

3. Transportation

3.1 VISION STATEMENT

Yorktown should have a multi-modal transportation system that provides the full range of travel options for residents, and improves the flow of traffic in the town. Roadways should be well-maintained and safe for cars, pedestrians, and cyclists, and traffic "hot spots" should be improved. To protect quality of life, local streets in residential neighborhoods should have low volumes and speeds, and minimal truck traffic. Transit and para-transit services should continue to be expanded. The five designated business districts should continue to have convenient automobile access and parking but should also become more pedestrian-friendly. Yorktown should have a Town-wide network of bike routes that links together parks, regional trails, the business centers, and residential neighborhoods.

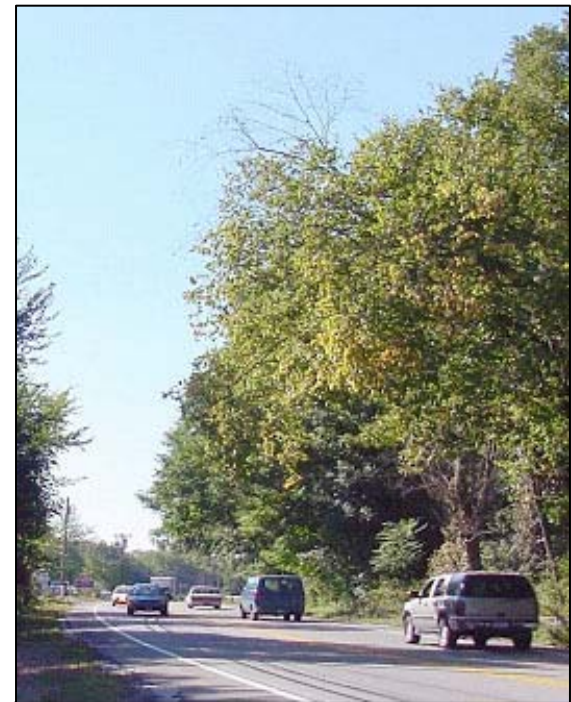
3.2 GOALS

Goal 3-A: Undertake roadway improvements that are compatible with the land uses and development intensities in the Town's adopted Land Use Plan (see Chapter 2.)

Goals 3-B: Reduce traffic congestion along arterial roads, such as Route 6 and Route 202, and improve safety, and traffic movements at major intersections. Work to improve access management along commercial strips. Work with the State to improve access to the Taconic State Parkway.

Goals 3-C: Strive to maintain acceptable levels of service for traffic along collector streets throughout Yorktown.

Goal 3-D: Utilize site plan and subdivision standards that facilitate efficient traffic flow, minimize safety hazards, and encourage pedestrian- and bicycle-friendly development.



Routes 202/35 (Crompond Road), Crompond.

Goal 3-E: Work to reduce speeding and traffic volumes along local residential streets and to create a safe environment for pedestrians and bicyclists in those areas.

Goal 3-F: Encourage walking in and around the five hamlet business centers, and ensure safety for pedestrians walking to and from schools, community institutions, park and other public or quasi-public sites.

Goal 3-G: Promote walking and biking along greenway trails, and facilitate bike circulation on streets throughout Yorktown.

Goal 3-H: Encourage major employers in Yorktown to adopt transportation demand management strategies that help reduce traffic volumes during the daily commute to work.

3.3 OVERVIEW OF TRANSPORTATION

- During the SWOT discussions of the Task Force, participants indicated that Yorktown has a good transportation system with excellent access to the region's network of highways. Yorktown is within a reasonable travel time to White Plains, New York City, East Fishkill, and other major employment and commercial centers.
- The primary weakness identified was traffic congestion, especially on Route 6, Route 202, Route 35, Underhill Road, and at the Triangle intersection (Commerce Street @ Routes 202 and 118.) Reasons for congestion include the lack of sufficient east/west roads, especially the lack of a highway connection between the Bear Mountain Parkway and Taconic State Parkway. Traffic congestion was noted to occur during the morning and evening rush hours, during the mid-afternoon hours when school ends, and on Saturdays within the hamlet centers.
- While the Comprehensive Plan is a twenty-year vision, it would fail to address the real and present concerns of residents if it did not include a series of actions to offset congestion straight away. Therefore, this chapter puts forth specific short-term recommendations for improving traffic conditions now. The suggested long-term improvements are more costly, but more substantial in their potential benefits. They attempt to address the basic problems in the Town's roadway network, especially by making new roadway connections and otherwise increasing roadway capacity.
- Yet roads are not just for cars and trucks. Roads are shared by pedestrians and cyclists, as evident in the strong preference stated in the Task Force workshops for pedestrian-friendly hamlet centers and bicycle amenities. Roads also define the character of neighborhoods and create residential value, as evident in the varying preferences of residents to live on cul-de-sacs, or sidewalk lined streets close to hamlet centers, or narrow and winding country roads.

- "Traffic calming" refers to a variety of measures that shift the balance away from the fast and efficient movement of vehicles, towards pedestrian/bicycle safety and comfort and the quiet enjoyment of adjoining uses. Most traffic calming measures reduce vehicular speeds and improve safety; traffic volumes may or may not be affected. Traffic calming measures emphasize changes to the roadway itself or to its immediate physical environment.
- In the year 2000, only 8.4 percent of Yorktown's residents commuted by public transit. These are mainly rail commuters traveling to one of the several Metro North railroad stations located *outside* of Yorktown, and bound for either White Plains or Manhattan. The present importance of transit has less to do with the number of users, than with the dependence of certain populations upon it. Transit is also important in terms of creating a sense of transportation *choice* for residents.
- Yorktown Heights presents a unique opportunity to create a dynamic town center, with both a much stronger pedestrian focus, and greater vehicular capacity. Transportation improvements for Yorktown Heights must be integrated as part of an overall economic, development, urban design, and transportation plan for that commercial core (see Chapter 4.) It is informative to single out Yorktown Heights in this chapter on transportation, for two reasons. First, it is the most important hamlet center from the viewpoint of Town identity. Second, it is the scene of many of the traffic and safety problems noted by Task Force participants.



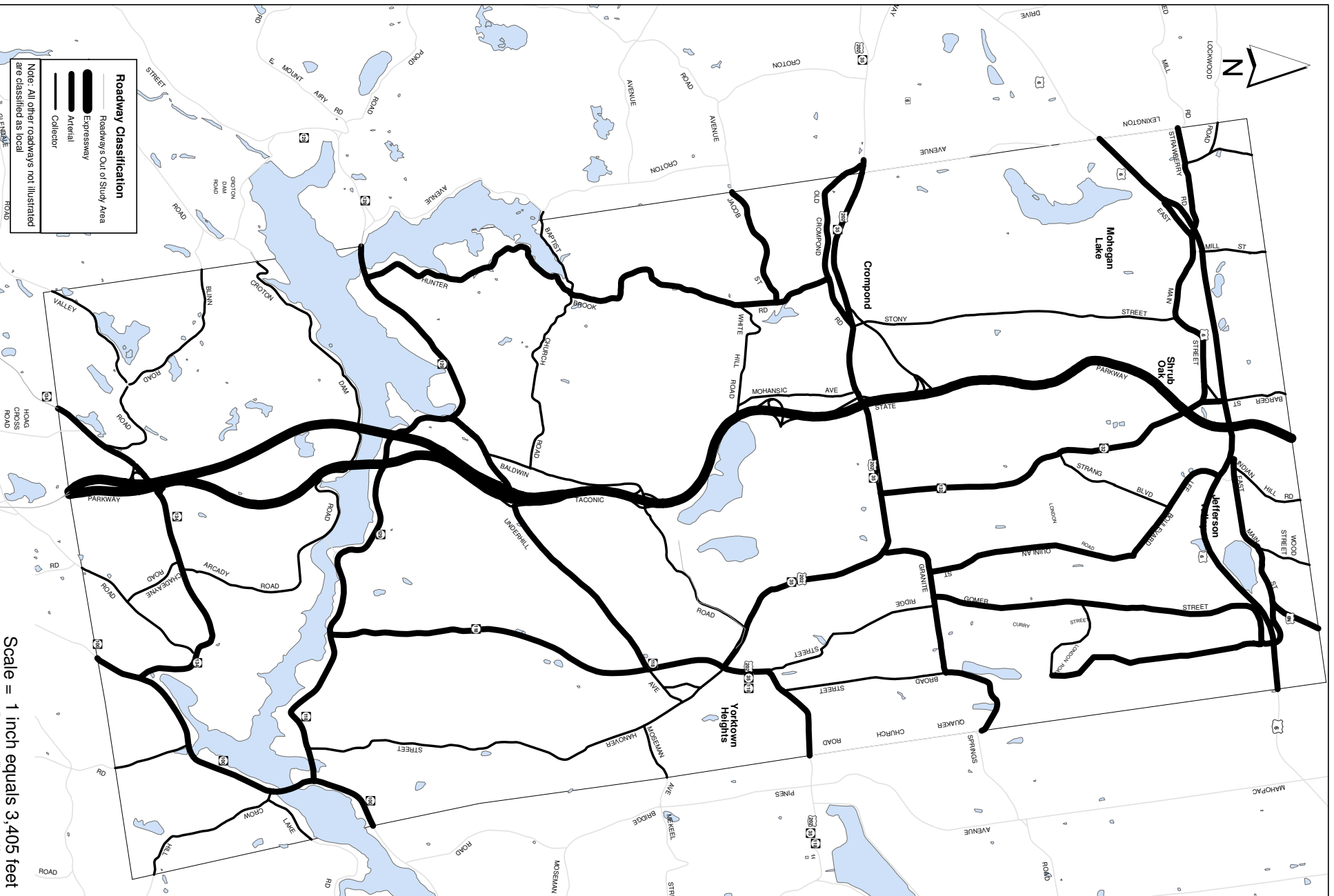
Commerce Street & Veterans Road, Yorktown Heights.

3.4 POLICIES

Roadway & Intersection Improvements — Short Term

Policy 3-1: Adopt the roadway classification system shown on Figure 3-1.

- Yorktown's roadway network consists of limited-access roads (a.k.a. expressways); arterial roads; collector roads; and local streets (a.k.a. residential neighborhood streets.)
 - **Highways:** The Taconic State Parkway and Bear Mountain Parkway provide a higher level of traffic capacity per lane and have limited opportunities for traffic access and egress. They do not provide direct access to adjacent land uses.



- **Arterial Streets:** Primary roadways whose main function is to channel higher volumes of traffic, with limited, signalized intersections. They may also provide local land use access in certain locations. State Routes 6 and 202 are considered arterials.
- **Collector Streets:** Roadways that link together arterial roadways and also connect local streets with those arterials. They are frequently intersected by local streets and are generally residential in character. Examples: Stony Street and Baldwin Road.
- **Local Streets:** Roads intended to primarily provide access to their adjoining uses and which are not major through streets.

Policy 3-2: Without widening, install STOP signs or traffic signals, enhance existing signalization, or reconfigure turning movements at intersections for improved traffic flow.

- Many intersections in Yorktown experience high accident rates or delays due to inadequate provisions for turning movements. Other intersections experience high accident rates because of visibility problems.
- The short-term improvements for addressing such issues include the following:
 - Provide traffic signals or STOP signs at intersections where turning maneuvers are difficult or unsafe. Locations where improvements have reduced accident rates include the Town-installed traffic signal at Ridge Street and Granite Springs Road and the four-way STOP sign at Strang Boulevard and Oakside Road, which had previously been high-accident locations.
 - Reconfigure lanes at intersection approaches and/or add turning lanes using available shoulder space in order to better suit traffic patterns, prohibit left turns at critical intersections for safety or capacity reasons. Left-turn prohibitions have been effectively used to reduce accident rates and traffic congestion in many suburban areas in New York and New Jersey and may be necessary at Route 202/35 at Hallock’s Mill Road, Route 202/35/118 and Commerce Street entrances to the Triangle Center, and Route 6 at East Main Street near Indian Hill Road.



