Chapter 1 | The Planning Process & the Shared Vision

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1. INTRODUCTION

All indicators suggest that the planning area of the New York Metropolitan Transportation Council (NYMTC) will continue to grow in population to 14.3 million by 2045, remaining the largest population and job center in the United States. The transportation system in NYMTC’s planning area currently supports on a daily basis approximately 3.3 million trips by bus, 5.7 million trips on rail rapid transit, 1.2 million trips on commuter rail, 103,000 trips on ferries, and over 162 million vehicle miles traveled on its roads. Long-range forecasts (found in Chapter 2 of Plan 2045) suggest that daily trips will increase by more than 2.5 million (nearly 10 percent growth), of which 1.5 million will be auto trips and another million in transit trips.

With the anticipated growth, the existing transportation network must be maintained, as well as further integrated and improved. It is critical to the economic health of the region that future resources be brought to bear for this purpose.

WHY A REGIONAL TRANSPORTATION PLAN?

Plan 2045 is a comprehensive, multimodal, and coordinated Regional Transportation Plan for the New York Metropolitan Transportation Council (NYMTC) planning area, covering the period of Federal Fiscal Years (FFYs) 2018-2045. The theme of Plan 2045 is “Maintaining the Vision for a Sustainable Region” building on the foundation of its predecessor, Plan 2040. A Plan covers all major modes of transportation from a regional perspective, including roadways, public transportation, bicycles and pedestrian facilities, goods movement and special needs transportation. In addition, key transportation topics are addressed, such as transportation system management and operations, safety and security, resiliency, freight transportation, specialized transportation and congestion management.

Like its predecessor, Plan 2045 has been developed through a cooperative effort among the NYMTC members and has included a vigorous community outreach and public involvement program. It is built around current and estimated future demand for transportation services and the current and future needs of the transportation system that are key to maintaining a sustainable region in the long-term.
2. NYMTC IN CONTEXT

Federal legislation requires that any urbanized area (UZA) with a population greater than 50,000 must have a metropolitan planning organization (MPO) to plan for and make decisions on the use of federal transportation funding. MPOs ensure that existing and future expenditures for transportation projects and programs are based on a continuing, cooperative and comprehensive planning process. Among other functions/requirements, MPOs cooperate with state agencies and public transportation operators to program federal funds for eligible transportation projects.

Long Island and the Lower Hudson Valley, NYMTC serves as a collaborative planning forum for the five boroughs of New York City and the suburban counties of Nassau and Suffolk on Long Island, and Putnam, Rockland and Westchester in the Lower Hudson Valley. NYMTC joins the City of New York and the suburban counties with the State of New York and the Metropolitan Transportation Authority in a regional council to undertake the federally-mandated planning process in order to access federal funding for transportation projects. As shown in Figure 1.1, NYMTC’s members are also divided into three geo-

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NYMTC’s planning area lies at the core of a multi-state metropolitan region surrounding New York City, which in turn is a portion of the Northeast Megaregion, the most densely populated, urbanized land in the country. The Megaregion, as defined by the Regional Plan Association, includes the metropolitan areas of Washington, D.C., Baltimore, Philadelphia, New York City and Boston (see Figure 1.2), is home to 49.5 million people (translating to nearly 18 percent of the nation’s total population), and is also a major contributor to the United States’ economy, producing one-fifth of the national GDP in 2010.¹

The multi-state New York City metropolitan region is demarcated by the U.S. Census Bureau’s New York Metropolitan Statistical Area (MSA), the largest such area in the nation in terms of population and one of the largest in the world. The New York MSA is home to over 20 million people (2015 estimate) and covers 25 counties (see Figure 1.3).²

While the multi-state region is centered on New York City, it also contains some of the largest cities in New Jersey (i.e., Newark, Jersey City, and Paterson) and Connecticut (i.e., Stamford, Bridgeport and New Haven) as well as large suburban municipalities on Long Island (i.e., Hempstead, Brookhaven and Babylon) and in the lower Hudson Valley (i.e., Yonkers, Mount Vernon, Newburgh, New Rochelle, Poughkeepsie, and White Plains).

The multi-state region also includes the planning areas of various MPOs and Councils of Government, or COGs, including NYMTC, the Orange County Transportation Council, the Poughkeepsie-Dutchess County Transportation Council, the Ulster County Transportation Council, the North Jersey Transportation Planning Authority, the Lehigh Valley Planning Commission, the Western Connecticut Council of Governments, the Naugatuck Valley Council of Governments, the Connecticut Metropolitan Council of Governments, the South Central Regional Council of Governments, and the Lower Connecticut River Valley Council of Governments.
FIGURE 1.3: THE NEW YORK MSA

GEORGRAPHY AND THE ENVIRONMENT

The multi-state metropolitan region is geographically centered on New York City, which is made up of Manhattan Island and Staten Island, the western end of Long Island (the boroughs of Queens and Brooklyn), and part of the North American mainland (the Bronx). The City possesses a well-used natural harbor and sits at the southern end of the Hudson River. East of Queens lie Nassau and Suffolk counties in suburban Long Island, known for its beach-lined coastline and barrier islands.

Across the Hudson River to the west of the City, lies northern New Jersey, an area which contains thirteen individual counties and several major cities. North of the Bronx on the east side of the Hudson River, and north of the New Jersey-New York state border on the west side of the river, lies the Lower Hudson Valley, a hilly region comprised of several counties (Westchester, Rockland, Putnam, Orange, and Dutchess counties) and dotted with suburban communities of varying size. Rockland County in particular is occupied by large swaths of natural habitat, such as Harriman and Bear Mountain state parks.

To the east of these Hudson Valley counties lies the southwestern portion of the State of Connecticut, across the Long Island Sound from Queens and suburban Long Island. This area of Connecticut is comprised of two counties (Fairfield and New Haven) and seven of the largest communities in the state are located in the area. It is characterized by a fairly dense, urban landscape, interspersed by a number of wealthy suburban towns.
The Pennsylvania portion of the multi-state region lies at the foothills of the Poconos Mountains, and is characterized by the valleys formed by the Lehigh River and Delaware River, the latter of which creates the border between Pennsylvania and New Jersey, and the Susquehanna River. The southernmost portion of the multi-state region is made up of southern New Jersey in an area to the southeast of Philadelphia. Southern New Jersey’s coastline and barrier islands also are included in this metropolitan region.

ECONOMY
The multi-state metropolitan region’s economy is large, diverse, and international. In 2015, the region produced a gross metropolitan product of $1.6 trillion, the largest in the country among metropolitan regions. The multi-state region’s economic output is nearly twice that of the Los Angeles metropolitan area and second only to Tokyo globally, by a margin of about nine percent. It is home to numerous Fortune 500 companies and foreign corporations, with one in ten private sector jobs being at a foreign company.

