Route 32 Linkage Study

Conceptual Plan Development & Transportation Analysis

Final Report—January 2011
For the Village of Menands, Town of Colonie, City of Watervliet and Capital District Transportation Committee
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Acknowledgements

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Description of the Project

Previously known as the Albany-Watervliet Turnpike, the present day New York State Route 32 was built in 1828 by the Watervliet Turnpike Company from the northern boundary of Albany north to the northern limit of Gibbonsville (now Broadway and 15th Street in Watervliet). Over the years Route 32 has provided access to shopping, entertainment/recreation, employment and homes. Today it still serves as an important transportation route for area residents living in the Port Schuyler neighborhood in Watervliet and in the Town of Colonie as well as for employees of the Watervliet Arsenal and other businesses located along the corridor and consumers of these businesses. The Watervliet Arsenal is still a major employer for the City of Watervliet employing approximately 600 people. Additionally, the Enhanced Use Lease (EUL) granted to the Arsenal Business and Technology Partnership at the Watervliet Arsenal will potentially allow development of approximately 63 acres of underutilized land by private companies. Key objectives of the development plan of the Partnership include adding 550,000 square feet of building space for manufacturing, office, research and development and high-tech companies; creating 1,000 new private-sector jobs and providing more opportunities for public-private business partnerships.

Route 32 connects the Village of Menands, Town of Colonie and City of Watervliet to I-787 and the greater Capital District. During rush hour, Route 32 is very well travelled and if there is any back up on I-787 due to an accident, etc, Route 32 is utilized causing major traffic jams on this local road. Because Route 32 serves as a vital roadway to Menands, Colonie and Watervliet, the three municipalities came together to develop a plan that would best serve their communities in achieving a corridor that would allow for mixed-use, mixed-income, transit-oriented and pedestrian friendly development.

The Route 32 Corridor includes Broadway in the Village of Menands and Town of Colonie and Third Avenue in the City of Watervliet. The Corridor runs 1.4 miles from the Route 378 interchange in Menands to the south gate of the Watervliet Arsenal in the City of Watervliet. Traveling north along Route 32, the road transitions from a relatively high speed five lane highway to an urban street with two travel lanes and two parking lanes at the Watervliet City line. Land adjacent to the west side of Route 32 in the Village of Menands and Town of Colonie is underutilized. The Watervliet section of the corridor is a typical city street with mixed residential and small business uses, though current planning and employment trends envision a renaissance for this area. The portion of Route 32 in Watervliet is maintained by the City, while the portions of Route 32 located in the Town of Colonie and Village of Menands come under New York State of Transportation jurisdiction. There are split lots on the Watervliet/Colonie border east of Route 32 which present a development/redevelopment challenge. Inconsistent zoning and the lack of site and building design standards across the three municipalities also pose a private sector development challenge.

The City of Watervliet identified the Port Schuyler section of Route 32 as its focus for the Microenterprise and Facade Improvements elements of a 2008 CDBG Comprehensive Grant. Rehabilitation of buildings along the street could bring increased development interest to the area. In addition, employment at the Watervliet Arsenal is expected to increase. The recommendations that follow identify improvements to the transportation system; address the redevelopment potential for specific sites, properties and buildings within the corridor; suggest appropriate uses especially business/residential development that are consistent with the plan; identify the zoning changes necessary within the municipalities and corridor wide and identify appropriate site access, streetscape and bicycle/pedestrian accommodations. See Appendix A for the Route 32 Corridor
Existing Conditions Report. A glossary containing terms used in this study can be found in Appendix B.

The resulting report describes existing land use and transportation conditions for the overall Route 32 Corridor as well as for each municipality. Recommendations for the entire corridor as well as each subsection are provided as well.

I. Collaboration/Partnerships

A Shared Vision

This planning project represents a collaborative effort by the City of Watervliet, Town of Colonie and Village of Menands to work together and identify a common vision for Route 32. In addition to the three municipalities, the recommendations represent the input from residents, business owners and major property owners like the Watervliet Arsenal. The plan also relies on technical assistance provided by the Capital District Transportation Committee (CDTC), Capital District Transportation Authority (CDTA) and the New York State Department of Transportation (NYSDOT). The consensus built among the partners will speed implementation and coordination of efforts.

The recommendations dovetail with local planning efforts and the New Visions Plan for the Capital District prepared by CDTC and build upon the strong success of the streetscape enhancements implemented by the Village of Menands along Route 32 south of the 378 interchange and the design and development recommendations emerging from the City of Watervliet’s ongoing comprehensive plan process.

II. Approach

The goal of the planning process is to identify future transportation and land use treatments that respect and strengthen the residential neighborhoods, encourage appropriate development and redevelopment (including expansion at the Arsenal) and provide for a safe and convenient corridor for walkers, cyclists and transit users as well as motorists.

This study examines both land use and transportation issues. Land use strengths include having a diverse mix of land uses, important historical and recreational sites, and property that can be developed, redeveloped or adaptively reused. Land use weaknesses include the location of part of the area in the 100 year flood plain, flooding and stormwater management issues, strong automobile orientation in the southern end of the area in the Village of Menands, no cohesive design standards and a lack of density to support pedestrian activity. Transportation strengths include its sufficient roadway capacity to support development and its active transit corridor that is under future consideration for enhanced service (Bus Rapid Transit or BRT). Transportation weaknesses identified along the corridor including a history of crashes (most commonly right angle, overtaking and fixed objects collisions), high travel speeds (despite being posted for a maximum speed of 30 mph) and poor walking and biking conditions.
III. Goals

Based on the feedback received at the public workshops and from the Study Advisory Committee, the goals for the Route 32 Corridor Plan include:

A. Complete Streets
   
   A Complete Streets network “designed and operated so it is safe, comfortable, and convenient for all users – pedestrians, bicyclists, motorists and transit riders of all ages and abilities.” See Appendix C for a sample Complete Streets resolution.

B. Safe Travel Speeds
   
   A road designed for 25 to 30 mph, consistent with posted speed limits and efforts to calm traffic to support safe and efficient travel for all modes.

C. Pedestrian Friendly
   
   A street network that is pedestrian friendly with full sidewalks, crosswalks, ADA compliant curb drops and signal systems, pedestrian-scale lighting, and access management to control frequency and width of driveways.

D. Bicycle Friendly
   
   A street network that is bicycle friendly with bicycle lanes/shoulders, shared lanes, bikeway signage and bicycle parking.

E. Transit Oriented
   
   Enhanced transit service and amenities with opportunity in support of possible future Bus Rapid Transit service.

F. New Development/Redevelopment
   
   Opportunities for new developments that support local economic development initiatives and transit investments (transit-oriented development).

G. Streetscapes
   
   Enhanced streetscapes with attractive landscaping, multi-municipal design guidelines to encourage high-quality sites and building features, pedestrian-scale street lighting, signage, and other amenities.

H. Stormwater Management
   
   Improved stormwater management, specifically coordinating future efforts to address flooding within the corridor with roadway enhancements.
I. Connections

Future roadway connections should be provided to support local and regional economic development initiatives, particularly to provide alternative access for heavy vehicles.

IV. Public Involvement

The planning process has been overseen by a project Study Advisory Committee. The role of the Study Advisory Committee has been to guide and lead the planning process; collect and share relevant information; review documents; supervise the consultant team; and conduct community outreach and publicity. Two community workshops were held at the Watervliet Elks Club. The first workshop was held on May 11, 2010 and provided participants with an overview of the Corridor Study, a summary of existing land use and transportation conditions, and presented some initial recommendations. The second community workshop, held July 13, 2010, presented more formalized recommendations based on feedback received at the first workshop and from the Study Advisory Committee. This workshop had small group discussions to obtain additional feedback. Comments from each workshop can be found in Appendix D.

V. The Corridor as a Whole: Conditions and Recommendations

A. Land Use Conditions

The Route 32 Corridor includes three municipalities. The Village of Menands comprises the southern end of the study area and the primary land use along Broadway/Route 32 is commercial. The Town of Colonie’s portion of the Broadway/Route 32 Corridor is a mix of land uses (residential, recreational and commercial). The portion of the Third Avenue/Route 32 Corridor that is located in the City of Watervliet is an intact urban neighborhood. There is a mix of residential and small businesses along this section of the corridor. A map showing the study area boundary and conditions follows and can be found at a larger scale in Appendix E.
B. Transportation Conditions

The Route 32 roadway is classified as a minor urban arterial with average annual daily traffic (AADT) based counts ranging from 9,900 vehicles in the northern half of the study area in Watervliet to 14,800 vehicles in Colonie and Menands. Estimates of peak hour traffic on Route 32 based on 2002 count data range from 990 vehicles in Watervliet to 1,436 peak hour vehicles in the southern half of the corridor. Traffic volume estimates from 2008 indicate peak hour traffic in the southern part of the corridor ranging from 1,499 trips in the AM peak to 1,976 PM peak hour trips\(^1\). According to NYSDOT’s Traffic Volume Report, traffic volumes along Route 32 in the study area have increased. In 2010 it is estimated that AADT based counts ranged from 10,160 in the northern part of the study area in Watervliet to 21,530 vehicles in Colonie and Menands. Truck traffic is moderate along the corridor, accounting for approximately 7% of all trips.

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\(^1\) Estimates of 2008 peak hour traffic at the Broadway/British American signal by CME (See “Transportation Access & Land Use Improvement Study”) were 1,499 total peak hour trips in the AM peak and 1,976 PM peak hour trips. A full copy of the study can be found at [http://www.cdtcmpo.org/linkage/ny32menands.pdf](http://www.cdtcmpo.org/linkage/ny32menands.pdf)
much of the corridor given its frequent curb cuts, sections of frontage without formalized curbing, and lack of demarcation of the pedestrian realm across driveways. Despite what appear to be significant differences in motorists’ travel speeds throughout the study area, all of Route 32 within the study area is posted with a 30 mile per hour speed limit.

Pedestrian and bicyclist accommodations also vary throughout the corridor. Sidewalks are not continuous, with a significant gap in Menands and Colonie along the eastern side of the roadway, as well as smaller gaps along the western side of Broadway. Where sidewalks do exist, their width and condition vary. In addition, pedestrian crossing treatments are essentially limited to crosswalks, some of which are faded with limited visibility. Pedestrian push buttons are in place at most signalized intersections; however, pedestrian signal heads are not uniformly provided. ADA curb drops, while present in some fashion at the study area’s controlled intersections, do not meet current design standards and are rarely in place at uncontrolled crossings. While Route 32 is designated as State Bike Route #9, there are few, if any, accommodations for bicyclists. Exceptions include bicycle racks on CDTA busses and a bicycle rack at the parking area along the Hudson River where the Mohawk-Hudson Trail is accessed in Watervliet.

Route 32 is an active transit corridor with CDTA’s Route #22 traversing the study area to provide service between Albany and Troy. Bus Route #22 is one of CDTA’s busiest routes with approximately 230 daily boardings within the study area. Route 22 is under consideration for future BRT service, which presents transit-oriented design redevelopment opportunities in the future.

An analysis of all crashes that have occurred within the study area from June 30, 2004 through the first half of 2009 reveals a total of 228 crashes, including 23 that occurred on or near the Route 378 ramps at the southern edge of the study area. Of the total 228 crashes, 62 occurred directly on or adjacent to Route 32. The most common crash type was a right angle crash, accounting for 15 percent of all crashes, followed by crashes resulting from attempted passing and/or overtaking at 13 percent. Collisions with fixed objects, including guiderails, sign posts, utility poles and hydrants accounted for 12 percent of the recorded crashes. Rear-end collisions accounted for ten percent, while crashes involving left-turning vehicles accounted for approximately five percent of the study area’s crashes. Weather may have played a role in 23 percent of the crashes within the study area, with an equal split between snow/ice and wet conditions. Light conditions may have been a contributing factor in 11 percent of all crashes, including dark, unlit sections of road, as well as those crashes that occurred at dawn or dusk.

C. Corridor-Wide Recommendations

In addition to providing specific land use and transportation recommendations for each municipality (see below), the study identifies a number of recommendations for the entire Route 32 Corridor Study area. These recommendations are described as follows:

1. Inter-municipal zoning overlay district for Route 32: The Route 32 Corridor spans three municipalities, with each municipality having its own land use regulations. As mentioned above, split lots on the Watervliet/Colonie border east of Route 32 present a development/redevelopment challenge. Inconsistent zoning among the three municipalities also poses a private sector development challenge. Adoption of an inter-municipal zoning overlay district would be helpful. It would apply additional regulations to the underlying
zoning regulations in order to protect certain features or to encourage a particular type of development.

2. **Uniform design guidelines for commercial development:** Uniform design guidelines for commercial, multi-family and mixed-use development along the entire length of the study area are recommended. Design guidelines offer designers and developers flexibility in meeting the requirements of municipal land use regulations, while designing high quality new buildings and landscapes. The guidelines are tools which:

   i. Give the community a chance to plan for development versus reacting to development pressure.

   ii. Encourage more sensitive design while recognizing market and site realities.

   iii. Help developers visualize how their projects can work toward municipal goals.

   iv. Coordinate projects so they help each other succeed.

   v. Respond to retail franchises and chains.

   vi. Protect and enhance a municipality’s unique character.

   vii. Provide guidance and flexibility to municipal boards.

Design guidelines can address landscaping, lighting, signage, building setbacks, building entries, sidewalks, driveways, parking, facades, roofs, and windows, among other features. Currently the Village of Menands has existing design guidelines in place.

3. **Streetscape Enhancements:** Pedestrian and bicyclist accommodations vary throughout the Route 32 corridor. Sidewalks are not continuous, with a significant gap in Menands and Colonie along the eastern side of the roadway, as well as smaller gaps along the western side of Broadway. There are also sections of dark, unlit road. Streetscape enhancements improve the quality of the pedestrian realm, which has been shown to increase walking. Recommendations for streetscape enhancements along the corridor include:

   i. Extend decorative street lighting north from the center of the Village of Menands, along with street trees/planting strip and full sidewalks.

   ii. Within proposed development nodes in Menands/Colonie, add pedestrian-oriented and scaled lamps to better light existing and future sidewalks and CDTA bus facilities. Work with property owners to incorporate additional landscaping along access drives and sidewalk linkages from the Route 32 frontage into site interiors. The Town and Village will address the maintenance of sidewalks. The design of sidewalk widths and parking lot will accommodate snow storage.

   iii. In Watervliet, incorporate pedestrian street lamps in key locations such as between 6th and 7th Streets where commercial businesses are clustered, and have a consistent build-to line along 3rd Avenue.
4. **Bicycle/Trail Connections and bicycle parking standards:** The Mohawk-Hudson Bike-Hike Trail is an extensive trail that is approximately 42 miles long and generally runs along the Hudson and Mohawk Rivers. The trail runs through the Village of Menands, Town of Colonie and City of Watervliet and actually connects to the Schuyler Flatts Cultural Park, which also has walking and multi-use paths within the site. There are no specific accommodations for cyclists within the City of Watervliet with the exception of bicycle parking at the parking lot at the terminus of 4th Street along the Hudson River. While the on-street parking lanes along 3rd Avenue could provide some road space for cyclists when not in heavy use, the ‘door zone’ created by parked vehicles results in potential conflicts. Nonetheless, Route 32 in Watervliet is a potentially important connection for cyclists accessing Schuyler Flatts and the Mohawk Hudson Rail Trail. Recommendations for bike/trail connections and bicycle parking standards include:

i. Future extension of Mohawk Hudson Bike Hike Trail to the north to connect the rest of the City of Watervliet with the Hudson River waterfront and this multi-use trail.

ii. Future extension of multi-use trail in Schuyler Flatts south along the I-378 ramps to the southern end of the study area.

iii. Future bike route designation recommended for 4th Street in the City of Watervliet west across 3rd Avenue to 8th Avenue. Also recommend one additional cross street be designated as a bike route (and ultimately striped with bike lanes if sufficient roadway width exists). This street should be either 6th or 7th Street from 8th Avenue to Broadway.

iv. Add convenient bicycle parking both within the City of Watervliet and in commercial clusters in Menands and Colonie. It is also recommended that all three communities adopt bicycle parking requirements as part of required off-street parking. Recommend working with business community and non-profits to possibly fund bicycle parking. See Appendix F for information on the CDTC/CDTA’s Bike Rack Program.

5. **Drainage Improvements:** Evidence of drainage problems was observed during site visits and flooding problems have been previously documented between Cemetery Avenue and the Burger King and are currently under review by Menands, Colonie, and property owners. Recommendations include:

i. Future curbing and roadway improvements should be coordinated with any drainage solutions developed along the corridor.

6. **Pedestrian Access/ADA enhancements:** Within the Route 32 Corridor, there are limited sidewalks in Menands and Colonie and, where sidewalks do exist (mostly in the City of Watervliet), their width and condition vary. Pedestrian crossing treatments are essentially limited to crosswalks, some of which are faded with limited visibility. ADA curb drops, while present in some fashion at the study area’s controlled intersections, do not meet current design standards and are rarely in place at uncontrolled crossings. Recommended pedestrian access/ADA enhancements include:

i. Restriping of crosswalks

ii. Installation of ADA curb ramps
iii. Installation of pedestrian push buttons at intersections

7. **Access management standards to improve traffic flow:** As discussed extensively in the Existing Conditions Report found in Appendix A, access management is a challenge along much of the corridor with frequent curb cuts, sections of frontage without formalized curbing, and lack of demarcation of the pedestrian realm across driveways. Development of access management standards provides many benefits including fewer vehicle conflicts, reduced crashes, and improved movement of through traffic. Access management standards for the Route 32 Corridor will focus on:

i. Location, spacing and design of driveways.

ii. Future inclusion of curbing as a long-term recommendation as Route 32 is upgraded.

iii. Design standards that require planting strips to be maintained between the cartway/curbing (The cartway is the curb to curb pavement width of the road) and front yards of properties with frontage on Route 32.

iv. Combining and aligning driveways at key locations, including Price Chopper Plaza and the future development site to its south, and aligning this combined access drive with future interchange improvements as recommended in the Village of Menands Transportation Access and Land Improvement Study Broadway (NY Route 32).

8. **Local safety campaign to improve awareness and safety for motorists as well as cyclists and pedestrians:** Participants at the community workshops and Study Advisory Committee members commented on the current conditions for pedestrians and cyclists along the Route 32 Corridor. Most agreed that even for the experienced bicyclist the corridor presents challenges. Participants also commented on speeding and poor driving behaviors as a threat to pedestrians. Accident data confirms that motorists are attempting to pass other motorists, even within Watervliet where the corridor is one lane in each direction. See Appendix G for crash statistics. Educational outreach should be considered to address these concerns, including programs to address speeding and driver inattention, an educational program for cyclists to offer training for those newer to cycling with traffic, as well as outreach to motorists so they understand the rights of pedestrians and their obligation to share the road with cyclists. In addition, the use of portable speed trailers and other devices should be used in conjunction with educational outreach and enforcement efforts.

