I. INTRODUCTION

The Routes 202/35/6/Bear Mountain Parkway Sustainable Development Plan represents a consensus among the public as well as local, county, state and federal government participants on ways to:

- create more livable neighborhoods and communities
- improve traffic flows in the study area
- integrate transportation and land use decisions and
- improve interagency and intermunicipal coordination.

The planning process was initiated in spring 2000 as a partnership between the City of Peekskill, the Town of Cortlandt, the Town of Yorktown, Westchester County, the New York Metropolitan Transportation Council (NYMTC), the New York State Department of Transportation (NYS DOT) and the US Department of Transportation Federal Highway Administration. These agencies established a study Steering Committee on which each had a representative. The firm Edwards and Kelcey was selected as the consultant for the study.

The Plan is the result of a sustainable development study, one of four such pilot studies conducted nearly concurrently

in the New York Metro area. The study area was identified by local municipal planners and by NYMTC's Regional Transportation Plan as an appropriate target for this new approach to transportation planning due to increasing traffic congestion, development pressures, environmental concerns and the complexity of identifying transportation improvements acceptable to the communities. The local municipalities agreed that they wanted to participate in a pilot study.

There are five innovative aspects to this study. First, it involved the collaboration of four levels of government - federal, state, county and municipal (including three municipalities at the local level) - to help resolve common issues. Second, land use, transportation and environmental aspects and strategies were considered in a coordinated and comprehensive manner. Third, multiple roadways and modes of transportation were addressed as a system rather than as individual elements. Fourth, the study allowed the regional Metropolitan Planning Organization (NYMTC), in concert with the other study partners, to identify specific transportation projects that should be advanced. And fifth, the study provided a major resource for use by the municipalities in the updating of their comprehensive plans and land use regulations.

It is important to note that it is unlikely that the major transportation improvements recommended in this study would receive state or federal funding without the cooperative approach that has been taken by the study partners. The cooperation is anticipated to be rewarded with



priority consideration for funding of this Plan's recommendations.

Prior to this study, corridor studies in the Hudson Valley typically focused on identifying solutions for single highways using traffic forecasts based on existing land use policies. Consideration was generally not given to changing land use policies in order to alter future traffic patterns and demand. The Route 35 Corridor Study (1987-1989) conducted by Westchester County and the Routes 202/35 Corridor Study for the towns of Cortlandt and Yorktown completed by the NYS State Department of Transportation in the 1980s are two such examples.

The Sustainable Development Plan includes in Chapter I: a description of the study area; a summary of concerns, issues and suggestions identified by agencies, residents and business owners; the study's objectives as agreed to by the agencies and the public participants; and a description of the unique planning process that the study employed. Chapter II presents existing conditions pertaining to the road system and traffic conditions, travel patterns, land use, the physical environment and development potential. Chapter III identifies the short term action projects that were undertaken by the study participants while the plan was being developed. These projects addressed immediate issues that were identified by the public. Chapter IV describes the land use and transportation alternatives that the study considered and the analytical modeling that was used to help the study participants identify and arrive at preferred alternatives. Chapter V presents the recommended implementation steps

to make the changes to future road facilities, travel patterns and land use that the study identified as a consensus vision of the future.

Throughout this Plan, reference is made to the extensive community outreach process that shaped the study and the recommendations set forth in this Plan.

A. STUDY AREA

The study area encompasses approximately 40 square miles and is home to approximately 91,000 residents. It is located in the northwest corner of Westchester County bordered by the Hudson River on the west, Putnam County to the north and the Taconic State Parkway on the east. See **Figure 1**. Mid-town Manhattan in the City of New York is located approximately 40 miles south of the center of the study area.

