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**The Nassau Hub Study  
Alternatives Analysis/  
Environmental Impact Statement**

**Purpose and Need  
Technical Memorandum**

**DRAFT FINAL**

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**Prepared For:**

**Nassau County**

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**Version Control Sheet**

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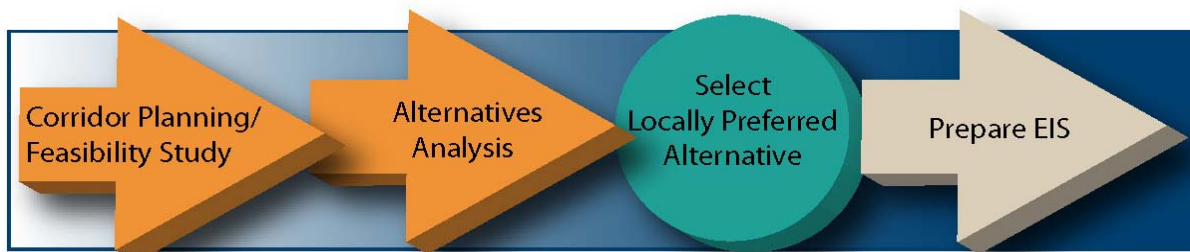
# 1. INTRODUCTION

## 1.1 The Nassau Hub Study Overview

Nassau County has undertaken *The Nassau Hub Study Alternatives Analysis/Environmental Impact Statement (AA/EIS)* to define new transportation options and identify land use strategies that will help promote economic development, create jobs in the Study Area and improve access and mobility, which, in turn, will enhance the overall quality of life for all Nassau County residents. The AA phase is expected to result in the selection of a Locally Preferred Alternative or Alternatives (LPA) or a system of near and long-term improvements. Following the selection of the LPA and with the Federal Transit Administration's (FTA) concurrence, the potential environmental consequences and necessary impact mitigation required for implementation of the LPA will be evaluated pursuant to the National Environmental Policy Act (NEPA) EIS process.

Transit projects seeking funding from the FTA New Starts or Small Starts program must follow a standard process (see Figure 1). New/Small Starts is the Federal funding program for new transit initiatives and Nassau County must follow a prescribed process to be eligible to receive these funds. An important early step in this standardized planning process is the preparation of an Alternatives Analysis (AA) that documents existing and future transportation problems, evaluates a range of potential alternatives to address those problems, and selects an LPA. An Environmental Impact Statement (EIS) is then prepared to fully disclose the potential impacts of the LPA on the human and natural environment. During both the AA and EIS processes, the public and other stakeholders are given frequent opportunities to review the analyses and provide comments and other input.

*Figure 1-AA/EIS Process Flow Chart*



## 1.2 Background

In 2003, the Nassau County Planning Department began efforts to position the County to be eligible for Federal grants related to improving, upgrading and extending the transit network within the County, specifically the Study Area. The results were documented in the 2006 *Nassau Hub Major Investment Study Final Report* (the MIS) that examined and analyzed the demographic, economic and transportation issues within an area known as the "Nassau Hub". The MIS concluded that the County should further study potential transit and related land use improvements, within the context of the FTA's project development process.

### **1.3 Document Purpose**

The purpose and need for this AA/EIS study (“the Study”) are defined on the basis of the transportation and related problems identified in the Nassau Hub Study Area, which is defined below and is documented in the Study’s Problem Statement. The Purpose and Need Statement, in conjunction with the Problem Statement, and the Goals and Objectives Technical Memorandum, functions as the cornerstone of the AA, as well as the EIS. These documents describe the purpose of the proposed project and identify the study area needs to be addressed, thus establishing the framework for all subsequent analyses and, ultimately, for the decision-making process that the AA and EIS serve. On the basis of this Statement of Purpose and Need, project goals and objectives will be defined; potential alternatives that may address the project purpose and need and associated goals and objectives will be identified; and the technical analyses to evaluate the alternative(s) will be focused to determine which would fulfill the purpose and need for the proposed project.

This Purpose and Need Statement provides an initial statement of the project purpose and need, which will be reviewed through the Study’s public involvement process and updated to reflect public input and additional data and information that is obtained and generated during the preparation of the AA and EIS.