D. **Relationship To The Route 378 Interchange Possible Improvements**

The Route 378 interchange represents the southern boundary of the corridor study area in the Village of Menands. The traffic volumes in this location are the highest in the study area at 14,800 annual average vehicles per day and 1,436 estimated peak hour trips. An analysis of the LOS (level of service) of the Broadway (Route 32)/Route 378 signalized intersection undertaken in 2008 indicates that the
intersection operates at an acceptable level of service and has adequate roadway capacity. This interchange was previously studied in the Village of Menands Transportation Access and Land Improvement Study completed in September 2008. A number of options were evaluated and the strongest recommendations were for the construction of a roundabout at the Route 378/32 interchange, alignment of driveways at Price Chopper Plaza and the adjacent parcel, and four lane cross section (with center turn lane) with sidewalks on both sides of Route 32 and bike lanes.

E. Redevelopment Opportunities/Catalysts

Three potential development nodes or redevelopment opportunities/catalyst projects have been identified for the study area: Menands Diner Development Node, Colonie/Menands Development Node, and the Watervliet Gateway Development Node. Each is discussed in further detail below. In addition to the illustrations shown below, Appendix H contains larger size images for reference.

VI. Introduction to Each Sub-Section

For purpose of this analysis, the study area has been divided into three sections:

A. Menands to Colonie

In Menands, the Broadway/Route 32 Corridor includes the Village of Menands from the Route 378 interchange to the Town of Colonie line.

B. Colonie to Watervliet

In Colonie, the Broadway/Route 32 Corridor includes the Town of Colonie from the Village of Menands line to First Street (City of Watervliet line).

C. Watervliet

In Watervliet, the Third Avenue/Route 32 Corridor includes the City of Watervliet from First Street to the south gate of the Arsenal.

For each section, a description of the land use and transportation conditions is provided as well as specific recommendations. Additionally, there are two images shown. The first image shows an aerial map of the municipality. The second is an overall concept map that shows the recommendations graphically.

See Appendix E for larger image of the Study Area Boundary map and Appendix H for larger images of the Future Recommendations Map by Sub-Area.
VII. Description of Menands to Colonie Subsection

A. Existing Land Use Conditions

The Village of Menands comprises the southern end of the study area. The primary land use along Route 32 is commercial. Businesses located along the western side include Price Chopper, Rite Aid, New York State Department of Corrections, Cryo Weld, Albany Steel, Peter Mason Insurance, Burger King, and Blasch Precision Ceramics. Just south of the Price Chopper Plaza (across the 378 exit ramp) is a vacant lot that is available for sale/lease. The entrance to St. Agnes Cemetery and Albany Rural Cemetery, also located on the western side, just north of the Price Chopper Plaza is the only community service use.
The Price Chopper Plaza is listed for sale (3.7 acres and 56,180 SF of gross leasable area). Businesses located in the Plaza include Price Chopper Supermarket, Rite Aid Drug Store, Save More Wines & Liquor and Homemart Party Store. There is one vacant retail space.

Bank of America (located at the eastern end of the Menands Shopping Center - former Two Guys building), Menands Diner (vacant, for lease/sale), Guaranteed Auto Credit, Menands Water Supply, Schuyler Inn, Getty Gas Station, Village One Apartments are the uses located on the eastern side of Route 32. There is approximately 36,569 square feet of retail space available at the Menands Shopping Center.

B. Existing Transportation Conditions

The southern end of the corridor study area is located within the Village of Menands at the Route 378 interchange area. The traffic volumes in this location are the highest in the study area at 14,800 annual average vehicles per day and 1,436 estimated peak hour trips. An analysis of the LOS (level of service) of the Broadway/Route 378 signalized intersection undertaken in 2008 indicates that the intersection operates at an acceptable level of service and has adequate roadway capacity. Appendix G contains information about traffic volumes.

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<tr>
<th>Transportation Summary</th>
<th>Route 32 Corridor – Village of Menands</th>
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<tr>
<td>Pavement Width</td>
<td>Vary from 45’ to over 70 feet with 50 to 53 feet common and 10’ wide travel lanes.</td>
</tr>
<tr>
<td>Travel Lanes</td>
<td>4</td>
</tr>
<tr>
<td>Posted Speed Limits</td>
<td>30 MPH</td>
</tr>
<tr>
<td>Traffic Volumes</td>
<td>21,530 vehicles in Colonie and Menands.</td>
</tr>
<tr>
<td>Sidewalks</td>
<td>4’ to 6’ sidewalk along much of the west side of Route 32; no sidewalk on the east side</td>
</tr>
<tr>
<td>On-Street Parking</td>
<td>No</td>
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In addition to the Route 378 signalized intersection, traffic signals are located at British American Boulevard (privately owned but maintained by NYSDOT). There are also numerous unsignalized intersections and driveways along the corridor. Access management is a challenge due to sections of Broadway without cubing within the Village, as well as the frequency, width, and proximity of access drives. Of particular concern is access to the Price Chopper Plaza development as well as the vacant parcel to its south given their proximity to the Route 378 ramps and associated traffic controls. This area was studied extensively in the “Transportation Access & Land Use Improvement Study” of September 2008 (see Existing Conditions report for a summary of this study’s findings). A full copy of the study can be found at [http://www.cdtcmpo.org/linkage/ny32menands.pdf](http://www.cdtcmpo.org/linkage/ny32menands.pdf).

The Broadway corridor in Menands is primarily a four-lane roadway with little or no shoulders and no on-street parking. The road section expands to incorporate dedicated, northbound right-turn lanes in two locations, north of the Price Chopper Plaza and at Cemetery Avenue. Current roadway pavement widths vary from 45’ in front of Cryo Weld/Albany Steel to over 70 feet at the widest point (where dedicated right-turn lanes have been added) with 50 to 53 feet common and 10’ wide travel lanes. The posted speed limit is 30 mph in the Village. Evidence of drainage problems was observed during site visits and flooding problems have been previously documented between Cemetery Avenue and the Burger King.
Poor drainage combined with winter clearing activities results in limited pedestrian accessibility and very poor accessibility for disabled persons. Roadway lighting consists of cobra head lights on both sides of the corridor. Utility poles are located primarily along the eastern side of Broadway.

A four to six-foot wide sidewalk is in place along much of the west side of the roadway; however, there is no sidewalk on the east side of Broadway. Furthermore, the lack of sidewalks along the eastern side of Broadway, in addition to sections of roadway without curbing, results in challenging conditions for pedestrian traffic. These conditions are especially evident along the frontage of the Menands Diner and Guaranteed Auto Credit (used auto sales). Where sidewalks are in place along the western side of the corridor, there is generally no demarcation of the pedestrian realm across access drives and/or parking areas.

Several busy CDTA (Bus Route 22) stops are located in Menands, including those at the Price Chopper Plaza, British American Boulevard, the Menands Diner, and Village One Apartments. Bus shelters are located at the northern end of the Price Chopper Plaza and the Menands Diner. Furthermore, both transit usage and land use patterns indicate a demand for pedestrian flows across Broadway in the Village. However, not all bus stops and shelters are fully accessible by sidewalks, nor are they uniformly located at crosswalks or pedestrian signal heads.

A total of 96 crashes occurred within the study area in the Village of Menands during the five year period analyzed (July 2004 through June 2009). While almost one quarter of these crashes resulted in injuries, there were no fatalities. Approximately a quarter of these accidents occurred on or near the Route 378 ramps on the edge or slightly outside of the boundaries of the study area. The remainder of the crashes occurred on Route 32 or on side streets and access drives serving the corridor. Of the 96 total crashes, five involved pedestrians and one involved a cyclist. Motorists hitting fixed objects was the most common crash type with one fourth of the crashes involving motorists colliding with guide rail (common along the Route 378 ramps), trees, signs, and utility posts. Right angle crashes were the next most common accident, accounting for almost 17% of all crashes. It should be noted that all of the right angle crashes occurred at mid-block locations, which is common along corridors with many uncontrolled access points. A total of just over ten percent of the crashes involved motorists attempting to pass other motorists, while just over six percent were rear-end collisions, and four percent right turn crashes. Appendix G contains crash information.

C. Recommendations

1. General

Parcels in the Village of Menands portion of the Route 32 Corridor are zoned Business and Light Industrial. There are four potential redevelopment sites along the Broadway/Route 32 Corridor within this section. All of these sites are located in the B-Business District. Permitted uses by right in the Business District that would be appropriate for these sites and fit in with the surrounding uses include: retail stores and shops, barbershops and beauty parlors, banks and offices, and newspaper establishments and job printing establishments. Additionally, restaurants and athletic clubs would be permitted by a special use permit. Existing zoning regulations should be reviewed as the Village is currently evaluating land development alternatives for the Broadway corridor. Additionally, the development of uniform design guidelines for commercial development along the entire length of the study area is recommended (see above). The Village may also want to consider limiting the number of access
points for new commercial developments. Additionally as mentioned above, an Inter-municipal zoning overlay district for Route 32 is also recommended.

2. **Land Use**

The major sites available along the Corridor in the Village of Menands for commercial redevelopment include Price Chopper Plaza, Menands Shopping Center, Menands Diner, and the site adjacent to the Price Chopper Plaza. The Village of Menands Broadway Corridor Economic Development Initiative recommended targeting larger mixed use development for the North End (from Route 378 to the Town of Colonie line); transitioning from light industrial uses to commercial and residential development. This section offers the most opportunity for large scale redevelopment due to the size of the parcels, location as a Village gateway, and its existing diversity of uses.

i. **Price Chopper Plaza – 442 Broadway**: The Price Chopper Plaza is listed for sale (3.7 acres and 56,180 SF of gross leasable area). The Plaza is located on the western side of Route 32. Businesses located in the Plaza include Price Chopper Supermarket, Rite Aid Drug Store, Save More Wines & Liquor and Homemart Party Store. There is one vacant retail space within the plaza that is available for lease.

ii. **Menands Shopping Center – 431 Broadway**: There is approximately 36,569 square feet of retail space available for lease at the Menands Shopping Center (former Two Guys building) on the eastern side of Route 32. Bank of America occupies the eastern end of the building for office use. With the amount of square footage available, there are many possibilities for this site.

iii. **Menands Diner – 563 Broadway**: This site has 0.6 acres and a 4,700 square foot building that is vacant and is available for sale. It is located on the eastern side of Route 32. According to the Arsenal Business & Technology Partnership, dry cleaner and restaurant would be ideal along the Route 32 Corridor for employees because making a left turn out of the Arsenal is very difficult, so most travel south on Route 32/Third Avenue from work to go out at lunch or at the end of the day.

iv. **Redevelopment Site – 434 Broadway**: Located just south of the Price Chopper Plaza, this 3.4 acre cleared site is available for lease or build to suit. The site was also suggested for senior housing at the community workshop.

3. **Transportation**

Recommendations identified for the Route 32 Corridor within the Village of Menands include:
i. Construct roundabout at the Route 378/32 interchange as recommended in the Village of Menands Transportation Access and Land Improvement Study Broadway (NY Route 32) plan.

ii. Combine driveways at Price Chopper Plaza with adjacent parcel to the south and align with future roundabout/Route 378 ramp interchange as recommended in the Village of Menands Transportation Access and Land Improvement Study Broadway (NY Route 32) plan.

iii. Construct three to four lane cross section and sidewalks on both sides of Route 32 as recommended in the Village of Menands Transportation Access and Land Improvement Study Broadway (NY Route 32) plan.

iv. Add bike lanes/shoulder and bicycle parking as proposed in previous studies.

v. Connect off-road trail linkage just north of Route 378 ramps to corridor and via linkage to Schuyler Flatts.

vi. Consider gateway signage for the Village of Menands.

4. **Relationship To New Roadway Connection To Open Land For Development**

The Town of Colonie is actively working on developing properties, particularly the D & H site and the Adirondack Steel site (both located just outside the study area) including providing alternative truck access to these sites. A future roadway was proposed in the Albany County Commercial Transportation Access Study connecting Lincoln Avenue and First Street (near their current intersection) to Broadway at the current FedEx driveway. According to that Study, this appears to offer the best opportunity to enhance access to the Watervliet Arsenal/Colonie Economic Development Zone (EDZ) while minimizing environmental concerns and cost issues. In addition, this action could remove a considerable amount of truck traffic from First Street, which is residential in character. However, this proposal is not favored by the Watervliet Arsenal.

5. **Key Catalyst Project - Potential Development Node at Menands Diner/Menands Shopping Center/British American**

This area of the Route 32 Corridor includes major tenants (NYS Department of Correctional Services) at the British American building and (Bank of America) at the Menands Shopping Center. There is also potential to develop approximately 41,269 square feet of retail space available at the Menands Diner and the Menands Shopping Center. The Broadway corridor in Menands is primarily a four-lane roadway with little or no shoulders and no on-street parking. There is a traffic signal at British American Boulevard and a transit shelter in front of the Menands Diner. Transportation issues identified include numerous
unsignalized intersections and driveways; access management challenges; lack of sidewalks; and limited pedestrian accessibility. Recommendations for this area include:

i. Encourage more nodes of development with, pedestrian and transit-friendly development pattern in future redevelopment opportunities;

ii. Encourage mixed-use development at transit supportive densities;

iii. Encourage compact, pedestrian-oriented access, connections, and amenities;

iv. Require bicycle parking in all future development as part of off-street parking requirements;

v. Encourage access management, including shared access, driveway spacing standards, and shared parking (See appendix I). Offer density bonuses and reductions in required off-street parking in exchange for shared access and shared parking arrangements;

vi. Future roadway section could transition to three lanes in this area with sidewalks and bike lane/shoulder, allowing for improved transit operations and facilities, including the possibility of bus nubs and future BRT service.

vii. As mentioned above, there are many possibilities for the Menands Shopping Center site (Former Two Guys Building) including attracting another financial institution or supermarket, or mix of retail stores. Redevelopment of this site should consider mixed use, reconfiguring buildings, dividing the parking lot into a series of smaller lots with more green space and pedestrian-oriented design, as well as adding bicycle parking and connections to exiting bike trails. It will also be important to provide a true pedestrian facility connecting this site to Route 32. See Appendix F which contains information about CDTC’s Bike Rack Program)

Appendix H contains a larger format illustration of proposed recommendations map.

VIII. Description of Colonie to Watervliet Subsection

A. Existing Land Use Conditions

The Town of Colonie’s portion of the Route 32 Corridor comprises a mix of land uses. Fleet Pride, FedEx, and Xtra Mart are businesses located on the western side of the corridor, while the Submaker, Citgo Gas Station and Dawson’s Body Shop are located on the eastern side. Schuyler Flatts Cultural Park encompasses a large portion of the eastern side of the corridor. Residential uses are located on the western side and include apartment complex (Schuyler Place Apartments) and single family and multi-unit homes.
B. Existing Transportation Conditions

The Broadway corridor in Colonie is a four-lane roadway with no on-street parking. Pavement widths are approximately 50 to 55 feet with 10' wide travel lanes. The posted speed limit is 30 miles per hour within the Town. The only traffic signal on Broadway within Colonie is at the intersection with 1st Street at the Colonie/Watervliet line. This signalized intersection has a dedicated northbound left-turn lane in addition to a northbound through travel lane. There are several unsignalized driveways within Colonie, including access to Schuyler Flatts and the Citgo gas station on the east side of the road and access to the Xtra Mart/gas station on the west side of Broadway. Because of the limited access points along the eastern side of the road, access management is not as significant a challenge as it is in Menands. However, curbing is sporadic or in marginal condition where it does exist and some residential land uses on the west side of the road have direct access onto Broadway, providing opportunities for conflicts. There are no sidewalks south of Schuyler Lane and Schuyler Lane itself has no curbing or pavement markings to demarcate the cartway (the cartway is the curb to curb pavement width of the road) resulting in uncontrolled access along all of Schuyler Lane, including where it intersects with Route 32.

Lighting along this section of the Route 32 Corridor is limited, particularly near the Schuyler Flatts Cultural Park, where there are no street lights along this section of roadway. Street lights are located on the western side of the corridor. There are a set of four antique street lights in front of Fleet Pride and cobra street lights located at Fleet Pride/Fed Ex, Schuyler Place Apartments and at the intersection of Broadway and Idlewild Park.

Sidewalks are narrow and marginal along the west side of Broadway and completely washed out in some sections. In addition, there are no sidewalks along the east side of the corridor within the Town. Furthermore, the lack of sidewalks combined with sections of roadway without curbing, results in potentially challenging conditions for pedestrians. However, walking and multi-use paths within Schuyler Flatts provide access to the City of Watervliet's street network and the Mohawk-Hudson Trail. These connections, along with the safest means of accessing this trail network, should be incorporated into wayfinding signage for pedestrians and cyclists. Pedestrian treatment at the approach to the 1st Street intersection is particularly problematic. Sections of the sidewalk along the western side of the roadway are in very poor condition with landscaping material encroaching on the sidewalk. There appears to either be no sidewalk in the immediate vicinity of the pedestrian push button at the southwestern corner of the Broadway/1st Street intersection or it is buried in soil that has runoff from the adjacent property's landscaping.

In addition, crosswalks are worn and faded at this intersection, particularly at the southwestern leg of the intersection. While there are no specific facilities for cyclists, there is a shoulder along some

<table>
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<tr>
<th>Transportation Summary</th>
<th>Route 32 Corridor - Town of Colonie</th>
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<tbody>
<tr>
<td>Pavement Width</td>
<td>Approximately 50 to 55 feet and 10' wide travel lanes.</td>
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<td>Travel Lanes</td>
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<td>Posted Speed Limits</td>
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<tr>
<td>Traffic Volumes</td>
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</tr>
<tr>
<td>Sidewalks</td>
<td>Narrow and marginal along the west side of Route 32; no sidewalk on the east side.</td>
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<tr>
<td>On-Street Parking</td>
<td>No</td>
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sections of Broadway within Colonie with old bicycle stenciling on the northbound side. The lack of curbing/cartway (curb to curb pavement width of the road) demarcation, in conjunction with a lack of sidewalks, results in potentially challenging conditions for non-motorized modes of travel.

The #22 bus makes several stops within Colonie, including those at shelters located north of Dawson’s and at the Village One Apartments (on the eastern side) and at Fleet Pride (on the western side). However, these stops are not fully accessible by sidewalks, nor are they located at pedestrian crossings or controlled intersections. With the exception of the bus shelter at Fleet Pride, the other bus shelters are not located in well-lit areas.

A total of 22 crashes occurred within the study area in the Town of Colonie during the five year period analyzed (July 2004 through June 2009). While almost half of these crashes resulted in injuries, there were no fatalities. Of the 22 total crashes, four (18%) involved pedestrians or bicyclists. Both of the crashes involving pedestrians occurred during evening hours in poor light conditions. The most common types of collisions other than those involving pedestrians or cyclists include rear-end crashes (18% of all crashes) and left-turning vehicles hitting other cars (14%). More than half of the total crashes within Colonie are on the Broadway corridor.

