Chapter 8 | Additional Planning Considerations

1. Social Considerations
2. Transportation Conformity
3. Amending the Plan
1. SOCIAL CONSIDERATIONS

Plan 2045 is a product of extensive coordination and collaboration between NYMTC, its member agencies, its partners in the public and private sectors, and the general public, during which these groups worked together to reconcile long-term transportation plans with regional, social and environmental concerns. The environmental justice and environmental mitigation assessments were specifically developed by NYMTC to ensure that the planning process continues to be attentive to the transportation needs of low-income minority communities, and to the potential impacts of transportation projects on natural and historical resources.

TITLE VI & ENVIRONMENTAL JUSTICE

Many federal mandates emphasize environmental justice principles in all aspects of the transportation planning process, including the nondiscrimination policies set forth in Title VI of the Civil Rights Act of 1964 and other directives. Additionally, Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations,” requires all federal agencies to incorporate environmental justice principles into their policies, activities, and procedures. The order also requires federal agencies to identify and address disproportionately high and adverse health and environmental impacts on minority and low-income populations to the maximum extent practical and as permitted by law. Each federal agency is also directed to develop a strategy for implementing environmental justice principles.

In response to Executive Order 12898, federal agencies set out their own orders to ensure compliance. In April 1997, USDOT issued Order 5610.2, “Environmental Justice in Minority Populations and Low-Income Populations,” which established environmental justice guidelines and procedures to be incorporated into USDOT planning, programs, and policies. This order was updated in 2012 as Order 5610.2(a) to clarify certain aspects of the original Order. In 1998, FHWA issued Order 6640.23, which established policies and procedures for agency compliance with Executive Order 12898. This Order was also updated in 2012 as Order 6640.23(a) to provide further guidance on compliance. On August 12, 2012, FTA issued Circular C4703.1 to provide recipients of FTA financial assistance with guidance on incorporating environmental justice principles into plans, projects, and activities that receive funding.
Based on these federal actions and guidance, environmental justice issues that should be considered in the metropolitan transportation planning process, including proper identification of communities; assessment of program benefits; assessment of participation in the development of products and activities (public involvement); and any disproportionate impacts. Nondiscrimination is also an integral part of NYMTC’s transportation planning and project development processes. NYMTC and its members work assiduously to ensure that the needs of protected populations are addressed and impacts of activities are assessed from project planning to implementation. NYMTC and its members understand that the transportation needs of specific populations should be considered and that these needs will vary from group to group.

In September 2014, NYMTC adopted its Title VI Program to help meet its obligations in serving protected populations within the planning area and ensuring that the relevant requirements of the metropolitan transportation planning process are being met. Additionally in the same year, the Language Access Operating Procedures were also adopted to fulfill Federal requirements (including Executive Order 13166) concerning persons with Limited English Proficiency (LEP).

PLANNING PROCESS ASSESSMENT
Notwithstanding the above-mentioned programs/procedures, an Environmental Justice & Title VI Assessment was completed as part of Plan 2045 to inform and guide the efforts of NYMTC to ensure that the benefits and burdens of the transportation planning process and the projects, programs and initiatives that result, do not disproportionately affect minority and low-income populations. More detailed analysis and assessment of impacts are conducted by NYMTC’s members at the project planning level. For the purpose of this analysis, the term minority refers to a person’s racial or ethnic identity. The USDOT defines minority as a person who is:

1. African American: a person having origins in any of the black racial groups of Africa;
2. Hispanic or Latino: a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race;
3. Asian American: a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent;
4. American Indian and Alaskan Native: a person having origins in any of the original people of North America, South America (including Central America), and who maintains cultural identification through tribal affiliation or community recognition; or
5. Native Hawaiian and Other Pacific Islander: people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

Similarly, USDOT defines as low-income a person whose median household income is at or below the U. S. Department of Health and Human Services’ poverty guidelines. For example, the 2016 Federal Poverty Level for a household of four is an annual income $24,300.

Plan 2045’s Environmental Justice and Title VI assessment evaluates trends and identifies geographic locations as Communities of Concern in the NYMTC planning area. The following section briefly outlines its findings. All demographic data were obtained from the 2011-2015 5-year American Community Survey. A complete presentation of data and analysis, and a list of the agencies contributing to the assessment, is available in the Plan 2045 Appendix 4: Environmental Justice and Title VI.
Communities of Concern

In keeping with federal mandates, Communities of Concern were located and identified at the census tract level using two criteria: percentage of minority population, and percent of persons below the poverty level. Census tracts were designated as a Community of Concern when (1) the percent minority population equaled or exceeded the regional average of 56 percent, and (2) the percent of persons below the poverty level equaled or exceeded the regional average of 16 percent.