Policy 3-3: Implement the recommendations in Table 3-1, pending the completion of detailed traffic analysis.

- Intersections observed as having safety, congestion, or other problems are listed in Table 3-1. Options to be considered for each intersection are also shown in the table.
- It must be emphasized that further traffic studies will be needed for each intersection to determine the best course of action. Detailed signal analyses must satisfy technical traffic requirements regarding minimum volumes and/or accident histories before a signal can be installed.

Policy 3-4: On a case-by-case basis, make roadway or intersection improvements that improve land utilization and increase the throughput capacity of roadway corridors without undertaking roadway widening.

- For example:
 - Replace the climbing lanes on Route 202/35 between Baldwin Road and Springhurst Street with left-turn lanes. If traffic studies determine that the climbing lane does not provide a significant capacity advantage, then left-turn lanes may be preferred. Currently, vehicles queue behind left-turning vehicles, causing delays and rear-end accidents.
 - Work with the County to relocate bus stops to the far side of busy intersections to increase intersection capacity.

Table 3-1. Intersection Improvements

<i>Intersections</i>	<i>Observation, 2002-03</i>	<i>Recommendation, Pending Future Traffic Studies</i>
<i>Shrub Oak & Mohegan Lake</i>		
Route 6 @ Lexington Avenue	Heavy traffic, both weekdays and weekends, based on field observations. High accident rate.	Provide capacity improvements compatible with the Sustainable Development Study by adding additional through and/or turning lanes.
East Main @ Stony Street	Heavy traffic.	Add new signal.
East Main @ New Road (eastern intersection)	Poor sight distance, based on Traffic Safety Officer (TSO) observations.	Use traffic calming to slow down traffic.

Table 3-1. Intersection Improvements

<i>Intersections</i>	<i>Observation, 2002-03</i>	<i>Recommendation, Pending Future Traffic Studies</i>
Route 132 @ Barger Street	Unsafe turns; current alignment directs Route 132 traffic onto East Main Street.	Realign the intersection, so that Barger Street becomes a continuous roadway with the southern leg of Route 132, with the western leg of Route 132 meets it at a "T". This would lead northbound traffic on Route 132 out to Route 6 instead of through the Shrub Oak hamlet center.
Route 6 @ Barger Street	Unsafe left turn, based on TSO observations	Only allow left turns (from Route 6 to Barger and from Barger to Route 6) during protected left-turn signal phases.
<i>Jefferson Valley</i>		
Route 6 @ East Main Street (across from Par-3 Golf Course)	High accident rate.	Prohibit left turns, to reduce accident rate. Left turns would take place at either Hill or Lee under a protected left turn phase.
Route 6 @ Lee Boulevard	High accident rate.	Upgrade traffic signal so that east-west rear-end accidents are mitigated and allow left turns during protected left-turn signal phase.
East Main @ Hill Boulevard	Fast travel speeds on East Main makes turns difficult.	Realign intersection, such that Hill Boulevard and the eastern leg of East Main Street form a continuous roadway, with western leg of East Main Street joining it at a "T" intersection. This forces East Main traffic to come to a stop, effectively traffic-calming East Main Street. In combination with restricting left turns on Route 6 at East Main Street (across from the Par-3 Golf Course), this improvement will help accommodate traffic that currently makes left turns at that intersection.

Table 3-1. Intersection Improvements

<i>Intersections</i>	<i>Observation, 2002-03</i>	<i>Recommendation, Pending Future Traffic Studies</i>
<i>Crompond</i>		
Route 202 @ Lexington Avenue	Heavy traffic, both weekdays and weekends, based on field observations.	Westbound left-turn lanes are being planned currently. Ensure that signal timings are optimized so that southbound left-turns move concurrent with westbound right-turns. As discussed in Table 3-3, a new connection up to Old Crompond Road should be considered. In that case, signalization will have to be re-designed for the resulting four-way intersection.
Route 202 @ Pine Grove Court; Route 202 @ Old Crompond Road (BJ's intersection); Stony Street/Old Crompond Road @ the Bear Mountain Parkway ramps. <i>These three intersections are in close proximity and should be examined and addressed comprehensively.</i>	<i>Pine Grove Court intersection:</i> Fast travel speeds and heavy traffic on Route 202 make turns difficult. <i>BJ's intersection:</i> High accident rate. <i>BMP ramps intersection:</i> Fast travel speeds and heavy traffic on BMP exit make crossing difficult.	Short-term solutions: <i>Pine Grove Court intersection:</i> Add new signal and westbound left-turn lanes on Route 202. <i>BJ's intersection:</i> Study further to understand source of high accident rate. <i>BMP ramps intersection:</i> Add signal, to be removed once BMP is completed. In the long-term, the BMP connection will result in the elimination of the ramps. Stony Street should be realigned to form a four-way signalized intersection with Pine Grove. Old Crompond Road should meet Stony at a "T" intersection, serving as an entrance to the mixed-use center in the Triangle.
Route 202 @ Taconic Parkway ramps	Heavy traffic, weekdays, based on field observations.	Study further upon completion of Taconic Parkway overpass construction project.
Mohansic Avenue @ Park Lane	Poor sight distance, based on TSO observations.	Improve sight distance by eliminating curves; or slow down traffic on Mohansic Avenue using traffic calming or signs.

Table 3-1. Intersection Improvements

<i>Intersections</i>	<i>Observation, 2002-03</i>	<i>Recommendation, Pending Future Traffic Studies</i>
<u>Route 202 Corridor</u>		
Route 202 @ Route 132	Heavy traffic.	Lengthen existing eastbound left-turn storage lane and add full right-turn lane on westbound Route 202 to increase capacity of intersection. Add a southbound right-turn lane on Route 132.
Route 202 @ Granite Springs Road	Unsafe left turns, based on TSO observations.	In the short term, add left-turn lanes and protected left-turn signal phase. In the longer term, coordinate intersection improvements with the proposal to turn the High School driveways into a one-way pair. Part of the former Old Crompond Road right-of-way is found next to Route 202. It could potentially be used to create an expanded intersection or even an oval-shaped, elongated roundabout. Wetlands, grades, and the overhead power lines may make this impossible, but it should be explore further.
Ridge Street @ Elizabeth Road	Poor sight distance, based on TSO observations.	Improve safety by slowing down traffic on Ridge Street using traffic calming or signs, or improve sight lines by widening the shoulders.
<u>Yorktown Heights</u>		
<i>Intersections in Yorktown Heights are in close proximity and should be examined and addressed comprehensively.</i>		
Route 202/35/118 @ Commerce Street	Heavy traffic, weekdays and weekends, based on surveys and field observations. High accident rate.	Completely redesign this intersection for better traffic flow and safety, pursuant to Policy 3-39 in this Chapter.
Route 202/35/118 @ Ridge/Hallock's Mill Roads	Unsafe movements, based on TSO observations.	Add new signal, with three phases, one for Route 118, another for Ridge Street, and the last for Hallock's Mill Road.

Table 3-1. Intersection Improvements

<i>Intersections</i>	<i>Observation, 2002-03</i>	<i>Recommendation, Pending Future Traffic Studies</i>
<i>Underhill Corridor</i>		
Baldwin Road @ Underhill Avenue	Poor sight distance, based on TSO observations.	Close the lower part of the intersection and realign the upper part to form a “T.”
Underhill Avenue @ Echo Hill Path	Poor sight distance, based on TSO observations.	Widen eastbound shoulder for improved visibility; upgrade warning signs on Underhill Avenue.
Underhill Avenue @ Route 129	Poor sight distance, based on TSO observations.	Realign to form more discrete “T.”

Roadway & Intersection Improvements — Long Term

Policy 3-5: Ensure that long-term roadway and intersection improvements build on the recommendations of the Sustainable Development Study.



Route 6, Mohegan Lake.

The Comprehensive Plan assumes that the recommendations of the *Sustainable Development Study* will be implemented. As elaborated upon throughout this Chapter, the Comprehensive Plan builds on the *Sustainable Development Study* to posit the best features of the options considered (Table 3-2), namely:

As of December 2004, the committee that guided the study also continued to refine the recommendations through more detailed study. The traffic consultant modeled the recommendations and found the traffic network is improved to the greatest extent with connection of the Bear Mountain Parkway, a Route 6 bypass and a widened Route 202 to accommodate a center turn lane.

The Comprehensive Plan assumes that the recommendations of the *Sustainable Development Study* will be implemented. As elaborated upon throughout this Chapter, the Comprehensive Plan builds on the *Sustainable Development Study* to posit the best features of the options considered, namely: as noted above, a continuous two lane connection for the Bear Mountain Parkway; a two-way, four lane roadway (parallel to Route 6 (realigned Route 6)); and the widening of Route 202 a continuous turning lane.

Policy 3-6: Fully support and advocate for completion of the Bear Mountain Parkway (BMP.) If a two-lane extension is decided upon, urge consideration of long-term expansion to four lanes.

- The completed parkway, while it may not be a "silver bullet" that fixes all of Yorktown's transportation problems, will provide an important regional linkage that better connects Yorktown to the rest of northern Westchester. Also, it will turn the Bear Mountain Triangle into an important highway interchange, with increased opportunities for business and economic development. And last but not least, it will dramatically improve congestion on Route 202 in Crompond and could help ease congestion on Route 6 as well. Congestion on surface streets would be improved whether the connection is in the form of two lanes or four, but a four-lane extension, with double the capacity, would be even more effective in this regard.
- Travel on expressways is the preferred for many drivers. With the completion of any major roadway connection, not only is traffic congestion on nearby surface roads improved, but the connection often brings in additional regional traffic. The two-lane roadway, once built, will soon be unable to handle all the traffic it attracts. Thus, it should be designed with the need for an eventual four-lane expansion in mind.
- Consistent with the *Sustainable Development Study*, cooperate with the State to build the connection to the immediate north of the current right-of-way, so as to avoid the wetlands found immediately north of Route 202 in Crompond.
- Also consistent with the *Sustainable Development Study*, explore the possibility of truck traffic on the Bear Mountain Parkway. This would likely justify sound attenuation walls in the occasional places where the new parkways abut residential property in Cortlandt and Peekskill. In Yorktown, most of the Parkway abuts ridgelines and commercial/industrial zoned property.

Policy 3-7: Fully support and advocate for the widening of Route 202 west of the Taconic to accommodate a center turning lane, and use the expansion as an opportunity to "green" the commercial frontage along the south side of the roadway.

- The Route 202 Boulevard should feature open space views to the north, and a handsomely landscaped bicycle lane and sidewalk on the south.
 - The sidewalk and bike lane, taking up the equivalent of a single lane of traffic, should be carried out within Route 202's new right-of-way; the parking areas for existing developments are generally too constrained.
 - In addition, a bike lane could be added along the BMP right-of-way, or in between the Route 202 and BMP right-of-ways, which could also provide access to Sylvan Glen.

- While wetland mitigation or replacement may be required, the widening would represent a vast improvement to safety and visual quality and provide an alternative node in the area. The new BMP connection will be located significantly farther north than there could be adequate room for wetland mitigation, even if Route 202 is expanded.
- Use the reconstruction of Route 202 as an opportunity to develop an access management plan for the corridor. This would involve fewer curb cuts, cross access agreements, etc. to reduce the "friction" caused by cars turning in and out of the many driveways associated with businesses in this area.