C. Recommendations

1. General/Land Use

Since land uses are fairly intact within the Town of Colonie, the Town should focus primarily on the transportation and streetscape improvements. In reviewing the Town’s land use regulations, zoning districts within the study area include industrial, multi-family residential, land conservation, commercial office and single-family residential. The Xtra Mart, Citgo Gas Station and Dawson’s Body Shop are located in the CO Commercial Office District. The uses of these businesses (motor vehicle repair shop – major and motor vehicle service station) currently are not permitted in the Commercial Office District as of right or by a special use permit. No change in zoning is recommended at this time, although the development of uniform design guidelines for commercial development along the entire length of the study area is recommended as well as an Inter-municipal zoning overlay district for Route 32 (see above).

2. Transportation

Broadway/Route 32 in Colonie: As mentioned above, the Broadway corridor in Colonie is a four-lane roadway with no on-street parking. Schuyler Flatts Cultural Park encompasses a large portion of the eastern side of the corridor. Recommendations for this area include:

i. The roadway section through Colonie is proposed to be one lane in each direction, with left turn pockets and/or a center turn lane, bicycle lanes/shoulders and sidewalks on both sides of Route 32. The three lane section is the preferred scenario as it is consistent with the goal of complete streets
unless four lanes with traffic calming, bike lanes and full sidewalks can be accommodated within the existing ROW.

ii. Install wayfinding signage improvements to direct visitors to Schuyler Flatts parking areas and cyclists to the Mohawk Hudson Bike Hike Trail as well as to local bike routes in Watervliet.

iii. Consider gateway signage for the Town of Colonie, perhaps combining with the wayfinding signage (i.e. "Welcome to Colonie...Home of Schuyler Flatts").


The focus of this potential development node will be on transportation improvements. This area could include a future BRT transit stop as well as a potential future roadway at the FED-EX site that was recommended in the Albany County Commercial Transportation Access Study. The Broadway corridor in Menands and Colonie is a four-lane roadway with no on-street parking. There is a transit stop at the Village One Apartments. Transportation issues identified include: sporadic curbing; limited sidewalks; access management challenges; transit stops are not fully accessible by sidewalks or are located at pedestrian crossings or controlled intersections. Recommendations for this area include:

i. The preferred roadway section here is also a 3-lane section with a center turn-lane/pockets and one thru lane in each direction unless four lanes with traffic calming, bike lanes and full sidewalks can be accommodated within the existing ROW. Full sidewalks on both sides of the street and bicycle lanes would complete the streets.

ii. This area has potential as a future development node with opportunities for compact, mixed-use, pedestrian and transit-oriented design.

iii. Encourage access management, including shared access, driveway spacing standards, and shared parking. Offer density bonuses and reductions in required off-street parking in exchange for shared access and shared parking arrangements. See Appendix I for a sample shared parking agreement.

iv. Continue requiring bicycle parking in all future development as part of off-street parking requirements.

v. To improve transit operations and access in this node, we recommend realigning the transit shelters near the intersection in this area (Village One Apartments access drive) that would have high visibility pedestrian crossings. A future secondary road should also be considered to the west at this location, as recommended in a prior study, adjacent to Federal Express so that future growth and development in Colonie can access Route 32/Route 378 without having to travel through the City of Watervliet. Appendix J contains guidelines for CDTA Transit Station Design.

Appendix H contains a larger format illustration of proposed recommendations map.
IX. Description of Watervliet Subsection

A. Land Use Existing Conditions

The Route 32 Corridor in the City of Watervliet stretches from the city line at 1st Street along 3rd Avenue to the South Gate at the Arsenal (just past 8th Street). Land use is generally mixed residential and small businesses. From 1st Street to 2nd Street, land use is primarily residential (single family and two family homes). Land use is a mix of residential and commercial from 2nd Street to 4th Street. Robert's Auto Service is located at the intersection of 2nd Street and 3rd Avenue and Schanz Beverage is located on southwest corner at 4th Street and 3rd Avenue on the western side. Frankoos Unisex and Full Circle Beauty are located on the eastern side. Residential uses are mostly two family homes.

From 4th Street to 5th Street, land use is also a mix of residential and commercial uses. Quality Transmissions is located on northwest corner at 4th Street and 3rd Avenue. About mid-block on the western side of 3rd Avenue, there is a large subdivided lot that represents a potential redevelopment site. Riverfront Insurance Agency Building is located on eastside (tenants also include Capital Region IT). Ted's Fish Fry is located on the southwest corner of 5th Street and 3rd Avenue. Giuseppe’s Pizza is located on the southeast corner at 5th Street and 3rd Avenue. Residential uses include single and two-family homes.

The Elks Club is located on the northwest corner of 5th Street and 3rd Avenue. A park – triangular shaped from 4th Avenue to 6th Street on the western side of 3rd Avenue has a gazebo and benches. Businesses located on the eastern side of the street include Watervliet Tavern, Swimwear Outlet, and Lamb & Lamb Attorney at Law. Residential uses include single and two-family homes.

Continuing from 6th Street to 7th Street, land use is also residential/commercial mixed use. Stewart’s is located at the northwest corner of 6th Street and 3rd Avenue. Olde Polish Deli is located on the northeast corner of 6th Street and 3rd Avenue. There are small businesses located on 3rd Avenue between 6th and 7th Streets such as Ashline Moving Co., Schuyler Bakery, Cummings Funeral Home, Tri-City Discount Deli and Foods, Wm. E. Sheridan Insurance Company, BeCee’s Tavern, Mac's Ice Cream Parlor, Jim's Barber Shop and Joey's Restaurant. Residential uses include single and two-family homes.

Land uses along 3rd Avenue between 7th to 8th Street include Schuyler Barber Shop, Tigon Academy, JH Bennett Sheet Metal, and JH Kenney Flowers, as well as two-family homes. Businesses located between 8th Street and Broadway include the Watervliet Arsenal, McIntyre’s Pub, Gilhooley Designs and the Woodburning Warehouse. A park is also located from 7th Street to the intersection with McIntyre’s on Route 32. This park is behind all of the properties in the 700 block of Third Avenue.
B. Existing Transportation Conditions

The northern part of the Route 32 study area is located within the City of Watervliet and includes 1st Street through 8th Streets, culminating at the South Gate of the Arsenal. This section of Route 32 is known as 3rd Avenue and is generally comprised of one travel lane in each direction with granite curbs and on-street parking on both sides of the street. In contrast to the southern parts of the study area, there are street trees along 3rd Avenue in many locations and sidewalks on both sides of the street. The northern end of 3rd Avenue widens to three to four lanes at the Arsenal gate between 8th Street and Broadway. Pavement width varies from 46 feet between 1st and 2nd Streets to 37 to 42 feet for much of the remainder of 3rd Avenue. The road width widens back to 46 feet at the Broadway/Route 32 intersection. Pavement markings are faded in several locations along 3rd Avenue, including lane striping, stop bars, and crosswalks.

### Transportation Summary

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<th>Route 32 Corridor - City of Watervliet</th>
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<tr>
<td><strong>Pavement Width</strong></td>
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<tr>
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<td><strong>Traffic Volumes</strong></td>
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<td><strong>Sidewalks</strong></td>
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<td><strong>On-Street Parking</strong></td>
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One location of particular concern with respect to access management and pedestrian safety is Schuyler Lane. The Schuyler Lane/1st Street/Route 32 intersection is the southern gateway to Watervliet. There is no curbing on Schuyler Lane, no access management to minimize vehicle conflicts, and no crosswalk across Schuyler Lane. In addition, the crosswalk across 1st Street is also faded.

Total traffic volumes are approximately 10,000 vehicles per day with peak hour traffic estimated at around 1,000 vehicles. Traffic signals are located at several Route 32 intersections, including at 1st Street, 7th Street, and Broadway. A blinking light is located at the South Gate to the Watervliet Arsenal at 8th Street. Given the urban density and grid network in Watervliet, there are numerous unsignalized intersections where cross streets intersect with 3rd Avenue, as well as curb cuts that provide access to properties along the corridor's frontage. Appendix G contains additional information about traffic volumes.

The posted speed limit within the City is consistent with the rest of the corridor at 30 mph. On-street parking is unrestricted on the majority of 3rd Avenue with the exception of one small section of two hour parking on the eastern side of Route 32 near 2nd Street and one small area of 20 minute parking, also on the east side of Route 32, in front of JH Kenney Flowers near 8th Street. There is no striping or signage restricting parking at intersection approaches or adjacent to crosswalks.

This section of Route 32 is generally well served by sidewalks on both sides of 3rd Avenue. Sidewalks are generally four to five feet wide and concrete, with the exception of a few locations where blacktop now covers the sidewalk. Some blocks have maintained a planted buffer strip between the sidewalk and the curb; in other locations this area has been paved over. A planted strip, even a narrow one, is a valuable amenity in buffering pedestrians from street traffic. While sidewalks are generally in place on both sides of the street, they are no longer in place on
most commercial properties nor are they carried across driveways. The land use patterns and
historic nature of much of the commercial development fronting 3rd Avenue are a challenge in
terms of maintaining pedestrian accessibility across curb cuts and through parking areas
located in the front yards of several businesses.

Pedestrian accommodations along 3rd Avenue also include striped crosswalks, though several
are faded, including the crosswalk across Route 32 at the t-intersection with 2nd Street, as well
as at the northern legs of both the 1st Street and 6th Street intersections. Pedestrian push-
buttons are generally in place at the signalized intersections along 3rd Avenue. However, the
push-button at the northwest corner of the 7th Street/3rd Avenue intersection does not appear
to be working. Pedestrian indicators are not uniformly provided at signalized intersections,
including at the 1st Street intersection and at the northern boundary of the study area at the
Route 32 intersection with Broadway. Finally, due to the lack of any traffic controls between 1st
Street and 7th Street, it is challenging for pedestrians to cross 3rd Avenue at certain times of
the day.

As previously noted, on-street parking is permitted along 3rd Avenue with a 7.5 to 8 foot parking
lane provided. There are no signed parking prohibitions or curb markings at the approaches to
intersections or crosswalks in the study area. This is a concern because the proximity of on-
street parking to crosswalks and intersections can constrain motorists’ visibility of pedestrian
crossings.

There are no specific accommodations for cyclists within the City of Watervliet with the
exception of bicycle parking at the parking lot at the terminus of 4th Street along the Hudson
River. While the on-street parking lanes along 3rd Avenue could provide some road space for
cyclists when not in heavy use, the ‘door zone’ created by parked vehicles results in potential
conflicts. Nonetheless, Route 32 in Watervliet is a potentially important connection for cyclists
accessing Schuyler Flatts and the Mohawk Hudson Multi Use Path.

A total of 110 crashes occurred within the study area in the City of Watervliet during the five
year period analyzed (July 2004 through June 2009). While just over one quarter of these
crashes resulted in injuries, there were no fatalities. Approximately 40% of these accidents
occurred directly on or immediately adjacent to Route 32, with the remainder occurring on
local side streets between 1st Street and Broadway or local streets parallel to Route 32 between
Broadway and 8th Avenue. Of the 110 total crashes, 12 involved pedestrians or cyclists,
accounting for 11% of all crashes; the majority of these crashes occurred at intersections and
they were equally split between daylight and dark conditions. Motorists attempting to pass
other motorists accounted for 17% of all crashes within Watervliet, raising some significant
concerns about driver behavior and travel speeds given that most of the study area’s streets
within the City are one travel lane in each direction. Right-angle crashes were the second most
prevalent crash type, accounting for 15 percent of all crashes. Right angle crashes are common
in areas with poorly controlled access and/or frequent driveways, but are also often the result
of and/or exacerbated by driver behavior. Rear end and sideswipe crashes accounted for 13% and
11% of all crashes, respectively, with just over half of these occurring at intersections.
Almost five percent of the crashes involved left turning vehicles, with three percent involving
right-turning vehicles. Vehicles hitting fixed objects, including utility poles and hydrants,
accounted for 3% of all the crashes within the City. See additional crash data in Appendix G.
C. Recommendations

1. General

Properties located along most of the Third Avenue/Route 32 Corridor are zoned R-3 residential. The R-3 Residential District currently does not allow the typical small businesses that are actually located in this area. This District permits: one-family and two-family dwellings, churches, public libraries and schools, public parks, hospitals, cemeteries, public utilities, and fire stations. These businesses are either preexisting or they are permitted by use variance.

There is one city block between 6th and 7th Avenue that is zoned B-1 Local Business and the east side of Third Avenue between 7th and Broadway is zoned R-4 Residential. The B-1 Local Business District permits all uses in the R-3 Residential District and stores, shops or markets where goods are sold or personal services are rendered, business and professional offices and banks, restaurants (not including diner or roadside stand), and gasoline sales stations. The R-4 Residential permits all uses in the R-3 Residential District and multi-family dwellings, high-density multi-family dwellings, residential hotels, boarding houses, clubs, nursing homes, professional offices, and funeral parlors.

Additionally, the development of uniform design guidelines for commercial development along the entire length of the study area is recommended as well as an Inter-municipal zoning overlay district for Route 32 (see above).

2. Land Use

Within the City, there are a variety of potential redevelopment sites including the following:

i. Vacant Lot on Third Avenue: Located on the west side of Third Avenue between 4th and 5th, this site was approved for a three-lot subdivision last year. The front parcel will be office/residential and will keep the building frontage and the back lots (fronting 5th Avenue) will be residential use conforming to the zoning in the district.

ii. 632 Third Avenue: Approximately 2,856 SF of retail space available for sale. It is located next to 636 Third Avenue (see below). Options for this site and 636 Third Avenue include retail store, restaurant, dry cleaner, copy shop/office supply store, business and professional offices.

iii. 636 Third Avenue: Approximately 2,860 SF of retail space available for sale. Located next to 632 Third Avenue (see above). Building consists of two store fronts and there is an apartment unit on the upper floor. It can be purchased with the 632 Third Avenue site. Options for this site and 632 Third Avenue include retail store, restaurant, dry cleaner, copy shop/office supply store, business and professional offices.
iv. Colonie Mechanical Contractors site: Located on the east side of Third Avenue between 2nd Street and 4th Street, the site appears to be vacant. There is also a small parking lot adjacent to the building. Potential uses of this site include a service/repair shop, or parts store.

v. Watervliet Arsenal: Under the Enhanced Use Lease (EUL) Program at the Watervliet Arsenal, approximately 63 acres of underutilized land was potentially released by the U.S. Army for development by private companies. Key objectives of the development plan include expanding the private sector presence on the Arsenal campus to 550,000 square feet of building space for manufacturing, office, research and development and high-tech companies; creating 1,000 new private-sector jobs and providing more opportunities for public-private business partnerships. The Arsenal Business & Technology Partnership is the master developer of the EUL at the Arsenal, responsible for marketing, real estate, development, financing, community relations and public information activities with the Army Corps of Engineers and the Watervliet Arsenal.

3. Transportation

Third Avenue is generally comprised of one travel lane in each direction with granite curbs and on-street parking on both sides of the street. There are street trees along 3rd Avenue in many locations and sidewalks on both sides of the street. The northern end of 3rd Avenue widens to three to four lanes at the Arsenal gate between 8th Street and Broadway. Transportation issues identified along Third Avenue include: faded pavement markings; lack of signed parking prohibitions or curb markings at the approaches to intersections or crosswalks; numerous curb cuts; blacktop covered sidewalks; lack of sidewalks north of 8th Street; and lack of roadway striping and signage for the Arsenal. Recommendations along Third Avenue include:

i. Sidewalk repair/selective replacement in sections.

ii. Maintain street trees/encourage new street trees that will not interfere with utility lines when old trees are removed; encourage maintenance of planting strip between curb and sidewalk.

iii. Add curb extensions and textured/high visibility cross walks at all major cross streets, to be added initially as a pilot project in one or two locations along 3rd Avenue. Complete curb extensions and high visibility crosswalks along the rest of 3rd Avenue (medium-to-long term). The remaining crosswalks (those not part of the pilot project area) should be restriped with thermo-reflective paint with yield-to-pedestrian stanchions installed at locations without curb extensions.

iv. Clearly sign and mark no parking zones around crosswalks and intersections.
v. ADA curb ramps should also be added where missing and all obstructions in the ADA path of travel removed/relocated.

vi. Clarify policy regarding sidewalks across access drives and parking areas. Sidewalk grade and material to be maintained across driveways and existing planting strips to be maintained between curbing and sidewalks rather than paved over.

vii. Consider adding sharrows along 3rd Avenue to denote shared lane use by motorists and cyclists. Parking lane widths along Third Avenue range from 7 ½ to 8 feet. In the short-term, add "Share the Road" signage at Watervliet gateway, at 4th Street and at the approach to the arsenal where additional travel lanes force cyclists further into the street.

eight. Repair pedestrian push button at 7th Street.

ix. Property maintenance – encourage maintenance of facades, landscaping, etc.

x. Restripe worn lane markings in front of the Arsenal’s South Gate (left turn lane to serve the Arsenal if approaching from the south and a right turn/thru land if coming from the north) and add signage clearly directing Arsenal-bound traffic.

xi. Add/formalize sidewalks and/or pedestrian path of traffic, especially on the northbound side of Route 32 between 8th Street and Broadway.

xii. Limit the ability to add new curb cuts onto 3rd Avenue and restrict the maximum width of new curb cuts.

xiii. Designate local cross-streets as bike routes to facilitate east-west access across 3rd Avenue to 4th Street, the Mohawk-Hudson Trail and to Broadway, a designated local bike route.

xiv. Consider adding traffic light at 4th Street or 5th Street.

xv. Use yield-to-pedestrian stanchions and speed trailers to attempt to slow traffic and warn motorists of enforcement efforts.

xvi. Reconstruct and repave 3rd Avenue.

4. The Arsenal’s Process and Plans

One of the primary concerns of the Partnership and the Arsenal is security at the south gate which is the only entrance to the facility. The Arsenal is currently not in compliance with Army standards and does not have a proper "federal" access point at the Arsenal. Additionally, the Arsenal may require a second Security Access point to accommodate the anticipated increase in traffic.

The Army recently studied five options for an approved secure entrance to the facility which includes the following:
i. South Gate (on Third Avenue) acquiring the ball park to be used for vehicles and trucks;

ii. South Gate (on Third Avenue) acquiring the houses on East side for both tractor trailers and vehicles;

iii. Main Gate (on Broadway) for both tractor trailers and vehicles;

iv. Main Gate (on Broadway) for just vehicles with South Gate (on Third Avenue) for tractor trailers; and

v. Gillespie Gate (on Route 155) for tractor trailers and South Gate (on Third Avenue) for vehicles.

There was also concern by the Study Advisory Committee that if all traffic is going through the Southern Gate, full build out of Arsenal will likely exceed the capacity of 3rd Avenue and impair conditions for other roadway users. Future access options should ideally balance and consider impacts on residents and small businesses along 3rd Avenue, conditions for non-motorized users along the corridor, as well as the operational needs of transit serving the corridor. The clustering of future private development at the Arsenal is also an opportunity to consider traffic demand management programs that encourage and incentivize ridesharing, transit use, and alternative work schedules so that peak traffic can be better accommodated within the constraints of the corridor.