Of the 3,081 census tracts within the NYMTC planning area, 31 percent were identified as Communities of Concern. As shown in Table 8.1, New York City has the largest share of Communities of Concern, followed by the Lower Hudson Valley and Long Island, respectively.

Travel Characteristics

Public transportation tends to be more vital to Communities of Concern in the aggregate than to the remainder population of the planning area: within the region’s Communities of Concern, 60 percent of workers use public transportation to commute to work, compared to 33 percent of the remainder population. However, the use of public transportation in Communities of Concern varies by sub-region. In New York City, 64 percent, or over 950,000 workers in Communities of Concern use public transportation to commute, whereas only 16 percent or just over 9,300 workers in Long Island Communities of Concern do so, and are more likely to commute by car, truck, or van. Nevertheless, public transportation is an important mode of transportation for Communities of Concern. The percentage of workers that use bicycles, taxicabs, walking, or working from home in Communities of Concern is similar to the percentage of workers in the remainder population.

Travel Time to Work

Among the three subregions of the NYMTC planning area, only New York City exhibited longer commutes for Communities of Concern, on average, than the remainder population. Approximately 72 percent of workers in Communities of Concern commute longer than the national average of 25 minutes, as compared to approximately 64 percent of the remainder population. It is important also to note that since New York City contributes a significant share of the region’s total population as well as number of Communities of Concern, New York City workers’ longer travel times skew the regional average.

Workers commuting from the Lower Hudson Valley and Long Island, regardless of whether they reside in a Community of Concern, have commute times closer to the national average. In fact, workers in Communities of Concern on Long Island and in the Lower Hudson Valley have slightly shorter commute times than the remainder population: 43 percent and 44 percent of those in Communities of Concern on Long Island and in the Lower Hudson Valley, respectively, commute longer than 30 minutes, compared to 46 percent of Long Island’s remainder population and 49 percent of the remainder population in the Lower Hudson Valley.

Linguistic Isolation

The U.S. Census Bureau defines a linguistically isolated household as one in which “no person 14 years old and over speaks only English and no person 14 years old and over who speaks a language other than English speaks English ‘very well.’” Among all of the households within the Communities of Concern, 283,030 (or 20 percent) of households are considered linguistically isolated. Over 260,000 of these households are located in New York City’s Communities of Concern. In both the Lower Hudson Valley and Long Island, 19 percent of total households are linguistically isolated.

The data reveals that households in Communities of Concern are between two to five times more likely to be linguistically isolated than other households. Thus, language needs should be taken into account in linguistically isolated Communities of Concern when communicating public engagement efforts and project and service notifications to ensure that these populations have ample access and opportunity to provide public input, and are informed about projects.

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1. Minority and minority population are defined in Plan 2045’s Environmental Justice Assessment, Appendix E.
2. Low-income person and low-income population are defined in Plan 2045’s Environmental Justice Assessment, Appendix E, along with information on the determination of poverty status.
TABLE 8.1: COMMUNITIES OF CONCERN IN NYMTC REGION

<table>
<thead>
<tr>
<th>Subregion</th>
<th>Minority Population</th>
<th>Percent Minority*</th>
<th>Population Below Poverty Level</th>
<th>Percent Below Poverty Level**</th>
<th>Communities of Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York City</td>
<td>5,686,988</td>
<td>67%</td>
<td>1,710,872</td>
<td>21%</td>
<td>900</td>
</tr>
<tr>
<td>Lower Hudson Valley</td>
<td>566,377</td>
<td>41%</td>
<td>142,082</td>
<td>10%</td>
<td>45</td>
</tr>
<tr>
<td>Long Island</td>
<td>958,986</td>
<td>34%</td>
<td>185,415</td>
<td>7%</td>
<td>28</td>
</tr>
<tr>
<td>NYMTC Planning Area</td>
<td>7,212,351</td>
<td>57%</td>
<td>2,806,582</td>
<td>16%</td>
<td>973</td>
</tr>
</tbody>
</table>

Source: 2011-2015 5-year American Community Survey

* Percent minority is calculated by dividing minority population by total population

** Percent below poverty level is determined by dividing population below poverty level and total population for who poverty status is determined (population over age 15, and do not live in group quarters, for example dormitories)

FIGURE 8.1: COMMUNITIES OF CONCERN IN THE NYMTC REGION

Defined as a census tract that is both a Minority Community and a Low-Income Community. See Appendix 4 of the Plan for more information.
ENVIRONMENTAL CONSERVATION

NYMTC and its members are committed to protecting and enhancing natural resources, promoting energy conservation, improving the quality of life, and promoting compatibility of transportation improvements with state and local planned growth. Therefore, resource conservation and environmental impact mitigation are key elements of NYMTC’s transportation planning process. NYMTC worked with its partners and the public to reconcile Plan 2045 with environmental concerns. In keeping with federal requirement, NYMTC was in consultation with federal, state, tribal, wildlife, land management, and regulatory agencies, in addition to state and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation, during the development of Plan 2045.