### **1.4 The Nassau Hub Study Area**

#### **1.4.1 Primary Study Area**

The Nassau Hub Primary Study Area (Study Area) occupies an approximate 11.7 square-mile area in the heart of Nassau County, and is home to Hofstra University (existing campus and planned medical school), Nassau Community College, Museum Row, the Nassau Veterans Memorial Coliseum, the County Government Center, Nassau University Medical Center, Mitchel Field, Eisenhower Park, Roosevelt Field, and other notable County features (see Figures 2 and 3). Additionally, thousands of residents, employees, students and others live, work, or travel to, within and through the area. This crucial economic center, so vital to the future of Nassau County, has substantial traffic congestion, lacks efficient and direct transit choices and includes large areas of disjointed land use patterns. These factors have contributed to long commutes, decreased environmental quality, and overall difficulty in traveling to, from and within the area.

The Study Area has been established as the focus of this Study and is the area where it is anticipated that the majority of physical improvements associated with any given alternative may occur. During the MIS, a Study Area boundary was established based on the nexus of major roadways, transit stations and infrastructure, major land-use features and institutions and principal trip origins and/or destinations that might benefit from transit and mobility improvements. The MIS’ Study Area northern boundary was located just to the north of the LIRR’s Port Jefferson Branch, while the southern boundary was just to the south of Hempstead Turnpike. The western boundary ran along Rockaway Avenue and Cathedral Avenue, and the eastern boundary was Eisenhower Park. It included all or parts of the Villages of Mineola, Westbury, Garden City and Hempstead; the Hamlets of Carle Place and Uniondale; and the U.S. Census defined area of East Garden City. This area also included the Mineola, Carle Place, Westbury, Garden City, Country Life Press, and Hempstead LIRR stations; the Mineola Intermodal Center; the Rosa Parks – Hempstead Transit Center; and the Roosevelt Field Bus Transfer Facility. Finally, major roadways within these boundaries that serve both regional and local destinations include: the Meadowbrook State Parkway, Franklin Avenue, Clinton Road, Merrick Avenue, Hempstead Turnpike, Old Country Road, and Stewart Avenue.

The MIS Study Area boundary has been adopted as the starting point for this AA with one modification (see Figure 3). The eastern boundary has been extended to incorporate the Nassau University Medical Center's East Meadow campus that is immediately east of Eisenhower Park. It was determined that the Medical Center is integral to any consideration of improved transit because it is:

- a major provider of public healthcare;
- a major employer with existing transit-dependent users and visitors;
- a destination with significant expansion plans; and,
- a key location on Hempstead Turnpike and adjacent to the existing MIS Study Area boundary.

The Study Area boundary is not necessarily a hard and fast line. Rather, as the Study progresses with technical analyses and outreach to the public, stakeholders and government agencies, the boundaries may contract or expand if dictated by Study needs.

#### **1.4.2 Preliminary Regional Study Area**

A Preliminary Regional Study Area (Regional Study Area) has also been defined based on travel patterns, potential opportunities for connections among activity centers, and key economic development opportunities outside the Primary Study Area. Building on the conclusions of the MIS, coupled with a need to incorporate areas that have the greatest potential for economic development, boundaries have been established. These boundaries extend slightly north of Mineola along Jericho Turnpike, on the east to the Village of Bethpage along the Seaford Oyster Bay Expressway, on the south along Sunrise Highway, and to the west along Nassau Boulevard (see Figure 4). Beyond the features included in the Study Area, this area includes portions of the West Hempstead, Babylon and Ronkonkoma Branches of the LIRR; major roadways such as the Northern and Southern State Parkways, the Wantagh State Parkway, Routes 106/107, the Seaford Oyster Bay Expressway, Sunrise Highway and Jericho Turnpike; as well as major town centers such as the Hamlet of Hicksville and the Village of Freeport; and the former Grumman site in unincorporated Bethpage (currently undergoing redevelopment). The Regional Study Area was established to capture the context of the larger travel market to the Study Area.

As noted above for the Study Area, the boundary of the Regional Study Area may be modified if warranted by findings of the Study's technical analyses and/or input from the outreach process.