The Army decided to use the South Gate for truck traffic and to open a POV entrance north of the existing Main Gate entrance on Broadway. The Army anticipates this will take place in 2017 depending on funding. However, this requires removal of Parcel 2, one of the key development parcels, from the EUL. The Study Advisory Committee recommends that whatever modification of access to the Arsenal is considered that a traffic analysis be completed, as well as parking demand management at the Arsenal.

5. Key Catalyst Project - Potential Development Node at the Watervliet Gateway (1st/Schuylar Lane)

As mentioned above, the Broadway corridor in Colonie is a four-lane roadway with no on-street parking. The only traffic signal on Broadway within Colonie is at the intersection with 1st Street at the Colonie/Watervliet line. This signalized intersection has a dedicated northbound left-turn lane in addition to a northbound through travel lane. There is a transit stop in front of Dawson’s Autobody, but it not fully accessible by sidewalks, nor is it located at a pedestrian crossings or controlled intersections. Other transportation issues identified include: lack of sidewalks, curbing and pavement markings; worn and faded crosswalks; and access management and pedestrian safety issues with regard to Schuyler Lane. Recommendations for this area include:
i. In the short-term, all faded crosswalk striping and road striping (and signage, in particular for the left turn pocket for vehicles turning from Route 32 onto 1st Street) needs to be re-striped and replaced.

ii. Schuyler Lane roadway to be demarcated with curbing/drainage improvements, crosswalk, roadway striping.

iii. Future long-term redevelopment opportunities given proximity of Schuyler Flatts should be explored to ensure a wide range of future permitted uses and allow existing businesses to continue to operate.

iv. Consider gateway improvement as longer-term option with improved plantings and public art, entry sign, seating, curb extensions and textured crosswalk at northern leg of the 1st/3rd Avenue intersection.

Appendix H contains a larger format illustration of proposed recommendations map.

X. Implementation

The recommendations proposed for the Route 32 Corridor are also described in the following Implementation Matrix. For each proposed activity, the matrix identifies time frame for completion, lead agency, potential funding sources, if applicable, and the entity responsible for maintenance.

The “funding source” column refers to channels through which the municipalities can seek funding. Current availability of programs should be confirmed with the individual entities. Municipal budgets have not been included as a funding source in the matrix as it is assumed that they are always a potential source of funding. Likewise, a good potential source of funding for any project is through a State or Federal Legislative representative. These “member items” have not been listed as a source of funding as they could be included under most of these projects. The Implementation Matrix can be found in Appendix K.

XI. Conclusions and Next Steps

The design and construction of most of the transportation elements proposed for the Route 32 Corridor will need to wait until funding can be obtained for this work (suggestions for funding are included in the Implementation Matrix). It is suggested that the municipalities start immediately to seek funding for the design and construction of the Route 32 improvements through the Capital District Transportation Committee’s (CDTC) 5-year Transportation Improvement Program (TIP). Once the project is programmed on the TIP it will be eligible to receive federal funding. The municipalities could also seek other sources of funding for this project such as state legislative or congressional appropriations.

Required disclosures can be found in Appendix L.
Appendices

Appendix A: Assessment of Existing Conditions

Appendix B: Glossary of Terms

Appendix C: Sample Complete Streets Resolution

Appendix D: Notes From Public Meetings

Appendix E: Study Area Boundary map

Appendix F: CDTC Bicycle Rack Program

Appendix G: Crash Data and Traffic Volume Report

Appendix H: Future Recommendations Maps By Sub-Area

Appendix I: Sample Shared Parking Agreement

Appendix J: CDTA Guidelines for Transit Station Design

Appendix K: Implementation Matrix

Appendix L: Required Disclosures

Appendix M: Graphics
Appendix A: Assessment of Existing Conditions

I. INTRODUCTION & OVERVIEW OF STUDY AREA

The Route 32 Corridor includes Broadway in the Village of Menands and Town of Colonie and Third Avenue in the City of Watervliet. Traveling north along Route 32, the road transitions from a relatively high speed five lane highway to an urban street with two travel lanes and two parking lanes at the Watervliet city line. Land adjacent to the west side of Route 32 in the Village of Menands and Town of Colonie is underutilized. The Watervliet section of the corridor is a typical city street with mixed residential and small business uses, though current planning and employment trends envision a renaissance for this area.

The purpose of this document is to review, present and summarize information related to the study area’s transportation and land use characteristics, and to serve as a foundation to support future enhancements to the Route 32 Corridor. Transportation issues addressed include roadway conditions, crash history, transit, and pedestrian and bicycling amenities. Land Use and related characteristics addressed in the report include environmental conditions, historic attributes, open space and recreation resources. For purpose of this analysis the study area has been divided into three sections:

- Section 1 includes the Village of Menands from the Route 378 interchange to the Town of Colonie line.
- Section 2 includes the Town of Colonie from the Village of Menands line to First Street (City of Watervliet line)
- Section 3 includes the City of Watervliet from First Street to the intersection of Broadway and Third Avenue
II. EXISTING CONDITIONS

A. Study Area Overview

The Route 32 corridor study area encompasses 1.4 miles from the Route 378 Interchange in the Village of Menands to the South Gate of the Watervliet Arsenal in the City of Watervliet. The roadway is classified as a minor urban arterial with average annual daily traffic (AADT) based counts ranging from 9,900 vehicles in the northern half of the study area in Watervliet to 14,800 vehicles in Colonie and Menands. Estimates of peak hour traffic on Route 32 based on 2002 count data range from 990 vehicles in Watervliet to 1,436 peak hour vehicles in the southern half of the corridor. Traffic volume estimates from 2008 indicate peak hour traffic in the southern part of the corridor ranging from 1,499 trips in the AM peak to 1,976 PM peak hour trips. According to NYSDOT’s Traffic Volume Report, traffic volumes along Route 32 in the study area have increased. In 2010 it is estimated that AADT based counts ranged from 10,160 in the northern part of the study area in Watervliet to 21,530 vehicles in Colonie and Menands. Truck traffic is moderate along the corridor, accounting for approximately 7% of all trips. Given a variety of truck generators along the Route 32 corridor, including the Watervliet Arsenal, future improvement concepts will need to reflect and accommodate a moderate amount of truck traffic.

The roadway design varies greatly in the study area with a four-lane cross-section in the southern half of the corridor (Menands and Colonie), transitioning to a two-lane section with on street parking in the City of Watervliet. Access management is a challenge along much of the corridor with frequent curb cuts, sections of frontage without formalized curbing, and lack of demarcation of the pedestrian realm across driveways. Despite what appear to be significant differences in motorists’ travel speeds throughout the study area, all of Route 32 within the study area is posted with a 30 mile per hour speed limit.

Pedestrian and bicyclist accommodations also vary throughout the corridor. Sidewalks are not continuous, with a significant gap in Menands and Colonie along the eastern side of the roadway, as well as smaller gaps along the western side of Broadway. Where sidewalks do exist, their width and condition vary. In addition, pedestrian crossing treatments are essentially limited to crosswalks, some of which are faded with limited visibility. Pedestrian push buttons are in place at most signalized intersections; however, pedestrian signal heads are not uniformly provided. ADA curb drops, while present in some fashion at the study area’s controlled intersections, do not meet current design standards and are rarely in place at uncontrolled crossings. While Route 32 is designated as State Bike Route #9, there are few, if any, accommodations for bicyclists. Exceptions include bicycle racks on CDTA busses and a bicycle rack at the parking area along the Hudson River where the Mohawk-Hudson Trail is accessed in Watervliet.

Route 32 is an active transit corridor with CDTA's Route #22 traversing the study area to provide service between Albany and Troy. Bus Route #22 is one of CDTA’s busiest routes with approximately 230 daily boardings within the study area. Route 22 is under consideration for future BRT service, which presents transit-oriented design redevelopment opportunities in the future.

1 Estimates of 2008 peak hour traffic at the Broadway/British American signal by CME (See "Transportation Access & Land Use Improvement Study") were 1,499 total peak hour trips in the AM peak and 1,976 PM peak hour trips.
An analysis of all crashes that have occurred within the study area from June 30th 2004 through the first half of 2009 reveals a total of 228 crashes, including 23 that occurred on or near the I-378 ramps at the southern edge of the study area. Of the total 228 crashes, 62 occurred directly on or adjacent to Route 32. While approximately one fourth of all study area crashes resulted in injuries, there were no fatalities during this period. Approximately ten percent of the crashes in the study area involved a pedestrian or bicyclist. The most common crash type was a right angle crash, accounting for 15 percent of all crashes, followed by crashes resulting from attempted passing and/or overtaking at 13 percent. Collisions with fixed objects, including guiderails, sign posts, utility poles and hydrants accounted for 12 percent of the recorded crashes. Rear-end collisions accounted for ten percent, while crashes involving left-turning vehicles accounted for approximately five percent of the study area’s crashes. Fortunately, head-on collisions were infrequent with only three recorded during the period analyzed. Weather may have played a role in 23 percent of the crashes within the study area, with an equal split between snow/ice and wet conditions. Light conditions may have been a contributing factor in 11 percent of all crashes, including dark, unlit sections of road, as well as those crashes that occurred at dawn or dusk.

The following sections provide a more detailed discussion of the study area’s transportation conditions and are organized into distinct sections by municipality.

**B. Village of Menands - Detailed Conditions for Section 1**

1. Land Use

   a. Overview of Existing Land Uses

   The Village of Menands comprises the southern end of the study area. The primary land use along Route 32 is commercial. Businesses located along the western side include Price Chopper, Rite Aid, New York State Department of Corrections, Cryo Weld, Albany Steel, Peter Mason Insurance, Burger King, and Blasch Precision Ceramics. Just south of the Price Chopper Plaza (across the 378 exit ramp) is a vacant lot that is available for sale/lease. The entrance to St. Agnes Cemetery and Albany Rural Cemetery, also located on the western side, just north of the Price Chopper Plaza is the only community service use.

   The Price Chopper Plaza is listed for sale (3.7 acres and 56,180 SF of gross leasable area). Businesses located in the Plaza include Price Chopper Supermarket, Rite Aid Drug Store, Save More Wines & Liquor and Homemart Party Store. There is one vacant retail space.

   Bank of America (located at the eastern end of the former Two Guys building), Menands Diner (vacant, for lease/sale), Guaranteed Auto Credit, Menands Water Supply, Schuyler Inn, Getty Gas Station, Village One Apartments are the uses located on the eastern side of Route 32. There is approximately 36,569 square feet of retail space available at the former Two Guys building.

   b. Environmental Conditions

   Portions of the Village to the east of Broadway and along the Kroma Kill are located within the 100 year flood plain. Most of the land right on Broadway is considered Zone B – which is between 100 and 500 year flood plain. Water sources have been diverted under the cemetery, which is evident in the frequently flooded areas along Cemetery Avenue. According to the National Register of
Historic Places Registration form for St. Agnes Cemetery, the cemetery features more than 20 varieties of trees and a diversity of bird species.

c. Historic Resources

The entrance to the Albany Rural Cemetery and St. Agnes Cemetery is located at Cemetery Avenue and Broadway. Both cemeteries are listed on the National Register of Historic Places. The Albany Rural Cemetery was founded in 1844 and encompasses a total of 467 acres. This cemetery is an early example of the rural cemetery movement.

St. Agnes Cemetery comprises 114 acres in the Village of Menands. It is bounded by the Albany Rural Cemetery along the northwest perimeter. St. Agnes Cemetery is significant for the information it provides about the social history of Albany. It also illustrates 19th Century Rural Cemetery and the evolving cemetery designs that followed. The cemetery includes more than 50,000 interments and is the largest and most important Catholic cemetery in the region.

Albany Rural Cemetery Historic Marker – Broadway
d. Recreation/Open Space Resources

Schuyler Flatts Cultural Park is located immediately north of the Village of Menands in the Town of Colonie and is discussed in the next section.

e. Land Use Regulations

Parcels in the Village of Menands portion of the Route 32 Corridor are zoned Business and Light Industrial.

Permitted uses by right in the Business District include: Public parks and playgrounds, places of worship, parish houses, rectories and convents, fire stations, ambulance stations, village maintenance facilities, village service facilities, village office facilities and libraries, garages, filling stations, car washes and facilities for the sale of motor vehicles and accessories, retail stores and shops, barbershops and beauty parlors, banks and offices, radio and television stations, municipal recreational uses, commercial agricultural uses to include only nurseries and greenhouses, orchards and growing other field crops and newspaper establishments and job printing establishments. The minimum lot size is 10,000 sq. ft. This district is found along the east side of Broadway from the 378 interchange to the Town of Colonie line and on the western side of Broadway from the 378 interchange to Cemetery Avenue.
Permitted uses by right in the Light Industrial District include: fire stations, ambulance stations, village maintenance facilities, village service facilities, village office facilities and libraries, retail stores and shops, barbershops and beauty parlors, banks and offices garages, filling stations, car washes and facilities for the sale of motor vehicles and accessories, radio and television stations, municipal recreational uses, commercial agricultural uses to include only nurseries and greenhouses, orchards and growing other field crops, newspaper establishments and job printing establishments, light manufacturing and wholesale distribution facilities, and facilities for parcel and package distribution. The minimum lot size is 15,000 sq. ft. This district is located along the western side of Broadway from Cemetery Avenue to the Town of Colonie line.

2. Transportation

a. Existing Roadway & Traffic Conditions
The southern part of the corridor study area is located within the Village of Menands at the I-378 interchange area. The traffic volumes in this location are the highest in the study area at 14,800 annual average vehicles per day and 1,436 estimated peak hour trips. An analysis of the LOS (level of service) of the Broadway/Route 378 signalized intersection undertaken in 2008 indicates that the intersection operates at an acceptable level of service and has adequate roadway capacity.

In addition to the Route 378 signalized intersection, traffic signals are located at British American Boulevard. There are also numerous unsignalized intersections and driveways along the corridor. Access management is a challenge due to sections of Broadway without cubing within the Village, as well as the frequency, width, and proximity of access drives. Of particular concern is access to the Price Chopper Plaza development as well as the vacant parcel to its south given their proximity to the Route 378 ramps and associated traffic controls. This area was studied extensively in the “Transportation Access & Land Use Improvement Study” of September 2008 (see Section 5 of this report for a summary of this study’s findings).
The Broadway corridor in Menands is primarily a four-lane roadway with little or no shoulders and no on-street parking. The road section expands to incorporate dedicated, northbound right-turn lanes in two locations, north of the Price Chopper Plaza and at Cemetery Avenue. Current roadway pavement widths vary from 45’ in front of Cryo Weld/Albany Steel to over 70 feet at the widest point (where dedicated right-turn lanes have been added) with 50 to 53 feet common and 10’ wide travel lanes. The posted speed limit is 30 mph in the Village. Evidence of drainage problems was observed during site visits and flooding problems have been previously documented between Cemetery Avenue and the Burger King.

Poor drainage combined with winter clearing activities results in limited pedestrian accessibility and very poor accessibility for disabled persons. Roadway lighting consists of cobra head lights on both sides of the corridor. Utility poles are located primarily along the eastern side of Broadway.

b. Pedestrian & Bicyclist Accommodations

A four to six-foot wide sidewalk is in place along much of the west side of the roadway; however, there is no sidewalk on the east side of Broadway. Furthermore, the lack of sidewalks along the eastern side of Broadway, in addition to sections of roadway without curbing, results in challenging conditions for pedestrian traffic. These conditions are especially evident along the frontage of the Menands Diner and Guaranteed Auto Credit (used auto sales). Where sidewalks are in place along the western side of the corridor, there is generally no demarcation of the pedestrian realm across access drives and/or parking areas.

Poor drainage on the west side of Broadway impairs pedestrian accessibility

Lack of sidewalks and curbing; no buffer between parking lot and bus shelter.
c. Existing Transit Service

Several busy CDTA (Bus Route 22) stops are located in Menands, including those at the Price Chopper Plaza, British American Boulevard, the Menands Diner, and Village One Apartments. Bus shelters are located at the northern end of the Price Chopper Plaza and the Menands Diner. Furthermore, both transit usage and land use patterns indicate a demand for pedestrian flows across Broadway in the Village. However, not all bus stops and shelters are fully accessible by sidewalks, nor are they uniformly located at crosswalks or pedestrian signal heads.

Bus shelter in location without pedestrian accommodations

d. Crash History

A total of 96 crashes occurred within the study area in the Village of Menands during the five year period analyzed (July 2004 through June 2009). While almost one quarter of these crashes resulted in injuries, there were no fatalities. Approximately a quarter of these accidents occurred on or near the Route 378 ramps on the edge or slightly outside of the boundaries of the study area. The remainder of the crashes occurred on Route 32 or on side streets and access drives serving the corridor. Of the 96 total crashes, five involved pedestrians and one involved a cyclist. Motorists
hitting fixed objects was the most common crash type with one fourth of the crashes involving motorists colliding with guide rail (common along the Route 378 ramps), trees, signs, and utility posts. Right angle crashes were the next most common accident, accounting for almost 17% of all crashes. It should be noted that all of the right angle crashes occurred at mid-block locations, which is common along corridors with many uncontrolled access points. A total of just over ten percent of the crashes involved motorists attempting to pass other motorists, while just over six percent were rear-end collisions, and four percent right turn crashes.

The following breakdown provides more detail on those crashes that occurred on Route 32 or immediately adjacent to the corridor.

- Total crashes: 54 (of which 17 or 31% involved injuries)
- Crashes involving pedestrians: 5 (9%); 3 of these occurred at a controlled crossings (signal or stop sign)
- Crashes involving bicyclists: 1 (2%) at uncontrolled location
- Collision type:
  - Right angle: 12 (22%); 3 at stop signs and 2 at traffic signals
  - Overtaking: 7 (13%)
  - Bike/pedestrian: 6 (11%)
  - Rear end: 5 (7%); 3 at traffic signals
  - Right turn: 4 (7%); 3 at stop signs and 1 at traffic signal
  - Left turn: 4 (7%); 3 at uncontrolled locations
  - Fixed object: 3 (6%)
  - Sideswipe: 2 (4%)
  - Head on: 1 (2%)
  - Other/unknown: 10 (5%)

As noted in the Crash Map (Figure 1), right angle crashes are clustered in the southern part of Menands within the study area, generally between the Route 378 intersection and British American Boulevard. The intersection configuration at the Route 378 intersection, as well as the number and location of nearby driveways, are likely contributing factors to these crashes. Pedestrian crashes are also clustered at the southern end of the study area in Menands, reflecting the lack of pedestrian accommodations in this part of the corridor, particular at the Route 378 intersection.
C. Town of Colonie - Detailed Conditions for Section 2

1. Land Use

a. Overview of Existing Land Uses

The Town of Colonie’s portion of the Route 32 Corridor comprises a mix of land uses. Fleet Pride, FedEx, and Xtra Mart are businesses located on the western side of the corridor, while the Submaker, Citgo Gas Station and Dawson’s Body Shop are located on the eastern side. Schuyler Flatts Cultural Park encompasses a large portion of the eastern side of the corridor. Residential uses are located on the western side and include apartment complex (Schuyler Place Apartments) and single family and multi-unit homes.

b. Environmental Conditions

The eastern side of the Schuyler Flatts Cultural Park contains portions of the Little River Environmental area. The Little River is one of the few tidal and wetland marshes remaining in the Town. It is home to a diversity of wildlife include Great Blue Heron and migrating Warbler species of many types.