Although significant numbers of workers who reside in the multi-state region commute to New York City - Manhattan in particular - suburban Long Island, the Lower Hudson Valley, northern New Jersey and southwestern Connecticut are all home to their own industries which contribute to the multi-state region’s economy. Agriculture and tourism are important to the suburban Long Island and Lower Hudson Valley economies. The New York City region is home to some of the busiest ports in the country, including the Newark-Elizabeth Marine Terminal in Northern New Jersey. In 2016, the Port Authority of New York & New Jersey’s (PANY&NJ) terminals handled approximately 6.25 million twenty-foot equivalent units (TEUs), or nearly 3.7 million cargo containers. The suburban areas close to New York City also have their own economic ecosystems, often including major corporations. Westchester County in New York State and Fairfield County in Connecticut, for example, have become major business centers which draw commuters who live in New York City as well as elsewhere in the region.

Areas further from the New York City core have varied demographic and economic profiles. Eastern Pennsylvania, for example, has historically been manufacturing-based, and is currently the site of a variety of industrial-related firms, such as the global headquarters of Air Products and Chemicals. In New Jersey’s capital city of Trenton, officials are attempting to incentivize more industrial and business development along the Route 1 corridor, using Boston’s Back Streets program and Chicago’s Local Industrial Retention Initiative as models. The city is also looking to encourage more retail development within city limits, as many residents currently travel outside the city for their shopping needs.

DEMOGRAPHICS
The multi-state metropolitan region is large and diverse. The U. S. Census Bureau estimates its 2015 population at 23,723,696. While New York City is famous for its diversity, the region as a whole is also quite ethnically and racially diverse, with large communities hailing from all over the world. Nearly 27 percent of the region’s population in 2015 was born outside the United States. The total size of the region’s work force is 9,046,910, with the largest shares of jobs in the office and administrative support, sales, food, education, and financial sectors.
TRANSPORTATION

The transportation system of the multi-state metropolitan region is large, complex, and aging, tied together by a network of highways, rail lines, bridges, tunnels, and other infrastructure. As the largest metropolitan area in the nation, the multi-state region is traversed by numerous major limited access highways and rail lines. These include:

> Interstate highways I-78, I-80 and I-280 which extend from New York City west into Pennsylvania; I-87, which becomes the New York State (NYS) Thruway between New York City and Albany; I-95, a north-south highway of which a portion is the New Jersey Turnpike; and I-495, known as the Long Island Expressway.

> Rail lines include the New Jersey Transit, MTA Metro-North Railroad (MNR), and MTA Long Island Rail Road commuter rail networks; the Shore Line East commuter rail service; MTA New York City Transit’s subway network; the Port Authority of New York & New Jersey’s PATH rail rapid transit service; and New Jersey Transit’s Hudson-Bergen Light Rail and Newark Light Rail systems.

> Intercity rail services provided by Amtrak along the Northeast Corridor.


> Three major commercial airports; John F. Kennedy International Airport in southern Queens, Newark Liberty International Airport in Newark, and LaGuardia Airport in northern Queens; and a variety of smaller commercial and general aviation airports, including Lehigh Valley International Airport in Lehigh County, Pennsylvania; Long Island MacArthur Airport in Suffolk County, New York; Stewart International Airport in Orange County, New York; Trenton-Mercer Airport in Mercer County, New Jersey; and Tweed New Haven Regional Airport in New Haven, Connecticut.

> Due to the large numbers of islands, rivers, and other geographic features, bridges and tunnels are common throughout the multi-state region, carrying both roadways and rail lines across or under various topographical features.
TRAVELSHED
Figure 1.4 is a representation of the daily metropolitan travelshed in the multi-state region. Daily transit and highway trips estimates are shown for 2017 and forecasted to the 2045 horizon year within and between six subregional areas: northern and central New Jersey, New York City, suburban Long Island, southwestern Connecticut, the lower Hudson valley and the mid-Hudson Valley.¹

Figure 1.4 demonstrates that the majority of current and future trips are and will be within these six subareas, with the greatest volume of daily intra-area trips being made in northern and central New Jersey, in New York City and within suburban Long Island. By far, the greatest number of daily transit trips made within a subarea is and will be in New York City. In terms of daily trips made between the subareas, the majority of these inter-area trips are made between New York City and northern and central New Jersey, between New York City and suburban Long Island, and between New York City and the lower Hudson Valley. These three sets of inter-area trips also feature significant proportions of transit trips.

The core of the multi-state region is notable for its enormous mass transit system. It is estimated that in the United States, about one in every three users of mass transit, and two out of three rail riders, use this system.¹¹ New York City is served by an intensively used subway and bus system, and its more immediate suburban neighbors are served by commuter rail and local bus systems. Inter-city travel is provided by Amtrak, as well as long-haul buses and air travel facilities. The region is the busiest airspace in the United States, serving over 130 million passengers annually.¹²

¹ These estimates are derived from the 28-county New York Best Practice Model, a four-step transportation demand model maintained by NTMC.
The daily trip estimates and forecasts contained in this figure are derived a regional simulation model for the purposes of providing an overview of travel in the multi-county metropolitan region. Therefore, the estimates and forecasts are calibrated regionally with a focus on inter- and intra-county travel, not for individual travel corridors and sectors.
TRANSPORTATION INVESTMENTS

Due to the continued growth of the region and the aging state of many key pieces of infrastructure that require renewal, a number of regionally-significant improvements to the transportation infrastructure are either planned or moving forward in the multi-state metropolitan region. Major New York City-focused projects include the Second Avenue Subway in Manhattan, various trans-Hudson River rail and vehicular crossing improvements, and commuter rail improvements.

There are a range of projects in the multi-state region designated as “boundary projects” whose impacts cut across planning areas and state lines. Examples include:

> The Penn Station (New York) Access project that would provide direct access for the MTA MNR New Haven Line to Manhattan’s Penn Station while creating four new neighborhood stations in eastern Bronx.
> Interstate 95 (I-95) improvement projects from Stamford to Bridgeport and Old Lyme to New London, along with New Haven Line commuter rail service improvements.
> Various improvement projects along I-84 in both Connecticut and the Hudson Valley, including a complete replacement of the I-84/Route 8 interchange in Waterbury.
> A Cross Long Island Sound Connection between suburban Long Island and either the Bronx, Westchester or Connecticut.
> The New New York (NY) Bridge project to replace the Tappan Zee Bridge across the Hudson River between Westchester and Rockland counties, in tandem with the development of new BRT services in the I-287/Tappan Zee Bridge corridor.
> West-of-Hudson transit improvements, including improvements to the Port Jervis Line in Orange County, New York.
> The replacement of the aging Goethals Bridge between Elizabeth, New Jersey and Staten Island.
> The replacement of the Lincoln Tunnel Helix in Weehawken, New Jersey.