Policy 3-8: Make small capacity improvements to Underhill Avenue and Baldwin Road without undertaking widening.

- Aside from the *Sustainable Development Study* corridors (Route 202 and Route 6), these are two additional connector roadways carrying significant daily traffic volumes that may need additional capacity in the next 20 years.
- Underhill Avenue and Baldwin Road have sections with narrow lane widths and sharp curves; increasing the radius of dangerous curves and adding shoulders will increase through-traffic capacity without requiring additional travel lanes.
- If, after undertaking such measures, traffic conditions continue to degrade, the Town should then consider widening as an option.

Policy 3-9: Taking into account both pro's and con's, pursue the roadway connections listed in Table 3-3 and shown on Figure 3-2.

- Fixing such "missing links" will be a gradual process, involving significant traffic assessment, environmental study, consideration of neighborhood character, and community input. Some street extensions may involve utility relocations, wetlands encroachment, and/or impact on community facilities or character.

Policy 3-10: In new subdivisions, require multiple roadway connections to existing streets and adjacent neighborhoods, where feasible.

- The roadway extensions and connections described in this Chapter are to correct existing problems. Promoting multiple connections are the best ways to make sure that these problems are not replicated in the future.

Policy 3-11: Use access management tools to improve circulation in the business centers. Promote shared parking and cross-access arrangements.

- In all hamlet centers, prohibit curb cuts within 100 feet of an intersection, which would promote safer conditions for motorists, especially in commercial areas.

- On arterial roads, limit the number of curb cuts and potential vehicular conflict points by working with property owners to consolidate driveways. This would be particularly useful along Route 202 in Crompond, along Route 6 in Mohegan Lake, and for the A&P shopping center area along East Main Street in Shrub Oak.
- Along Route 6 in Mohegan Lake, limit commercial driveways to right-in/right-out only operations. In high-traffic locations such as Route 6, this would help reduce conflicts that often arise from left-in/left-out movements. There may be additional location in the future where such restrictions are appropriate, but none are now apparent. This will not be necessary along Route 202 in Crompond, because of the planned addition of a center turning lane.

Table 3-2. Roadway Connections

<i>Possible Roadway Connections</i>	<i>Pro's</i>	<i>Con's</i>	<i>Recommendation, Pending Future Traffic Studies</i>
1. New Road from Strang Boulevard (north) to Route 202 in Crompond. .	Provides a new connection across Taconic. Links the populated northeastern quadrant of Yorktown to the BMP, relieving Routes 6 and 202. Provides a more direct connection between Route 202 and the Mall.	Crossing slopes and wetlands may be problematic. Could add traffic to Route 202 in Crompond. Direct access to BMP may not be possible, as no entrance is planned for Crompond.	Continue to study. Design as a “park drive” with no access to property (i.e., no driveways or curb cuts; no intersections except for Stony Street), a landscaped median, and woodland buffers. Avoid major re-grading or wetland crossings. If they cannot be avoided, provide wetland mitigation and slope stabilization.

Table 3-2. Roadway Connections

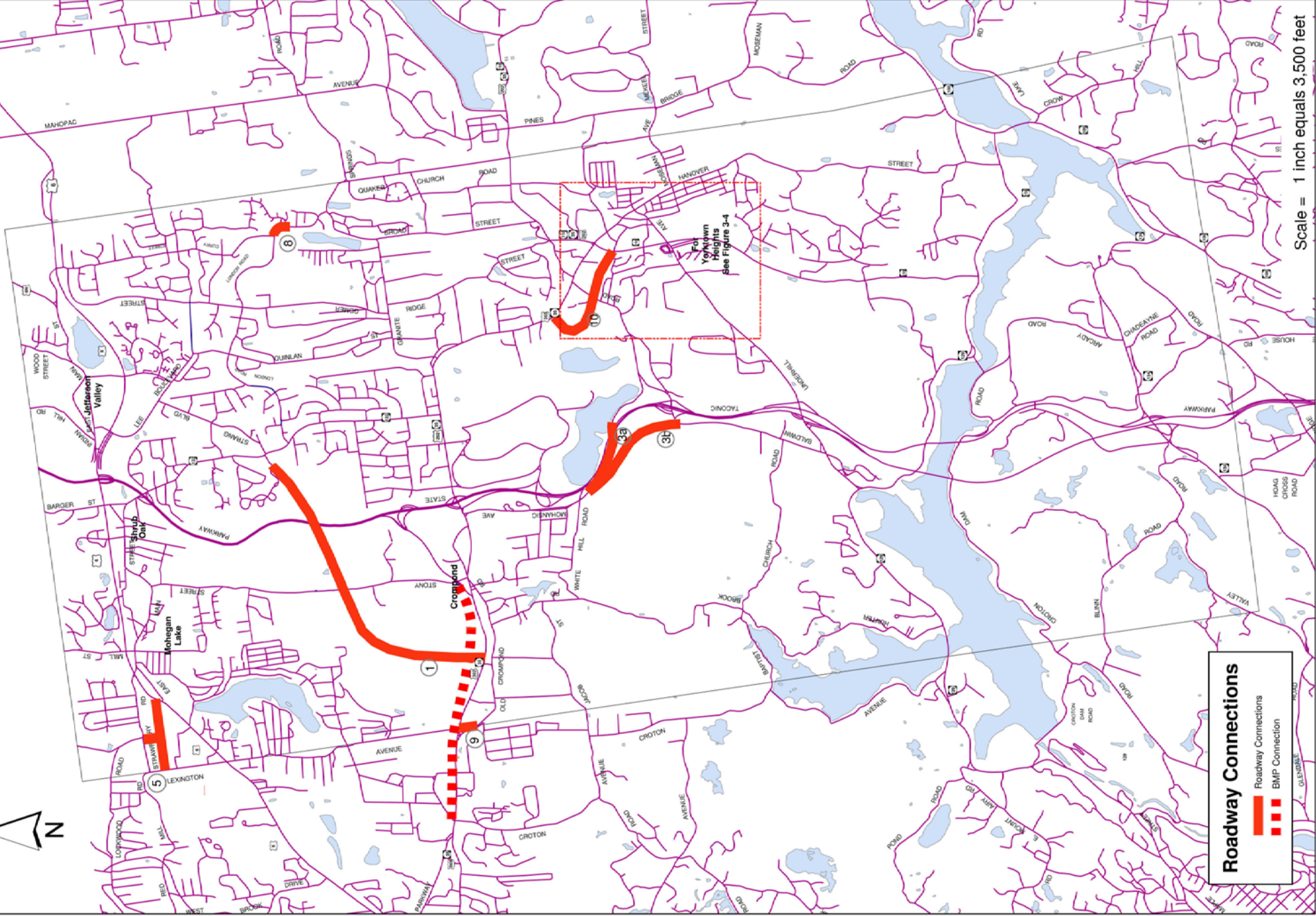
<i>Possible Roadway Connections</i>	<i>Pro's</i>	<i>Con's</i>	<i>Recommendation, Pending Future Traffic Studies</i>
<p>(3a) Mohansic Avenue north to south or (3b) Mohansic Avenue to Baldwin Road.</p> <p><i>Options are alternatives to one another.</i></p>	<p>Provides alternate link between Crompond and Yorktown Heights, relieving congestion on Route 202. Also, it provides a bypass to Hunterbrook Road, which is scenic and winding.</p>	<p>Both could increase traffic on residential streets, including Mohansic Avenue itself, White Hill Road, Baldwin Road, and the side streets thereof.</p> <p><i>Option 3a:</i> Would require additional Taconic overpass; Grade could be hard to negotiate. Comes close to Mohansic Lake.</p> <p><i>Option 3b:</i> Would cross Mohansic Golf Course, albeit along the eastern edge</p>	<p>This connection, if done, should happen after the Downing Street extension (see Option 9), to limit traffic on side streets between Baldwin and the Yorktown Heights business center.</p> <p>Of the two, Option 5b is preferred, provided the roadway design would blend in with the natural topography and not disrupt golfing activity.</p> <p>Part of the existing Mohansic Avenue is in the form of a boulevard. The boulevard design should be expanded along the rest of the roadway, including the new connector road.</p>

Table 3-2. Roadway Connections

<i>Possible Roadway Connections</i>	<i>Pro's</i>	<i>Con's</i>	<i>Recommendation, Pending Future Traffic Studies</i>
(5) Route 6 bypass	Would provide bypass of congested Route 6 corridor and Lexington Avenue intersection.	Would increase traffic through a residential area.	<p>In the short term, endorse the <i>Sustainable Development Study</i> recommendations and focus on Lexington Avenue intersection widening/improvement.</p> <p>In the long term, reserve a right-of-way for a four-lane, two-way bypass that also serves as a collector street. Work with Cortlandt to encourage a similar right-of-way to be west of Lexington and connection back down to Route 6 near the Cortlandt Town Center.</p> <p>Design the bypass as a “park drive” with woodland buffers on the sides. There should be a signalized intersection at Lakeland, but no curb cuts.</p>
(7) Lexington Avenue to Old Crompond Road	Improves upon the existing intersection of Route 202 and Old Crompond Road (in Cortlandt), which suffers from poor visibility. Would provide better access to multi-family housing and the continuum of care facility south of Route 202. Would provide better access to the hamlet center, Route 202, the BMP, and Lexington corridor.	Grade could be hard to negotiate. Would cross private property and could require removal of existing structures.	Construct, pending further study of acquisition costs and displacement impacts.

Table 3-2. Roadway Connections

<i>Possible Roadway Connections</i>	<i>Pro's</i>	<i>Con's</i>	<i>Recommendation, Pending Future Traffic Studies</i>
<i>Yorktown Heights</i>			
(8) Downing to Baldwin Road and Route 202	Allows bypass of Route 202-Route 118 intersection. Provides a more direct route into and out of the Yorktown Height commercial center.	Would increased traffic adjacent to French Hill School and some residences.	Construct with effective wetland mitigation, STOP sign at Baldwin Road, and traffic signals at both Route 118 and Route 202. Provide roadside buffers for residential and school uses. Maintain separate trailway alongside the road, consistent with current trailway plans.
(9) Front Street to Route 118	Alternate truck route.	Would cross wetlands, trailway.	Construct with effective wetland mitigation, STOP sign at trailway.
(10) Realign Veterans and Greenwood	Completes loop road.	Would cross wetlands.	Construct, in connection with Option 19, with effective wetland mitigation.



Scale = 1 inch equals 3,500 feet

Roadway Connections

- Roadway Connections
- BMP Connection

Traffic Calming

Policy 3-12: Revisit residential roadway standards, and narrow overly wide residential streets by providing wider sidewalks, bicycle lanes, and/or planting strips.

- For streets in new subdivisions, considering reducing the required width. At the same time, in order to ensure adequate emergency access, restrict the number and length of cul-de-sacs, and require at least two connections to outside streets. Through the review process, encourage use of an interconnected street network, which is more conducive to walking and biking.
- Where existing streets are being narrowed, the appropriate design solution for each street depends upon several factors, including the prospect of connecting to or completing networks of sidewalks and bicycle routes and input from local residents.

Policy 3-13: On a case-by-case basis, apply traffic calming measures along residential streets where they improve public safety or help meet local goals for reducing traffic or speeding.

