology to support regional transportation planning and select projects that support this approach; and Institute staff retention and development training initiatives.

#### **DESCRIPTION:**

The NJTPA provides pass-through funding for many federally sponsored programs, including the Subregional Transportation Planning Program (Volume II), the Subregional Studies Program (Volume III), and the TMA Program (Volume IV).

The NJTPA is responsible for the contract management of third party (sub-recipient) contracting opportunities within the region. This task includes pre-award desk audits to establish subrecipients eligibility to receive federal grants, developing contractual agreements, providing accounting services to support contractual agreements, execution and procurement of planning grants, tracking of projects, and monitoring of subcontracts and providing administrative assessments of subrecipient compliance. It also includes the development of grant administration and fiscal guidelines and budget policies, as well as assisting the NJTPA member agencies in consultant solicitations and selections. The contract administration function currently performed by Central Staff in coordination with NJIT's Grants and Contracts office provides necessary administrative coordination with our subregional and TMA partners.

In addition, staff issues various consultant contracts throughout the program year. The NJTPA is responsible for the contract management of planning studies managed by staff to enhance and develop the Regional Transportation Plan and to support the development of the Transportation Improvement Plan. This includes issuing requests for proposals for planning projects, negotiating and developing contractual agreements, providing accounting services to support contractual agreements, issuing and ensuring the execution of contracts, tracking of project expenditures, processing vendor invoices, providing administrative support, and ensuring compliance with all relevant federal and state regulations. It also includes assisting staff members in the development of budgets, the consultant selection process and acquiring NJTPA Board Member approvals.

# SUBTASKS INCLUDE:

- Ensuring applicable subcontract compliance with OMB guidance for the administration of federal grants, including federal procurement, cost principles and audit requirements, as stipulated in federal 2 CFR 200.
- Assisting in the development of project budgets, review and administering requests for proposals (RFPs), participating on consultant selection committees, and review of cost proposals, as required.
- Reviewing the annual DBE goal received from NJDOT; applying the appropriate DBE/ESBE goal to NJTPA

### 17/702 GRANTS AND CONTRACTS ADMINISTRATION (Cont.)

contractual agreements, as necessary. Providing guidance on DBE/ESBE goals and assisting, upon request, in identifying DBE and/or ESBE firms.

- Preparing contract extensions and budget modifications for "pass-through" programs and consultant activities, as needed.
- Preparing and executing letters to incur costs and contracts between the subrecipients/consultants and the NJTPA/NJIT for all pass-through programs/agency consultant activities.
- Ensuring that all prime and sub-consultants are eligible to contract with the NJTPA/NJIT, have adequate insurance and indemnification policies, and provide certificates of insurance, NJ Business Registration Certificates, etc..
- Monitoring DBE/ESBE compliance on federally funded contractual activities, including confirmation of certification of any proposed DBE/ESBE firms.
- Upgrade and monitoring of the internal reporting system to track the status of all monthly/quarterly invoices and reports.
- Assisting in the review, development, and update of programmatic and administrative guidelines for the all pass-through programs in accordance with federal regulations.
- Performing annual pre-award desk audits of subrecipient grant supporting documentation, including the review of single annual audits, budget plans and indirect costs statements.
- Ensuring compliance with procedures for the procurement of professional services.
- Negotiating contract scope of work, budget, terms and conditions between NJIT, outside consultants, the subregions, and other sponsoring agencies.
- Reviewing cost submittals in conformity with federal and NJTPA adopted guidelines, reviewing direct expenses for detail and eligibility, examining consultant and sub-consultant costs for accuracy and reasonableness, and processing invoices for payment.
- Reviewing and monitoring contract delivery progress, schedule, budgets and expenditures for all "pass-through" programs.
- Reviewing and monitoring consultant contract delivery progress, schedule, budgets, and expenditures.
- Updates to the NJTPA website relating to this task.

#### **PRODUCTS:**

- Execution, administering and monitoring of contracts and purchase orders to the subregions and TMAs for the Subregional Transportation Planning (STP) Program, Subregional Studies Program (SSP), and TMA Program (expected to be completed by December 2016).
- Solicitation of proposals, the execution, administration and monitoring of contractual agreements, the issuing of purchase orders, the processing of invoices for payment of expenses, and closeout of subcontracts for professional consultant services (as needed).
- Monitoring the attainment of DBE goal and applying annual goal to NJTPA Contracts as necessary (ongoing activity).