> The Hudson Tunnel Project to create an additional rail tunnel that would preserve the current functionality and strengthen the resiliency of the Northeast Corridor’s Hudson River rail crossing between New Jersey and New York.
> The Amtrak Gateway Program’s strategic rail infrastructure improvements designed to improve current services and create new capacity that will allow the doubling of passenger trains running under the Hudson River.
> The replacement of the Port Authority Bus Terminal, the redevelopment of Penn Station and the completion of Moynihan Station on Manhattan’s west side.
> Airport access improvements, including the extension of the Port Authority Trans-Hudson rail service to Newark Liberty International Airport, a new AirTrain connection to LaGuardia Airport and transit and roadway access improvements for John F. Kennedy International Airport.

While passenger transport is critical, these important projects are not limited to the movement of people. In such a densely populated and economically active region, freight transportation is critical as well, and there are several major projects dedicated to freight in the region. For example, the Port Authority’s Cross Harbor Freight Program is seeking to address the difficulty of moving freight from one side of New York Harbor to the other by examining a wide range of alternatives, including railcar and truck floats, container barges, and a cross-harbor rail tunnel. After review, the enhanced railcar float and double-track rail tunnel emerged as the preferred alternatives.
The Lincoln Tunnel Helix in Weehawken, NJ
Photo Source: PANY&NJ

East Side Access construction progress
Photo Source: MTA
2. NYMTC’S PLANNING PROCESS

NYMTC acts as a forum for collaborative planning from a regional perspective. It facilitates informed decision-making among its members by providing sound technical analysis and forecasts. NYMTC’s collective efforts help ensure that the region is prepared to obtain the maximum federal funds available to achieve the shared regional goals. All of this is in an attempt to focus the collective planning activities of NYMTC’s members to achieve a shared regional vision.

Federal legislation and related planning regulations require MPOs to produce a long-range Plan, a five-year Transportation Improvement Program (TIP), and an annual Unified Planning Work Program (UPWP). Plan 2045 is the FFYs 2018-2045 Plan for NYMTC’s planning area. The Plan includes forecasts of future conditions and needs and potential transportation improvements, as well as a shared strategic vision for transportation and development within the NYMTC planning area. Thus Plan 2045 fulfills federal planning requirements and maintains NYMTC’s eligibility for federal funding for transportation planning and improvement projects.

NYMTC is comprised of the chief elected or appointed officials of its member agencies, which include nine voting members and another group of seven non-voting advisory members (see Figure 1.5). It operates through four standing committees: the Program, Finance and Administration Committee (PFAC), which oversees the day-to-day operations of the organization, and the three geographically-based TCCs, which provide subregional planning forums. NYMTC is supported by a professional staff, which is responsible for conducting the daily business of the organization.
FIGURE 1.5: NYMTC STRUCTURE

NEW YORK METROPOLITAN TRANSPORTATION COUNCIL

PRINCIPAL MEMBERS (9)

- County Executives of Putnam, Rockland & Westchester Counties
- County Executives of Nassau & Suffolk Counties
- Chief Executive Officer of the Metropolitan Transportation Authority (MTA)
- Director of New York City Department of City Planning (NYCDCP)
- Commissioner of New York City Department of Transportation (NYCDOT)
- Commissioner of New York State Department of Transportation (NYSDOT)

ADVISORY MEMBERS (7)

- Port Authority of New York & New Jersey (PANYNJ)
- New York State Department of Environmental Conservation (NYSDEC)
- New Jersey Transit
- North Jersey Transportation Planning Authority (NJTPA)
- Federal Highway Administration (FHWA)
- Federal Transit Administration (FTA)
- US Environmental Protection Agency (EPA)

PROGRAM, FINANCE, AND ADMINISTRATION COMMITTEE (PFAC)

Standing Committee made up of the Principal Members and Advisory Members representatives

CENTRAL STAFF

- Director’s Office
- Administrative Group
- Planning Group
- Technical Group
- TCC Staff Units

THREE STANDING SUBREGIONAL TRANSPORTATION COORDINATING COMMITTEES (TCCs)

- MID-HUDSON SOUTH (MHSTCC)
  - MTA Chief Executive Officer
  - New York State Thruway Executive Director
  - NYSDOT Region 8 Director
  - Putnam County Executive
  - Rockland County Executive
  - Westchester County Executive
  - Advisory Members

- NEW YORK CITY (NYCTCC)
  - MTA Chief Executive Officer
  - NYCDCP Commissioner
  - NYCDOT Commissioner
  - NYSDOT Region 11 Director
  - Advisory Members

- NASSAU-SUFFOLK (NSTCC)
  - MTA Chief Executive Officer
  - Nassau County Executive
  - Suffolk County Executive
  - NYSDOT Region 10 Director
  - Advisory Members
THE METROPOLITAN TRANSPORTATION PLANNING PROCESS

The Metropolitan Transportation Planning Process ensures a cooperative, continuous, and comprehensive regional framework for multi-modal transportation planning, as required by federal regulation. As part of this process, NYMTC is required to produce the following products and analyses:

THREE PLANNING PRODUCTS

1. The Plan, which describes long-range goals, objectives, and needs, typically over a 25-year horizon for the NYMTC planning area;
2. The TIP, which defines federal funding for specific transportation projects and actions, typically over a five-year period; and
3. The UPWP, which determines how federal funding for planning activities will be spent over the course of a program year.

TWO PLANNING ANALYSES

4. The Congestion Management Process (CMP): since NYMTC’s planning area is part of a federally-designated Transportation Management Area, NYMTC must maintain a CMP to forecast traffic congestion and consider congestion reduction strategies.
5. Transportation Conformity: NYMTC’s Transportation Conformity Determinations quantitatively demonstrate how Plan and TIP projects impact future mobile source emissions milestones set in response to federally-mandated air quality standards.

FIGURE 1.6: PLANNING PRODUCTS AND ANALYSES
LEGISLATION AND REGULATIONS

The current federal legislation that guides the development of the Plan is the Fixing America’s Surface Transportation (FAST) Act, which was signed into law by President Obama on December 4, 2015. This Act builds on its predecessor – Moving Ahead for Progress in the 21st Century (MAP-21). Planning regulations under the FAST Act require the following of long-range Plans:

(a) The metropolitan transportation planning process shall include the development of a transportation plan addressing no less than a 20-year planning horizon as of the effective date. In formulating the transportation plan, the MPO(s) shall consider factors described in § 450.306 as the factors relate to a minimum 20-year forecast period. In nonattainment and maintenance areas, the effective date of the transportation plan shall be the date of a conformity determination issued by the FHWA and the FTA. In attainment areas, the effective date of the transportation plan shall be its date of adoption by the MPO(s).