- The decisions as to when to use traditional *or* traffic calming design, and then which traffic-calming design, requires a problem-solving approach, balancing traditional street engineering (maximizing sight lines and capacity, for instance) with quality of life considerations (reducing speed and noise, for instance.) Ideally, traffic calming measures should be used where they can divert through-traffic back to arterial roads, like Route 202 and Route 6, and/or slow down traffic speeds enough to have a meaningful improvement in pedestrian or bicycle safety.
- The more successful traffic calming programs take a comprehensive look at an entire neighborhood or district, mindful that one road’s traffic calming may be another’s traffic generator. The more successful programs also tailor the specific measures to the needs and desires of the neighborhood and call for education and enforcement, not just engineering. To be fully successful, traffic calming should be pursued with both community input and technical study.
- Use the neighborhood planning process (see Chapter 5) to identify problem areas for congestion, speeding, and/or pedestrian/bicycle safety; to develop acceptable solutions for neighborhood traffic calming; and to plan pedestrian and bicycle improvements. Traffic-calming measures and pedestrian and bicycle safety improvements can be one in the same. For example, a speed table, which slows down traffic, can also be used as a crosswalk.



Allan Avenue, Yorktown Heights.

Policy 3-14: Use the parameters shown in Table 3-4 to determine which traffic-calming measures might be suitable for particular roadways.

Table 3-3: Suitability and Effectiveness of Traffic Calming Measures for Different Types of Streets

Traffic Calming Measures	<u>Suitability by Type of Street</u>			<u>Effectiveness</u>	
	Type I (15 mph or less)	Type II (25 to 35 mph)	Type III (35 to 50 mph)	Speed Reduction ¹	Volume Reduction ¹
<u>Vertical Shifts²</u>					
Raised Crosswalks	Suitable	Suitable up to 30 mph	Not Suitable	Yes	Possible
Raised Intersections	"	"	"	"	No
Speed Humps	"	"	"	"	Possible
<u>Lateral Shifts</u>					
Alternate Side Parking	Suitable	Suitable	Not Suitable	No Information	No Information
<u>Constrictions</u>					
Neck-downs, Chokers ³	Suitable	Suitable	Not Suitable	Slight	No
One-way Entry/Exit	"	"	"	Yes	Yes
Curb Extensions	"	"	Suitable ⁴	Slight	No
Pedestrian Refuge Islands	"	"	Suitable	"	"
<u>Narrow Pavement Widths</u>					
Pavement Narrowing	Suitable	Suitable	Not Suitable	Possible	Possible
<u>Entrance Features</u>					
Gateways	Suitable	Suitable	Suitable	Yes	Yes
<u>Streetscape Treatments</u>					
Color Contrast or Patterns/ Markings	Suitable	Suitable	Suitable	Possible	Not Likely
Landscape Development	"	"	"	"	No
Sidewalks, Shoulders	"	"	"	No Information	No Information
Street Furniture and Lighting	"	"	"	Possible	"

Table 3-3: Suitability and Effectiveness of Traffic Calming Measures for Different Types of Streets

Traffic Calming Measures	<u>Suitability by Type of Street</u>			<u>Effectiveness</u>	
	Type I (15 mph or less)	Type II (25 to 35 mph)	Type III (35 to 50 mph)	Speed Reduction ¹	Volume Reduction ¹
<u>Surface Textures</u>	"	"	"	"	Unlikely
<u>Uncategorized Measures</u>					
Reduced Intersection Radii	Suitable	Not Recommended ⁵	Not Suitable	Yes	No Information
Single-Lane Roundabouts	Suitable	Suitable	Possible ⁶	Yes	Not Likely
<u>Route Modifications</u>					
Bike Facilities	Suitable	Suitable	Suitable	No Information	No Information
One-way Operation	"	"	"	"	"
Truck Prohibitions	"	"	"	No	Minor
Cul-de-sacs	"	"	Not Suitable	Yes	Yes
Diverter	"	"	"	Likely	"
<u>Traffic Control Devices</u>					
Higher Visibility Crosswalks ⁷	Suitable	Suitable	Suitable	Possible	No
Signing	"	"	"	"	"
Walk Phase on Signals	"	"	"	No	"
Regulations/Enforcement	"	"	"	Likely	"

Source: NYSDOT Highway Design Manual

Definitions:

Type I – Design speed is 15 to 25 mph. Examples include neighborhood streets and areas intended for shopping, recreation, or entertainment activities where the intended or preferred transportation modes are walking or bicycling.

Type II – Design speed is 25 to 35 mph. Included in this grouping are most collector streets in residential or commercial areas, as well as some local streets.

Type III – Design speed is 35 to 50 mph. This includes arterials and collectors, and most state highways, county or town roads, such as Route 202 and 35.

Notes:

(1) This information is based on the experience of agencies that have implemented traffic calming and monitored the results. Individual results may be influenced by the combination of traffic calming measures used, the frequency of use, street type, and the intended function of the facility or area, and other site-specific factors. Sources: A Guidebook for Residential Traffic Management and Neighborhood Traffic Management and Calming Program.

(2) Speed humps/bumps are not used on New York State highways to control speed. These guidelines extend this restriction to include all vertical shift measures. Use of vertical shifts on local roads is subject to the approval of the local authority having jurisdiction.

(3) In locations where no parking is provided, tapered lanes should precede neck-downs or chokers.

(4) Curb extensions are suitable for Category III roads only with upstream parking.

(5) Those measures shown as "Not Recommended" may be considered in case-specific projects.

(6) Any proposal for a roundabout on a Category III road should be tested on a case-by-case basis with input from the NYSDOT Design Quality Assurance Bureau.

(7) Crosswalk markings must be white, in accordance with the NYS Manual of Uniform Traffic Control Devices.

General Note: Traffic calming measures should not be used on principal emergency response routes. Their proposed use should be coordinated with and approved by the local police/fire/emergency medical services.

Policy 3-15: Traffic-calm streets through the hamlet centers.

- Curb extensions at crosswalk locations can increase pedestrian visibility, shorten the pedestrian crossing distance, and provide the perception of a narrower travel lane, thereby slowing traffic.
- On-street parking buffers pedestrians from pass-by traffic. Cars have to slow down to accommodate people parallel parking.
- Raised and articulated crosswalks draw attention to crosswalks, increase pedestrian visibility, and usually slow traffic.

Policy 3-16: Undertake a public education program to educate about traffic calming measures and tradeoffs involved.

- Involve local residents and businesses in future traffic calming efforts. Centerline rumble strips, speed humps, stop signs, neck downs, etc. are not without consequence. Local residents and businesses should be consulted about the tradeoffs involved. Within the limits of public safety, there should be full consideration of neighborhood concerns.
- Use as a model the education programs developed by cities like Madison, Wisconsin, using materials obtained by Town officials who attended a traffic calming workshop in that city.

Policy 3-17: Establish a process for notifying residents about scheduled roadway improvements.

- Too often, neighborhoods are unaware of traffic planning and roadway improvement time-tables, and are surprised when construction begins on their streets.

Pedestrians

Policy 3-18: In residential areas, provide sidewalks in those locations where there are safety concerns or where neighborhood plans call for sidewalks.

- Most residential areas of Yorktown do not currently have sidewalks. Through the neighborhood planning process, local residents can identify locations where there is a general consensus that sidewalks would be appropriate.
- The Town should avoid installing sidewalks along scenic corridors or areas with a unique woodland or rural character. In such areas, the Town should consider clearing brush alongside the road in order to allow a pedestrian to walk outside the path of oncoming cars.

Policy 3-19: Provide sidewalks, crosswalks, and crosswalk signals along the major walking routes near schools, places of worship, parks, and other community gathering places, and leading into the hamlet centers.

- Possible locations near schools include Route 132 from Wildwood Street to Beaver Drive near Copper Beech Elementary School and Route 202/35 between Strang Boulevard and Hawthorne Drive near Yorktown Middle and High Schools.
- Candidate locations include, but are not limited to, Hanover Street and Allan Avenue in Yorktown Heights; Stony Street and New Road in Shrub Oak; Hill Boulevard south of Route 6 in Jefferson Valley; and Lakeland and Mohegan in Mohegan Lake.

Policy 3-20: Provide continuous sidewalk connections in the hamlet centers.

- Require wider sidewalks in the hamlet centers to accommodate higher volumes of pedestrians and promote a safer walking environment. The preferred standard is a minimum of 12 feet (compared to the five-foot minimum Townwide.) Within those 12 feet, street trees, street lamps, planters, and street furniture (i.e., mailboxes, newspaper vending machines, benches) would be permitted.

- Provide walkways between rear parking lots and the sidewalk, where businesses would have their entrances.
- Encourage new commercial sites to share access/egress with neighboring sites and provide connecting sidewalks. This can be carried out through site plan review and zoning incentives (e.g., reduced parking requirements.)
- On a case-by-case basis, allow sidewalk improvements to serve as partial mitigation for development-related traffic impacts.
- Sidewalk and walkway improvements should be coordinated with overall streetscape enhancements and with pedestrian-oriented development/redevelopment projects.

Policy 3-21: Provide attractive streetscapes and pedestrian amenities in the hamlet centers.

- The specifics vary by hamlet center, with Yorktown Heights and Jefferson Valley providing walkable "main streets," Crompond and Shrub Oak having walkable "village centers," and other hamlet areas simply providing safer crosswalks and better walkway connections (see Chapter 4,) but some general standards are as follow.
- Sidewalks: Provide pedestrian-scale lighting, street trees, landscaping, and awnings along sidewalks. Provide street furniture such as benches and trash receptacles where appropriate. Maintain parking as a buffer between pedestrians and moving vehicles both on-street and in parking lots. Allow outdoor tables for restaurants and cafes.
- Crosswalks:
 - Enhance with articulated pavers or high visibility crosswalk markings, such as the traditional striped ("zebra") markings. In areas with heavy pedestrian traffic, raised crosswalks can be considered.
 - Provide crossing signs at non-signalized intersections and pedestrian signals at signalized ones. Consider a "pedestrian only" phase at busy or dangerous intersections.
 - Provide adequate lighting at each crossing. Ensure all crosswalks are delineated with materials that provide day and night visibility.

Policy 3-22: Encourage uses and development patterns in the hamlet centers that create a truly pedestrian-oriented environment, particularly along "Main Street" areas.

- Again, the specifics will vary from hamlet to hamlet (see Chapter 4.) "Main Street" or "village center" areas are planned in ~~vary~~ varied amounts in all of the hamlet centers.

- Sidewalk Orientation: Encourage, if not require, buildings to abut and front on sidewalks, and to be designed in such a way as to facilitate pedestrian circulation. Discourage, if not prohibit, solid blank walls, solid roll-down gates, and other design features that make sidewalks less appealing.
- Mixed Use Development: Promote a mix of ground-floor retail with second-floor offices or apartments. This would promote walking as well as more of a 24/7 character. Promote civic and community uses as well.
- Parking: Create public parking lots, and provide parking waivers for developments that contribute in land or money ("payments in lieu of parking.") Allow on-street parking in "Main Street" areas. Encourage, if not require, shared parking. Encourage, if not require, cross-access agreements between parking lots.