# **RELATIONSHIP TO PRIOR WORK:**

### 17/702 GRANTS AND CONTRACTS ADMINISTRATION (Cont.)

The development of the NJTPA annual work program includes the hiring consultants for agency contractual efforts and the development of pass-through grant programs to the NJTPA's 15 subregions and 8 statewide TMAs.

#### **OUTCOMES:**

The goal of this task is to provide the successful administration and compliance of grants programs, including subcontracts for central staff consultant efforts and contractual pass-through grant programs, in accordance with the UPWP and federal, state, NJIT and NJTPA requirements.

### **PROJECT COST:**

 Task Activity

 Grants and Contract Administration

 Central Staff salaries and fringe benefits costs are applied to Indirect Costs

Total FY 2017Budget Line ItemProgram BudgetIndirect Costs\$ 471,596

### **PROJECT MANAGER:**

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#### 17/801 INFORMATION SYSTEMS SUPPORT AND DEVELOPMENT

#### **RELATIONSHIP TO MISSION OF THE AGENCY:**

This task supports the mission of the NJTPA by developing and maintaining the agency's technological foundation and leveraging information technology to support regional transportation planning. This foundation is the platform, medium, and tools by and through which our technical and informational resources are developed and disseminated to the people of northern New Jersey.

#### LINK TO NJTPA STRATEGIC BUSINESS PLAN:

Leveraging Information Technology to support regional transportation planning is the primary objective of this task. This includes improving and streamlining internal operations, processes and infrastructure to achieve operational efficiencies. Effective information technology also allows the NJTPA to better communicate its work to the public, stakeholders, other agencies, etc.

#### **DESCRIPTION:**

This tasks provides the technological foundation and information technology solutions for the entire work program of the NJTPA. NJTPA information systems consist of a complex networked infrastructure of multiple blade servers, switches, security and network appliances, routers, printers, multiple workstations, and phone system. IT staff will be maintaining and administering this infrastructure including internal phone system based on voice over IP (VOIP), Storage Area Networking (SAN), virtualization services, databases, data archival, e-mail, VPN, web applications, Enterprise GIS, videoconferencing, and web streaming services. Software and hardware components will be administered to work seamlessly with the network servers and client workstations. End-user technical support including client hardware and software support will be provided to central staff and subregions. The Mobile Media Library will be maintained and supported to provide central staff with mobile resources. Video/audio equipment and teleconferencing maintenance and support will be provided for internal and external meetings and conferences. NJTPA hosted webinar capabilities will be supported and enhanced to improve the agency's public outreach.

This task will proactively evaluate and implement new technologies that further the goals as outlined by the NJTPA's Regional Transportation Plan. New equipment and networking software will be integrated into the network infrastructure as required. Disaster recovery measures will be implemented to ensure that the NJTPA's data will survive either man-made or natural disaster and provide high availability of agency resources. This will include off-site data center management and administration. In addition, working in collaboration with other NJTPA divisions, staff will develop a Continuity of Operations Plan (COOP) that documents administrative, communications and IT procedures for agency continuity during disasters, closures, etc.

All hardware and software for agency and subregional deployment will be researched for compatibility with existing systems and software. Hardware will be checked against known Hardware Compatibility Lists (HCL) for the existing environment. Software appropriateness and compatibility will be vetted through industry reviews and ratings and checked in a test environment prior to deployment. Purchase requests with vendor quotes will be submitted through Finance and Administration Division based on NJIT equipment procurement policies. All software and hardware requests will be analyzed to achieve economies of scale through equipment and/or software sharing if applicable. IT Staff will provide programming solutions and software tools for the NJTPA staff and subregions. These solutions and software tools will address central staff and subregional communications, data sharing, and workflow needs based on the goals outlined in the Strategic Business Plan and the Regional Transportation Plan. Microsoft SharePoint platform will continue to be enhanced to improve project collaboration both internally and with the subregions. This task will also provide support and enhancement of current applications including reporting, automation, and project information systems.

# 17/801 INFORMATION SYSTEMS SUPPORT AND DEVELOPMENT (Cont.)

Streamlining operational efficiencies will be achieved through the utilization of specialized software and tools. This will include utilization and enhancements of the integrated project management system, MS SharePoint development, the subregional Cost Tracking System (CTS), Financial Management System (FMS) and Financial Reporting System (FRS).