(b) The transportation plan shall include both long-range and short-range strategies/actions that provide for the development of an integrated multimodal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

(g) The metropolitan transportation plan shall, at a minimum, include:

1. The current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan;

2. Existing and proposed transportation facilities (including major roadways, public transportation facilities, intercity bus facilities, multimodal and intermodal facilities, nonmotorized transportation facilities (e.g., pedestrian walkways and bicycle facilities), and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan.

3. A description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with § 450.306(d).

4. A system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in § 450.306(d), including -

   i. Progress achieved by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports, including baseline data; and

   ii. For metropolitan planning organizations that voluntarily elect to develop multiple scenarios, an analysis of how the preferred scenario has improved the conditions and performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified performance targets.

5. Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods;
(6) Consideration of the results of the congestion management process in TMAs that meet the requirements of this subpart, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide.

(7) Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure, provide for multimodal capacity increases based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters. The metropolitan transportation plan may consider projects and strategies that address areas or corridors where current or projected congestion threatens the efficient functioning of key elements of the metropolitan area’s transportation system.

(8) Transportation and transit enhancement activities, including consideration of the role that intercity buses may play in reducing congestion, pollution, and energy consumption in a cost-effective manner and strategies and investments that preserve and enhance intercity bus systems, including systems that are privately owned and operated, and including transportation alternatives, as defined in 23 U.S.C. 101(a), and associated transit improvements, as described in 49 U.S.C. 5302(a), as appropriate;

(9) Design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source, in nonattainment and maintenance areas for conformity determinations under the EPA's transportation conformity regulations (40 CFR part 93, subpart A). In all areas (regardless of air quality designation), all proposed improvements shall be described in sufficient detail to develop cost estimates;

(10) A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The MPO(s) shall develop the discussion in consultation with applicable Federal, State, and Tribal land management, wildlife, and regulatory agencies. The MPO(s) may establish reasonable timeframes for performing this consultation;

(11) A financial plan that demonstrates how the adopted transportation plan can be implemented. (i) For purposes of transportation system operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain the Federal-aid highways (as defined by 23 U.S.C. 101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53).

(ii) For the purpose of developing the metropolitan transportation plan, the MPO(s), public transportation operator(s), and State shall cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under §450.314(a). All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.

(iii) The financial plan shall include recommendations on any additional financing strategies to fund projects and programs included in the metropolitan. In the case of new funding sources, strategies for ensuring their availability shall be identified. The financial may include an assessment of the appropriateness of innovative finance techniques (for example, tolling, pricing, bonding, public private partnerships, or other strategies) as revenue sources for projects in the plan.
(iv) In developing the financial plan, the MPO(s) shall take into account all projects and strategies proposed for funding under title 23 U.S.C., title 49 U.S.C. Chapter 53 or with other Federal funds; State assistance; local sources; and private participation. Revenue and cost estimates that support the metropolitan transportation plan must use an inflation rate(s) to reflect “year of expenditure dollars,” based on reasonable financial principles and information, developed cooperatively by the MPO(s), State(s), and public transportation operator(s).

(v) For the outer years of the metropolitan transportation plan (i.e., beyond the first 10 years), the financial plan may reflect aggregate cost ranges/cost bands, as long as the future funding source(s) is reasonably expected to be available to support the projected cost ranges/cost bands.

(vi) For nonattainment and maintenance areas, the financial plan shall address the specific financial strategies required to ensure the implementation of TCMs in the applicable SIP.

(vii) For illustrative purposes, the financial plan may include additional projects that would be included in the adopted transportation plan if additional resources beyond those identified in the financial plan were to become available.

(viii) In cases that the FHWA and the FTA find a metropolitan transportation plan to be fiscally constrained and a revenue source is subsequently removed or substantially reduced (i.e., by legislative or administrative actions), the FHWA and the FTA will not withdraw the original determination of fiscal constraint; however, in such cases, the FHWA and the FTA will not act on an updated or amended metropolitan that does not reflect the changed revenue situation.

(12) Pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g).

(h) The MPO(s) shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the transportation plan. The consultation shall involve, as appropriate:

(1) Comparison of transportation plans with State conservation plans or maps, if available; or
(2) Comparison of transportation plans to inventories of natural or historic resources, if available.

(i) The metropolitan transportation plan should integrate the priorities, goals, countermeasures, strategies, or projects for the metropolitan planning area contained in the HSIP, including the SHSP required under 23 U.S.C. 148, the Plan required under 49 U.S.C. 5329(d), or an Interim Agency Safety Plan in accordance with 49 CFR part 659, as in effect until completion of the Public, and may incorporate or reference applicable emergency relief and disaster preparedness plans and strategies and policies that support homeland security, as appropriate, to safeguard the personal security of all motorized and non-motorized users.

A key new feature of both MAP-21 and the FAST Act is the establishment and use of a performance-based approach to transportation planning and decision-making. On May 27, 2016, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) jointly issued a Final Rule to update the federal planning regulations governing the development of metropolitan transportation plans and programs and provide revisions related to the use of a performance-based approach to the metropolitan transportation planning process.
NATIONAL GOALS AND PERFORMANCE MEASURES

MAP-21 established National Goals in the areas of safety, pavement and bridge infrastructure, congestion reduction, system reliability, freight movement, environmental sustainability, and project delivery. These National Goals, which appear in Table 1.1, were carried forward into the FAST Act, along with requirements for performance management. Plan 2045’s approach to the Transportation Performance Management (TPM) requirements, which accompany the National Goals, is described at length in Chapter 4. Since the TPM requirements will become effective after Plan 2045 is adopted, a future amendment of the Plan will be needed at that time to fulfill the TPM mandates.

TABLE 1.1: NATIONAL GOALS

<table>
<thead>
<tr>
<th>GOAL AREA</th>
<th>NATIONAL GOAL</th>
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<tbody>
<tr>
<td>Safety</td>
<td>To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.</td>
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<tr>
<td>Infrastructure Condition</td>
<td>To maintain the highway infrastructure asset system in a state of good repair.</td>
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<tr>
<td>Congestion Reduction</td>
<td>To achieve a significant reduction in congestion on the National Highway System.</td>
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<tr>
<td>System Reliability</td>
<td>To improve the efficiency of the surface transportation system.</td>
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<tr>
<td>Freight Movement &amp; Economic Vitality</td>
<td>To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.</td>
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<tr>
<td>Environmental Sustainability</td>
<td>To enhance the performance of the transportation system while protecting and enhancing the natural environment.</td>
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<tr>
<td>Reduced Project Delivery Delays</td>
<td>To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies’ work practices.</td>
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FEDERAL PLANNING FACTORS

The FAST Act requires that the following planning factors be considered in the long-range Plan and throughout the planning process:

> Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
> Increase the safety of the transportation system for motorized and non-motorized users;
> Increase security of the transportation system for motorized and non-motorized users;
> Increase accessibility and mobility of people and for freight;
> Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
> Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
> Promote efficient system management and operation;
> Emphasize the preservation of the existing transportation system;
> Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
> Enhance travel and tourism.