Compliance with the National Environmental Policy Act (NEPA), the State Environmental Quality Review Act (SEQRA) regulations ensure that NYMTC members are engaged in environmental impact mitigation activities during project planning and implementation processes. These mitigation activities aim to implement projects that are in harmony with the community and preserve the environmental, scenic, aesthetic, historic, and natural resource values of the area in which they are located. In the NYMTC planning area, there are a number of ongoing environmental mitigation activities targeting watersheds, wildlife areas, and eco-systems. Appendix 5 of Plan 2045 presents the data, maps, and research produced through comprehensive regional coordination of environmental regulation and initiatives in the development of the Plan.

Partner Agencies & Process

NYMTC’s members have formal and informal relationships with federal, state, and local partner agencies that provide feedback on environmental and other issues related to transportation projects and studies in the planning area. NYMTC formalized Plan 2045’s consultation process through various outreach strategies, including one-on-one meetings, letters, teleconferences, and webinars. These consultations produced resource and conservation concerns that may impact future transportation planning efforts in the planning area. A full list of partner agencies can be found in Appendix 5.

In developing the appendix the process included:

> Identifying partner agencies to consult regarding natural and cultural resources.
> NYMTC compiled a list of agencies in the planning area responsible for land use management, natural resources, environmental protection and conservation, and historic preservation in order to identify the federal, state and local agencies relevant to the long-range transportation plan.
> Identifying agencies’ goals, objectives and geographic focus areas.
> Initially, research was conducted through partner agency websites and other online resources that house documents and data related to the agencies’ work, such as the New York State GIS Clearinghouse. The agencies were then contacted individually to confirm the accuracy of the data sources. Efforts were made to contact each agency at various points in the production of Plan 2045.
> Reviewing planning documents.
> Partner agencies provided planning documents with agency-wide and program-specific goals and objectives. The goals and objectives from these plans were reviewed and compared with the goals of the member agencies. Where this review identified issues not addressed specifically by NYMTC in its shared vision, goals, and individual projects, the issue was researched in coordination with the partner agency and the appropriate NYMTC member agency. The agencies’ respective goals and objectives were then taken into consideration in the development of the vision, goals, and objectives in Plan 2045.
> Mapping identified natural and cultural resources.

Maps were created to compare the environmental and historic preservation areas and redevelopment areas to projects included in the Plan. When projects are in proximity to these resources, the NYMTC member agency responsible for the project will review available information and, if needed, undertake further analysis.
Three types of maps were created for each of the three subregions: land-based issue maps, water-based issue maps (for example flood hazard and coastal risk areas, as shown in Figure 8.2 for Long Island), and redevelopment area maps. Land-based issue maps display parks and wildlife areas, historic sites, and government-run facilities. Water-based issue maps show protected water bodies, coastal wildlife habitats, and wetlands. Redevelopment area maps illustrate areas which present opportunities for development and need for future access. These maps can be found in Appendix 5.

**FIGURE 8.2: ENVIRONMENTAL CONCERNS IN THE NYMTC PLANNING AREA - FLOOD ZONES**

**Special Flood Hazard Areas**
Areas that will be inundated by the 1 percent annual chance (or 100-year) flood. In these areas, the National Flood Insurance Program's floodplain management regulations must be enforced and purchase of flood insurance is mandatory for federally backed mortgages.

**Moderate Flood Hazard Areas**
Areas that are between the limits of the 1 percent annual chance (or 100-year) flood and the 0.2 percent annual chance (or 500-year) flood. While these areas may be at a moderate risk of flooding, flood insurance is not mandatory for federally backed mortgages.

**Coastal Risk Areas**
- **Extreme Risk Areas:** These are areas currently at risk of frequent inundation, vulnerable to erosion in the next 40 years, or likely to be inundated in the future due to sea level rise.
- **High Risk Areas:** These are areas that fall outside of the Extreme Risk Areas and are currently at infrequent risk of inundation or are at risk in the future from sea level rise.
- **Moderate Risk Areas:** These are areas that fall outside of the Extreme and High Risk Areas, but are currently at moderate risk of inundation from infrequent events or are at risk in the future from sea level rise.