Figure 2-Regional Context for Study Areas

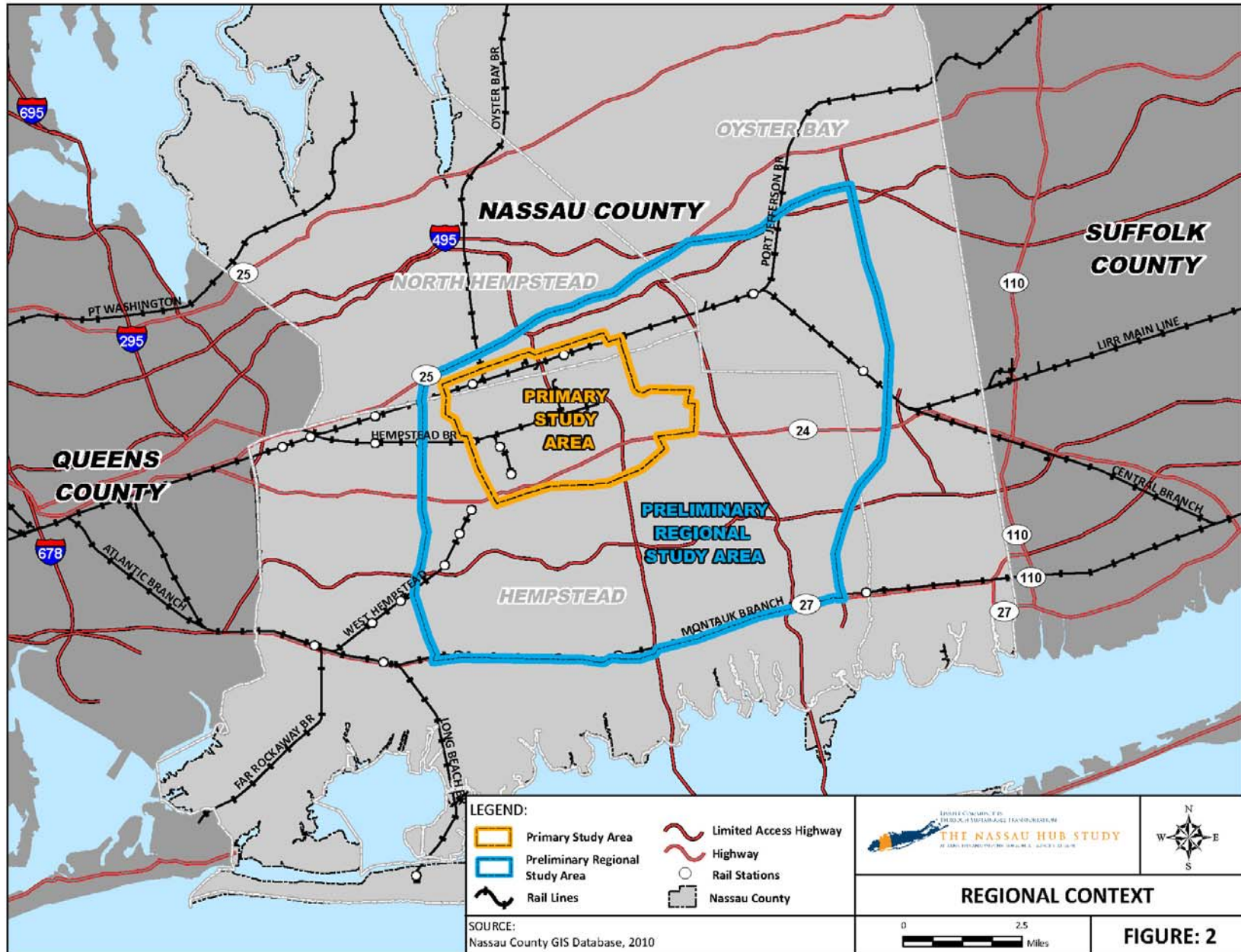