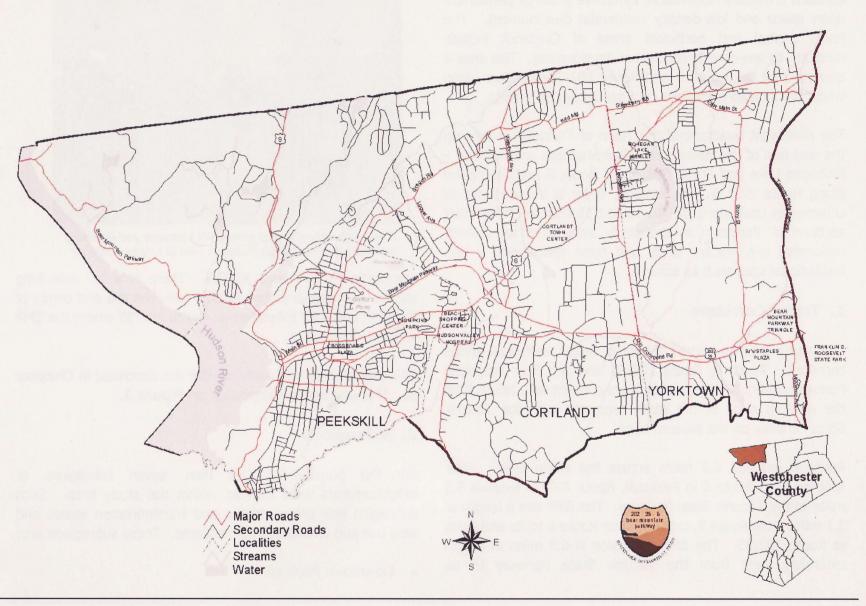
The extent of the study area was based on the US Census Blocks that would incorporate all of the roads to be studied. Census Blocks allow a computer to model transportation analysis zones in a transportation demand model and to compute an analysis of the full buildout potential of the land and its affect on traffic.

The entire City of Peekskill is included in the study area at its west end. The city has an historic downtown and the highest density of land uses in the study area. Peekskill is bounded on the north, east and south by the Town of Cortlandt.

The northern half of the Town of Cortlandt is included in the



Figure 1. Study Area



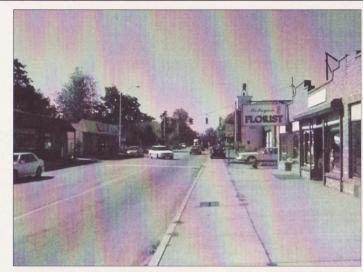
center of the study area. The northwest portion of the town contains a military reservation, extensive areas of permanent open space and low-density residential development. The north central and northeast areas of Cortlandt include medium- to low-density residential development. This area is traversed by the Route 6 and Route 202/35 corridors along which are located numerous commercial developments.

The northwest quadrant of the Town of Yorktown makes up the east end of the study area. Three hamlets are included – Mohegan Lake and Shrub Oak along Route 6 and Crompond along Route 202/35. In addition, there is a broad mix of commercial uses along the Route 202/35 corridor. The other sections of Yorktown in the study area have low-density residential use, vacant lands and open space with a few institutional uses such as schools.

1. Travel Corridors

The study area is served by three major east-west travel corridors - Route 6, Route 202/35 and the Bear Mountain Parkway (BMP). The three corridors connect with Route 9 on the western edge of the study area and with the Taconic State Parkway on the eastern edge.

Route 6 extends 6.2 miles across the study area. After splitting from Route 6 in Peekskill, Route 202/35 extends 5.5 miles to the Taconic State Parkway. The BMP has a length of 3.1 miles from Route 9, crossing over Route 6 to its end point at Route 202/35. The BMP Extension is 0.9 miles in length extending west from the Taconic State Parkway to an



Preserving and enhancing community character and improving traffic movement through Mohegan Lake are major concerns.

intersection with Route 202/35. There is a 1.7 mile long vacant reserved land area located between the end points of the BMP and BMP Extension on Route 202/35 where the BMP was not constructed.