These federal planning factors are incorporated into the shared goals and desired outcomes of Plan 2045 and by extension the strategies and action to be implemented by the NYMTC members as described throughout the Plan document. As will be seen later in this chapter these federal planning factors are all built into the various aspects of the strategic framework set forth by NYMTC’s members.
URBAN AREA BOUNDARIES AND METROPOLITAN PLANNING AREA BOUNDARIES (UABS AND MPAS)

MPOs are required to examine their urbanized area growth patterns following each decennial census. The U.S. Census determines which areas are considered urbanized based on an area’s concentration of residential density. The urbanized area designations established in the 2010 Census are used to establish Metropolitan Planning Area (MPA) boundaries for MPOs. Adjusting the Census Urban Area Boundaries (UAB) to include the areas expected to become urbanized within a 20-year horizon is a necessary first step to establishing the eligibility of various components of the transportation system for federal transportation funding under specific funding programs.

Adjusted UABs are subject to approval by the U. S. Department of Transportation and review by NYS-DOT. The 2010 UAB map (see Figure 1.7) contains minor adjustments to NYMTC’s UAB.

THE MULTI-STATE METROPOLITAN REGION

Inter-organizational communication between government agencies and planning organizations across jurisdictions is essential for sustaining the integrity of overlapping transportation networks, ecosystems, economies, and environments. To address these geographically expansive issues, NYMTC must participate in planning at the level of the entire multi-state metropolitan region.

Toward this end, NYMTC is part of a Memorandum of Understanding (MOU) among the Orange County Transportation Council in the State of New York; the North Jersey Transportation Planning Authority in the State of New Jersey; the Western Connecticut Council of Governments, Connecticut Metro Council of Governments, Naugatuck Valley Council of Governments, South Central Regional Council of Governments, and Lower Connecticut River Valley Council of Governments in the State of Connecticut, and the Lehigh Valley Planning Commission in the State of Pennsylvania. The MOU recognizes that these planning councils are interdependent of each other and share ecosystems, environments, transportation systems, and a metropolitan travelshed. Through this MOU, NYMTC and the other MPOs/Councils of Government (COGs) collaborate as the Metropolitan Area Planning (MAP) Forum, which is working on issues such as data exchange, information sharing on regional projects, and other transportation planning issues related to the metropolitan transportation planning process.
FIGURE 1.7: NYMTC URBAN AREA BOUNDARIES

2010* Urban Area Boundaries:

- Census Urban Area
- NYMTC adjusted Urban Area

*There is no change from the 2000 to the 2010 Urban Area Boundary.

FIGURE 1.8: NEW YORK STATE MPA BOUNDARIES

NYMTC: New York Metropolitan Transportation Council
A/GFTC: Adirondack/Glens Falls Transportation Council
BMTS: Binghamton Metropolitan Transportation Study
CDTC: Capital District Transportation Committee
ECTC: Elmira-Chemung Transportation Council
GTC: Genesee Transportation Council
GBNRTC: Greater Buffalo-Niagara Regional Transportation Council
HOCTS: Herkimer-Oneida Counties Transportation Study
ITCTC: Ithaca-Tompkins County Transportation Council
OCTC: Orange County Transportation Council
PDCTC: Poughkeepsie-Dutchess County Transportation Council
SMTC: Syracuse Metropolitan Transportation Council
UCTC: Ulster County Transportation Council
WJCTC: Watertown-Jefferson County Transportation Council
3. PLAN 2045 STRATEGIC FRAMEWORK

Plan 2045 is built from a framework of the members’ strategic goals, their desired outcomes associated with the goals, and near-term actions related to the goals and outcomes which are intended to be advanced during the Plan’s first ten years. NYMTC members collaboratively developed eight strategic goals and related desired outcomes that are consistent with both the National Goals and the federal planning factors described above. In addition to other elements described throughout the Plan, Coordinated Development Emphasis Areas (CDEAs) and other sustainability initiatives described below are also part of this strategic framework; all of them working towards the achievement of the strategic goals. CDEAs are described in greater detail in Appendix 11.

The following section presents the eight goals developed by NYMTC members, with desired outcomes and near-term actions detailed for each goal. The goals are not structured hierarchically and as such the achievement of one goal and its outcomes and actions are just as important as any of the others. Some of the near-term actions listed here contribute to achieving more than one goal or set of desired outcomes.
GOAL: ENHANCE THE REGIONAL ENVIRONMENT

NYMTC’s members are committed to selecting transportation projects and programs and encouraging land use policies that, in the aggregate, continue efforts to reduce the negative impacts of transportation on the natural environment and human health.

NYMTC WILL CONTINUE TO WORK IN A COLLABORATIVE FASHION TO ACHIEVE THESE OUTCOMES:

> Reduced traffic congestion and improved air quality;
> Reduced greenhouse gas emissions;
> Improved water quality; and
> Preservation of open space, especially wetlands.

NEAR-TERM ACTIONS

> Evaluate and enhance demand management programs;
> Evaluate and enhance mobile source emissions reduction programs;
> Inventory greenhouse gas emissions;
> Plan for additional financing strategies;
> Implement transit improvements, enhancements in the FFYs 2017-2021 TIP;
> Implement mobility, traffic improvement projects in the FFYs 2017-2021 TIP;
> Implement programmed strategic improvements and initiatives (see Chapter 6):
  • MTA NYCT Second Avenue Subway, Phase II (current planned completion: 2027)
  • MTA LIRR East Side Access (current planned completion: 2022)
  • Additional NYC Select Bus Service routes (current planned completion: 2022)
  • MTA LIRR Ronkonkoma Branch Second Track (current planned completion: 2021)
  • MTA LIRR Expansion Project (current planned completion: 2021)
  • Lower Hudson Transit Link (current planned completion: 2018)
  • Nassau Hub Transit Initiative – Initial Operating Segment (current planned completion: 2021)
  • Nicolls Road Multimodal Corridor (current planned completion: 2021)

New bus shelters in Nanuet, as part of the Lower Hudson Transit Link Project

Photo Source: NYSDOT
GOAL: IMPROVE THE REGIONAL ECONOMY

NYMTC’s members must continue to maintain and develop the regional transportation infrastructure to support the vitality, competitiveness, and sustainable growth of the entire regional economy that will create employment opportunities and support the local tax base.

NYMTC WILL CONTINUE TO WORK IN A COLLABORATIVE FASHION TO ACHIEVE THESE OUTCOMES:

> A strengthened position of the region as a global and national gateway;
> Strategic distribution of growth throughout the region (see Coordinated Development Emphasis Areas (CDEAs) below); and
> Improved regional mobility for people and goods.