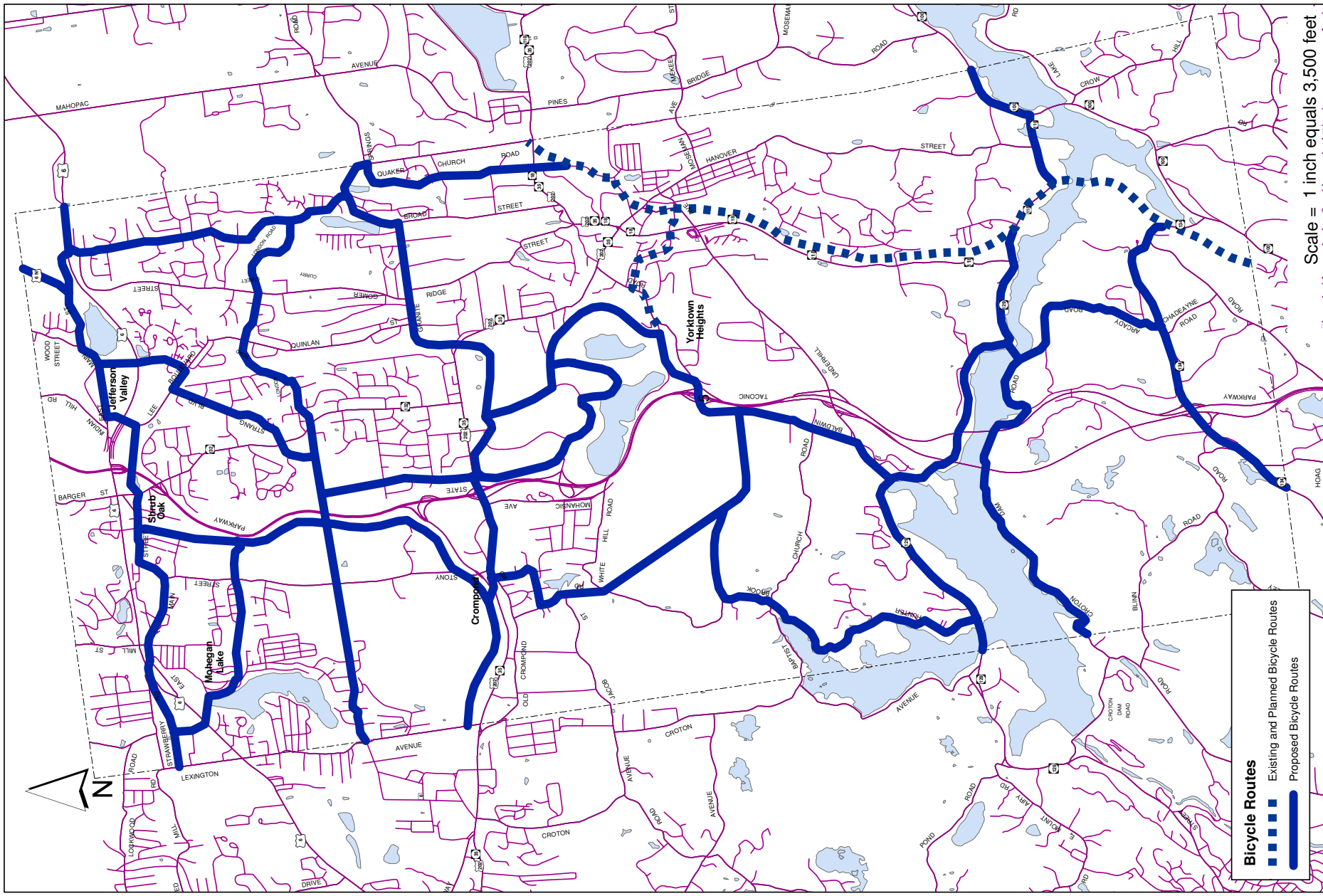
Bicycling

Policy 3-24: Building on the proposed greenway system, (see Chapter 9) establish a Townwide network of bicycle routes consistent with Figure 3-3.

- The goals of the bike network include: increased recreational opportunities and improved pedestrian/bike connections between Yorktown's parks, hamlet centers, and residential neighborhoods.
- The network should include a mix of dedicated bike paths/greenways (e.g., the North County Trailway), marked on-street bike lanes, and streets with extra-wide shoulders with posted "Bike Route" signage.
- The Town should focus first on developing the greenway system. There is a current plan to build a greenway connection from the North County Trailway to FDR Park (see Chapter 4.) Existing utility rights-of-way create opportunities for establishing north-south greenways. Wherever practicable, greenway should have shared walking and biking paths.
- Once those are in place, bikers will have the same problems as motorists in Yorktown. It will be easy to travel north-south, but harder to travel east-west. To provide such east-west connections, the Town should work to establish bike lanes and routes along existing streets, with partial off-street bike paths through parks or open space preserves.



North County Trailway.



Bicycle Routes

- Existing and Planned Bicycle Routes
- Proposed Bicycle Routes

Scale = 1 inch equals 3,500 feet

- As shown on Figure 3-3, roadways which should be the priority for installing bike lanes or wider shoulders include the following:
 - Route 202/35 in Crompond. The *Sustainable Development Study*'s proposed redesign of Route 202/35 in Crompond provides a rare opportunity to create a dedicated bike lane or path. This could connect to bike paths in FDR Park, which lead to the Yorktown Heights hamlet center.
 - Bear Mountain Parkway. Off-street bike paths could also be added to the BMP right-of-way, with connections to Sylvan Glen.
 - Granite Springs Road, leading to Sparkle Lake and east into Somers.
 - Route 129. A bike path could be established along this scenic roadway bordering the New Croton Reservoir.
 - Strawberry Road-East Main Street-Mahopac Avenue. Because Route 6 carries such heavy traffic volumes, the adjacent side streets are the more appropriate bike routes.

Policy 3-25: Adopt standards for bicycle routes of all types, consistent with any applicable NYSDOT standards for bike lanes and curb lanes, as shown in Table 3-4.

Table 3-4: Bicycle Routes — Minimum Widths

<i>Bike Paths</i>	<i>Bike Lanes</i>	<i>Shoulders</i>
5 feet for one-way, 10 feet for two-way.	4 feet, 6 feet on downgrades in excess of 5%.	13.7 feet. May require adjustments to drainage grates, longitudinal roadway joints, and gutter sections.

Source: Eng-Wong Taub

Policy 3-26: Provide "Bike Route" signage on arterial and collector streets where cyclists are encouraged to use the shoulders.

- On road with wide shoulders, cars sometimes double-up and interfere with biking. For this reason, bike lanes are still preferred on arterial and collector roads with greater traffic volumes and higher speeds.
- However, because shoulders are necessary whether bike lanes are present or not, the addition of a bike lane may require additional right-of-way, a potentially costly and difficult undertaking. Wider shoulders may be the only practical means of providing room for bikes on certain roadways.

- Signage serves both cyclists and motorists. They indicate to cyclists the preferred routes, and they alert motorists to the presence of bikes.

Policy 3-27: Require bike racks and amenities for commercial sites, schools, parks, and public facilities.

- Encourage shopping centers along bicycle routes to provide bike racks, as well as bike lanes in their driveways and parking lots.
- Work with the school districts to provide bike lanes in their driveways and parking lots, as well as bike lanes along major routes leading to school entrances.

Policy 3-28: Continue to coordinate bike planning with the County and the State.

- The Town has been working with the County and Cortlandt to study possible routes for connecting the North County Trailway to the Hudson Valley Greenway. The initial idea is to wind a bike path through FDR Park and up Strang Boulevard and then to construct a new pedestrian-bike bridge across the Taconic State Parkway. From that point, there are a variety of potential future routes that could be used to reach the Greenway. The Taconic bridge is the critical link.
- The County has developed a system of bike routes and trails, and various future off-street and on-street paths are proposed. Specifically, the County envisions on-street paths along Route 6, East Main Street, Strang Boulevard (south), and Route 202 near the Bear Mountain Triangle. Off-street paths are envisioned along the Catskill Aqueduct (north of Mohansic Golf Course), the Bear Mountain Parkway, the Taconic State Parkway (north of the Bear Mountain), through FDR Park, and a highway crossing near Strang Boulevard (north).
- Many of these concepts, with slight modifications, have been incorporated into the proposed plan of bike routes shown in Figure 3-3.

Policy 3-29: Increase public awareness of the Townwide bicycle network.

- Post standardized, weather-proof maps along bike routes, particularly where bicycle paths intersect, at bike "rest" stops (e.g., Railroad Station Park in Yorktown Heights), and at trailway entrances.
- Create and publish a bicycle network map and make it available in Town Hall, at the Hart Library, and in the YCCC.

Transit

Policy 3-30: Encourage the County to increase commuter bus service from Yorktown to nearby train stations and into White Plains.

- Typically, people will not commit to using transit for commuting purposes unless buses come at least once every 10 minutes. The County should ideally adopt this standard for the morning and evening rush hours, and for the remainder of the day, buses should abide by a timetable that is coordinated with train schedules.
- Currently, the only express service to White Plains traverses the entire northern part of Yorktown and ultimately enters the Taconic at Underhill Avenue. Encourage the County to consider adding another express bus route to White Plains that enters the Taconic at the Route 6 or Route 202 entrances.
- Also consider adding one or more express bus routes that service some of the other train stations used frequently by Yorktown residents, including Ossining, Cortlandt, Peekskill, Golden's Bridge, or Katonah. For example, an offshoot of the existing routes could enter the southbound Taconic at Underhill Avenue, exit at Route 134, and travel west to the Ossining Station.

Policy 3-31: Maintain, improve, and encourage use of existing park-n-ride facilities in Yorktown.

- Work with the County to improve bus service to the FDR Park commuter lot. Currently, the park-n-ride lot is not listed as an official Westchester County park-n-ride. With official designation, investment in advertising, facility upgrade, it could be served by existing routes, which currently pass by but do not stop to pick up passengers.
- If the Par-3 golf course in Jefferson Valley is developed, work with the developer to provide an off-street park-n-ride lot. Currently, people park on the street in front of the golf course. Alternatively, work with the Jefferson Valley Mall to allow commuters to use a portion of the parking lot. The mall could tap into the commuters as a customer base.
- Consider establishing a small-scale transportation center in the hamlet in conjunction with the existing park-n-ride facility. (See separate discussion in this Chapter.)

Policy 3-32: Provide additional park-n-ride facilities in key locations along commuter bus routes, while ensuring that any new lots do not unnecessarily duplicate existing lots.

- Candidate locations:
 - Underhill Avenue at Route 129. This is on a current bus route, which goes to the Croton-Harmon train station. It would provide a park-n-ride lot in southern and western Yorktown, where none currently exists.

- Route 6 west of the Taconic Parkway. This is on a current bus route. It would provide a park-n-ride facility in the northwestern part of the community where none exists. A possible location would be the parking lot of the proposed shopping center use in the Mohegan Lake hamlet center (see Chapter 4.)
- Route 134 at the Taconic Parkway. A bus route passes by this area on the parkway. The bus could pull off the parkway, load passengers at a new lot, and then return to the parkway. This would provide a commuter lot in southern Yorktown, where none currently exists.
- Crompond Triangle. Once the Bear Mountain Parkway is completed, the County should be encouraged to provide a commuter bus that starts in Peekskill or Cortlandt, travels east on the Bear Mountain Parkway, and then south on the Taconic. In this scenario, the Crompond Triangle would provide an ideal location for a park-n-ride facility. In this scenario, it might also make sense to close either the Downing Park or FDR Park lots.
- Other lots. If express routes are changed or increased over time, additional lots in other locations may become necessary or appropriate.

Policy 3-33: Provide jitney service to take seniors to shopping and teenagers to sporting events.



Seniors leaving the Yorktown Nutrition Center.

- Provide a weekly or monthly scheduled jitney service that brings senior citizens to local shopping areas. Expand this service to accommodate teenagers for sporting and cultural activities.
- Consider working with local businesses or neighboring towns to sponsor the service.

Policy 3-34: Improve safety and provide amenities at bus stop locations, such as shelters, kiosks, benches, route maps, and trash receptacles.

- Provide for increased safety and amenities at many bus stop locations, especially where there is no weather protection and minimal space to wait for buses. Provide signage/information kiosks, especially in the hamlet centers, at high-volume stops, and at triangular points.
- Work with local businesses and the New Chamber of Commerce to seek funding to design and pay for more bus shelters and aesthetically pleasing shelters.

Policy 3-35: Better coordinate existing bus service by establishing a central transfer point.