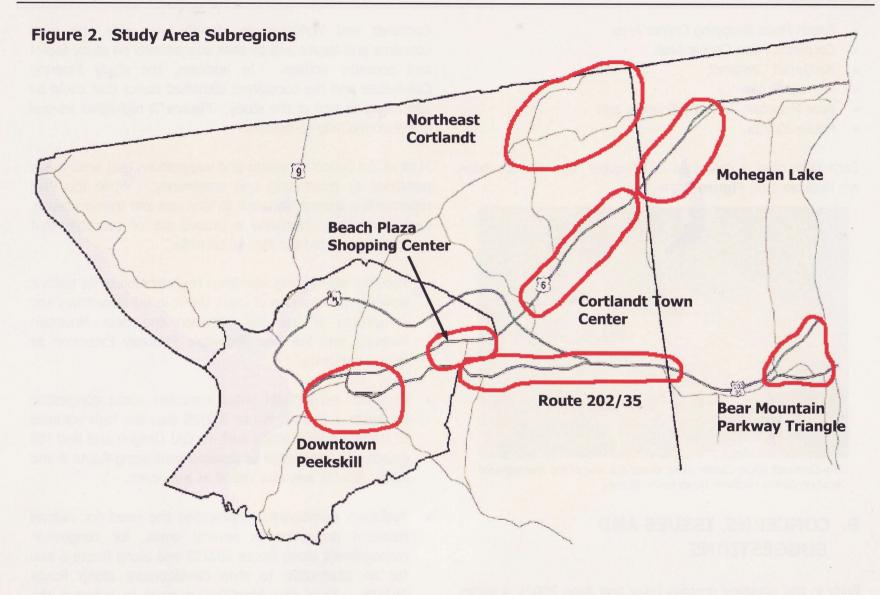
The characteristics of each corridor are described in **Chapter II**. The locations are illustrated on **Figure 2**.

2. Subregions

For the purpose of this Plan, seven subregions or neighborhoods were defined within the study area. Each subregion has unique traffic and transportation issues and land use and environmental concerns. These subregions are:

Downtown Peekskill





- Beach Plaza Shopping Center Area
- Cortlandt Town Center Area
- Northeast Cortlandt
- Mohegan Lake
- Bear Mountain Parkway Triangle and
- Route 202/35.

Each subregion is described in **Chapter II**. The locations are illustrated on **Figure 2**.



The Cortlandt Town Center along Route 6 is one of the few regional retail centers in northern Westchester County.

B. CONCERNS, ISSUES AND SUGGESTIONS

Early in the planning process (May and June 2000), a series of workshops and public meetings were held in Peekskill,

Cortlandt and Yorktown to identify area-wide and local concerns and issues and to seek suggestions on study topics and potential actions. In addition, the study Steering Committee and the consultant identified topics that could be addressed as part of the study. **Figure 3** highlights several of the community comments.

Most of the concerns, issues and suggestions that were made pertained to more than one community. While the Plan represents a shared approach to land use and transportation, each community identified a unique set of concerns that participants wanted the Plan to consider.

- Peekskill participants identified revitalization of its historic downtown, reduction of truck traffic in the downtown and completion of the link between the Bear Mountain Parkway and the Bear Mountain Parkway Extension as critical concerns.
- Cortlandt participants noted concerns about congestion on Route 6 and on Route 202/35 plus the high volumes of traffic on local roads such as Old Oregon and Red Mill Roads. The character of development along Route 6 and Route 202/35 was also raised as a concern.
- Yorktown participants emphasized the need for natural resource protection in several areas, for congestion management along Route 202/35 and along Route 6 and for an alternative to strip development along Route 202/35. They also identified a need to enhance the community character and economic development of



Mohegan Lake and to address the potential for a Mohegan Lake bypass that could extend to near the Cortlandt Town Center.

1. Transportation

Transportation concerns were identified in four categories that interrelate – traffic, goods movement, transit and pedestrian/bicycle needs.

Traffic

Concerns were raised by participants that:

- Many intersections are congested.
- Local streets, such as Strawberry Road, are being used as a main through route for Putnam Valley and Cortlandt traffic to reach the Taconic State Parkway and other destinations.
- Growth in Putnam Valley (the town in Putnam County that is adjacent to the study area on the north) is contributing to increased traffic on local roads such as Red Mill Road in northern Cortlandt and Foothill Road in Yorktown.
- The lack of shared parking and of connections between business and retail centers creates congestion and traffic conflicts.
- The numerous curb cuts along Route 6 and Route 202/35 contribute to the traffic problems along these roadways.