Figure 3-Primary Study Area

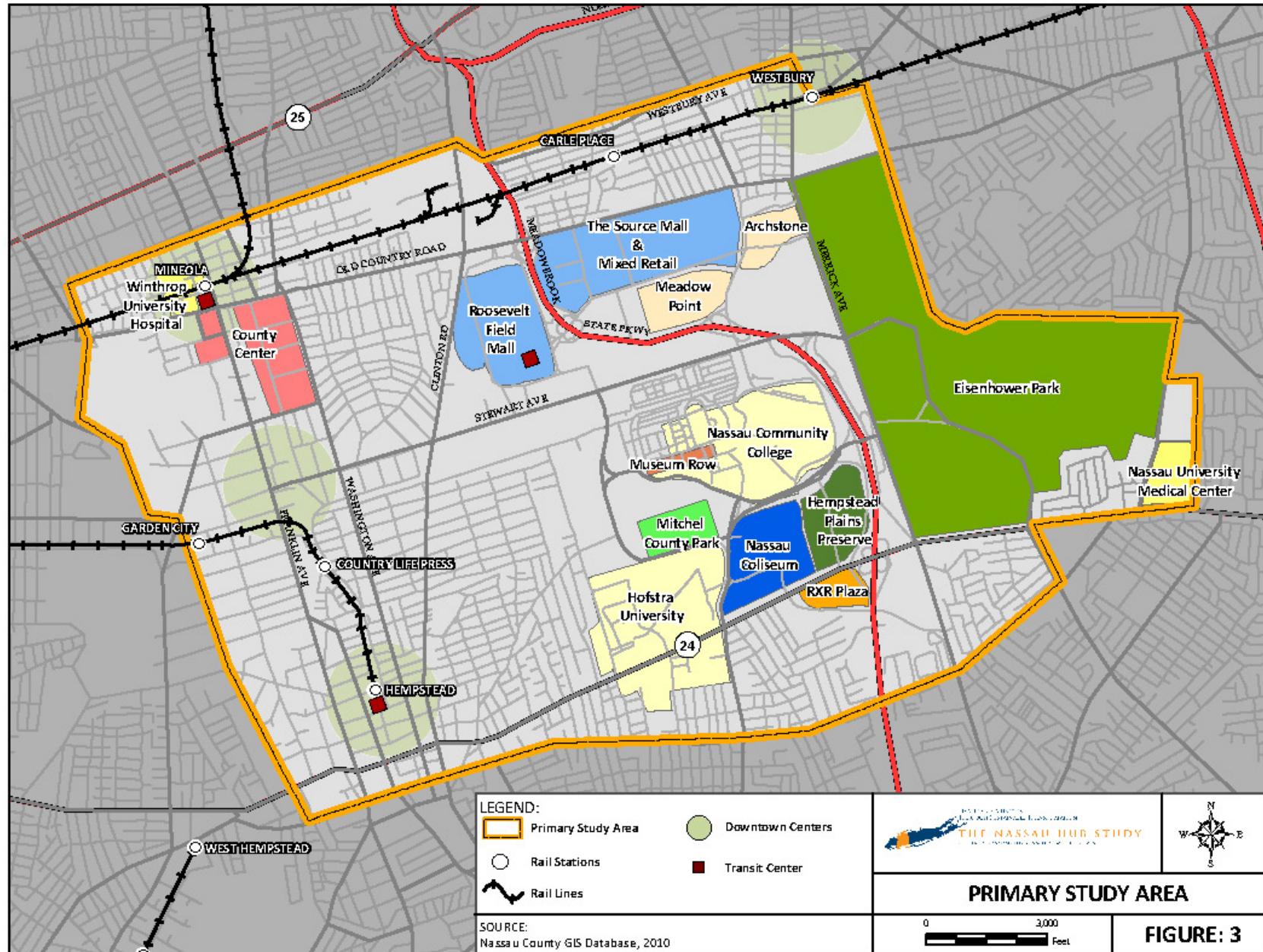
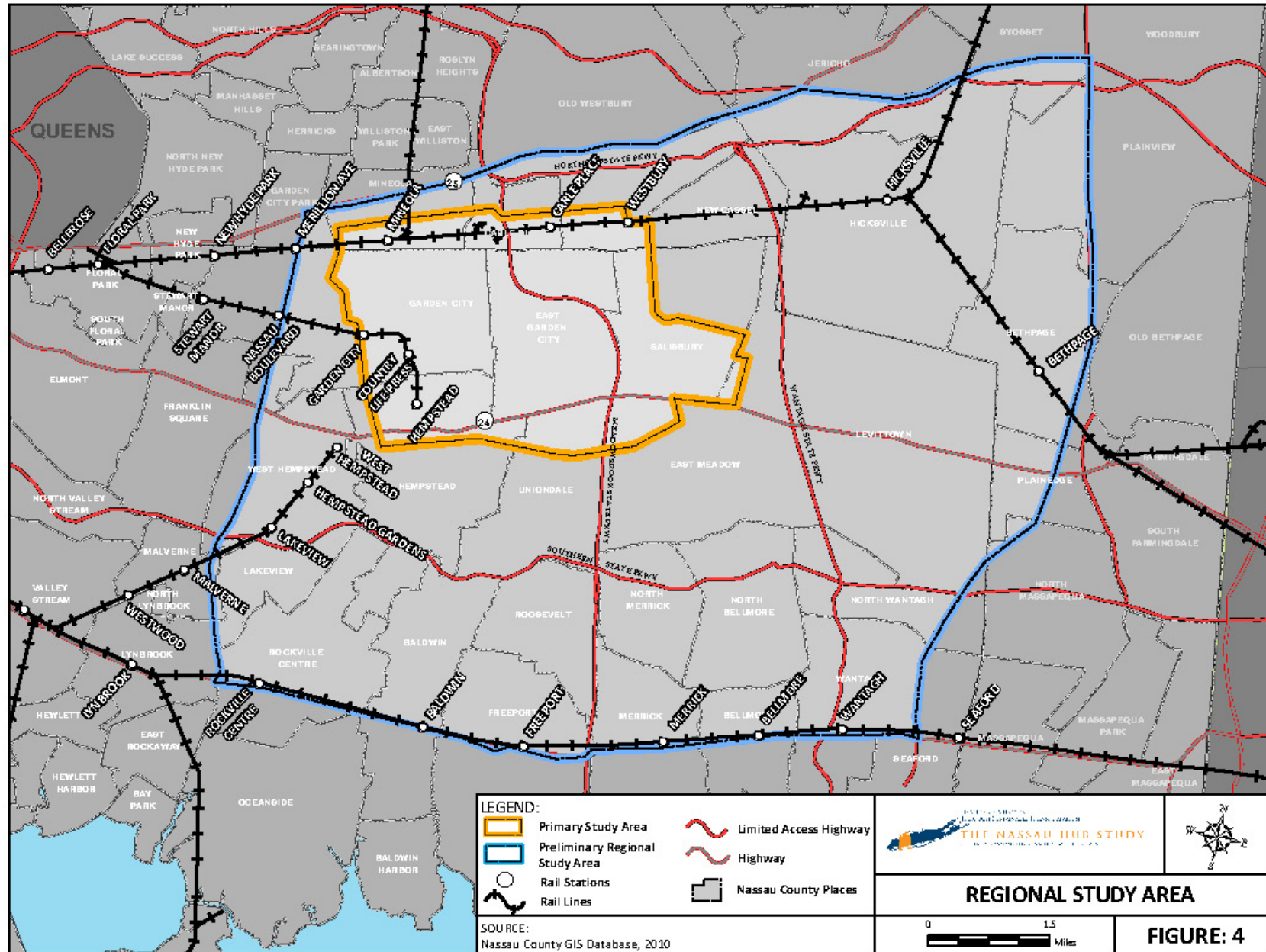