This task will provide database management and support of all data stored in the agency's data repositories. The will include the backend support of the enterprise-class GIS solution, NOTIS, VizTools, PRIME and others. This task will also provide support for the mobility programs effort including rideshare application software and the enhancement of the NJDOT 511 system.

This task will coordinate with the agency's Communications Action Plan by providing compatible technology solutions, including back-end support for the agency website. This task will manage the agency websites, maintain timely web content updates, and provide recommendations on new web technologies. Maintenance and enhancement of all agency web applications including the NJTPA Online Transportation Information System (NOTIS) and others will continue.

#### **SUBTASKS INCLUDE:**

- Administration of VOIP phone system
- End-user technical, application, and telephone system maintenance and support including individual workstation updates, maintenance, and monitoring
- Network development including research and implementation of new technologies in storage, security, communications
- Development and enhancement of the agency's Continuity of Operations Plan (COOP).
- Maintenance, monitoring, and development of the agency off-site resources including third party data centers
- Network Administration and Security
- Support for the Content Management System (CMS) and websites
- Software licensing and compliance
- Implementation and development of video conferencing, streaming, recording, and broadcasting
- Application server support, administration, and maintenance (Exchange, SQL, VCenter, SharePoint, IIS, SAN, Enterprise GIS, etc.)
- NJTPA MobileMedia Library support and administration
- Agency applications development, enhancements, and maintenance (ERP, CTS, NOTIS, etc)
- Software and hardware research and procurement for both central staff and subregions
- Inventory and Audits
- Audio/Video systems support and enhancements

#### **PRODUCTS:**

- IT Systems Administration
- Network and Applications Development

### 17/801 INFORMATION SYSTEMS SUPPORT AND DEVELOPMENT (Cont.)

- Software and Hardware Assets Management
- Continuity of Operations Plan (COOP)
- Audio/Video implementation and development

#### **RELATIONSHIP TO PRIOR WORK:**

The NJTPA technological foundation was developed over a number of years and work programs. This task provides for the maintenance and development of that technical foundation.

#### **OUTCOMES:**

Scalable and robust information systems and solutions that support and advance the goals of the NJTPA work program.

#### **CONSULTANT ACTIVITY:**

IT Systems Support Services

#### **DESCRIPTION:**

Consultant services will be used as necessary to provide IT technical support. The rapidly changing nature of technology and its potential impact on Central Staff productivity makes it very important to have outside expertise available as a staff resource to assist in the development and maintenance of its IT network system, and to provide emergency support services as needed. This expertise is another layer in the NJTPA's comprehensive backup system of technical support to help ensure efficient network functioning and limit network downtime.

Continuity of Operations Plan (COOP) and Disaster recovery measures will be continue to be implemented to help ensure that the NJTPA's continuity of operations and agency data will survive either man-made or natural disaster and provide greater availability of agency resources. This includes maintaining the off-site colocation facility as well as hardware and software integration and configuration in order to provide a redundant infrastructure to support agency IT resource availability.

#### **PRODUCTS:**

• IT support of network systems and services

#### STATUS:

This is an ongoing activity.

# 17/801 INFORMATION SYSTEMS SUPPORT AND DEVELOPMENT (Cont.)

# **CONSULTANT ACTIVITY:**

Audio Visual Conference Room Upgrade

# **DESCRIPTION:**

Video/audio equipment in the NJTPA conference room will be replaced and upgraded to improve agency audio visual capabilities. A review and analysis of existing systems, recommendations, and implementation of improved functionality will be completed. This will include the supplementation or replacement of existing audio and video hardware including projectors, flat panels, audio signal processing, speakers, microphones and controls.

### **PRODUCTS:**

Audio Visual Conference Room Upgrades and Improvements

### STATUS:

This is a new project that will be completed by the end of FY 2017.

# INFORMATION TECHNOLOGY 17/801 INFORMATION SYSTEMS SUPPORT AND DEVELOPMENT (Cont.)

# **CONSULTANT ACTIVITY:**

Off-site Disaster Recovery Implementation

# **DESCRIPTION:**

Disaster recovery measures will be implemented to help ensure that the NJTPA's data will survive either man-made or natural disaster and provide greater availability of agency resources. This includes the procurement, development, and launch of an off-site colocation facility. Hardware and software integration and configuration in order to provide a redundant infrastructure to support agency IT resource availability.