- This would ideally be located in Yorktown Heights, which is the most centrally located of the five hamlet business centers. See separate discussion in this Chapter.

Yorktown Heights Hamlet Center

Refer to Figure 3-4

Policy 3-36: Reinforce the radial street patterns leading into Yorktown Heights.

- Upgrade Greenwood Street as an entry into Yorktown Heights from the north. For instance, provide signage directing people to Yorktown Heights at the Route 202/Greenwood intersection and widen Greenwood.
- Extend Downing Drive as an entry into Yorktown Heights from the west. This would involve an extension to Route 202, with a four-way intersection at Baldwin Road.

Policy 3-37: By connecting existing streets and realigning an intersection, create a loop road around the Yorktown Heights commercial center.

- Explore options to facilitate improved traffic flow at Commerce Street and Veterans Road.

- Realign the intersection of Veterans Road with Greenwood Street to fit into the loop scheme.

Policy 3-38: Undertake the following roadway connections and intersection improvements to improve traffic flow and reduce truck impacts on residential areas.

- Extend Front Street to Route 118.
- Provide traffic signals at intersections where left-turn maneuvers are difficult and can be unsafe, namely Downing Street at Route 118. Another possibility is the Commerce-Hanover intersection.
- Install a traffic signal or an all-way STOP at the Underhill/Kear intersection and at the Veterans/Maple Hill intersection.
- Consider closing the last block of Moseman Road on the east side of Front Street.

Policy 3-39: Redesign the Triangle intersection and adjacent intersections for improved traffic circulation.

- For the Triangle intersection, prohibit left turns in as many directions as possible, so as to reduce "friction" from turning movements. For those directions where left turns are restricted, the Towns should make sure that motorists would have the opportunity to turn left at other adjacent intersections.
- Reduce the potential for turning movements at adjacent intersections, so as to prevent adjacent back-ups that could interfere with the function of the Triangle intersection.
- Signalize the intersection of Route 118 and Hallock's Mill Road/Ridge Street, and restrict left turns from Route 118. This would improve safety at the intersection and help prevent cut-through traffic along Hallock's Mill Road.
- Consider relocating the bus stops to the far side of the intersection to increase intersection capacity, specifically at the northbound approach of Commerce Street at the Triangle intersection.









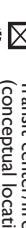
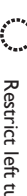


Figure 3-4:
Yorktown Heights
Circulation Plan

Yorktown, NY

Phillips Preiss Shapiro Associates, Inc. 2005



-  Stop signs
-  Traffic lights
-  Roadway connections
-  Road closures
-  Pedestrian improvements
-  Bike paths
-  Bike lanes
-  Transit center/fire station (conceptual locations)
-  Restrict left turns
-  Traffic calming

Policy 3-40: Encourage the County to enhance transit service to Yorktown Heights.

- Encourage the County to provide more frequent local and commuter bus service.
- Provide distinctive shelters unique to the hamlet center.

Policy 3-41: Establish a central bus transfer point in Yorktown Heights.

- This would be larger-than-normal outdoor bus stop, potentially double or triple the normal size. All bus services in Yorktown would meet there, including express buses, local buses, and jitneys, thereby providing easy and convenient transfers. A taxi stand or dispatch office should be located adjacent to the transfer station.
- Amenities should be provided at the transfer point, which can be called "Yorktown Heights Station," including a public phone, kiosk, public restrooms, a heated shelter, and a park-n-ride lot (which can be used in the evenings and on the weekends by shoppers, YCCC patrons, and people using the Trailway). The Town should work with local businesses to solicit a unique architectural design for the station, contributing to the unique identity of Yorktown Heights.
- Ideally, the station should be located on or immediately adjacent to the proposed "Main Street" shopping area along Commerce Street. Cafes, newsstands, dry cleaning drop-off/pickup, small convenience stores, drug stores, and other commuter-oriented shops and services should be encouraged to locate next to the station.

APPENDIX TO CHAPTER 3: EXISTING CONDITIONS REPORT

Roadways & Traffic

- Based on a survey of Yorktown residents, the roadways that were cited most often as being congested included:
 - Route 6 in Mohegan Lake (weekends);
 - Route 202 in Crompond (weekday evening rush hour, 4-7 p.m.);
 - Route 6 in Mohegan Lake (weekdays); ~~and~~
 - Triangle intersection: Routes 35, 118, and 202 (weekdays); ~~and~~
- Peak period field observations confirmed the survey results and the input from the Task Force. The following locations were observed to be the most congested: (*Refer to Figure 3-5*)
 - Route 6 in Mohegan Lake — weekdays and weekends; ~~and~~
 - Route 6 intersection at Lexington Avenue — weekdays and weekends; ~~and~~
 - Route 202 in Crompond — weekday rush hours and weekends; ~~and~~
 - Route 202 at the Taconic State Parkway ramps — weekday rush hours (this congestion is partially the result of the Parkway reconstruction project); ~~and~~
 - The Route 202/Route 18/Commerce Street intersection (a.k.a. the Triangle intersection) in Yorktown Heights — weekdays and weekends; ~~and~~
 - Route 202 intersection at Lexington Avenue — weekday rush hours and weekends; ~~and~~
 - Strawberry Road from Route 6 to Lexington Avenue — weekdays and weekends, when Route 6 is backed up.
- As shown in Table 3-5, traffic increased significantly in Yorktown in the 1990s. Traffic has increased only partly because of new development within Yorktown itself. Increased development in nearby parts of Westchester and Putnam Counties is also a contributing factor to congestion on surface streets. Increased congestion on the Taconic is a factor of regional growth.
- More significantly, traffic has increased because more trips are now made per household (for errands, for school and extracurricular activities, etc.); and more cars are owned per households (for the older kids as well as each parent), and people are driving longer distances. From 1990 to 2000, the population growth rate of both Yorktown and Westchester County was less than one percent per year. BUT traffic growth rates on the major roadways through Yorktown were much higher (refer to Table 6-6.)

- The most heavily trafficked roadways in Yorktown, other than the Taconic Parkway, include Route 6, Route 202, Route 118, East Main Street in Shrub Oak and Jefferson Valley, Route 132, Granite Springs Road, and Route 100. (See Figure 3-6: Daily Two-Way Traffic Volumes.)