Suggestions were made to construct several new roadways to relieve traffic congestion:

• Build a 1.7 mile limited access two-lane Bear Mountain

Parkway Connection between the current Parkway terminus at Route 202/35 in Cortlandt and the Bear Mountain Parkway Extension terminus in Yorktown.

- Build a Route 6 bypass to the north of Mohegan Lake to alleviate congestion in that hamlet along Route 6.
- Extend Lexington Avenue north into Putnam County to reduce traffic on local roads in the northeast quadrant of Cortlandt.
- Provide a new north/south connection between Route 6 and Route 202/35.

Participants requested that the study specifically address strategies that would link the rate of development to road capacity.

Goods Movement

Participants commented that truck traffic and truck produced noise represent a pedestrian safety concern and a nuisance concern in downtown Peekskill. They suggested that use of the Bear Mountain Parkway by trucks during the daytime should be explored. Conversely, some residents were concerned about safety and additional noise impacts that might result from adding trucks to the Parkway during the daytime.

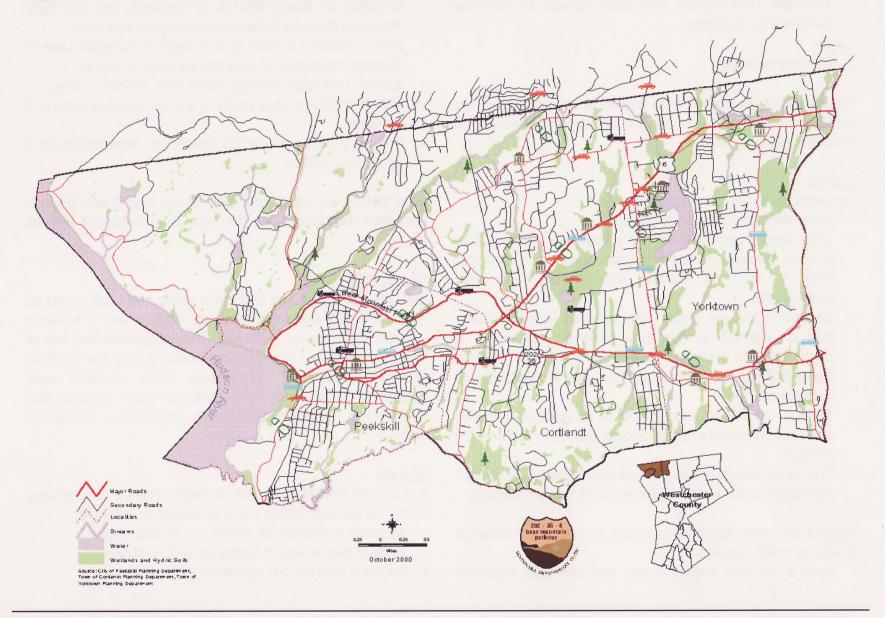
Transit

Participants identified several strategies related to improving transit service and transit use that should be explored:

- Increase incentives for people to use bus service.
- Expand bus service in Cortlandt and Yorktown.
- Increase express bus service to White Plains.



Figure 3. Community Concerns, Issues and Suggestions





Examples of Concerns, Issues and Suggestions Raised by Study Agencies, Area Residents and Business Owners

Auto Traffic

- Traffic congestion along Route 6 and Route 202/35
- Need for north-south connection between Route 6 and Route 202/35
- Traffic to and from Cortlandt Town Center
- Local streets used as short cuts between major roads
- Putnam Valley growth con tributes to traffic problem
- Too many curbs cuts on Route 6 and on Route 202/35
- Impact of Route 9 bridge improvements on surrounding area
- Road improvements have not keep up with development

Truck Traffic

- Truck traffic in downtown Peekskill
- Trucks illegally traveling on residential streets
- Lack of direct north/south route to Cortlandt Town Center



Transit

- Increase incentives to take the bus
- Expand bus service in Cortlandt and Yorktown
- Increase express bus service to White Plains
- Increase the number and use of park and ride facilities
- Enhance bus stop facilities
- Provide more bus turn-out lanes at bus stop locations
- Improve coordination of bus and train schedules