NEAR-TERM ACTIONS

> Advance Bus Rapid Transit (BRT) and managed-use lane projects as part of a regional system;
> Continue planning for multi-modal access to ports and airports;
> Continue planning for multi-modal goods movement and distribution improvements;
> Implement programmed strategic improvements and initiatives (see Chapter 6):
  • Bayonne Bridge Navigational Clearance Project (navigational clearance improvements: 2017; full bridge modernization: 2019)
  • Moynihan Station Phase II (current planned completion: 2020)
  • MTA LIRR Expansion Project (current planned completion: 2021)
  • Lower Hudson Transit Link (current planned completion: 2018)
  • Nassau Hub Transit Initiative – Initial Operating Segment (current planned completion: 2021)
  • Nicolls Road Multimodal Corridor (current planned completion: 2021); and
> Complete planning and/or environmental assessments for the following vision projects:
  • Cross Harbor Goods Movement improvements (Tier II EIS)
  • Hudson Tunnel Project
  • Amtrak Gateway Program
  • Northeast Corridor (Tier II EIS) and Empire Corridor inter-city passenger rail improvements
  • Port Authority Bus Terminal Replacement Program
  • Van Wyck Expressway Access & Capacity Improvements
GOAL: IMPROVE THE REGIONAL QUALITY OF LIFE

NYMTC’s members must work together to coordinate regional transportation, land use and zoning to provide a high quality of life for all residents of the region, thereby attracting and retaining people and businesses in the region.

NYMTC WILL CONTINUE TO WORK IN A COLLABORATIVE FASHION TO ACHIEVE THESE OUTCOMES:

> Increased intra-regional mobility and accessibility for commuting, recreation and tourism;
> Mitigation of negative externalities of transportation in the design, construction, and operation of the system (i.e., noise, emissions, viewsheds, safety, etc.);
> Increased ability to safely enjoy walking, bicycling, and the use of public space; and
> Help create/sustain vibrant communities through placemaking; and
> Improve transportation access and mode choice options for the elderly, persons with disabilities, and other population groups that may have special transportation needs

NEAR-TERM ACTIONS

> Implement programmed strategic improvements and initiatives:
  • NYBridge project (Tappan Zee Bridge replacement project) (current planned completion: 2018)
  • Nassau Transit Hub Initiative – Initial Operating Segment (current planned completion: 2021)
  • Nicolls Road Multimodal Corridor (current planned completion: 2021) and Suffolk County Innovation Zone
  • NY 347 corridor reconstruction (current planned completion: 2022-2033)
> Complete planning and/or environmental assessments for the following transit-oriented development (TOD) and transportation improvement vision projects linked to land use plans:
  • Wyandanch Rising and Ronkonkoma Hub TOD development
  • Route 110 BRT
  • Staten Island North Shore transit improvements
  • I-684 capacity improvements
  • Southeast MTA Metro-North Railroad (MNR) Station parking and pedestrian improvements
  • Southern Westchester East-West Corridor (Yonkers-New Rochelle) transit improvements
  • Nanuet TOD study
> Advance the recommendations of the New York-Connecticut Sustainable Communities Initiative;
> Advance the Plan 2045 Pedestrian and Bicycle Element (see Appendix 2) and implement pedestrian and bicycle projects in the 2017-2021 TIP;
> Complete planning and/or environmental assessments for the following pedestrian and bicycle projects:
  • Brooklyn and Manhattan waterfront greenways
  • Hudson River Valley Greenway link;
> Continue implementation of Complete Streets policies;
> Continue implementation of Vision Zero policies;
> Continue Safe Routes to School policies;
> Advance planning in the CDEAs
  • Continue local capacity-building through community planning workshops;
> Continue planning for transportation sector clean fuels expansion; and
> Implement initiatives and actions from the Coordinated Public-Transit Human Services Transportation Plan
GOAL: PROVIDE CONVENIENT, FLEXIBLE TRANSPORTATION ACCESS WITHIN THE REGION

NYMTC’s members provide mobility and transportation options, to maximize individuals’ opportunities to participate in society, regardless of income level, residence, access to transit, age, or ability. NYMTC’s members also must provide for the efficient movement of freight to, from and through the region.

NYMTC WILL CONTINUE TO WORK IN A COLLABORATIVE FASHION TO ACHIEVE THESE OUTCOMES:

> A sufficient array of transportation choices;
> Expanded connections, particularly across modes and between communities;
> Increased reliability for passenger and freight trips; and
> Increased transit ridership.

NEAR-TERM ACTIONS

> Implement programmed strategic improvements and initiatives, including:
  • MTA NYCT Second Avenue Subway, Phase II (current planned completion: 2027)
  • MTA LIRR East Side Access (current planned completion: 2022)
  • Additional NYC Select Bus Service routes (current planned completion: 2022)
  • MTA LIRR Ronkonkoma Branch Second Track (current planned completion: 2021)
  • MTA LIRR Expansion Project (current planned completion: 2021)
  • MTA MNR Penn Station Access (current planned completion: 2023)
  • Lower Hudson Transit Link (current planned completion: 2018)
  • New Staten Island Ferry vessels (current planned completion: 2021)
  • Kew Gardens Interchange (current planned completion: 2020)
  • 11th Avenue Viaduct replacement (current planned completion: 2022)
  • Harlem River Viaduct replacement (current planned completion: 2018)
  • Cross Bronx Expressway improvements (current planned completion: 2022)
> Complete planning and/or environmental assessments for the following vision projects:
  • East River crossing and Hudson River crossing bus/High Occupancy Vehicle (HOV) capacity
  • Bruckner Expressway Bridge replacement
  • I-495 Integrated Corridor Management, New Jersey to Queens
  • Route 110 BRT
  • Central Avenue Bus Rapid Transit BRT
  • Bronx-to-Getty Square transit improvements
> Continue planning for ferry service enhancements and station access improvements;
> Implement congestion-related improvements and enhancements in the FFYs 2017-2021 TIP;
> Implement Transportation Demand Management (TDM) and Transportation Systems Management (TSM) projects; and
> Complete planning and/or environmental assessments for the following projects:
  • Cross County Parkway-Saw Mill River Parkway interchange
  • MTA NYCT Queens Communications-Based Train Control
  • MTA NYCT vehicle fleet, depot and station expansion, and sustainability investments
  • MTA MNR Port Jervis Line improvements
  • PATH Extension to Newark Liberty International Airport Rail Link Station
> Study the impacts of future changes likely to impact transportation
GOAL: ENHANCE THE SAFETY & SECURITY OF THE TRANSPORTATION SYSTEM

NYMTC’s members will work to reduce the rate and severity of transportation-related crashes in the region and make the transportation system safer for all users. Members will also strive to increase the security of the transportation system, and support emergency management response and recovery efforts.