Portions of the Town of Colonie in the target area are located in a flood plain. The western side of Broadway is considered Zone C (areas of minimal flooding). Broadway and eastern side of
Broadway is Zone B (areas between the limits of the 100 year and 500 year flood plain). The area to the east of Broadway to the Hudson River is Zone A (100 year flood plain).

c. Historic Resources

The Schuyler Flatts Archeological District is on the National Register of Historic Places as of January 21, 1974 and additionally designated a National Historic Landmark in 1993. Schuyler Flatts is the 17th to early 20th century homestead farm of the famous Albany Schuyler family, including the family’s New World progenitor and first Albany Mayor Philip Peterse and Revolutionary War General Philip Schuyler. The park area served as a resting area for troops and settlers in colonial times. It also was a meeting place and trade center for Native American Tribes. The site of the homestead is a central resource within the park. The western boundary of the park contains the remnants of the Erie Canal or Clinton’s Ditch.

d. Recreation/Open Space Resources

The Schuyler Flatts Cultural Park and the Mohawk-Hudson Bike-Hike Trail are located within the Town’s portion of the Route 32 Corridor. Schuyler Flatts is a multi-use facility with open space areas and trails. There are also historic markers that identify the historic nature of the site.

The Mohawk-Hudson Bike-Hike Trail is an extensive trail that is approximately 42 miles long and generally runs along the Hudson and Mohawk Rivers. The trail runs through the Village of Menands, Town of Colonie and City of Watervliet and actually connects to the Schuyler Flatts Cultural Park.

e. Land Use Regulations

Zoning districts include industrial, multi-family residential, land conservation, commercial office and single-family residential.

Permitted uses in the Industrial District include such uses as indoor amusement use, large outdoor amusement use, animal shelter, bakery (commercial and retail), bank, bar, bed and breakfast, building supplies, car wash, Christmas tree sales, commercial parking, community center, construction company, convenience store, convention and exhibit center, correctional facility, dance hall, cultural venue, daycare center, multifamily dwelling, eldercare use, farm, fast food establishment, fire station, funeral home, garden center, golf course, miniature golf course, health club, heavy equipment storage/sales/service, hospital, hotel, light industrial, heavy industrial, kennel, library, marina, mini-mart, mini-warehouse/self-storage facility, mining, motor vehicle rental agency, motor vehicle repair shop (major). The minimum lot size is 20,000 sq. ft. This district is located along the border with the Village of Menands on the west side of Broadway.

Permitted uses in the Multi-Family Residential District include single family and multi-family dwelling units, townhouse, two-family dwelling units, farm, fire station, golf course, municipal uses, nursery, park, places of worship, school and truck garden. The minimum lot size is 20,000 sq. ft. This district is found along the border with the Village of Menands on the east side of Broadway and immediately adjacent to the industrial district on the west side of Broadway.
Permitted uses in the Land Conservation District include community center, farm, fire station, junkyard, municipal uses, nursery, park, truck garden and wholesale business. The minimum green space coverage is 35%. This district is found on the eastern side of Broadway.

Permitted uses in the Commercial Office District include indoor amusement use, retail bakery, bank, Christmas tree sales, community center, convenience store, convention and exhibit center, cultural venue, daycare center, elder care use, farm, fire station, funeral home, golf course, health club, hospital, hotel, library, motor vehicle rental agency, municipal uses, nursery, nursing home, medical office, professional or business office, park, personal service business, place of worship, preschool, private club, recreation field, research and development laboratory, restaurant, school, service business, shipping store retail, truck garden and veterinarian. The minimum lot size is 20,000 sq. ft. This district is found adjacent to the City of Watervliet line straddling both sides of Broadway.

Permitted uses in the Single-Family Residential District include single family dwelling units, farm, fire station, golf course, municipal uses, nursery, parks, places of worship, school, and truck garden. The minimum lot size is 18,000 sq. ft. This district is located on the west side of Broadway.

2. Transportation

a. Existing Roadway & Traffic Conditions

The central section of the study area is located within the Town of Colonie. The Broadway corridor in Colonie is a four-lane roadway with no on-street parking. Pavement widths are approximately 50 to 55 feet with 10’ wide travel lanes. The posted speed limit is 30 mph within the Town. The only traffic signal on Broadway within Colonie is at the intersection with 1st Street at the Colonie/Watervliet line.

This signalized intersection has a dedicated northbound left-turn lane in addition to a northbound through travel lane. There are several unsignalized driveways within Colonie, including access to Schuyler Flatts and the Citgo gas station on the east side of the road and access to the Xtra Mart/gas station on the west side of Broadway. Because of the limited access points along the eastern side of the road, access management is not as significant a challenge as it is in Menands. However, curbing is sporadic or in marginal condition where it does exist and some residential land uses on the west side of the road have direct access onto Broadway, providing opportunities for conflicts. There are no sidewalks south of Schuyler Lane and Schuyler Lane itself has no curbing or pavement markings to demarcate the cartway resulting in uncontrolled access along all of Schuyler Lane, including where it intersects with Route 32.
Lighting along this section of the Route 32 Corridor is limited, particularly near the Schuyler Flatts Cultural Park, where there are no street lights along this section of roadway. Street lights are located on the western side of the corridor. There are a set of four antique street lights in front of Fleet Pride and cobra street lights located at Fleet Pride/Fed Ex, Schuyler Place Apartments and at the intersection of Broadway and Idlewild Park.

b. Pedestrian & Bicyclist Accommodations

Sidewalks are narrow and marginal along the west side of Broadway and completely washed out in some sections. In addition, there are no sidewalks along the east side of the corridor within the Town. Furthermore, the lack of sidewalks combined with sections of roadway without curbing, results in potentially challenging conditions for pedestrians. However, walking and multi-use paths within Schuyler Flatts provide access to the City of Watervliet’s street network and the Mohawk-Hudson Trail. These connections, along with the safest means of accessing this trail network, should be incorporated into wayfinding signage for pedestrians and cyclists. Pedestrian treatment at the approach to the 1st Street intersection is particularly problematic. Sections of the sidewalk along the western side of the roadway are in very poor condition with landscaping material encroaching on the sidewalk. There appears to either be no sidewalk in the immediate vicinity of the pedestrian push button at the southwestern corner of the Broadway/1st Street intersection or it is buried in soil that has runoff from the adjacent property's landscaping.
In addition, crosswalks are worn and faded at this intersection, particularly at the southwestern leg of the intersection. While there are no specific facilities for cyclists, there is an informal, narrow shoulder along some sections of Broadway within Colonie. Further, the lack of curbing/cartway demarcation, in conjunction with a lack of sidewalks, results in potentially challenging conditions for non-motorized modes of travel.
c. Existing Transit Service

The #22 bus makes several stops within Colonie, including those at shelters located north of Dawson's and at the Village One Apartments (on the eastern side) and at Fleet Pride (on the western side). However, these stops are not fully accessible by sidewalks, nor are they located at pedestrian crossings or controlled intersections. With the exception of the bus shelter at Fleet Pride, the other bus shelters are not located in well-lit areas.

![Bus shelter in location with marginal pedestrian accommodations on the east side of Route 32 in Colonie.](image)

d. Crash History

A total of 22 crashes occurred within the study area in the Town of Colonie during the five year period analyzed (July 2004 through June 2009). While almost half of these crashes resulted in injuries, there were no fatalities. Of the 22 total crashes, four (18%) involved pedestrians or bicyclists. Both of the crashes involving pedestrians occurred during evening hours in poor light conditions. The most common types of collisions other than those involving pedestrians or cyclists include rear-end crashes (18% of all crashes) and left-turning vehicles hitting other cars (14%).

More than half of the total crashes within Colonie on the Broadway corridor. The following breakdown provides more detail on those crashes that occurred directly on Route 32 or immediately adjacent to the roadway.

- Total crashes: 15 (8 or 53% involved injuries)
- Crashes involving pedestrians: 2 (13%), both at a mid-block location;
- Crashes involving bicyclists: 1 (7%) at a signalized intersection;
- Collision type:
  - Rear end: 2 (13%)
  - Bike/pedestrian: 3 (20%)
Route 32 Linkage Study

Existing Conditions Report

- Right angle: 1 (7%)
- Left turn: 3 (20%), 2 at uncontrolled locations
- Head on: 1 (7%)
- Other/unknown: 5 (33%)

With the exception of two pedestrian crashes near the access to Village One Apartments, a generator of pedestrian traffic within the Town, and two rear-end crashes as the roadway approaches the 1st Street/Schuyler Lane intersection, there are no significant crash patterns within this part of the study area.

D. City of Watervliet - Detailed Conditions for Section 3

1. Land Use

a. Detailed Land Use

The Route 32 Corridor in the City of Watervliet stretches from the cityline at 1st Street along 3rd Avenue to the South Gate at the Arsenal (just past 8th Street). Land use is generally mixed residential and small businesses. From 1st Street to 2nd Street, land use is primarily residential (single family and two family homes). Land use is a mix of residential and commercial from 2nd Street to 4th Street. Robert’s Auto Service is located at the intersection of 2nd Street and 3rd Avenue and Schanz Beverage is located on southwest corner at 4th Street and 3rd Avenue on the western side. Frankoos Unisex and Full Circle Beauty are located on the eastern side. Residential uses are mostly two family homes.

From 4th Street to 5th Street, land use is also a mix of residential and commercial uses. Quality Transmissions is located on northwest corner at 4th Street and 3rd Avenue. About mid-block on the western side of 3rd Avenue, there is a large subdivided lot that represents a potential redevelopment site. Riverfront Insurance Agency Building is located on eastside (tenants also include Capital Region IT). Ted’s Fish Fry is located on the southwest corner of 5th Street and 3rd Avenue. Giuseppe's Pizza is located on the southeast corner at 5th Street and 3rd Avenue. Residential uses include single and two-family homes.

The Elks Club is located on the northwest corner of 5th Street and 3rd Avenue. A park - triangular shaped from 4th Avenue to 6th Street on the western side of 3rd Avenue has a gazebo and benches. Businesses located...
on the eastern side of the street include Watervliet Tavern, Swimwear Outlet, and Lamb & Lamb Attorney at Law. Residential uses include single and two-family homes.

Continuing from 6th Street to 7th Street, land use is also residential/commercial mixed use. Stewart’s is located at the northwest corner of 6th Street and 3rd Avenue. Olde polish Deli is located on the northeast corner of 6th Street and 3rd Avenue. There are small businesses located on 3rd Avenue between 6th and 7th Streets such as Ashline Moving Co., Schuyler Bakery, Cummings Funeral Home, Tri-City Discount Deli and Foods, Wm. E. Sheridan Insurance Company, BeCee’s Tavern, Mac’s Ice Cream Parlor, Jim’s Barber Shop and Joey’s Restaurant. Residential uses include single and two-family homes.

Land uses along 3rd Avenue between 7th to 8th Street include Schuyler Barber Shop, Tigon Academy, JH Bennett Sheet Metal, and JH Kenney Flowers, as well as two-family homes. Businesses located between 8th Street and Broadway include the Watervliet Arsenal, McIntyre Pub, Gilhooley Designs and the Woodburning Warehouse. A park is also located from 7th Street to the intersection with McIntyre’s on Route 32. This park is behind all of the properties in the 700 block of Third Avenue.

b. Environmental Conditions

Portions of the City of Watervliet are located in a floodzone. Within the Route 32 Corridor area, the majority of land along Route 32 is considered Zone B (between the 100 year and 500 year flood plain). Part of 1st Street to the east of Route 32 and at the intersection of 8th Street and Broadway is Zone A (100 year flood plain). At the intersection of 3rd Avenue and 8th Street is classified as Zone C (minimal flooding).

c. Historic Resources

The National Historic Preservation Act and New York State Historic Preservation Act establish criteria by which buildings, sites, and structures are determined historic. In order to be designated historic, and listed in the National and State Registers of Historic Places, buildings, structures, sites and neighborhoods are evaluated through a formal survey and nomination process, and, if determined significant based on the established criteria. Listed resources are afforded a basic level of protection from federal and state actions, but local regulation is needed to prevent demolition and other actions.

National and State Register-listed historic resources in the City of Watervliet’s Route 32 Corridor include the Watervliet Arsenal National Historic Landmark. The Watervliet Arsenal is the oldest arsenal in continuous operation in the United States. Founded in 1813, the site encompasses approximately 112.5 acres. Approximately one-third of the landmark (located mostly east of Buffington Street) consists of military quarters and office buildings in a park-like setting with lawns, mature trees and shrubs, fountains and monuments and athletic fields and recreational
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buildings. The remaining two-thirds of the landmark consist of the industrial buildings, laboratories and support facilities devoted to the manufacture of weaponry. The Arsenal began with the manufacture of small, fixed ammunition and artillery accoutrements. Since 1887, the Arsenal has been the Army's primary producer of large-caliber cannon. The Arsenal has increasingly become a research and development facility for weapons with production being limited to smaller quantities of cannon of small and medium caliber.

d. Recreation/Open Space Resources

There are three parks located within the Route 32 Corridor Area. Reds Field is located at Eighth Street and Third Avenue in the Port Schuyler section of the City. The park amenities include a baseball/softball field and a basketball court. Seventh Street Park is located at 7th Street and 2nd Avenue and includes basketball court, playground and spray pool. Located at 3rd Avenue and 6th Street, Park offers a gazebo and benches.

e. Land Use Regulations

Zoning districts of the Route 32 Corridor Area in the City of Watervliet include: B-1 Local Business District, R-3 Residential District, and R-4 Residential District.

Permitted uses in the B-1 Local Business District include: one-family dwellings, churches, public libraries and schools, public parks, hospitals, cemeteries, public utilities, two-family dwellings, and fire stations, stores, shops or markets where goods are sold or personal services are rendered, business and professional offices and banks, restaurants (not including diner or roadside stand), and gasoline sales stations. The minimum lot size is 2,000 sq. ft. This district is found on Third Avenue between 6th and 7th Streets.

Permitted uses in the R-3 Residential District include: one-family dwellings, churches, public libraries and schools, public parks, hospitals, cemeteries, public utilities, two-family dwellings, and fire stations. The minimum lot size is 4,000 sq. ft. This district is found from 1st Street (cityline) to 6th Street and then from 7th Street to the south gate of the Arsenal (on the western side of Third Avenue).

Permitted uses in the R-4 Residential District include: one-family dwellings, churches, public libraries and schools, public parks, hospitals, cemeteries, public utilities, two-family dwellings, fire stations, multi-family dwellings, high-density multi-family dwellings, residential hotels, boarding houses, clubs, nursing homes, professional offices, and funeral parlors. The minimum lot size is 20,000 sq. ft. This district is found from 5th Street to the Arsenal generally east of Third Avenue.
2. Transportation

a. Existing Roadway & Traffic Conditions

The northern part of the Route 32 study area is located within the City of Watervliet and includes 1st Street through 8th Streets, culminating at the Route 32/Broadway intersection at the northern edge of the study area. This section of Route 32 is known as 3rd Avenue and is generally comprised of one travel lane in each direction with granite curbs and on-street parking on both sides of the street. In contrast to the southern parts of the study area, there are street trees along 3rd Avenue in many locations and sidewalks on both sides of the street. The northern end of 3rd Avenue widens to three to four lanes at the Arsenal gate between 8th Street and Broadway. Pavement width varies from 46 feet between 1st and 2nd Streets to 37 to 42 feet for much of the remainder of 3rd Avenue. The road width widens back to 46 feet at the Broadway/Route 32 intersection. Pavement markings are faded in several locations along 3rd Avenue, including lane striping, stop bars, and crosswalks. One location of particular concern with respect to access management and pedestrian safety is Schuyler Lane. The Schuyler Lane/ 1st Street/ Route 32 intersection is the southern gateway to Watervliet. There is no curbing on Schuyler Lane, no access management to minimize vehicle conflicts, and no crosswalk across Schuyler Lane. In addition, the crosswalk across 1st Street is also faded.
Total traffic volumes are approximately 10,000 vehicles per day with peak hour traffic estimated at around 1,000 vehicles. Traffic signals are located at several Route 32 intersections, including at 1st Street, 7th Street, and Broadway. A blinking light is located at the South Gate to the Watervliet Arsenal at 8th Street. Given the urban density and grid network in Watervliet, there are numerous unsignalized intersections where cross streets intersect with 3rd Avenue, as well as curb cuts that provide access to properties along the corridor’s frontage.

The posted speed limit within the City is consistent with the rest of the corridor at 30mph. On-street parking is unrestricted on the majority of 3rd Avenue with the exception of one small section of two hour parking on the eastern side of Route 32 near 2nd Street and one small area of 20 minute parking, also on the east side of Route 32, in front of JH Kenney Flowers near 8th Street. There is no striping or signage restricting parking at intersection approaches or adjacent to crosswalks.

*Schuyler Lane at 1st Street/ Route 32/Schuyler intersection, the southern gateway to Watervliet. Note lack of curbing or any demarcation of Schuyler Lane, as well as the lack of a crosswalk across Schuyler Lane.*

*Parking in the front yard and lack of curbing at the corner of 5th Street and Route 32.*
b. Pedestrian & Bicyclist Accommodations

This section of Route 32 is generally well served by sidewalks on both sides of 3rd Avenue. Sidewalks are generally four to five feet wide and concrete, with the exception of a few locations where blacktop now covers the sidewalk. Some blocks have maintained a planted buffer strip between the sidewalk and the curb; in other locations this area has been paved over. A planted strip, even a narrow one, is a valuable amenity in buffering pedestrians from street traffic. While sidewalks are generally in place on both sides of the street, they are no longer in place on most commercial properties nor are they carried across driveways. The land use patterns and historic nature of much of the commercial development fronting 3rd Avenue are a challenge in terms of maintaining pedestrian accessibility across curb cuts and through parking areas located in the front yards of several businesses.

*Parked cars infringing on pedestrian realm and limiting use of sidewalk.*
Example of concrete sidewalk paved over with blacktop and no demarcation of pedestrian realm across driveway. Also note loss of planting strip with paving right up to street trees.
Pedestrian accommodations along 3rd Avenue also include striped crosswalks, though several are faded, including the crosswalk across Route 32 at the t-intersection with 2nd Street, as well as at the northern legs of both the 1st Street and 6th Street intersections. Pedestrian push-buttons are generally in place at the signalized intersections along 3rd Avenue. However, the push-button at the northwest corner of the 7th Street/3rd Avenue intersection does not appear to be working. Pedestrian indicators are not uniformly provided at signalized intersections, including at the 1st Street intersection and at the northern boundary of the study area at the Route 32 intersection with Broadway.