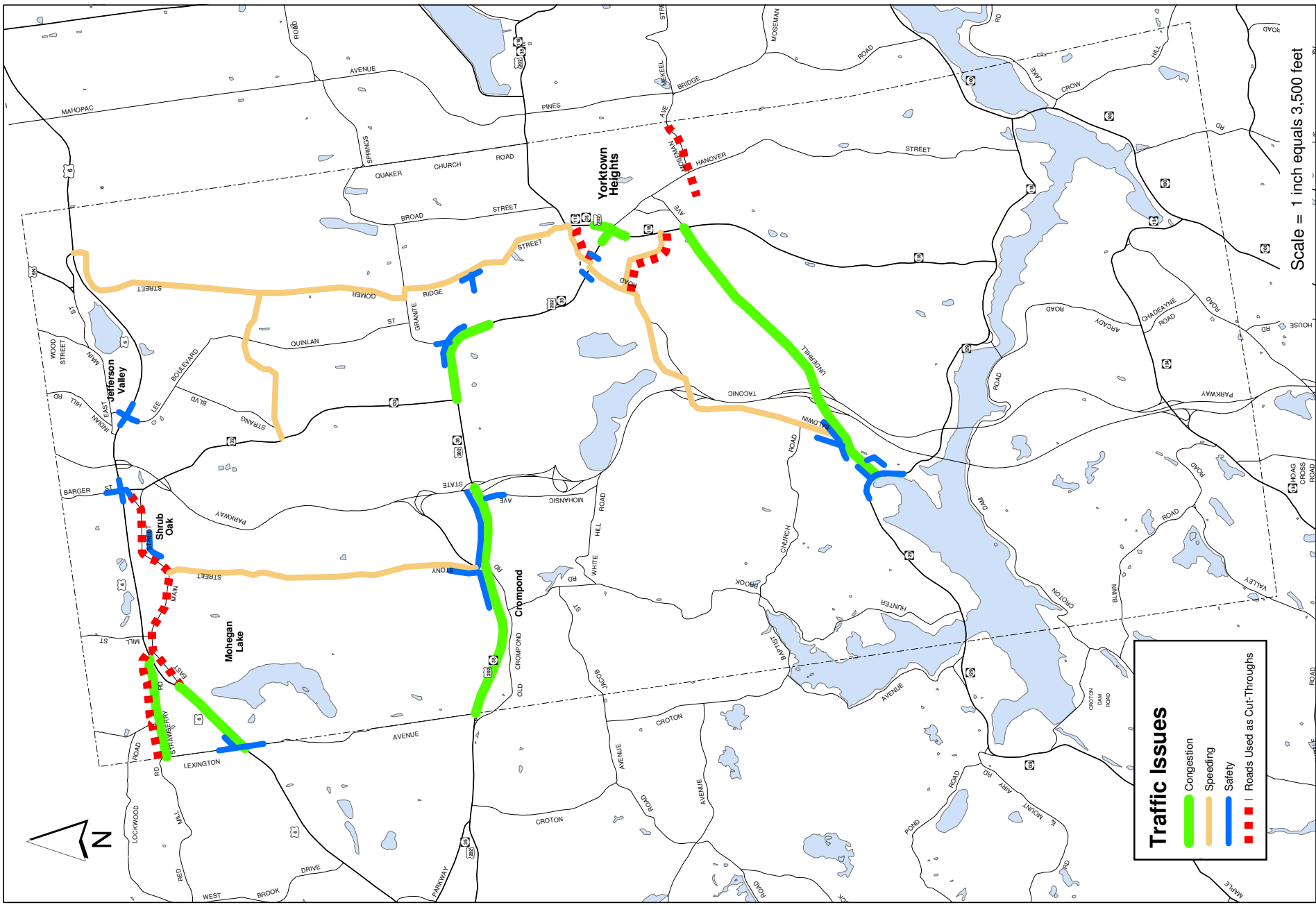
Table 3-5: Traffic Growth Rates

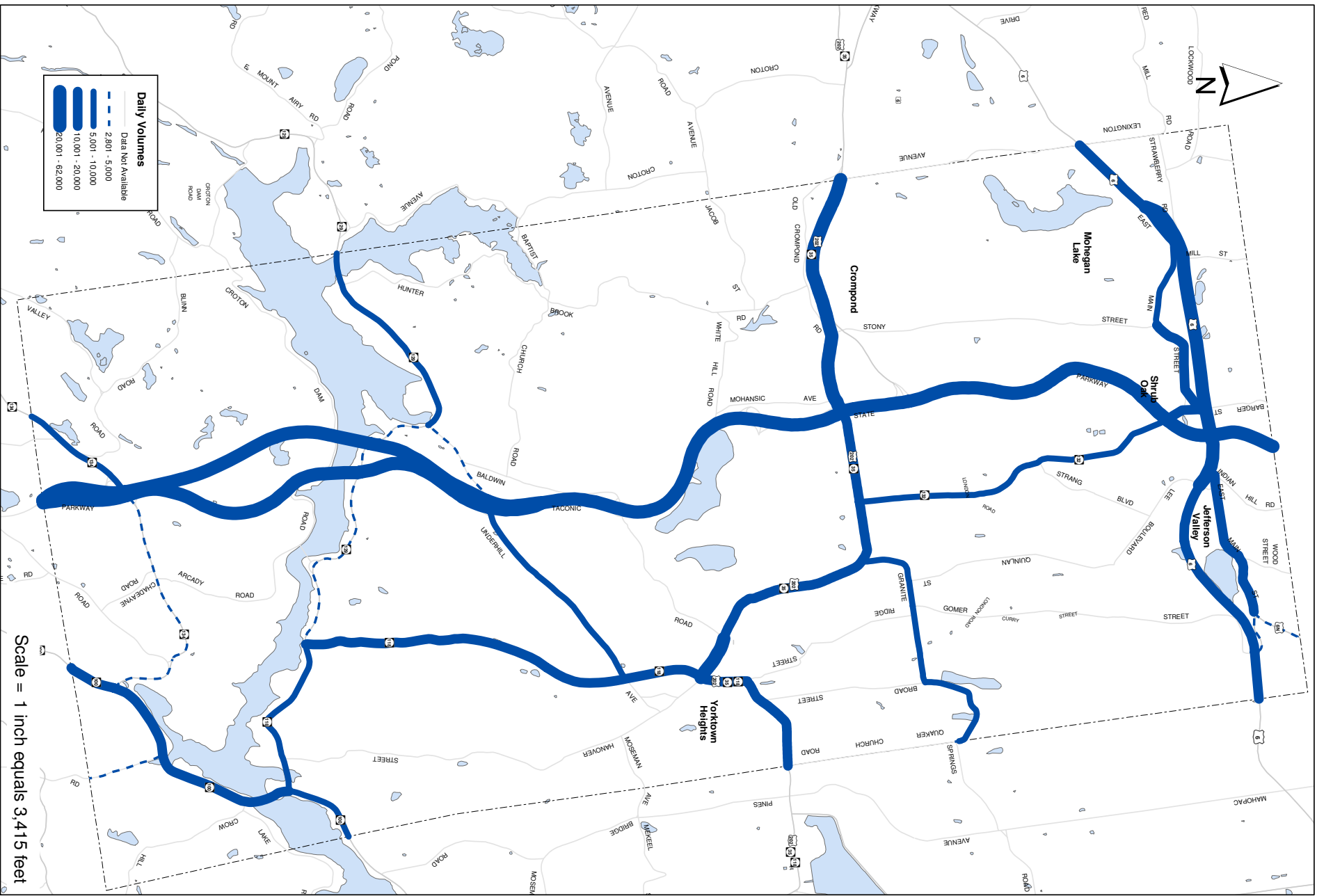
<i>Yorktown Roadway Segment</i>	<i>Annual Average Daily Traffic Volume (vehicles)</i>	<i>Average Annual Growth Rate</i>	<i>Total Growth Rate</i>
Taconic State Parkway from Route 134 to Route 202	45,010 (1993)	2.6%	36.5%
	50,240 (1996)		
	59,940 (1999)		
	65,800 (2004)		
	70,840 (2007)		
Route 202 from Lexington Avenue to Taconic State Parkway	18,600 (1990)	4.6%	47%
	27,300 (2000)		
Route 202 from Baldwin Road to Route 118	16,800 (1991)	1.3%	20.8%
	19,950 (1999)		
	20,240 (2002)		
	20,580 (2005)		
	21,220 (2007)		
Route 118 from Route 129 to Commerce Street	8,700 (1992)	2.1%	18%
	10,300 (2000)		
Route 6 from Taconic State Parkway to Lee Boulevard	30,300 (1990)	1.5%	14%
	34,600 (1999)		
	36,670 (2002)		
	39,540 (2007)		

Source: 2004 & 2007 NYSDOT Traffic Volume Reports

- Congestion has resulted in motorists using residential streets in order to bypass intersections known to operate at poor level of service conditions. Examples of bypass routes include: (Refer to Figure 3-5.)

- Hallock’s Mill Road is used as a bypass for Route 202 eastbound cars to avoid the Route 202/35/Route 118/Commerce Street intersection in Yorktown Heights.
- Allan Avenue is used as a bypass for Route 202 eastbound motorists who want to avoid the same intersection, yet go to the K-Mart shopping area or continue south on Route 118. Some people leaving the hamlet center may use it as an alternate way to get to the Taconic State Parkway.
- Strawberry Road is used as a bypass by Route 6 motorists who want to avoid the Lexington Avenue intersection, in addition to being a connector road to Peekskill, Putnam Valley, and the Bear Mountain Bridge. Strawberry Road experiences two-way, hourly traffic volumes of 800 to 1,000 vehicles during rush hours. These are the same volume levels observed on Route 118 south of its intersection with Route 202.
- It is becoming more difficult to make left turns onto or off of the major arterials due to congestion. This issue was documented in a 1998 traffic study prepared by John Collins Engineers, which cited that long delays are experienced by left-turning (westbound) vehicles at the Route 202 intersections at Lexington Avenue and Pine Grove Court. (*Refer to Figure 3-5.*) The study recommended a traffic signal at the Pine Grove Court intersection with a westbound left-turn lane. It also recommended a westbound right-turn lane (since built) at the Lexington Avenue intersection.





- Truck traffic is also reportedly using certain residential roads to avoid congestion on major routes. As one example: trucks originating from Front Street use the primarily residential Moseman Road to access Route 100 and destinations to the east, instead of driving through Yorktown Heights to Route 202 and Route 118. (*Refer to Figure 3-5.*) Moseman is viewed as a residential street by its neighborhood, but functions more like a connector road.
- Task Force participants were in favor of keeping traffic on the primary arterials (e.g., Route 202) and off of residential streets, although interconnected residential streets could help reduce traffic on some major roads. Some residents who attended the September 18, 2002 Task Force Meeting supported roadway connections such as Downing Drive to Route 202/35 or Baldwin Road and Front Street to Route 118. Another attendee suggested the Town provide a new southern access road to the Yorktown High/Middle School on Route 202/35 in the vicinity of Elizabeth Road.
- At the September 18, 2002 Task Force Meeting, traffic congestion on Routes 6 and 202/35 was the primary concern of most residents. The attendees' ideas included new roadway connections (i.e., Downing), select roadway closures (i.e., one block of Moseman east of Front Street), promoting carefully managed mixed-use, pedestrian-friendly environments in the hamlet centers, traffic-calming, restricting left turns at problem intersections, expanding shuttle/jitney service to train stations and the hamlet centers.
- Based on the surveys, respondents said that the actions they felt would best improve traffic conditions were new roadway connections, road widening, and better traffic management (i.e., signal timing, left-turn pockets.) In contrast to the Task Force meetings, the surveys suggested that respondents had little confidence that nontraditional approaches would help improve traffic conditions (i.e., bike lanes/trails, improved sidewalks, increased bus service, and providing more park-n-ride lots), except for clustered development patterns that help make people less auto-dependent. This does not mean that sidewalk, bike, and transit improvements are unnecessary, but it confirms that they are likely to be more about improving quality of life than serving as a long-term traffic solution.
- Confirming this notion, most survey respondents said that they would not be likely to use jitney service for shopping trips or ride their bikes for shopping or work trips. However, about 27% of respondents said they would use jitney service to reach a nearby train station. This reflects the fact that many respondents work in New York City (21%) and White Plains (8%).

Roadway Safety

Refer to Figure 3-5.

- Traffic safety problems also translate into pedestrian and bicyclist safety problems.
- The most recently available accident data (May 1, 1998 to April 30, 2001) was obtained from NYSDOT for the State and County routes in Yorktown. High accident locations identified include:

- Route 6 at Lexington Avenue — 117 accidents over three years.
- Route 6 in the vicinity of Barger Street and Route 132 — 63 accidents over three years.
- Route 6 at Lee Boulevard — 58 accidents over three years.
- Route 202 from Old Crompond Road to the Taconic State Parkway's Northbound Ramps — 63 accidents over three years.
- The Route 202/Route 118/Commerce Road intersection (a.k.a. Triangle intersection) — 61 accidents over three years.
- Route 202 in the vicinity of Baldwin Road and Hallock's Mill Road — 54 accidents over three years.
- Route 202 at Stony Street — 51 accidents over three years.
- Traffic Safety Officer Eidelman and field observations also identified several high accident situations, namely:
 - Unsafe left turns: for instance Route 6 at Barger Street, Route 202 at Baldwin Road, and Route 202 at Granite Springs Road.
 - Poor sight distances: for instance Baldwin Road at Underhill Avenue, East Main Street at New Road, Mohansic Avenue at Park Lane, Ridge Street at Elizabeth Road, Underhill Avenue at Echo Hill Path, and Underhill Avenue at Route 129.
 - Absence of needed traffic signal or storage area: for instance Stony Street at the Bear Mountain Parkway, and Route 202 west of Old Crompond Road.
- The Town has been working to address such problems. As examples:
 - Strang Boulevard at Oakside Road was a high-accident location until the Town installed four-way stop signs.
 - A high-accident location caused by sight-distance problems was mitigated by the installation of a traffic signal at the Town's expense (one of five Town-owned signals) at the Ridge Street/Granite Springs Road intersection.

Traffic Calming

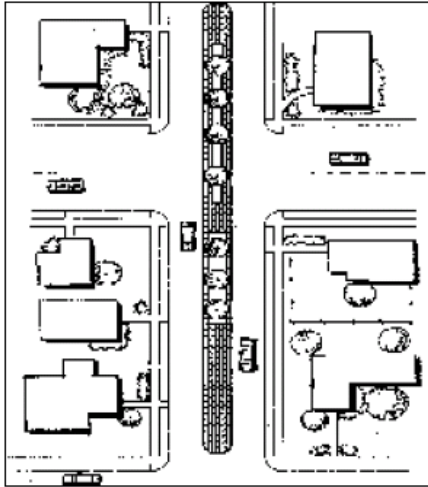
- According to Yorktown's Traffic Safety Officer, speeding is a problem on many residential streets. Examples include Allan, Baldwin, Gomer, Hallock's Mill, London, Mohansic, Ridge, and Stony.
- Many local residential streets are wider than necessary. Yorktown's subdivision standards call for very wide streets for the purpose of accommodating emergency vehicle access and high vehicular volumes. However, because actual traffic volumes on local streets are low, the excessive width only encourages high travel speeds. Examples include Curry, Gomer, Quinlan, and London between Quinlan and Gomer.

- Many Task Force participants said that vehicles (autos, trucks, and buses) have been using residential streets as bypass roads and said they felt concerned about excessive vehicle speeds near schools (e.g., Copper Beech School) and along narrow and winding roads (e.g., Crow Hill Road and Hanover Street.)
- The Town has been working to reduce traffic volumes and speeds on local streets and near schools. Examples:
 - The Town is currently planning to install a permanent variable speed sign along Route 132 near the Copper Beech School to reduce the speed limit during school hours.
 - The Town has a mobile speed trailer board that is used to enforce local speed limits and measure spot speeds.
 - The Town has recently installed centerline rumble strips on narrow, winding roads (e.g., Crow Hill Road) in order to keep motorists from driving over the centerline at sharp curves. There are evidently some concerns about the noise from such strips.
 - The Town initiated a test case for speed humps on Allan Avenue in 2003 to slow speeds. There are community concerns about the effectiveness and impacts of speed humps.
- The traffic-calming "toolbox" includes the following. (See Figure 3-7: *Sample Traffic Calming Measures.*)
 - Stop signs and traffic signals.
 - Notice to drivers in the form of signs, pavement markings, lights and other features in and along the street; for instance, signs alerting drivers to bike lanes, pedestrian crossings, radar-checked speed zones, etc.
 - On-street parking, thick landscaping, and "street furniture" such as benches and light poles which reduce "optical width" and create a buffer between pedestrians and passing automobiles.
 - Offset street alignments, in which connections are made but only through a circuitous route that discourages through-traffic.
 - Traffic circles or rotaries, which work best when there are cross streets with fairly equal and moderate levels of traffic. Also "roundabouts," which are very small traffic rotaries or circles, which are suited to local and residential streets.
 - "Neck downs" ("pinch points" and "chokers"), where build-outs are provided on both sides of a street, to reduce optical width or to allow only one-way travel.
 - Speed humps to make driving fast uncomfortable. Note that the more gradual speed *humps* pose significantly less problems in terms of snow clearance, trucks and noise than traditional speed *bumps*. Humps have a gradual rise on their leading and trailing edges, so that they can be easily negotiated by street sweepers, buses, snowplows, fire trucks, and ambulances. This not true of more conventional speed bumps, which have a nearly perpendicular angle to the underlying roadway.