# **PRODUCTS:**

• Deployment of an integrated off-site, co-location facility.

# STATUS:

This effort was initiated in FY 2015 and is anticipated to be completed in late FY 2016 or early FY 2017.

# INFORMATION TECHNOLOGY 17/801 INFORMATION SYSTEMS SUPPORT AND DEVELOPMENT (Cont.)

# PROJECT COST:

| <u>1</u>                                      |                  | Total FY 2017 |
|---|------------------|---------------|
| Task Activity                                 | Budget Line Item |               |
| Network Administration and Technology Support | Central Staff    | \$ 677,163    |
| IT Systems Support Services                   | Consultant       | \$ 340,000    |
| PL funding                                    |                  |               |
| Audio Visual Conference Room Upgrade          | Consultant       | \$ 100,000    |
| PL funding                                    |                  |               |
| Off-site Disaster Recovery Implementation     | Consultant       | \$ 40,000     |
| PL funding                                    |                  |               |

# **PROJECT MANAGER:**

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# **RESPONSE TO FEDERAL AND STATE PLANNING PRIORITIES MATRIX**

NJTPA 2017 UPWP Program Area Activities - Response to Federal Planning Priorities

|          | ſ  |        | Federal Emphasis Areas      |                      |                    |   |                                 |                                    |                          |  |                        |
|----------|--|--------|-----------------------------|----------------------|--------------------|---|---------------------------------|------------------------------------|--------------------------|--|------------------------|
| Task No. | Task Title   | Safety | Infrastructure<br>Condition | Congestion Reduction | System Reliability | Freight Movement and<br>Economic Vitality | Environmental<br>Sustainability | Reduced Project<br>Delivery Delays | MAP-21<br>Implementation | Models of Regional<br>Planning Cooperation | Ladders of Opportunity |
| 17/101   | Unified Planning Work Program                                  | S      | s                           | S                    | S                  | s   | S                               | S                                  | S                        | s  | s                      |
| 17/102   | Interagency Planning Collaboration                             | S      | s                           | S                    | S                  | s   | S                               | S                                  | S                        | Р  | s                      |
| 17/201   | Performance Based Planning - Process<br>Integration            |        |                             | Р                    | Р                  | Р   | S                               | S                                  | Р                        | s  |                        |
| 17/202   | Regional Congestion Management Process<br>Study                | Р      | Р                           | Р                    | Р                  | Р   | Р                               |                                    | Р                        | s  | s                      |
| 17/203   | Air Quality Planning and Conformity Analysis                   |        |                             | S                    |                    |   | Р                               |                                    | Р                        | s  |                        |
| 17/204   | Performance Measures Analysis, Data and Reporting              | Р      | Р                           | Р                    | Р                  | Р   | Р                               |                                    | Р                        | Р  | S                      |
| 17/205   | Travel Demand and Socioeconomic Modeling and Forecasting       |        |                             | Р                    | Р                  | Р   | Р                               |                                    | Р                        | Р  |                        |
| 17/301   | Regional Transportation Plan                                   | Р      | Р                           | Р                    | Р                  | Р   | Р                               | S                                  | Р                        | Р  | Р                      |
| 17/302   | Corridor Study and Project Planning                            | s      | S                           | S                    | S                  | s   | S                               | S                                  |                          | s  | S                      |
| 17/303   | Safety Planning  | Р      |                             |                      | Р                  |   | s                               | s                                  |                          |  |                        |
| 17/304   | Subregional Transportation Planning                            | Р      | Р                           | Р                    | Р                  | Р   | Р                               | Р                                  | S                        |  | S                      |
| 17/305   | Subregional Studies Program                                    | S      |                             | S                    | S                  | s   | s                               | s                                  |                          |  | Р                      |
| 17/306   | Mobility Programs  | Р      |                             | Р                    | Р                  | s   | s                               |                                    | S                        | Р  | Р                      |
| 17/307   | Environment and Climate Change Planning                        |        | Р                           | S                    | S                  |   | Р                               |                                    |                          | Р  |                        |
|          | Livable Communities Planning                                   | Р      | S                           | S                    | S                  | s   | Р                               | S                                  |                          | Р  | S                      |
|          | Freight Planning and Coordination                              | S      | S                           | S                    | S                  | Р   | S                               | S                                  | S                        | s  | S                      |
|          | Transportation Improvement Program<br>Development              | Р      | Р                           | Р                    | Р                  | Р   | Р                               | S                                  | Р                        | Р  | Р                      |
| 17/502   | Transportation Improvement Program<br>Management               | S      | Р                           |                      |                    |   | S                               |                                    | Р                        | Р  | Р                      |
| 17/503   | Local Capital Project Delivery Program                         | S      | Р                           | S                    | Р                  | Р   | S                               | Р                                  |                          |  |                        |
| 17/504   | Local Safety and Asset Management                              | Р      | Р                           | S                    | Р                  | s   |                                 | Р                                  |                          |  |                        |
| 17/505   | Study and Development Program                                  | S      | Р                           | S                    | Р                  | Р   | Р                               | s                                  | Р                        | Р  | Р                      |
| 17/506   | Transportation Alternatives and Safe Routes to School Programs | s      | Р                           | S                    | s                  | s   | Р                               | S                                  |                          |  |                        |
| 17/601   | Public Involvement/Outreach                                    | S      | S                           | S                    | S                  | S   | S                               | S                                  | S                        | s  | S                      |
| 17/602   | Committee Support  | S      | S                           | S                    | S                  | S   | S                               | S                                  | S                        | s  | S                      |
| 17/603   | Intergovernmental Relations, Policies and Legislation          | S      | S                           | S                    | S                  | S   | S                               | S                                  | S                        | S  | S                      |
| 17/701   | Office Administration  | S      | S                           | S                    | S                  | S   | S                               | S                                  | S                        | s  | S                      |
| 17/702   | Grants and Contracts Administration                            | S      | S                           | S                    | S                  | S   | S                               | S                                  | S                        | S  | S                      |
| 17/801   | Information Systems Support and Development                    | S      | S                           | S                    | S                  | s   | s                               | s                                  | s                        | s  | s                      |