Pedestrian and Bicycle Use

- Poorly marked crossings in downtown Peekskill
- Lack of signals and crosswalks at school locations
- Lack of sidewalks and bike lanes along major highways
- Poor access to off trail road systems
- Pedestrian and bicyclist needs not fully considered in highway design



Community Character

- Poor design/landscaping on commercial properties
- Signage needs to be toned down and made more uniform
- Avoid repeating Route 6 development patterns on Route 202/35
- Create neighborhood "centers"
- Connect downtown Peekskill with waterfront
- Commercial and residential land use conflicts
- Establish and connect destinations
- Increase sensitivity to rural and historic character of the area
- Protect the rural landscape and natural environment of the area



Natural Resources

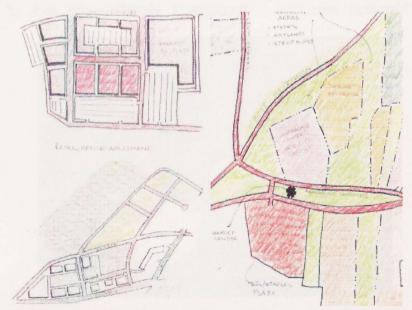
- Protect Hunterbrook and Hollowbrook streams
- Protect sensitive lands along the Bear Mountain Parkway
- Avoid developing large wetland areas
- Monitor the Oregon Road and Mohegan Lake watersheds
- Protect Peekskill water supply from impervious surface runoff

- Increase the number of park and ride facilities and encourage greater use.
- Enhance bus stop facilities.
- Provide more bus turn-out lanes at bus stop locations.
- Improve coordination of bus and train schedules.

Pedestrians and Bicycle Use

Residents expressed interest in being able to ride bicycles to local destinations such as parks, schools, extracurricular activities and shopping centers. Areas of exploration for improving pedestrian and bicycle facilities identified were:

• Improve access to off-road and Westchester County trail systems.



Sketches from residents at a public meeting during brainstorming session on topics of concern.



- Increase and strengthen the focus on pedestrian and bicycle accommodations in the design of transportation facilities.
- Improve pedestrian crossings, particularly in downtown Peekskill.
- Provide more sidewalks for pedestrians.
- Provide adequate shoulders for bikers along the major roadways.

2. Community Character

Participants noted that they would like to see an improvement in the aesthetics of the study area along with increased respect for the remaining rural character and for historical resources. Participants identified the lack of



Participants in an initial workshop to identify major concerns and issues to be addressed in the study.



The relocation of truck traffic in Downtown Peekskill to the Bear Mountain Parkway was frequently discussed.

consistency in style and character of commercial properties as a concern. Areas that were suggested for exploration included:

- Draft new design guidelines and design standards for non-residential development.
- Improve landscaping of commercial areas.
- Address the size and uniformity of commercial signage
- Create design overlay districts and natural resource regulatory overlays that could span municipal borders.
- Establish mixed-use centers that combine activities and create a sense of community.
- Provide better connections between shopping areas and residences for pedestrians, bicyclists and transit users.
- Provide better connections within and between centers.

Protect residential areas located adjacent to commercial areas.

3. Natural Features

Many participants stated that they moved to the study area due to its natural setting. The participants suggested that the study and its recommendations be mindful of several environmental factors and conditions:

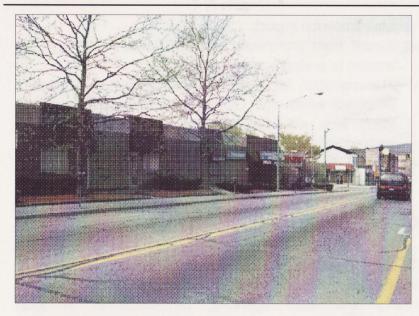
- Transportation improvements and development projects should be evaluated to determine potential environmental impact.
- Lands that contain steep slopes and wetlands should be protected; development should be directed to areas with minimal environmental constraints.
- Actions that negatively impact the environmental quality of the Peekskill Hollow Brook and its watershed, which provides Peekskill's drinking water supply, should be restricted.
- Sections of the area to the north of Route 202/35, within the Bear Mountain Parkway right-of-way, are environmentally sensitive with wetlands, aquifer and a trout stream; any plan to complete the Parkway or to widen Route 202/35 will need to recognize and mitigate against potential harm to the environment.
- A significant portion of the area between the Taconic State Parkway and Stony Street contains wetlands and should continue to be protected.
- Actions that impact the Oregon Road area and the Mohegan Lake watershed basin should be monitored for