*Commercial use at the southwest corner of 4th Street and Route 32. Note the lack of sidewalks and loss of any buffer between the curb and pedestrian realm*
Open access drive without curbing or demarcation of pedestrian realm across the driveway opening.

Worn and faded crosswalk at northern leg of 1st Street/Route 32 intersection.
Loss of formal sidewalks where Route 32 widens at the blinking light at the Arsenal south gate.

As previously noted, on-street parking is permitted along 3rd Avenue with a 7.5 to 8 foot parking lane provided. There are no signed parking prohibitions or curb markings at the approaches to intersections or crosswalks in the study area. This is a concern because the proximity of on-street parking to crosswalks and intersections can constrain motorists’ visibility of pedestrian crossings.

Loss of sidewalk and obstruction of pedestrian realm along business frontage just south of the Broadway/Route 32 intersection.
There are no specific accommodations for cyclists within the City of Watervliet with the exception of bicycle parking at the parking lot at the terminus of 4th Street along the Hudson River. While the on-street parking lanes along 3rd Avenue could provide some road space for cyclists when not in heavy use, the ‘door zone’ created by parked vehicles results in potential conflicts. Nonetheless, Route 32 in Watervliet is a potentially important connection for cyclists accessing Schuyler Flatts and the Mohawk Hudson Multi Use Path.

c. Existing Transit Service

There are frequent CDTA bus stops for the Route #22 bus along 3rd Avenue with designated stops on nearly every block. Boarding counts total 81 daily boardings along 3rd Avenue or more than one third of all boardings within the study area. Bus stops along 3rd Avenue are generally well served by sidewalks and pedestrian accommodations; however, there is a need to improve the visibility of crossing treatments and to provide pedestrian indicators at traffic signals. The incorporation of traffic calming measures could also contribute to improved access for transit users within Watervliet.

\[\text{CDTA's Route 22 Bus.}\]

d. Crash History

A total of 110 crashes occurred within the study area in the City of Watervliet during the five year period analyzed (July 2004 through June 2009). While just over one quarter of these crashes resulted in injuries, there were no fatalities. Approximately 40% of these accidents occurred...
directly on or immediately adjacent to Route 32 with the remainder occurring on local side streets between 1st Street and Broadway or local streets parallel to Route 32 between Broadway and 8th Avenue. Of the 110 total crashes, 12 involved pedestrians or cyclists, accounting for 11% of all crashes; the majority of these crashes occurred at intersections and they were equally split between daylight and dark conditions. Motorists attempting to pass other motorists accounted for 17% of all crashes within Watervliet, raising some significant concerns about driver behavior and travel speeds given that most of the study area’s streets within the City are one travel lane in each direction. Right-angle crashes were the second most prevalent crash type, accounting for 15 percent of all crashes. Right angle crashes are common in areas with poorly controlled access and/or frequent driveways, but are also often the result of and/or exacerbated by driver behavior. Rear end and sideswipe crashes accounted for 13% and 11% of all crashes, respectively, with just over half of these occurring at intersections. Almost five percent of the crashes involved left turning vehicles, with three percent involving right-turning vehicles. Vehicles hitting fixed objects, including utility poles and hydrants, accounted for 3% of all the crashes within the City.

The following breakdown provides more detail on those crashes that occurred on Route 32:

- Total crashes: 43 (16 or 37% involved injuries);
- Crashes involving pedestrians: 4 (9%), with all of these at mid-block locations;
- Crashes involving cyclists: 2 (5%), one at a signalized intersection;
- Collision type:
  - Right angle: 7 (16%), 3 of which occurred at stop signs
  - Rear end: 7 (16%), 4 of which occurred at traffic signals
  - Bike/pedestrian: 6 (14%)
  - Overtaking: 5 (12%)
  - Sideswipe: 3 (7%)
  - Left turn: 3 (7%), all of which occurred at controlled locations
  - Head on: 1 (2%)
  - Right turn: 1 (2%), at a stop sign
  - Other/unknown: 10 (23%)

Not surprisingly, crashes are clustered at the intersections along 3rd Avenue within the City. Two intersections in particular stand out for the number and/or type of crashes: the 1st Street/Schuyler Lane intersection with Route 32 and the Route 32/6th Street intersection. The former location has a variety of crash types with the number of crashes likely due in part to the transition to an urban street section at this intersection. The 6th Street intersection has clusters of both pedestrian and right angle crashes, which could be due to a number of factors, including the proximity of curb cuts to the intersection, cars parked on-street limiting sight distance at the intersection, the location of the pocket park and transit stops between 5th and 6th Streets increasing pedestrian traffic in general, as well as driver behavior.
III. OVERALL SUMMARY OF STRENGTHS AND WEAKNESSES OF THE CORRIDOR

A. Strengths

1. Sufficient roadway capacity, particularly in the Village of Menands and the Town of Colonie, to support future redevelopment opportunities;
2. ROW width ranging from 55 to 65 feet provides opportunities for improvements;
3. Active, well-served transit corridor;
4. Some nodes of higher density development along the corridor as focal points for future development;
5. Proximity to Schuyler Flatts and the Mohawk-Hudson Trail, regional open space and recreational amenities;
6. Nearly continuous sidewalk network within the City of Watervliet;
7. Future development opportunities at the Watervliet Arsenal;

B. Weaknesses

1. Poor accommodations for pedestrians, especially within the Village of Menands and the Town of Colonie;
2. Lack of accommodations for cyclists throughout the corridor;
3. Poor lighting for pedestrians;
4. Low-visibility pedestrian crossing treatments;
5. High travel speeds, a likely contributor to crashes throughout the corridor;
6. Lack of access management contributing to the potential for vehicular conflicts;
7. Limited curb to curb pavement width within the City of Watervliet;

IV. SUMMARIES OF RELEVANT STUDIES

A. Village of Menands Transportation Access and Land Improvement Study Broadway (NY Route 32)

This study includes the southern part of Route 32 with particular emphasis on the Route 378/Route 32 intersection and contains several recommendations that are relevant to developing future conceptual solutions for this study. Specifically, these recommendations are as follows:

1. Consolidation of driveways/curb cuts at the Route 378 WB Off-ramp/Route 32 intersection including one access point to the Price Chopper Plaza and the former Tomra site directly opposite the Route 378 WB off ramp to create a four-way intersection controlled by a roundabout (planning level cost estimated at $1.5 to $2.2 million).
2. Creation of a five-lane cross section for Route 32 in Menands and Colonie, consisting of two travel lanes in each direction, a center left-turn lane, new curbing, sidewalks, and five foot bicycle lanes on both sides of the roadway. Streetscape features such as pedestrian lamps and
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landscape elements are also included in the proposed cross section (planning level cost estimate of $8 million).

3. Creation of a mid-block pedestrian crossing at the existing transit shelter at the Colone/Menands line and exploration of the recurring flooding problem at this location.

4. Trail extension along the north side of Route 378 WB ramps opposite Price Chopper Plaza to Schuyler Flatts (preliminary planning has been completed for this trail by Boswell Engineering).

B. Village of Menands Broadway Corridor Master Plan

This study, conducted in 2002, contains several recommendations that are relevant to the northern part of the Broadway corridor in Menands. Specific recommendations are as follows:

1. Any reconfiguration of the Price Chopper Plaza parcel should create a consolidated entrance that aligns with the Route 378 exit ramp. The parking on the site should be reconfigured and landscape enhancements should be incorporated to break up the asphalt pavement. In addition to new or rehabilitated larger scaled buildings toward the back of the parcel, smaller buildings should be constructed closer to the road. In addition, landscape enhancement and signage are recommended to mark this gateway into the community.

2. Landscape enhancements are recommended for the 2,000’ plus area around the Route 378 exit ramp configuration along Broadway to help make this connection more attractive and usable, as well as to foster pedestrian movements between the Village center of Menands and the Price Chopper Plaza area. The study recommends that this area be heavily planted with thick evergreen trees to shield the overpass so that it is virtually invisible to the passerby.

3. The plan recommends the creation of an off-road bikeway east of the former Two Guys building linking Broadway to the Schuyler Flatts trail network.

4. In addition to these specific recommendations, the Broadway Corridor Master Plan includes design guidance for pedestrian street lamps, benches and trash receptacles, as well as suggestions for gateway signage to mark the entrances to the Village of Menands. In addition, the study recommends the creation of design standards to guide future development and to ensure a safe, attractive and functional built environment.

C. Mohawk Hudson Bike Hike Trail Crossroad Connection Study

This study, conducted in 2003, analyzed critical gaps and options for improvements in off-road trail connections linking Albany to Waterford. Priority areas identified include the following:

1. Trail connections to link the Village of Menands and the Broadway corridor to the Hudson River and the existing Mohawk Hudson Trail, including a trail along the Kroma Kill through the Schuyler Flatts Cultural Park;

2. A future off-road trail between the 4th Street trailhead and Henry Hudson Shores Park in Watervliet. The study recommends an off-road connection on the waterfront linking the 4th Street parking lot to Henry Hudson Shores Park. The study identifies areas with limited available land and notes the importance of contextual trail design to create a functional trail that protects natural resources
D. City of Watervliet Local Waterfront Revitalization Program

The City of Watervliet completed an LWRP in 2005 which identified a LWRP boundary, an inventory and analysis of existing conditions, waterfront policies, proposed land and water uses and projects and implementation techniques. The LWRP includes the Route 32 Corridor and the area east of Third Avenue. It also includes the Watervliet Arsenal. Proposed projects include:

1. The Mohawk Hudson Bike Hike Trail: The City recommends several projects be undertaken to improve the trailhead area, making it more attractive to a variety of users. Projects include enhancing amenities, improving the entrance to the Fourth Street Trailhead and Extend the off-road segment of the Mohawk Hudson Bike Hike Trail along the shoreline
2. Watervliet Arsenal: Use of the Watervliet Arsenal as a cultural resource that also promotes the City and highlights the City's historic role in the nation's defense and in ammunitions development is encouraged. Projects include: Increased Promotion of the Arsenal Museum, Enhance the Visual Appearance of the Arsenal, and Hosting Special Events. Additionally to encourage the continued economic vitality of the Watervliet Arsenal, the City plans to coordinate with the Arsenal Partnership to market available Arsenal space
3. Develop Architectural Design Guidelines: Guidelines can be used to coordinate building facades, setback, architectural themes, signage, landscaping, and streetscaping in the waterfront area.
4. Signage Improvements: Providing additional signage in the City’s major gateway areas would also provide motorists with clear direction on accessing the City’s recreational and cultural resources such as Schuyler Flatts, both at the entrance located off 1st Street and off-site in the City and Mohawk Hudson Bike Hike Trail and park, both at the site and off-site. Wayfinding signs identifying the City’s historic, cultural, and recreational resources should be located along the City’s major roadways, including Broadway, Route 32 (Second and Third Avenues), 19th Street, and 23rd Street.
5. Perform a Sidewalk Study: The City should conduct an evaluation of the condition of the City’s sidewalk system.
6. Develop City Gateways: Visually enhance the City's major gateways. Elements used in successful gateways include: signs, kiosks, street furniture, lighting, ornamental historic objects (such as bells or cannons) and landscaping. This includes 23rd Street at Broadway, Second Avenue at 19th Street, as well as Route 32 at the shared boundary with Colonie to the south and to the north.
7. Building Rehabilitation: The City can work with local property owners on building façade improvements, and rehabilitate deteriorated commercial and residential properties within the waterfront area.
8. Add Street Furniture and Lighting: Street furniture, such as benches, and attractive period lighting would help make the waterfront area more attractive and inviting.
9. Proposed Economic Development Projects Infill Business Development: The City should work with existing and new business owners to facilitate the development of restaurants, outdoor cafes, antique shops, and other tourism-related, pedestrian-oriented retail shops in appropriate locations on Broadway, Second Avenue, and Third Avenue.
10. Cultural Resources Committee: The City should create a Cultural Resources Committee to cultivate a program to identify, develop, and promote the City’s historic and cultural resources, through the creation of a Cultural Resources Museum and visitor center. The Committee could develop marketing tools such as brochures describing the area and its attractions, events calendars, walking tour maps, and on developing gateways for the major
intersections in the waterfront area, including at either end of Route 32 (Third Avenue south of the Arsenal and Second Avenue north of the Arsenal).

**E. Development Strategy for the Broadway commercial Corridor – North Albany/Village of Menands, NY**

This study was prepared in 2001 for the Broadway Corridor from the City of Albany to the Watervliet city line. One of the recommendations of the study called for Traffic Improvements/Calming in the Village of Menands since there is little differentiation between more community-oriented areas such as the Village and the more industrial sections of the Broadway Corridor. Detailed traffic studies were recommended to determine the potential for roadway narrowing, variations in speed limit and other traffic calming opportunities.

**F. Albany County Commercial Transportation Access Study**

The Albany County Commercial Transportation Access Study focused on the relationship between Interstate 787 (I-787) and three neighborhoods in distinct areas of the County. One of the areas examined was the Watervliet Arsenal/Colonie Economic Development Zone (EDZ) area in the City of Watervliet and Town of Colonie. The EDZ consists primarily of the lands of the former Delaware and Hudson (D&H) railyards located in the northeast quadrant of the 1st Street/Lincoln Avenue intersection. In addition, it includes the Al Tech Specialty Steel Corporation facilities on the west side of Lincoln Avenue. The area is generally bounded by 1st Street and the Colonie/Menands line to the north, Route 378 to the south, Broadway (Route 32) to the east and the CP RAIL railroad tracks to the west. The principal study finding for the EDZ study area is for the development of a new roadway connecting Lincoln Avenue and First Street (near their current intersection) to Broadway at the current FedEx driveway. This appears to offer the best opportunity to enhance access to the EDZ while minimizing environmental concerns and cost issues. In addition, this action stands to remove a considerable amount of truck traffic from First Street, which is residential in character.
Appendix B: Glossary of Terms

**Bicycle lane**: A corridor expressly reserved for bicycles, existing on a street or roadway in addition to any lanes for use by motorized vehicles.

**Bus Rapid Transit (BRT)**: BRT is an innovative, high capacity, lower cost public transit solution that can significantly improve urban mobility. This permanent, integrated system uses buses or specialized vehicles on roadways or dedicated lanes to quickly and efficiently transport passengers to their destinations, while offering the flexibility to meet transit demand. BRT systems can easily be customized to community needs and incorporate state-of-the-art, low-cost technologies that result in more passengers and less congestion.

**Complete streets**: Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street.

**Context Sensitive Design (CSD)**: Process of incorporating an increased sensitivity to the adjacent environment while completing roadway engineering.

**Gateway**: A point along a roadway at which a motorist or pedestrian gains a sense of having entered the city or a particular part of the city. This impression can be imparted through such things as signs, monuments, landscaping, a change in development character, or a natural feature.

**Metropolitan Planning Organization (MPO)**: The Metropolitan Planning Organization (MPO) of urban areas with a central city of 50,000 or more population is responsible for “…plans and programs which lead to the development and operation of an integrated, intermodal transportation system that facilitates the efficient, economic movement of people and goods”. The MPO for the Capital Region Area is CDTC – Capital District Transportation Committee.

**Sharrows**: Shared lane pavement markings.

**Traffic calming**: Traffic calming involves changes in street alignment, installation of improvements such as curb extensions, and other measures to reduce and/or reinforce posted traffic speeds and/or to minimize cut-through volumes. Traffic calming seeks to balance the interests of street safety, livability, and other public purposes.

**Transit-oriented design**: commonly defined as mixed-use development focused around (and designed to maximize access to) public transportation, with an emphasis on pedestrian circulation and accessibility.
Appendix C: Sample Complete Streets Resolution

RESOLUTION NO. 30

TOWN BOARD
TOWN OF BETHLEHEM
RESOLUTION
COMPLETE STREETS

WHEREAS, a goal of the Town of Bethlehem Comprehensive Plan is to improve mobility – the ability of people, regardless of age and status, to engage in desired activities throughout the Town; and

WHEREAS, the Town of Bethlehem Comprehensive Plan recommends maintaining and enhancing bicycle and pedestrian connections within neighborhoods, and between neighborhoods and hamlet centers;

WHEREAS, the Town of Bethlehem has established a pathways committee (PaTHs 4 Bethlehem) to explore bicycle and pedestrian facility connections and address issues; and

WHEREAS, bicycling and walking are important forms of transportation and recreation in our community; and

WHEREAS, bicycling and walking contribute to health, fitness, neighborhood vitality, social interaction, and economic development; and

WHEREAS, the full integration of all modes in the design of streets and highways will increase the capacity and efficiency of the road network, reduce traffic congestion by improving mobility options, limit greenhouse gas emissions, and improve the general quality of life; and

WHEREAS, educating the public about safety, health and mobility are part of being a quality community; and

WHEREAS, Complete Streets are defined as facilities that are designed and operated to enable safe and efficient access for all users. Persons with disabilities, pedestrians, bicyclists, motorists and transit riders are able to safely and efficiently move along and across a complete street.

NOW, THEREFORE, BE IT RESOLVED, the intent of the Town of Bethlehem Complete Streets Policy is to recognize bicyclists and pedestrians as equally important as motorists in the planning and design of all new street construction and street reconstruction undertaken by the Town.
BE IT FURTHER RESOLVED, it is also the intent of the Town of Bethlehem Complete Streets Policy to recognize that local Town streets with low vehicle volumes and slow travel speeds safely and efficiently accommodate bicyclists and pedestrians. However, principal Town roads that are characterized as having high vehicle volumes and high travel speeds, and are important for bicycle and pedestrian travel to access and connect to destinations in and adjacent to the Town, shall be considered for Complete Streets treatment.

BE IT FURTHER RESOLVED, that the Town Board hereby resolves to establish a Complete Streets Policy as follows:

**Engineering:** The Highway Superintendent shall consider the safe and efficient accommodation of bicyclists and pedestrians in all new street construction and street reconstruction undertaken by the Town of Bethlehem.

1. In addition, where the need for bicyclist and pedestrian facilities has been established or is defined in Town planning documents, including but not limited to the Bicycle and Pedestrian Priority Network identified by the PaTHs 4 Bethlehem Committee, the Highway Superintendent shall consider the addition of safe bicyclist and pedestrian facilities in new street construction and street reconstruction undertaken by the Town of Bethlehem. The addition of the bicyclist and pedestrian facilities shall be consistent with the scope of the improvement project, context sensitive to the surrounding environment, and shall not be disproportionate with the cost of the larger project.