NYMTC WILL CONTINUE TO WORK IN A COLLABORATIVE FASHION TO ACHIEVE THESE OUTCOMES:

> Reduced rate of annual injuries and fatalities on the region’s transportation systems;
> Promulgation of advanced safety and security measures throughout the region;
> Enhanced coordination, data, and information sharing among members and other stakeholders; and
> Promotion of safety and security improvements in all aspects of transportation planning and implementation.

NEAR-TERM ACTIONS

> Implement safety recommendations/strategies in Plan 2045;
> Enhance access to safety-related data;
> In conjunction with TPM requirements to be completed in 2018:
  > Develop a regional approach to safety-related data analysis;
  > Develop operating procedures for safety and security considerations;
> Implement safety improvements and enhancements in the FFYs 2017-2021 TIP;
> Implement programmed strategic improvements and initiatives, including:
  > Manhattan Bridge seismic retrofit (current planned completion: 2025)
  > Ed Koch Queensboro Bridge seismic retrofit (current planned completion: 2025)
  > Brooklyn Bridge seismic retrofit (current planned completion: 2028)
  > Brooklyn Bridge approach arches and towers rehabilitation (current planned completion: 2021)
> Complete planning and/or environmental assessments for the following projects:
  > Sagtikos Parkway operational improvements.

Photo Source: NYC DOT
GOAL: BUILD THE CASE FOR OBTAINING RESOURCES TO IMPLEMENT REGIONAL INVESTMENTS

NYMTC’s members and the region’s other elected officials must think regionally about transportation needs, solutions, strategies, and investment priorities. In developing a shared regional vision, NYMTC’s members support the position that these investments are a shared priority, and are of strategic importance to this region and to the nation.

NYMTC WILL CONTINUE TO WORK IN A COLLABORATIVE FASHION TO ACHIEVE THESE OUTCOMES:

- Coordinated long-term planning;
- Developing a list of prioritized projects supporting the region’s shared vision;
- An increase in the use of alternative methods of financing transportation investments to supplement existing Federal and State funding sources;
- Obtain a fair share of Federal funds available for transportation, proportional to its transportation needs and economic share relative to the nation; and
- Elimination of unfunded mandates as feasible.

NEAR-TERM ACTIONS

- Advance near-term actions, immediate strategic regional investments and improvement projects through the TIP;
- Pursue agreed upon alternative funding sources; and
- Reach consensus on other alternative funding sources to be used individually or cooperatively.
GOAL: IMPROVE THE RESILIENCY OF THE REGIONAL TRANSPORTATION SYSTEM

NYMTC’s members will continue to plan for improving the resiliency of the transportation system so that the system can better resist disruptions to services and facilities and recover from them when they occur. Greater resiliency will help mitigate the adverse impacts of disruptions on the movement of people and goods due to weather, climate, or other acts of nature.

NYMTC WILL CONTINUE TO WORK IN A COLLABORATIVE FASHION TO ACHIEVE THESE OUTCOMES:

> Member-defined adaptation measures for critical components of the transportation system to accommodate variable and unexpected conditions without catastrophic failure;
> Greater resiliency of the regional supply chain by identifying options for goods movement during and after events; and
> Cooperative partnerships with federal, state, local agencies, and other stakeholders to adapt the transportation system and improve recovery from disruptions.

NEAR-TERM ACTIONS

> Planning and implementation to improve the resiliency of the existing system, including:
  • Superstorm Sandy recovery projects
  • New York-New Jersey-Connecticut Transportation Vulnerability Assessment and Adaptation Analysis
  • MTA’s system-wide resiliency projects
> Create new cooperative partnerships with multiple government agencies when responding to disasters; and
> Pursue new partnerships through the Federal Recovery Framework for recovery from disasters.
**GOAL: PRESERVE THE EXISTING TRANSPORTATION SYSTEM**

NYMTC members will continue to maximize the service life of the existing transportation system with the resources available by systematically and strategically maintaining and replacing transportation assets based on need. Using asset management principles and data-driven decision-making will result in a sustainable approach to programming that considers the relative and cumulative value of transportation assets as they benefit the public, economy and environment.

**NYMTC WILL CONTINUE TO WORK IN A COLLABORATIVE FASHION TO ACHIEVE THESE OUTCOMES:**

- Making the investments necessary to maximize the useful life of existing assets and to manage these assets in the most cost-effective manner through preventive maintenance and other measures;
- Keeping existing federal-aid eligible and local roadway systems – pavement, bridges and tunnels safe and functioning as intended;
- Keeping the existing transit infrastructure and equipment safe and functioning as intended;
- Keeping the existing pedestrian and bicycle facilities safe and functioning as intended.
- Protecting the existing freight network; and
- Promoting and sustaining asset management and operations activities for the regional transportation system.

**NEAR-TERM ACTIONS**

- Implement programmed strategic investments and initiatives related to system preservation, including:
  - Kosciuszko Bridge replacement (current planned completion: 2020)
  - Goethals Bridge replacement (current planned completion: 2018)
  - George Washington Bridge “Restoring the George” Program (current planned completion: 2024)
  - Cross Bronx Bridge rehabilitation (current planned completion: 2022)
  - Major Deegan Expressway rehabilitation (current planned completion: 2022)
  - I-678 Van Wyck Expressway Bridges replacement and rehabilitation (current planned completion: 2022)
  - Belt Parkway bridges replacement, Gerritsen Inlet and Mill Basin (current planned completion: 2021)
  - Brooklyn-Queens Expressway/Grand Central Parkway interchange reconstruction (current planned completion: 2024)
  - Kew Gardens Interchange (current planned completion: 2020)
  - Brooklyn-Queens Expressway rehabilitation (from Sands St to Atlantic Ave) (current planned completion: 2025)
  - West 79th Street Bridge rehabilitation (current planned completion: 2021)
  - Broadway Bridge (over the Harlem River) rehabilitation (current planned completion: 2020)
  - Ed Koch Queensboro Bridge upper roadways replacement (current planned completion: 2021)
  - NY 347 safety, mobility & environmental improvements (current planned completion in multiple phases: 2022-2033)
  - Ashford Avenue Bridge replacement (current planned completion: 2018)
- Implement other system preservation-related projects in the 2017-2021 TIP including:
  - Support members’ Asset Management Plans
  - Implement recommendations from the NYMTC Regional Freight Plan (see Appendix 8)
PLANNING FOR SUSTAINABILITY
Plan 2045’s strategic framework contains an emphasis on sustainability, which is built around the on-going connection between transportation planning and the use of land in NYMTC’s planning area. Key components of this connection include:

A. COORDINATED DEVELOPMENT EMPHASIS AREAS (CDEAS)
CDEAs are an essential component of the Plan 2045 Strategic Framework, as described above. They are locations where changes to land use and transportation that will help shape future growth and the manner in which that growth is accommodated by the transportation system. Recognizing the intrinsic connection between land use and transportation planning, CDEAs provide a framework for sustainable growth and development, where land use changes and investment in transportation can help foster more efficient, sustainable growth, as well as mitigating environmental pollution, conserving land and strengthening economic vitality by investing in development and transportation in a coordinated fashion, particularly linked to the existing and future transit network.