|  | NJDOT MPO Transportation Priorities                       |   |  |   |  |   |   |  |   |   |   |  |   |   |  |
|--|---|---|--|---|--|---|---|--|---|---|---|--|---|---|--|
| Task No. Task Title  | Collaborate with NJDOT in meeting MAP-<br>21 requirements | Implement actions to foster Performance<br>Management of non-state-owned NHS<br>Bridges and Pavements | Coordinate with NJDOT in development<br>and integration of a Performance Based<br>Approach to Asset Management and to<br>implement the CIS | With the updated Comprehensive SHSP,<br>focus on local safety planning efforts<br>particularly relating to intersections, lane<br>departures and pedestrian traffic | Improve traffic operations through ITS<br>upgrades, and enhanced coordination at<br>the interstate, state, county and local<br>level. Support NJDOT's ICM Study for the<br>NJ 495 and NE Corridors | Pursue low cost operational<br>improvements and TDM congestion relief<br>strategies | Institutionalize an improved processs for<br>initiating mobility improvements with an<br>updated, coordinated and streamlined<br>approach to developing and vetting<br>problem statements | Improve primary freight corridors and<br>hubs for more efficient access and<br>improved system performance | Maximize opportunities for Complete<br>Streets Implementation | Support implementation of enhanced problem intake process and improved problem and project prioritization process | Implement actions to foster improved<br>local public agency project delivery and<br>compliance with federal regulations<br>during project development and<br>construction | Continue to support greater coordination<br>with other MPOs, NJDOT, transit<br>agencies, TMAs and subregions in<br>mobility and land use planning. | Work with NJDOT and other partners on<br>risk management strategies for improving<br>the resiliency of transportation<br>infrastructure against the impacts of<br>extreme weather | Implement actions that support fairness<br>and improved coordination of services,<br>access and mobility for low income,<br>minority, persons with disabilities and<br>seniors. | Continue to engage with the public to strengthen public confidence and participation in the planning process |
| 17/101 Unified Planning Work Program   | S   | s   | S  | S   | s  | S   | s   | S  | s   | s   | s   | S  | S   | S   | S  |
| 17/102 Interagency Planning Collaboration  | Р   | s   | S  | S   | Р  | S   | s   | s  | s   | s   | S   |  | Р   |   |  |
| Performance Based Planning - Process<br>17/201 Integration                             | Р   | Р   | Р  | Р   | Р  | Р   | Р   | Р  | Р   | Р   | s   | Р  | S   |   |  |
| Regional Congestion Management Process<br>17/202 Study                                 | Р   | Р   | S  | Р   | Р  | Р   | s   | s  | s   | s   |   |  | S   | S   |  |
| 17/203 Air Quality Planning and Conformity Analysis                                    | S   |   |  |   |  |   |   |  | s   |   |   | s  | S   | S   | s  |