Figure 4-Preliminary Regional Study Area



## 2. PURPOSE OF THE PROJECT

The purpose of the proposed project is to improve mobility to, from and within the Study Area by improving transit services and providing travel options other than automobile. Additionally, in order to improve mobility to, from, and within the Study Area, the Study will examine and propose potential improvements to key linkages between the Study Area and Regional Study Area.

The Nassau Hub Study, in response to identified problems, is intended to achieve the following purposes:

- Improve public transit service to, from, and within this severely congested Study Area by providing increased transit capacity and faster, convenient access to and from major Nassau County employment and activity centers for residents, employees and visitors alike.
- Enhance regional connectivity to and from the Study Area by expanding and interconnecting local transit services with LIRR in Nassau County; improve intermodal transit hubs where rail, bus, auto, bicycle and pedestrian links meet.
- Increase transit ridership by expanding transit services and facilities in an area with ever increasing travel demand that can no longer be met by existing or proposed roadway facilities.
- Mitigate congestion through the provision of attractive, efficient modal options.
- Support transportation solutions that will be instrumental in improving the economic vitality and continuing redevelopment of the Study Area.
- Improve mobility for residents, employees, and visitors to employment, educational, medical and retail centers.
- Improve regional air quality by reducing or slowing the growth in auto emissions.
- Support local and regional land use plans and facilitate Study Area municipalities' efforts to direct redevelopment opportunities in transit-oriented development.