- environmental impact.
- Runoff from impervious surfaces needs to be properly treated to protect water quality.
- Transportation improvements and development projects proposed within the Croton Watershed section of the study area will need to take into consideration the recommendations of the Croton Plan.
- Natural resource protection overlay districts that could span municipal boundaries should be considered.

C. CONSENSUS OBJECTIVES

This Plan represents a three year long working partnership of local elected officials and staff, community stakeholders, county and state agencies, representatives of local businesses and interested residents. All parties participated together in Stakeholder Committee meetings and public workshops of all types. As a result of this process, a consensus was reached on the following sustainable development objectives:

- 1. Maximize the efficiency of the existing transportation network by completing short-term actions, implementing smaller scale construction projects, improving transportation services and improving land use management.
- 2. Initiate planning for major construction projects.
- 3. Develop hamlet-type centers along Route 6 in Cortlandt



Redevelopment of the Crossroads Plaza in Downtown Peekskill was identified as an opportunity to improve the area's vitality.

and at the Bear Mountain Parkway Triangle in Yorktown.

- 4. Revitalize historic downtown Peekskill.
- 5. Improve community character along Route 202/35 and Route 6.
- 6. Protect unique natural resources and scenic areas.
- 7. Continue collaboration among the study partners.
- 8. For Peekskill, reduce adverse truck traffic impacts in downtown Peekskill and improve regional highway

connections to the downtown.

- 9. For Cortlandt, improve access and congestion management, protect community character and ensure watershed protection.
- 10. For Yorktown, emphasize natural resource protection congestion management and enhancement of the neighborhood and traffic considerations in Mohegan Lake.

D. PLANNING PROCESS

The sustainable development study process that led to the drafting of this Plan was based on a committee structure designed to include wide representation, the orderly completion of specific steps and tasks and the production of technical and informational reports at key stages of the process.

1. Committee Structure

To ensure ongoing community involvement and collaboration during the study, both a Steering Committee and a Community Stakeholders Committee were created.

The Steering Committee consisted of representatives from all partners undertaking the study. The Committee directed the planning process and reviewed all products produced. The Steering Committee members are identified in **Appendix A.**

The Community Stakeholders Committee brought together

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residents of many neighborhoods, local business owners, land developers and other parties with key interest in the future of the study area. Also serving on the Committee were representatives of local planning boards, comprehensive plan update committees, Peekskill City Council and the Cortlandt and Yorktown Town Boards. There were 15 to 20 "stakeholders" from each municipality. The Stakeholder Committee provided insight on all subjects explored during the study including the definition of the preferred future scenario presented in this Plan. This committee served as an effective "sounding board" for products of the study and for strategies to implement the preferred vision.

To supplement the work of the two committees, a series of municipal workshops and focus group meetings were held to solicit feedback from additional residents and business owners throughout the study process.

The full schedule of Stakeholder Committee meetings, workshops and focus groups is provided in **Appendix B**.

2. Steps and Tasks

The planning process that led to this Plan included the following steps and tasks:

Issues Definition

The initial steps in the study were to inventory existing conditions and to define critical issues. This was done with the help of the committees and through workshops, supplemented by information from the Steering Committee

agencies and the consultant team. The conditions and issues were used to define the next steps of the planning process.

Web Site

A web site (www.202and6.com) was established early in the planning process. It was continually updated to provide information on the planning process and meeting schedules. Suggestions and comments on the study could be submitted through the web site. All study documents were available at the web site

Consensus Objectives

Based on residents' suggestions, objectives addressing neighborhood design, transportation and the environment were established. The consensus objectives were presented in this chapter. More specific objectives are discussed in **Chapter V**. The objectives were used to develop alternative future land use and transportation scenarios for testing.