*Source:* FEMA Map Service Center, accessed June 2015, using the most up-to-date flood zone data available for each county.  
National Flood Hazard Layer (NFHL), effective 06/02/2015; Rockland County FEMA Advisory Base Flood Elevations, effective 06/21/2013; Westchester County Preliminary Flood Insurance Rate Map (PFIRM), generated 12/08/2014; New York City Preliminary Flood Insurance Rate Map (PFIRM), generated 01/30/2015; Coastal Risk Areas (NYS Dept. of State), published 08/04/2014
2. TRANSPORTATION CONFORMITY

The U.S. Environmental Protection Agency (USEPA), through the Clean Air Act Amendments of 1990, established National Ambient Air Quality Standards (NAAQS) for various pollutants. Areas where air quality monitoring show a violation of the NAAQS are designated as non-attainment areas and are subject to a provision in the Clean Air Act’s §176(c) known as transportation conformity. The New York State Department of Environmental Conservation (NYSDEC) produces a State Implementation Plan that details how the NAAQS will be achieved for each of the State’s non-attainment areas.

The intent of transportation conformity is to fully coordinate transportation and air quality planning to ensure that the Plan and TIP, and their constituent transportation projects will not:

1. Cause or contribute to any new violation of the NAAQS,
2. Increase the frequency or severity of any existing NAAQS violations, or
3. Delay timely attainment of the NAAQS or any required interim emissions reductions or other milestones in any area.

For transportation conformity, the overall set of investments contained in the Plan and TIP must not result in forecasted mobile source emissions that exceed emissions milestones defined in the State Implementation Plan. Therefore, NYMTC must consider the air quality impacts of its transportation investments. A Transportation Conformity Determination addresses all non-attainment or maintenance areas that fall in whole or in part within the NYMTC Planning Area Boundary. These include the following:

- The New York Metropolitan Eight-Hour Ozone Moderate Non-Attainment Area consisting of all NYMTC counties except Putnam County.iii
- The New York-New Jersey-Connecticut Annual and 24-Hour Fine Particulate Matter Maintenance (PM 2.5) Area includes all NYMTC counties except Putnam. It also includes within New York State Orange County and all or portions of eight other MPO boundaries across the tri-state area. Coordination with the Orange County Transportation Council (OCTC) is done as part of each conformity determination. Details are shown in the analysis by pollutant section and Appendix 3.

iii. Putnam County, although in the NYMTC Planning Area Boundary, was a part of the Poughkeepsie Moderate 8-Hour Ozone Non-Attainment Area (PONA). Under the 1997 NAAQS as of July 20, 2013 this area is in attainment for the 2008 ozone standard and is no longer required to demonstrate transportation conformity under the 1997 NAAQS. This non-attainment area includes Putnam, Orange and Dutchess counties.
To determine the impact of its Plan and TIP, NYMTC uses the third generation of travel demand models, which are commonly referred to as activity-based models. Known as the NYBPM, this model uses journeys (travel between two primary locations, including stops) as a unit of travel rather than using only home-to-work trips. NYBPM looks at the daily activity agenda of each household member, intra-household interactions, and other spatial and temporal constraints that affect travel choices. To do this, NYBPM encodes the characteristics of the transportation system and planned improvements using spatially-accurate digital mapping. NYBPM then uses sixteen categories of forecasted SED data to simulate travel demand.

Air quality impacts will continue to be considered in the regional transportation planning process and in achieving the goals and outcomes of Plan 2045. Many of the projects, policies, and programs that are included in Plan 2045 and the TIP result in air quality benefits through improved efficiency of the regional transportation system.

3. AMENDING THE PLAN

As a living document, Plan 2045 needs to be adjusted as implementation occurs. Among the actions that are likely to be taken during life of this Plan are: addition of projects, policies and investment options; revision of existing actions and investments; changes in the status of actions and investments within the Plan; changes in the financial analysis underlying the Plan; and changes due to new or updated federal legislation or regulation. In amending Plan 2045, fiscal constraint and transportation conformity impact will be fully considered.

ENDNOTES

1 Full text of Federal Executive Order 12898 can be found in Plan 2045’s Environmental Justice Assessment, Appendix B.
2 Full text of USDOT Order 5610.2(a) can be found in Plan 2045’s Environmental Justice Assessment, Appendix C.
3 Full text of FHWA Order 6640.23(a) can be found in Plan 2045’s Environmental Justice Assessment, Appendix D. See also http://www.fhwa.dot.gov/legsregs/directives/orders/6640_23.htm