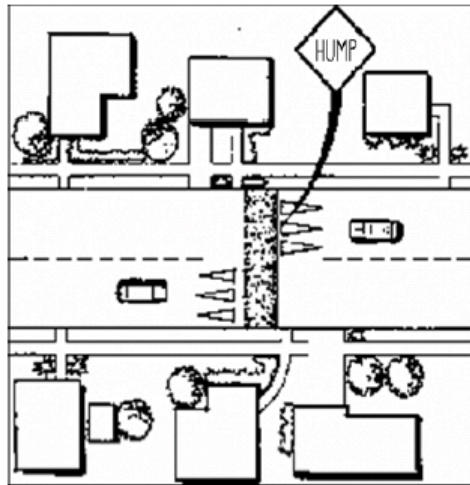
- Rumble strips, to produce vibration in vehicles passing over the strip. Note, however, that noise from rumble strips may impact adjacent residences.

Figure 3-7: Sample Traffic Calming Measures

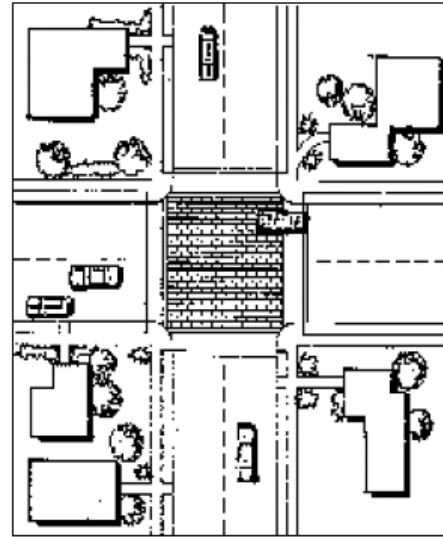
MEDIAN DIVERTER



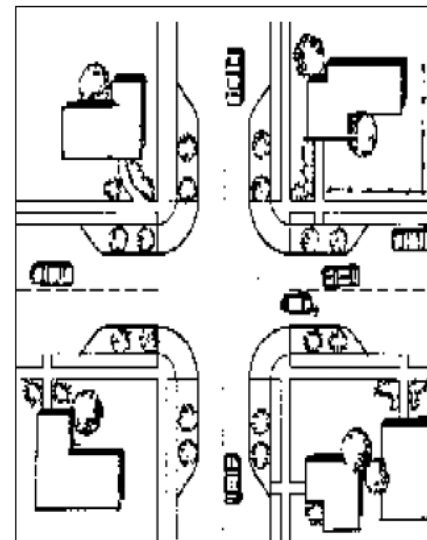
SPEED HUMPS



RAISED INTERSECTIONS



CURB EXTENSIONS



Pedestrians

- Walking is important in the hamlet business centers, as well as around schools, places of worship, and other centers of community life. In the hamlet centers, walking reduces the need for parking, contributes to the area's street life and vitality, and provides business opportunities for sidewalk-fronting shops and restaurants.
- Walking is also a popular form of recreation, which provides health benefits. The North County Trailway is a popular place for walking. The Braircliff-Peekskill Trail runs through the southwestern part of Yorktown. Also, there are walking and hiking trails in the Teatown Lake Reservation, Sylvan Glen, Turkey Mountain, and the Kitchawan Preserve. See Chapter 9 for a more detailed discussion.
- Task Force participants expressed support for pedestrian amenities in the hamlet centers and near public schools, libraries, and other community gathering places.
- Condition of sidewalks in the hamlet centers:
 - Most streets in the Shrub Oak and Yorktown Heights hamlet centers have paved sidewalks, which are in relatively good condition. In Shrub Oak, new sidewalks have recently been constructed along East Main Street between Route 6 and New Road, using grant funding.
 - In the Mohegan Lake hamlet, the sidewalks in some areas have become deteriorated. Parts of the Route 6 frontage in Mohegan Lake and most of the Route 202 frontage in Crompond lack sidewalks altogether.
 - In Jefferson Valley, there are well-maintained sidewalks along parts of Hill Boulevard but there are gaps in the sidewalk network elsewhere. There are plans to install sidewalks along East Main Street just east of Hill Boulevard.
- According to the Comprehensive Plan surveys, nearly 82 percent of respondents said that their neighborhoods lack sidewalks. Of those who do have sidewalks, more than half said that their sidewalks were in either excellent or good condition, and slightly less than half said that their sidewalks were in only fair condition.
- Many hamlet centers are centered on high-volume intersections. Channelized right-turn lanes increase traffic capacity but diminish the ease and safety of pedestrian crossings. An attempt has been made to increase pedestrian safety with high visibility pavement markings, brick pavers, and mid-roadway "yield to pedestrian" signs.

Bicycling

- Bicycling, like walking, has multiple benefits. In addition to serving as an alternative to the automobile, it provides recreational and health benefits and is especially popular with youth and teenagers who otherwise would have to be chauffeured by parents.
- Existing Town bicycling amenities:
 - The North County Trailway passes through the southeastern portion of Yorktown. The Trailway is well-maintained and popular among residents.
 - There are plans, at present, to connect this bike trail to FDR Park.
- There is a proposal to create a bike lane or path through FDR Park, running north along Strang Boulevard, crossing the Taconic on a new pedestrian/bike bridge, and providing a connection to Mohegan Lake via Scofield Road and Mohegan Avenue. This also would provide a connection to Route 6, a proposed future bike route, according to the State Department of Transportation (DOT.)¹
- Since there is only one off-street bike path currently in Yorktown, most cyclists ride on public streets, where they share the roadway with cars.
 - Local residential streets are typically good for biking. .
 - On major streets like Route 202, the combination of narrow shoulders, high traffic speeds, and heavy congestion make biking unsafe, uncomfortable, and inconvenient. Intersections can be particularly difficult to negotiate on a bike.
 - Providing additional bike lanes, routes, and paths would increase biking opportunities, promote more safe conditions, and provide a greater outlet for local biking interest.
- Some Task Force participants expressed support for establishing long-distance bicycle routes and connecting existing parks and open spaces with bicycling/walking trails.
- According to the NYSDOT *Highway Design Manual*, the establishment of a signed bicycle route is based on the following criteria:
 - The municipality with jurisdiction for each bicycle route segment has mapped the route as part of a comprehensive bicycle plan.
 - The route provides through and direct travel in bicycle-demand corridors.
 - Surface imperfections have been corrected, e.g., adjusting utility covers and installing bicycle safe drainage grates.

¹ New York State Department of Transportation, *Hudson Valley Trailways and Maps*, www.dot.state.ny.us/reg/r8/bikes/hudsbt_map.html, visited March 21, 2003.

- The route will be periodically maintained, dealing with the accumulation of dirt, broken glass and other debris at the sides of the road.
- The lane and/or shoulder widths along the bicycle route are consistent with specified guidelines.

Transit

- Although Yorktown itself does not have any train stations, many residents use trains for commuting purposes on a daily basis. Area train stations used by Yorktown residents include, in order of popularity according to the Comprehensive Plan surveys, Croton-Harmon or Ossining, White Plains or North White Plains, Peekskill or Cortlandt, Golden's Bridge or Katonah, Bedford Hills or Mt. Kisco.
- Participants during the Task Force SWOT session indicated that not enough non-resident parking is available at train stations, and that there is not enough connecting bus service to the stations.
- Buses are primarily used by commuters going to the train station, but also by employees working in Yorktown (e.g., at the Jefferson Valley Mall) and local residents.
- The Westchester County Bee-Line Bus System provides plastic bus shelters for free at the request of the Town. Some bus stops do not provide adequate room for waiting patrons, resulting in unsafe conditions.
- Yorktown provides four park-n-ride locations: at Town Hall, next to Downing Park, in FDR Park, and an on-street parking area in front of the Par-3 golf east just east of the Taconic State Parkway off Route 6. Of the four locations, the Town Hall park-n-ride is the most heavily used (approximately 30 to 40 cars per day.)
- Yorktown provides jitney service for senior citizens. It operates by appointment and is primarily used for medical-related trips.

Yorktown Heights Hamlet Center

Vehicular Access and Circulation

- Yorktown Heights is centrally located in terms of the Town's internal geography, but it is off-center in terms of commuters and others using the Taconic State Parkway. The Heights draws clientele from a wider area, so it is essential that it remain an easy and convenient place to get to.

- Yorktown Heights is well-served by a network of roads that disperses traffic to and within the hamlet center. A radial street pattern meets in Yorktown Heights at a series of locations, tied together by a loop system consisting of Route 118, Commerce Street, and Underhill Avenue, unified by a grid-like street pattern.
- The one notable exception is the Route 202/Route 118/Commerce Street intersection (a.k.a., the "Triangle intersection" due to the proximity of the Triangle Shopping Center.) Both by objective measures and by all accounts, this is one of the most congested intersections in the town.

Parking

- Yorktown Heights, thanks to urban renewal and new development, has ample parking facilities, in aggregate. While most businesses have the right amount of parking, some do not, and many have a surplus. Problematically, people drive from store to store, rather than walking. This increases the amount of parking needed, and adds to local congestion.
- The parking lots were designed in response to idiosyncratic site conditions. As such, they are not always efficiently laid out. Parking lot consolidations would yield an equal or greater amount of parking, even after accounting for more landscaping.

Pedestrians, Bicyclists, Transit

- Much of the original pedestrian-oriented fabric of Yorktown Heights was removed in connection with urban renewal projects during the 1960's. Yet the scale and intensity of development could still allow pedestrian circulation. The entire hamlet center is encompassed within a half-mile radius from the Downing-Veterans intersection.
- Sidewalk conditions include the following:
 - Most of Yorktown Heights has paved sidewalks, in relatively good condition.
 - An attempt has been made to make them attractive with decorative plantings, e.g., the plantings and brick border along the sidewalk across from the YCCC.
 - The brick pavers and painted crosswalks on Downing Street are fairly narrow and are not highly visible.
 - The pavers across Commerce Street and Underhill Avenue at the North County Trailway Bike and Pedestrian Path are wider and more visible.
- At the Triangle intersection, channelized right turns increase traffic capacity but make the pedestrian crossing unsafe. There is only one pedestrian crosswalk near the intersection, located about 100 feet east of the intersection with no signals. Motorists typically expect pedestrians at the intersection and not before it, which makes this crossing dangerous. The Triangle intersection is, simply, a mess for pedestrians.

- Overly wide streets in the hamlet center (e.g., Commerce Street and Downing Street) encourage speeding and the doubling-up of cars at intersections. Street widths could be narrowed to provide wider sidewalks and safer crosswalks or to "green" the streets with attractive plantings separating pedestrians from vehicles. Alternatively, on-street parking could be permitted on one or both sides of the street.
- The North County Trailway passes right through the center of Yorktown Heights, using the former railroad right-of-way. A trailway connection from Railroad Station Park to FDR Park is being planned.
- Several County bus routes pass through Yorktown Heights. The Town's most popular park-n-ride facility is next to Town Hall, with 30 to 40 users per weekday.