Building on the sustainability features of recent Plans and the work done through the federal Sustainable Communities Initiative, the CDEAs identified in Plan 2045 represent an evolutionary step in coordinated land use and transportation planning. They also represent a key linkage between the master plans and sustainability plans of NYMTC’s members and Plan 2045, helping to inform transportation investments and ensure that the development plans of individual jurisdictions in the NYMTC planning area are vital components of the transportation planning future.

Finally, the definition of CDEAs is an important step towards achieving several of Plan 2045’s strategic goals and desired outcomes goals by better linkages between land use decisions made at the local level with transportation investment decisions made at the regional level. The CDEAs identified by NYMTC members are mapped in Appendix 11.

B. SUSTAINABLE COMMUNITIES INITIATIVE (SCI)
Related to the CDEAs are sustainability planning initiatives such as the SCI, a key initiative of the federal partnership of the U.S. Department of Housing and Urban Development, the U.S. Department of Transportation, and the U.S. Environmental Protection Agency. Funded through a Sustainable Communities Regional Planning Grant, an SCI for the New York-Connecticut portion of the multi-state metropolitan region was developed through the New York-Connecticut Sustainable Communities Consortium, a partnership established in 2011 of nine cities, two counties and six regional planning organizations, including NYMTC. This resulted in the 2014 release of an implementation plan to create more sustainable and equitable growth in the region under study.

Through the SCI, the Consortium worked to foster livable and sustainable communities and growth centers around existing and planned transit services in order to enhance affordable housing and continue to reduce traffic congestion, improve the environment and expand economic opportunities. One of the major underlying factors was the understanding that transit-oriented development (TOD) is a foundation for sustainable and equitable development.

A major outcome of the SCI was the development of a set of project plans for specific locations that can provide a new dimension of growth for the region’s economy and models for other locations. Some of these projects developed community plans, while others either assessed the feasibility and potential impacts of major infrastructure improvements or addressed key sustainability and development issues that affected several communities in a jurisdiction.

C. TRANSIT-ORIENTED DEVELOPMENT (TOD) PROJECTS
TOD is compact, mixed-use development near transit facilities and high-quality walking environments. It is about creating sustainable communities where people of all ages and incomes have transportation and housing choices, increasing location efficiency where people can walk, bike and take transit. NYMTC has facilitated a number of Walkable Community and
Parking Management workshops in areas identified for TOD, while its members have partnered with local municipalities on development projects around transit stations and hubs. Chapter 2 details TOD projects in the NYMTC planning area.

D. COMPLETE STREETS REQUIREMENTS

New York State’s Complete Streets Act requires state, county and local agencies to consider the convenience and mobility of all users when developing transportation projects that receive state and federal funding. Complete Streets are roadways planned and designed to consider the safe, convenient access and mobility of all roadway users of all ages and abilities. This includes pedestrians, bicyclists, public transportation riders, and motorists; it includes children, the elderly, and persons with disabilities. They are a key building block to sustainable and equitable TODs.

In the NYMTC planning area, complete streets resolutions or policies are in place in Nassau, Suffolk, Rockland and Westchester counties, as well as at the municipal level in a number of constituent villages, towns, and cities. NYMTC has facilitated a number of workshops in the areas of Complete Streets and Safe-Routes-to-Schools to provide the tools required to develop complete streets and identify potential projects for funding through the transportation planning process.

4. PUBLIC PERCEPTIONS OF TRANSPORTATION ISSUES IN THE NYMTC PLANNING AREA

Throughout the development of Plan 2045, NYMTC has engaged the public for input through different methods. This section will briefly describe each effort, and provide valuable insight into what the public perceives to be the most important transportation issues in the NYMTC region.

Online tools were administered for two different campaigns: the first was a survey that sought to understand what factors the public perceived to be the most influential drivers of future changes that would impact transportation in NYMTC’s planning area. Survey respondents cited technological advancements and climate change as important drivers of change. These drivers will be discussed at length in Chapter 2.

The second online tool used in the development of Plan 2045 was an interactive website called MySidewalk, which allowed for the public to submit and discuss their feedback with other participants on major plan components (e.g. the strategic goals, impact of future growth on the transportation system, ideas for transportation solutions, financing options, and thoughts about planned projects).

In addition to these online forms of public engagement, NYMTC also conducted face-to-face public outreach. During the Spring of 2016, public workshops were held in each county and borough in the NYMTC planning area. At each workshop, the Plan development process was described, and participants could express local concerns and provide ideas and feedback on major plan components, special element plans, and planned projects. Later that spring, NYMTC held professionally-convened focus groups for each of its subareas (the Lower Hudson Valley, suburban Long Island, and New York City), as well as with residents of Communities of Concern. The focus groups were held to gain an understanding of what the public perceived to be the most significant issues in their local areas and in the region as a whole.

Appendix 7 includes the information gathered through these methods. Some of the major, overarching issues shared across geographies included the need to invest in transit infrastructure to achieve more reliable, higher-capacity service; the need to upgrade freight infrastructure for higher efficiency; and im-
improvements to transportation safety. In addition, TOD and sustainable growth initiatives and projects were generally well-supported by participants.

Concerns among participants about vehicular congestion were more prevalent in the suburban subareas. Of particular concern was congestion at important interchanges, on thoroughfares bound for New York City, and on east-west highways on Long Island. The need for improved east-west movement across the Hudson River was also identified.

At the same time, in recognition of the potential for public transit investments to alleviate roadway congestion, there was significant support among the participants for investments in transit service. Participants identified a need for better connectivity between transit services; for example, for trans-Hudson and north-south Long Island trips. Lower Hudson Valley and Long Island participants also expressed the need for increased service capacity and frequency at peak hours.

Participants in the suburban subareas also supported pedestrian and bicycle projects, citing the need for better pedestrian infrastructure around stations, as well as expanding recreational pedestrian and bicycle pathways.

For the New York City participants, most concerns were centered on public transit; specifically, the desire for subway service expansion to new, currently unserved destinations, concerns over aging infrastructure, overcrowding on trains and platforms, and frequent service delays. The expansion of bicycle infrastructure, especially on bridges, was supported in all boroughs, although the need to improve safe interactions with other modes was cited as a major concern. Vehicle-related comments mostly focused on the need to manage the volume of trucks through New York City communities.

As mentioned, Appendix 7 provides a detailed discussion of the public engagement process employed specifically for Plan 2045, including public comments collected during the public review period.
ENDNOTES

9 U.S. Census Bureau, 2015, Id.