Improved transit in the Study Area is consistent with the goals and objectives defined for prior studies of transportation in the Study Area (see Problem Statement, Section 1.3, Previous Studies) and responds to needs identified in the Regional Transportation Plan Update (RTP) adopted September 2009 by the New York Metropolitan Transportation Council (NYMTC). The primary goal articulated in the RTP is to provide transportation facilities and services that support and enhance the region's high quality of life and vibrant economy. The next RTP Update is scheduled for adoption in September 2013 by NYMTC. Accordingly, the County will coordinate with NYMTC in order to ensure consistency between the Study and the goals enumerated in the next RTP Update.

### 3. NEED FOR THE PROJECT

Based on the existing conditions and trends in the Study Area, a series of transportation and related problems were identified; they are described in the Study's Problem Statement. Based on those problems, the following needs have been identified that the proposed project should address:

- **Support transit-oriented economic development opportunities and land use plans.** Nassau County and many of the Study Area municipalities have identified land use and development goals that support greater transit services. New transit service will not only support land use plans but also make future developments viable and ultimately make all new proposed developments more successful.
- **Expand transportation system capacity.** There is a need to expand capacity in the transportation network to accommodate existing demand and projected growth.
- **Increase travel choices.** Modal options for travel to, from and within the Study Area are limited to automobiles and local bus service operating within the congested traffic network. Additional travel options will improve the ability to pursue more transit-friendly economic development opportunities within the Study Area.
- **Provide more reliable travel times.** Congested traffic conditions create longer transit travel times thereby reducing the reliability of the existing transit services. A reduction in traffic congestion by improving alternative travel modes to the automobile will thereby improve travel time reliability for all modes.
- **Improve transit access and connectivity.** There is a need for improved transit access and connectivity to the Study Area from the west and south and for new services from the east and north.
- **Better integrate LIRR into local and regional transit options.** The primary means of access between LIRR stations and activity centers in the Study Area is the automobile. There is not a frequent, reliable distribution system to deliver LIRR customers to Study Area locations that are beyond walking distance. Transit connectivity and accessibility would be greatly enhanced if transit service were enhanced between activity centers and LIRR stations.
- **Provide better off-peak and reverse-peak trip making options.** The high concentration of medical, retail, and event/recreation-related facilities in the Study Area results in a need to provide high levels of off- and reverse-peak transit service.
- **Improve operational efficiency.** Increasingly scarce operating resources require more efficient transit services.
- **Improve environmental quality.** More efficient growth and sustainable development patterns are necessary to reduce impacts to the local and global environment.

Table 1 identifies the problem, documented in the Problem Statement, to which each of these project needs relates.

*Table 1-Needs by Associated Study Area Problem*

<b>PROBLEM</b>	<b>NEEDS</b>
Dispersed and disjointed land use patterns within the Study Area limit transit service and increase reliance on auto travel.	<ul style="list-style-type: none"> <li>• Support transit-oriented economic development opportunities and land use plans.</li> </ul>
Traffic congestion is currently pervasive and recurrent at many locations within the Study Area making it difficult to travel to, from and within the Study Area.	<ul style="list-style-type: none"> <li>• Expand transportation system capacity, routes, and connectivity.</li> <li>• Increase travel choice options.</li> <li>• Improve travel time reliability.</li> </ul>
Transit Service within the Study Area does not adequately serve trips to, from and within the Study Area.	<ul style="list-style-type: none"> <li>• Improve transit access.</li> <li>• Identify locations where service expansion and contraction is required.</li> <li>• Better integrate LIRR into local and regional travel options.</li> <li>• Provide better off-peak and reverse-peak transit options.</li> <li>• Improve operational efficiency.</li> </ul>
The lack of transit choices within the Study Area limits the County’s ability to positively affect environmental quality and sustainability and degrades the area’s livability.	<ul style="list-style-type: none"> <li>• Improve environmental quality.</li> </ul>

## **4. NEXT STEPS**

The project needs identified in this Purpose and Need Statement will be used to develop goals and objectives to guide the Study through the identification and development of alternatives, the screening evaluation of the alternatives and, ultimately, the selection of a locally preferred alternative.

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