2. Bicyclist and pedestrian facilities are defined as improvements that are above and beyond the normal space, surfaces, pavement markings, and signing that would routinely be incorporated into street design and maintenance for the accommodation of bicyclists and pedestrians. These facilities shall include but not be limited to sidewalks, curb cuts and ramps, marked crosswalks, pedestrian actuated signals, paved shoulders, bicycle route signing, bicycle lanes, bicycle parking facilities, and shared use paths.

3. Bicycle and pedestrian facilities may be planned, designed, developed and maintained in accordance with guidelines adopted by the United States Department of Transportation (USDOT), New York State Department of Transportation (NYSDOT), and the American Association of State Highway and Transportation Officials (AASHTO) or other guidelines approved by the Town of Bethlehem.

4. Whereas, if the Highway Superintendent determines that the inclusion of bicycle and/or pedestrian facilities are unable to be accommodated on a roadway or within Town right-of-way proposed for construction or reconstruction, he/she shall provide said determination in writing, with supporting documentation, to the Town Board for their information. Education and

**Encouragement:** The Town supports the promotion of bicycling and walking for health, fitness, transportation and recreation through events, programs and other educational activities, which benefit residents, students, businesses and visitors of all ages and abilities. These activities can be coordinated with the PaTHs 4 Bethlehem Committee, other Town Committees and Departments, local bicycle clubs, schools, health organizations and other partners.
Furthermore, the Town encourages the NYSDOT and Albany County to consider a Complete Streets approach when constructing or reconstructing their respective streets in the Town.

**Enforcement:** The Town will provide a balanced enforcement of the New York State Vehicle and Traffic Law for motorists, pedestrians and bicyclists. This will include enforcement of pedestrian’s right-of-way in crosswalks, bicyclists riding with traffic and all modes sharing the road safely.

Additionally, the Town may consider the use of traffic calming applications as an alternative to bicycle and pedestrian facilities. Traffic calming applications help to physically or psychologically calm motor vehicle traffic behaviors, thereby aiding in the enforcement of a safe environment for bicycle and pedestrian travel.

On a motion by Mrs. Dawson_, seconded by Mr. Kotary, and by a vote of _5_ for, 0_ against and _0 absent, this RESOLUTION was adopted on _August 12, 2009_.

Appendix D: Notes From Public Meetings

Route 32 Linkage Study Community Workshop
Watervliet Elks Club - 7:00 PM
May 11, 2010

Introduction

This document provides a brief summary of comments received at the Community Workshop for the Route 32 Linkage Study held on May 11, 2010 at the Elks Club in the City of Watervliet.

The evening began with a presentation that highlighted the current conditions along the Route 32 Corridor in the City of Watervliet, Town of Colonie and Village of Menands. Examples of how other communities have managed similar conditions were shared and a discussion to clarify the scope and timing of the discussion as well as participant ideas began. Key comments included:

What are we going to do from 1st to 8th Street (in Watervliet) and when are we going to do it?

The study will provide recommendations to the communities and the Study Advisory Committee (SAC). The SAC will decide which recommendations should be pursued and then the draft report will present those at the next community meeting for further comment and refinement, following which a final report is issued and the report will be adopted in each community. The speed of implementation of the study depends upon the availability of funding and the priority and complexity of the concepts chosen. When finished (this plan) will list projects by priority, phasing, scope and ballpark cost. The idea is to have short and long term improvements to show early support and build momentum for implementation.

This is more for information? Is anything set in stone?

Participants were assured that nothing is “set in stone” and that their comments can influence the outcome. As materials are completed and accepted by the SAC they will be made available on the web including the City of Watervliet’s web site at http://watervliet.com.

Is this a traffic study or a corridor study for gentrification of businesses and jobs?

The consultant shared that the study is not intended to gentrify the communities. It is a study of how you can improve the corridor for existing businesses and new businesses that might want to locate there, making improvements around businesses, and thinking about other modes of transportation (walkers, bikers, etc.). None of this assumes businesses leaving the corridor, though that is certainly possible as land they own becomes more valuable. Reoccupying existing space, for example at the Arsenal wouldn’t displace any businesses but would have a major impact on the corridor. One participant felt that this was not the right approach. As a local developer he felt that we should look for opportunities for new investment, feeling that “gentrification” can be a good thing. Other concerns were voiced about the densely built environment in Watervliet arguing that there will never be more than two lanes and growth is not possible there.

Many of the issues we are discussing (crosswalks and signals, for example) are NYSDOT issues and not within the communities control. How is that handled?
The goal is for communities to work with NYSDOT. The strategy is coordinated with NYSDOT and partnerships between the communities and the state are an opportunity of this kind of Linkage Grant from the Capital District Transportation Committee. In Watervliet, for example the City, not NYSDOT, maintains traffic controls in the City. Purpose is to work together. The process is to do the plan and get buy in from NYSDOT and other agencies and then begin implementation. The funding formula is typically 80% of funding from the federal and state governments and 20% from the local municipalities.

A Village Trustee from Menands commented that the (Village of Menands Transportation Access and Land Improvement Study Broadway (NY Route 32)) completed by the Village with CDTC support was beneficial because even though NYS/NYSDOT controls Route 32, that study provided recommendations to NYSDOT in an adopted plan and they have been able to implement projects with NYSDOT’s assistance. He commented that their work was, in part, to create a streetscape like Watervliet has. Improvement on the existing assets is as important, or more important, than new development.

Can the Route 32 Bike Route be on Broadway? Could the local communities designate other bike routes?

Route 32 is the State designated Bike Route, and as such must be on a State roadway. Participants recommended that 4th St should be a Bike route, and the study should give people other options, since there is not enough road-width in Watervliet along 32 for bicycle facilities. Although a detailed bike plan is outside of the scope of this project, participants asked that it be a recommended implementation project.

Other thoughts about information presented to make corridor more effective?

The use of curb extensions/bump outs was discussed. Some participants felt that curb extensions are not necessary since the road width is so narrow. Others felt that they would help to create a “parking bay” at the intersection to prevent people from parking so close to the corner that visibility is decreased and pedestrians are at risk (based upon crash data). Some participants felt that the curb extensions could help to create little green areas and landscaping could help to reduce stormwater runoff and flooding. The City is using these features on 19th Street Streetscape Project and they look like they will help. It was also suggested that the communities help in fixing the sidewalks to be more unified, matching the commitment of local property owners.

A number of comments were received:

- **Bus Rapid Transit** - Though this CDTA initiative is outside the scope of the study, participants liked the idea of Bus Rapid Transit. They felt that improved basic service such as an express along Route 32 from Schuyler Flatts to Corning Preserve or expanded hours of operation would help to connect the two recreational areas and all of the communities. Another service, such as a trolley system could be designed entirely for recreation, like the trolley from Green Island to Watervliet. Participants felt that this would help to build community among the three municipalities.

- **Marked turn lanes** - The left turn lane at First Street and Third Street in Watervliet would be improved and better defined with a left arrow.

- **Traffic Circle** - A traffic circle discussed is not necessary. It would be challenging for the heavy truck traffic using gas stations and other auto-dependent uses. Participants thought that a roundabout might actually make crossing the street more difficult. The consultant explained that each leg of the roundabout where road feeds in – has a channelized area called a “splitter island” where the road feeds in at a narrow point, and that is where the pedestrian would be able to cross.
- **Rerouting Truck Traffic** - This would be difficult to do through residential areas but the options to use secondary routes or ideas expressed in the a study Albany County completed to create access to industrial lands might be possible.

- **Greening Up The Corridor** - Participants complained that the trees are chopped up all along the corridor to accommodate power lines. Opportunities to place utilities underground should be pursued. They asked that the plan identify suggested street tree species and for the municipalities to share one planting strategy to create more visual consistency and feeling of a consistent corridor. It was also felt that properly designed and located landscaping could help with stormwater management.

**Can we hear from NYSDOT representative about timing on previous Menands study? How soon could projects be implemented for the other Route 32 communities?**

The Menands project south of Route 378 began with bridge replacement project. After the bridge improvements were complete they restriped the area north of area to 378. Drainage improvements were completed to reduce flooding problems at the Menands Shelter. Funding involved a complicated process, including a potential land swap and auction was undertaken and the proceeds were used to make improvements. This is not a common process. Safe routes to school programs can also help with the sidewalk, crossings and ramps. NYSDOT feels that it helps when a municipality goes through this kind of a planning process. They also consider regional issues like increased activity at the Arsenal in prioritizing projects. In the City of Watervliet participants commented that Third Avenue from First Street to Seventh Street backs up as people try to avoid congestion on 787, at other times is it a speedway. It might help to put the traffic light back on Third Avenue.

**How can this project help the tax base?**

Participants asked for an idea of the cost of improvements and the consultant’s aid that would be part of the final report. Participants favored the improvements but don’t want taxes to increase. They felt that commercial development and job creation must occur simultaneously to help pay for improvements. Participants commented that abandoned buildings along the corridor could be replaced or brought back on the tax roles if corridor conditions were improved and connections to other parts of the communities were established. By making property more attractive you also make it more valuable and it might help to bring thriving businesses back. Participants concluded that incremental change, like Menands is enjoying, can make a big difference. They also felt that it is very important to increase cooperation between the municipalities especially with regard to regional issues like job growth and recreation planning.

**Meeting Wrap up**

At the end of the discussion the consultants reviewed the next steps which include reviewing meeting comments with the Study Advisory Committee, outlining preliminary concepts and recommendations, bringing those recommendations back to the community for discussion and helping the communities to adopt the final plan.
I. Introduction

Ron Miller (Menands Trustee) and Michael Manning (Watervliet Mayor) welcomed everyone to the community workshop. Ron Miller discussed how the Village of Menands has completed a number of CDTC Linkage Studies and has been able to accomplish many projects because of the Linkage Program. Mike Manning stressed that this was an important study that also ties in with the City's Comprehensive Plan efforts that are being completed as well.

Margaret Irwin (River Street Planning) introduced the Consulting Team (Susan Blickstein, Leila Jabour-River Street Planning and Joe Fama-TAP). Participants were asked by a show of hands if they were from Watervliet, Menands or Colonie. Most of the participants were from the City of Watervliet, with a few from Menands and Colonie.

Margaret Irwin presented an overview of the Route 32 Linkage Study Plan and Susan Blickstein presented recommendations for the entire corridor as well as the subsections for each community (see Route 32 public workshop July 13 2010 PowerPoint).

II. Small Groups

After the presentation, participants broke out into two groups to discuss the proposed recommendations and to provide additional input. Each group reviewed a large format Initial Concept Map. The following comments were received from the small groups are listed in alphabetical, not priority order:

A. Biking - would it be possible to move the Hudson-Mohawk Bike route down Schuyler Lane to Broadway. Participants were informed that it needs to follow NYS Roadways. Participants mentioned that there is no room on Third Avenue (for bikers) in Watervliet if cars are parked from 1st to 6th Streets. Participants supported the recommendations for providing bike parking, clear signage, sharrow and creating cross-connections with proposed local bike routes.

B. Design - Bring buildings closer to the road, parking on sides of buildings (instead of in front) and shared parking whenever possible.

C. Funding - Participants asked if there was any funding available for this type of plan? Although there are smaller sources of funds, the big “pots” of money are hard to come by because of State budget problems and issues with federal appropriation. CDTC struggles with re-authorization of funding from the federal government. Hopefully the State will have to pay attention if development at the Watervliet Arsenal takes off and traffic increases, etc. could make the problems worse. While the short term outlook for development is not good because of State finances, this is the right time to plan. The study should point to items that require a “detailed engineering study” which is the first step in getting the NYS Department of Transportation to act on a project.

D. Gateways - Both groups discussed the recommendation to enhance the Watervliet entry signage and the intersection of Route 32 and 1st /Schuyler. The idea of aligning 1st and
Schuyler was endorsed, although that runs counter to the proposal to expand the area of the entry sign. It was suggested that the sign could be south of the new roadway. It was believed that location would be south of the Watervliet line. It is possible that the current sign is also south of the Watervliet line. This needs to be researched. At the Watervliet Gateway there is a tuning lane (turning arrow @ 1st street) that needs to be clearly marked. Participants wondered what could be planned for Colonie and Menands (in terms of gateway signage)? It was mentioned that Menands did a gateway signage study but currently has no funding to implement it.

E. **Lighting** - Pedestrian oriented lighting is ideal throughout the corridor. The Village required the owners of the Fleet Pride Building to put the decorative lights in before they were allowed to construct building. Communities have bargaining power.

F. **Menands Ramps and Future Roundabout** - There have been deadly accidents on 787 and ramps from cars going the wrong way. The plan needs to make sure there are signs and that the design of any future roundabout prevents cars going the wrong way. It was noted that the cost to construct the Menands Roundabout is $11 Million and the Village doesn’t have the money. It will likely to be a long term project.

G. **“Neighborhood” Roundabout** - For the possible “neighborhood” roundabouts participants asked about safety data for roundabouts. It was mentioned that roundabouts move traffic well. Trucks and emergency service vehicles can handle them and they can be designed with a pedestrian refuge and mountable curbs. There was concern that trucks would drive right through it.

H. **Sidewalks** - There are no sidewalks in Colonie – it’s all dirt. In other places existing sidewalks are “heaved up” by tree roots. Participants did mention that there is a lot of foot traffic in Colonie (along Route 32). While the idea of sidewalks was positive, participants felt that it would create a burden for the residential property owners. Some older residents can’t move the existing snow kicked up by the plows. Participants questioned who is responsible for sidewalks? In Watervliet it is (and would be) the property owners responsibility to maintain sidewalks. A similar situation exists in Menands. Proper tree selection would help. The root systems of maple trees are incompatible with sidewalks. At Riverview Center in Menands (south of the study area) it was negotiated that the Village plows the sidewalks and the building owners maintain the sidewalk. It is a good partnership.

I. **Speeding and Congestion** - Participants reported that it is a "drag way" from 1st Street in Watervliet to the light at the Price Chopper Plaza in Menands. There are also high speeds on Third Avenue in Watervliet. If traffic gets backed up on 787, it creates heavy traffic along Route 32, so everyone gets off in Menands and goes though Watervliet creating congestion. There is constantly a heavy traffic at Riverview Center in Menands (south of the study area). It was felt that traffic along Route 32 is mostly through traffic-even going to Latham. Participants mentioned that speeding and parking enforcement are essential to the businesses and residents along 3rd Avenue. Several group members noted speeding as a problem and suggested that a traffic light be placed at 4th Street or 5th Street (at the corner of Ted’s Fish Fry) where there was once a traffic light. It was agreed by the participants that an additional light would help to address speeding as well as safety.
J. **Study Sub Area Recommendations** - Participants identified the following issues in each sub area.

1. **Village of Menands** - Residents at the Village One Apartments have a difficult time trying to turn left onto Route 32. They would like a traffic light at the Apartments. It was also suggested that the road to Village One apartments be reconfigured to align across from the Fed Ex access road. There have been incidents of pedestrian collisions trying to cross Route 32 to get to their bus stop. Aligning the roads would provide a traffic signal to make this crossing safer. There is some interest in the redevelopment of the former Menands Diner site. Questions were asked about development possibilities on the site south of the Price Chopper Plaza. The possibility of senior housing was suggested. Rite Aid and Price Chopper proposals for expansion were mentioned as well. The redevelopment of the former Two Guys building was also mentioned (and should be highlighted graphically on the map and included in the development node as well as in any recommendations for design standards).

2. **Town of Colonie** - Schuyler Lane is a "total eyesore" and it straddles municipal line (high possibility for mixed use area). The area is like a junkyard / parking lot and it feels like a "no man's land". Participants wondered who needs to be called to address the situation? Participants suggest that commercial traffic be re-routed to Broadway via Schuyler Lane. Facilitators mentioned that there does not appear to be enough space for trucks to make the turn onto 2nd Avenue. Others thought that would make a bad situation worse.

3. **City of Watervliet** – Third Avenue was the subject of much discussion. 5th Street and Third Avenue needs a traffic light (see comment above). 3rd Avenue needs to be repaved and realigned but residents do not want another 19th Street reconstruction project where everything is disrupted with construction happening at the same time. There are definitely 4 curb areas on 3rd Avenue that need to be replaced. Paving and aligning Third Avenue from 1st to 8th – is a very important project.

In addition, the intersection at First and Schuyler is difficult for truck traffic. There used to be a turn lane markings that have worn away. It is particularly hard for the Bonded Cement and other trucks to turn. North bound trucks have a difficult time turning right onto Schuyler Lane. Southbound trucks coming out of Schuyler lane often have a hard time because north bound traffic crowds the intersection when they stop for the light. All agreed that the undefined nature of the area was both a traffic and aesthetic problem and that the dedicated left turn pocket from Route 32 north to 1st Street needs to be better and more clearly delineated (faded pavement markings, poor signage, etc.). Participants felt that a high priority should be Schuyler and First. The study should emphasize and look into the many forces that converge at this site.

One person suggested that the traffic light on seventh could be removed because there is no longer an active Church or school at this intersection. There was disagreement on this suggestion. It was said that the light was needed to avoid problems with traffic backing up waiting to get into the arsenal and that traffic is around a curve and can’t be seen by north bound traffic. The traffic striping and signage in this area (the approach to the arsenal) should be improved.
4th and 2nd Streets were cited as the scene of many accidents. Susan suggested that the corners might be bumped out to make the intersection safer for pedestrians. It was also mentioned that bump outs help protect parked cars from being struck by turning cars. There was concern that the bump outs would eliminate badly needed parking spots; however, it was pointed out that the spaces closest to the intersection are not legal parking spaces and that no parking would be lost.

K. Transit – Participants asked what improvements are appropriate at transit stops? They felt that safe access and sidewalks are key particularly at the corner of 1st and 3rd. There is a bus stop on the Watervliet side and there is not adequate space to wait for the bus.

L. Turning Lanes – Participants felt that a turning lane the entire length of the corridor (in Menands and Colonie) should be considered. Cars generally stay in the right hand lane then cut over after passing Federal Express.

M. Wetlands - There are wetlands behind Albany Steel that were filled in and are still elevated. It needs to be excavated. Wetlands go up to the Al-tech property and there is some reusable land there.

III. Report Back

A. Based on the small group discussion, there was a lot of agreement and good suggestions.
B. Currently there is no money to implement – Federal re-appropriations are holding up the State planning and allocations
C. Doing the basics - repaving and restriping -could go a long way and make a big difference along the corridor
D. The 1st Street/3rd Avenue Intersection is a priority!

IV. Next Steps

A. Final Recommendations – Late September
B. Final Document - October
Appendix E: Study Area Boundary Map
Appendix F: CDTC Bicycle Rack Program

Capital Region Bike Rack Program Description

The Capital Region Bike Rack program is a new addition to a set of Travel Demand Management (TDM) strategies administered cooperatively by the Capital District Transportation Authority (CDTA) and the Capital District Transportation Committee (CDTC). Funding for TDM programs has been dedicated in the region’s Transportation Improvement Program (TIP) since 1997 using federal funds from the Congestion Management and Air Quality (CMAQ) program under the Federal Transit Administration (FTA). Applications are available from CDTC at www.cdtcmpo.org or by calling 518-458-2161, and from CDTA at www.cdta.org or by calling 518-437-6865 or emailing bikerackprogram@cdta.org.