Short Term Action Projects

A decision was made early in the study that emphasis must be placed on fixing known problems as quickly as possible. These "early action" projects were defined as items that would clearly improve transportation conditions and could be implemented quickly at low cost. Fifty projects were identified and prioritized based on ideas from stakeholders and from workshop participants. These projects are presented in **Chapter III**. Many of them were implemented before completion of this Plan. Others were moving toward construction. A few were found to require further study or more extensive preparation.

Buildout Analysis

A forecast of the remaining potential for development under existing zoning was prepared. This analysis identified potential development for all vacant and underutilized parcels (those parcels not developed to the full extent permitted by zoning). The parcels analyzed were identified by the three municipalities. The results are presented in **Chapter II**.

Origin and Destination Survey

An origin and destination survey was conducted to ensure that the land use and transportation model would accurately reflect travel patterns. The survey yielded 3,000 responses during the one-day peak a.m. and peak p.m. periods when the survey was conducted. The results are summarized in **Chapter II**. The complete survey report is provided in **Appendix D**.

Alternative Scenario Development

Alternative land use and transportation scenarios were prepared based on visioning and alternative futures workshops involving the general public and the Stakeholders Committee. The scenarios are presented in **Chapter IV.**

Transportation and Land Use Modeling

A motorized vehicle transportation model was prepared based on NYMTC's regional Best Practice Model. This model was used to assess the impacts of the land use and transportation scenarios on trip generation and travel delay. In addition, a traffic operations model was developed to assess impacts of each land use scenario on the volume to

capacity ratios and on the level of service at 24 intersections in the study area. The intersections and the traffic conditions are presented in **Chapter II**. The detailed traffic operations analysis is provided in **Appendix E**. The analyses were performed for the PM peak hour period as it typically provides the worst case scenario. Using the results, the consultant determined the improvements that would be needed at each of the 24 intersections to produce operations at an acceptable level of service for current traffic. The transportation model and the traffic operations model were then used to compare changes to the system that would result from the different land use and transportation scenarios.

Preferred Land Use Plan

After a thorough analysis of the modeling results, whereby each scenario was tested using the land use and transportation model to assess how well each performed within the context of the consensus objectives, Stakeholders Committee members and the consultants joined to identify a preferred land use scenario. This process took place during a day-long workshop. The preferred land use plan is presented in **Chapter IV.** Development of the preferred land use plan was intended to be coordinated with the comprehensive plan update process underway in Cortlandt and Yorktown.

Transportation Improvement Bundles

The preferred land use plan was then utilized in the modeling of three alternative bundles of transportation improvements. Each bundle featured a different package of major road improvements intended to optimize traffic operations. The

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three transportation improvement bundles are presented in **Chapter IV**.

Recommended Improvements

The Plan's recommendations are grouped in five categories – major road construction, intersection reconstruction, transportation services, land use management and regional coordination. All of the recommendations are based on the study's consensus objectives and the land use and transportation analysis performed by the consultant. The recommendations are presented in **Chapter V**.

3. Study Products

Thirteen technical reports and presentations were developed in the course of preparing this Plan:

1. July 2000	Issues Summary
2. July 2000	Summary of Current Development
	Proposals and Recently Approved
	Projects
3. August 2000	Existing Regulatory Review
4. November 2000	Outreach Visioning Summary
5. March 2001	Full Build Out Scenario
6. April 2001	Early Action Items
7. April 2002	Analysis of Land Use Scenarios and
	Transportation Improvements
8. April 2002	Synopsis of Findings: Choosing a
	Preferred Scenario
9. May 2002	Community Fact Sheets
10. May 2002	Public Workshop Presentation:

	Bundling of Land Use Scenarios and
	Transportation Improvements
11. May 2002	Public Workshop Summary Report
12. August 2002	Stakeholder Workshop Presentation
	Preferred Land Use and Transportation
	Bundles
3. November 2002	Proposed Land Use and
	Transportation Recommendations
	Presentation
March 2004	Sustainable Development Plan