| Performance Measures Analysis, Data and<br>17/204 Reporting                            | Р   | Р   | Р  | Р   | Р  | S   | s   | s  |   |   |   | Р  | S   | S   |  |
| Travel Demand and Socioeconomic Modeling<br>17/205 and Forecasting                     | S   |   |  | Р   | s  | S   |   |  |   |   |   |  | S   |   |  |
| 17/301 Regional Transportation Plan  | Р   | s   | Р  | Р   | Р  | Р   | Р   | Р  | Р   | s   |   | S  | Р   | Р   | Р  |
| 17/302 Corridor Study and Project Planning   | S   | S   | S  | S   | S  | S   | s   | S  | s   | Р   | s   | S  | S   | S   | S  |
| 17/303 Safety Planning   | Р   |   |  | Р   |  |   |   |  | s   |   |   | S  |   |   | s  |
| 17/304 Subregional Transportation Planning   | S   | s   | s  | S   | S  | S   | s   | s  | s   | s   | s   | Р  | s   | S   | Р  |
| 17/305 Subregional Studies Program   | S   | s   | s  | S   | s  | S   | S   | S  | s   | Р   | s   | s  | s   | s   | s  |
| 17/306 Mobility Programs   |   |   |  | S   | S  | Р   | s   |  | s   |   |   | Р  |   | Р   | S  |
| 17/307 Environment and Climate Change Planning   | S   | s   | S  | S   | s  | Р   | s   | s  |   |   |   | S  | Р   |   | s  |
| 17/308 Livable Communities Planning  | Р   | Р   | Р  | Р   | Р  | Р   | Р   | Р  | Р   | Р   | Р   | Р  | S   | S   | S  |
| 17/401 Freight Planning and Coordination<br>Transportation Improvement Program         | Р   | s   | s  | S   | s  | S   | s   | Р  | s   | s   | s   | S  | s   | S   | S  |
| 17/501 Development<br>Transportation Improvement Program                               | Р   |   | S  | Р   | s  |   | s   |  |   | Р   | S   | S  |   | S   | s  |
| 17/502 Management  | S   |   |  | S   |  |   |   |  |   |   | s   | S  |   | S   | S  |
| 17/503 Local Capital Project Delivery Program  | Р   |   |  | Р   |  |   | s   |  |   |   |   |  | S   |   | s  |
| 17/504 Local Safety and Asset Management   | Р   |   |  | Р   | s  |   |   |  |   | Р   | Р   |  | S   |   | S  |
| 17/505 Study and Development Program<br>Transportation Alternatives and Safe Routes to | Р   |   | Р  | Р   | s  |   | s   |  |   | Р   | Р   | S  |   | S   | s  |
| 17/506 School Programs   | Р   | Р   | Р  | Р   |  |   | s   |  |   | Р   | Р   |  |   |   |  |
| 17/601 Public Involvement/Outreach   | S   | s   | S  | S   | S  | S   | s   | s  | s   | s   | S   | S  | S   | Р   | Р  |
| 17/602 Committee Support<br>Intergovernmental Relations, Policies and                  | S   | s   | S  | S   | s  | S   | s   | s  | s   | s   | s   | S  | S   | Р   | Р  |
| 17/603 Legislation   | S   | s   | S  | S   | s  | S   | s   | s  | s   | s   | S   | S  | S   | S   | s  |
| 17/701 Office Administration   | S   | s   | S  | S   | s  | S   | s   | s  | s   | s   | s   | S  | S   | S   | s  |
| 17/702 Grants and Contracts Administration   | S   | s   | S  | S   | s  | S   | s   | s  | s   | s   | S   | S  | S   | S   | s  |
| 17/801 Information Systems Support and Development                                     | S   | S   | S  | S   | S  | S   | S   | s  | s   | s   | S   | S  | S   | S   | S  |