Demand management programs are designed to reduce single occupant vehicle (SOV) travel, fuel consumption, air pollution and parking demand by making travel options like buses, carpooling, walking and biking more attractive and affordable. Such programs also encourage people to engage in forms of transportation that improve personal health.

Bicycling reduces air emissions and single occupancy vehicle (SOV) trips. A shift of automobile trips to bicycle trips has a direct, positive impact by eliminating attributable emissions (a 100 percent reduction!). Biking is cost-effective for both society at large and for individuals, with benefits accruing from reductions in:

- Vehicle expenses
- Costs associated with municipal services devoted to vehicle traffic
- Air, noise, and water pollution
- Resource consumption (both fuel and vehicle steel and components)
- The “Barrier effect” created by heavy motorized traffic on pedestrian and bicycle mobility
- Negative land use impacts (proximity and a mix of uses are more bike accessible)

Provision of appropriate bicycling amenities, such as safe parking, encourages people to bike. Availability of bicycle parking adds convenience for the entire cycling community: businesses, commuters, shoppers, messengers and food deliverers and students. Businesses can expand their client base and improve customer satisfaction by providing convenient parking nearby. Also, the availability of bicycle parking discourages cyclists from parking at mailboxes, parking meters, trees, and other sidewalk structures.

1 www.epa.gov
Capital Region Bike Rack Program Description

The Capital Region Bike Rack program uses subsidies provided by the existing regional TDM allocation. The annual program budget will be set at $50,000. The program provides free approved bike racks to the public sector and non-profits, up to a $1,000 value, and provides 50/50 cost sharing of approved bike racks for the private sector, also up to a $1,000 value (which means up to $500 can be provided by the Bike Rack Program). Any additional costs will be paid by the applicant. CDTA/CDTC selected the DERO Bike Rack Company using a competitive bid process. See the ‘CDTA Price List’ for available models and pricing. Additional information about individual models can be found at www.dero.com.

A selection committee made up of the Capital District Transportation Authority, the Capital District Transportation Committee, the Capital District Regional Planning Commission, and the Governor’s Traffic Safety Committee will review applications received by the due date. Bike racks will be granted based on density of the proposed location, the appropriateness of the location according to the Association of Pedestrian and Bicycle Professionals’ “Bicycle Parking Guidelines” (specifically #4 – ‘The Rack Area Site’), found at http://www.sccrtc.org/bikes/APBP_bikepark.pdf; evidence that the applicant is engaging to manage travel demand, increase social equity, and/or reduce energy use; geographical balance; and the submittal date of the complete application. Applicants submitting more than one application must prioritize them. Depending on interest, the CDTA and CDTC will announce additional solicitation opportunities.

Additionally:

- Participants are responsible for obtaining any and all necessary approvals, permits, and licenses, including from the site owner (if not the applicant) and the municipality.
- Participants will be responsible for picking up bike racks from a CDTA/CTDC-designated central location, at CDTA/CDTC-designated times, and loading them into their own appropriate vehicles.
- The applicant will not be responsible for shipping costs by the vendor.
- Participants will be responsible for bike rack installation, no later than two months after pick-up. If participants do not have the capability to install bike racks, they can, for a fee, opt to use a CDTA contractor.
- Bike racks must be installed in locations that:
  - Are continuously accessible to the public (24 hrs a day) and in a visible location. For instance, installation cannot be at a back entrance utilized only by employees or only available for designated periods (ie the workday, 9-5pm).
  - Do not block fire escapes, fire lanes, or other such emergency access.
  - Do not impede pedestrian flow or accessibility for people with disabling conditions.
  - Allow the bike rack to be used to it’s capacity (If a rack will hold 4 bikes, it shouldn’t be so close to a building that it accommodates only 2 bikes)
- Participants must maintain and indemnify received bike racks for a minimum of five years after installation, and respond to annual survey questions on the current status of the bike racks. Removal of any bike rack prior to 5 years will require the participant to reimburse the program for the proportionate share of the rack.
- Participants in the program will be requested to participate in promotional activities for the program, including the use of photos of the finished sites, surveys and inventories of rack users and usage; and to include credit to CDTA/CDTC and the FTA in any materials that they produce promoting use of the racks.
Appendix G: Crash Data and Traffic Volume Report
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At Intersection | Accident Date | Severity | Fatality | Injury | Number of Vehicles | Accident Type | Collision Type | Traffic Control | Light Conditions | Weather | Road Surface Condition | Municipality | Accident Time |
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At Intersection | Accident Date | Severity | Fatality | Injury | Number of Vehicles | Accident Type | Collision Type | Traffic Control | Light Conditions | Weather | Road Surface Condition | Municipality | Accident Time |
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Appendix H: Future Recommendations
Maps By SubArea
Route 32 Corridor Linkage Study

Concepts Map
Menands

Proposed improvements throughout:
- Restriping of crosswalks
- ADA curb ramps
- Access management
- Bike parking
- Streetscape improvements
- Pedestrian push button at intersections

Off corridor City bicycle/traffic improvements:
- Stripe parking lanes
- Add bike lanes on cross streets, especially 4th Street and 8th or 7th Streets

Menands Diner Development Node

Proposed 3 lane segment:
- Center turn lane
- Bike lanes
- Sidewalks

Align transit shelter and speed control measures/pedestrian refuge and gateway treatment

Promote transit-oriented design standards and redevelopment opportunities

4 lane segment:
- 2 travel lanes in each direction
- Bike lane

Access pedestrian safety improvements to support transit redevelopment opportunities

4 leg roundabout at 378 westbound ramp with shared access to Price Chopper Plaza

Connection to South Troy Riverfront Bikeway/Walkway construction to be completed end of Summer 2010

Transit Shelter
Current Traffic Signal
Current Bike Route

Future Roadway
Proposed from Albany County Commercial Transportation Access Study

Future Pedestrian Safety/Traffic Calming Improvements
Future Traffic Light
Future Roundabout
Future Bike Route/Multi Use Trail

Route 32 Corridor Linkage Study Area

SGB Consulting
Proposed improvements throughout:
- Restriping of crosswalks
- ADA curb ramps
- Access management
- Bike parking
- Streetscape improvements
- Pedestrian push button at intersections

Off corridor City bicycle/traffic improvements:
- Strip parking lanes
- Add bike lanes on cross streets, especially 4th Street and 6th or 7th Streets

Promote transit oriented design standards and redevelopment opportunities

Formalize Schuyler Lane:
- Striping, curbing and sidewalks

Proposed 3 lane segment:
- Center turn lane
- Bike lanes
- Sidewalks

Roundabout with gateway treatment

Align transit shelters and provide median/pedestrian refuge and gateway treatment

RT 32:
- Future BRT Site

Future Pedestrian Safety/Traffic Calming Improvements
- High transit shelters and provide median/pedestrian refuge and gateway treatment

Proposed from Albany County Commercial Transportation Access Study

Future Bike Route/Multi Use Trail

Current Traffic Signal

Current Bike Route

Future Roundabout

Future Roadway

Municipality Boundary Lines

Route 32 Corridor Linkage Study Area

Transit Shelter

0 0.02 0.04 0.08 0.12

N

Future Pedestrian Safety/Traffic Calming Improvements

Future Traffic Light

SGB Consulting
Off corridor City bicycle/traffic improvements:
- Strip parking lanes
- Add bike lanes on cross streets, especially 4th Street and 6th or 7th Streets

Proposed improvements throughout:
- Restriping of crosswalks
- ADA curb ramps
- Access management
- Bike parking
- Streetscape improvements
- Pedestrian push button at intersections

Formalize Schuyler Lane:
- Striping, curbing and sidewalks

Proposed 3 lane segment:
- Center turn lane
- Bike lanes
- Sidewalks

Roundabout with gateway treatment:
- Textured crosswalk with curb extensions

Proposed 2 lane segment:
- Shared motorized/bicycle
- Possible sharrows
- Lighting/streetscape

Restripe/Enhance pavement markings:
- 2 lane segment:
  - Shared motorized/bicycle
  - Possible sharrows
  - Lighting/streetscape

Current Traffic Signal
Current Bike Route

Future Pedestrian Safety/Traffic Calming Improvements
Future Traffic Light
Future Roundabout
Future Bike Route/Multi Use Trail

SGB Consulting

River Street Planning & Development
Appendix I: Sample Shared Parking Agreement

Example: Model Shared Use Agreement for Parking Facilities

Effective: ________________

This Shared Use Agreement for Parking Facilities, entered into this ___day of ____________, between ___________________, hereinafter called lessor and ____________________, hereinafter called lessee.

In consideration of the covenants herein, lessor agrees to share with lessee certain parking facilities, as is situated in the (City, Town, Village) of _________________. County of _______________ and State of _______________, hereinafter called the facilities, described as:

[Include legal description of location and spaces to be shared here, and as shown on attachment 1 - map].

The facilities shall be shared commencing with the ___day of ____________, 20___, and ending at 11:59 PM on the ___day of ____________, 20___, for [insert negotiated compensation figures, as appropriate]. The lessee agrees to pay at [insert payment address] to lessor by the ___day of each month [or other payment arrangements]. Lessor hereby represents that it hold legal title to the facilities.

The parties agree:

1. USE OF FACILITIES
Lessee shall have exclusive use of the facilities between the hours of ______ [AM/PM] _________ [day] through ______ [AM/PM] _________ [day]. Lessor shall have exclusive use of the facilities between the hours of [AM/ PM] _________ [day] through ______ [AM/PM] _________ [day].

2. MAINTENANCE
Lessor shall provide, as reasonably necessary asphalt repair work. Lessee and Lessor agree to share striping, seal coating and lot sweeping at a 50%/50% mutual split based upon mutually accepted maintenance contracts with outside vendors. Lessor shall maintain lot and landscaping at or above the current condition, at no additional cost to the lessee. [Revise as necessary to meet local needs]

3. UTILITIES and TAXES
Lessor shall pay all taxes and utilities associated with the facilities, including maintenance of existing facility lighting as directed by standard safety practices. [Revise as necessary to meet local needs]
4. SIGNAGE
Lessee may provide signage, meeting with the written approval of lessor and the [City, Town, Village] of _____________, designating usage allowances. [Revise as necessary to meet local needs]

1. ENFORCEMENT
Lessee may provide a surveillance officer(s) for parking safety and usage only for the period of its exclusive use. Lessee and lessor reserve the right to tow, at owners expense, vehicles improperly parked or abandoned. All towing shall be with the approval of the lessor. [Revise as necessary to meet local needs]

6. COOPERATION
Lessee and lessor agree to cooperate to the best of their abilities to mutually use the facilities without disrupting the other party. The parties agree to meet on occasion to work out any problems that may arise to the shared use.

7. INSURANCE
At their own expense, lessor and lessee agree to maintain liability insurance for the facilities as is standard for their own business usage. [Revise as necessary to meet local needs]

8. INDEMNIFICATION
[This section should describe indemnification as applicable and negotiated. Legal counsel should be consulted for appropriate language to every agreement].

9. TERMINATION
If lessor transfers ownership, or if part or all of the facilities are condemned, or access to the facilities is changed or limited, lessee may, in its sole discretion, terminate this agreement without further liability by giving Lessor not less than 60 days prior written notice. Upon termination of this agreement, Lessee agrees to remove all signage and repair damage due to excessive use or abuse. Lessor agrees to give lessee the right of first refusal on subsequent renewal of this agreement. [Revise as necessary to meet local needs]

10. SUPPLEMENTAL COVENANTS
[This section should contain any additional covenants, rights, responsibilities and/or agreements.]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date Set forth at the outset hereof.

[Signature and notarization as appropriate to a legal document and as appropriate to recording process negotiated between parties.]

Adapted for New York from the Model – Shared Use Agreement for Parking Facilities developed by Stein Engineering, 1997, in the document: Model Zoning Regulations for
Appendix 2 - Model Shared Driveway Agreement

SHARED DRIVEWAY AND MAINTENANCE AGREEMENT

Background of Agreement

Users are owners of adjacent properties in the (City, Town, Village) of______________. New York. User One:___________________is owner of the property at _________________________(address) ______________________(tax parcel number). User Two:________________________is owner of the property at _________________________(address) ______________________(tax parcel number). The Users own properties that abut each other and have access from _________________. There is a driveway that serves both properties. The Users have determined that it is in their mutual interest to have executed and recorded an agreement for sharing the costs of maintenance and repair of the driveway. The purpose of this Agreement is to place into writing the mutual rights and obligations of the Users of the jointly used driveway.

Agreement

NOW THEREFORE, in consideration of their mutual promises and intending to be legally bound, the Users (parties) agree as follows:

1. Grant of Easement. Each party grants to the other a permanent easement over and across their respective properties for the purpose in ingress and egress to their adjoining properties.

2. Sharing of Costs and Expenses. The parties shall share the expenses as follows: ________________, his/her successors and assigns shall pay one-half of the maintenance and repair of the driveway that is jointly used. ________________, their successors and assigns shall pay one-half of the costs of maintenance and repair of the jointly used driveway that is used solely by them.

3. Binding Effect. This Shared Driveway Agreement shall not be modified except in writing signed by the parties, their successors or assigns. This Agreement and its obligations and benefits shall run with the land and shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. This Agreement dated this _______day of ___________, 20___.

(Signature – User One) (Print Name – User One)

(Signature – User Two) (Print Name – User Two)

Adapted for New York from the Township of Halfmoon, Centre County, Pennsylvania.
Appendix J: CDTA Guidelines for Transit Station Design
5. BUS STOP SIGN PLACEMENT

Sign Placement:
- Install in location adjacent to corner post or right front bumper when the bus comes to a full stop
- If practicable, install 8 feet from curb on far side of sidewalk
- Minimum distance should be 24 inches to ensure post does not conflict with bus mirror
- Should not block any traffic safety signs
- Should be on its own post unless explicit permission to use a shared pole exists

6. ACCESSIBILITY FOR THE DISABLED

Below are some key considerations crucial to accommodating people with disabilities:
- Non-slip finishes
- Eliminate hazards, mark dangerous areas
- Provide visual and tactile cues made through color contrast and texture
- Ensure area is well lit for orientation and security
- Make visible – ensure bus operator can see waiting passenger
- Make sure sidewalks are in good state of repair
- Concrete barrier curb 6 inches
- Transit stop waiting pad, minimum 7 x 6.5 inches
- 1-2 paved connections from pad to the sidewalk, width 5 inches
- Remove obstructions, provide a minimum clear width of 5 inches
- Waiting pad must have an accessible ramp on either side
  - slope 6 feet for 6 inches of curb
  - ramp must be minimum 5 inches wide
- Installation of an elevated concrete pad on the shoulder of the road
- Install transition at each end of pad (see ramp details above)
- Corresponding inbound and outbound stops should be accessible
- Curb cuts:
  - installed as right angles to the street (if possible, 2 per corner)
  - flush at the top and bottom of the slope
  - joint free
  - include pavement markings for visually impaired
  - free draining
  - contrasting color/surface to surrounding area
  - provide for a continuous accessible route – no sudden barriers leaving traveler stranded
Capital District Transportation Authority (CDTA)
Bus Stop Checklist

This checklist summarizes CDTA’s guidelines and criteria when locating bus stops. CDTA staff is available for consultation on practical application of these guidelines.

1. LAND USE - TRANSIT RELATIONSHIP

Coordination between transit and land use helps to create livable, sustainable communities. Several factors should be considered when developing site plans:

**Intended Site Use** - senior housing, medical centers or major shopping centers should be located along existing transit routes. Integrating transit into development site plan during early planning stages meets the proven high demand for transit service at such facilities. If transit is not considered in advance, it reduces to service options in the future.

**Site Layout** - there are several general factors that make a development transit-friendly:
- Buildings are located close to street side
- Buildings face the street
- Façade features windows (no blank walls are facing the street)
- Good pedestrian infrastructure throughout the site connects to the street sidewalks
- Adequate lighting is provided
- Parking does not exceed minimum requirements (reduced or shared parking is encouraged when development is located along transit corridor)
- Bicycle parking should be provided some transit riders complete a portion of their trip by bike; all CDTA buses are equipped with bike racks
- Landscaping should be maintained - no overgrowth

2. LOCATION CONSIDERATIONS

**Place Stop**
- Convenient to major destinations, including employment sites, hospitals, shopping and entertainment venues
- Convenient for transfers between services
- In the public right-of-way, unless written permission to operate on private property exists
- Consider the impact of stops on adjacent properties
- Paired, or as close as possible, with the stop in the opposite direction
- Convenient for errand running and “trip linking” tasks
- Grade of road should not impede accessibility

Source: San Diego Metropolitan Transit Development Board
Bus Turnout Design:

Bus turnout can slow transit operations because of merging, but provide important safety benefits under specific conditions.

Install bus turnout only under the following circumstances:
- Traffic speed average is greater than 40 mph
- Traffic in the curb lane exceeds 250 vehicles/peak hour
- Passenger boarding during the peak exceeds 20-40 persons
- Past history of vehicle/pedestrian conflict
- Layovers are expected
- Inadequate sight distances
- Parking in curb lane is prohibited
- Signal priority treatment exists at next intersection
- Right turn lane is used by buses as queue jumper lane
- Not too close to an intersection where waiting vehicles impede transit access/egress

Design considerations are the same as Curb-Side with special attention to:
- Turnout length must accommodate access/egress
- Lane width - minimum 11.5 feet
- Remove overhead obstructions - 16.5 feet
- Remove lateral obstructions cleared within 3.2 feet of curb
- Adequate curb space for number of buses expected at one time
- “No Parking” sign in a bus stop area
- Special pavement treatment is desirable (see image below)

Visibility
- Bus operators’ sightlines should not be obscured by trees, shrubs, poles, buildings
- Where there are bike lanes: locate the bus stop to provide sufficient distance for cyclists to stop safely
- Buses should not restrict the visibility of traffic signals
- Do not place bus stops on curves – 495 foot sight line is required going into zone and coming out of bus stop zone
- Ensure clear sightlines on the right side of the bus - no obstructions between bus operator and boarding passengers
- Stop should be well lit

Driveways
- Place on far side of driveway
- Consider volumes and turning movements of other vehicles (discussed further in following sections)
- Adequate curb space in waiting area – avoid spillover to adjacent curb space
- Ensure loading zone is wide enough to accommodate passing pedestrians, alighting and waiting riders
- All weather, slip resistant surface (impervious), well drained – especially to step from/to the bus

3. AMENITIES AND ACCESS

Pedestrian Accommodations

It is very important to remember that every bus rider is a pedestrian for a part of the trip. That is why special attention should be given to providing adequate pedestrian accommodations like sidewalks and crosswalks.
- Connecting path and sidewalks should be clear of obstructions, made of a firm surface material, and well drained; ADA compliant
- Locate stops at traffic signals for safe street crossing wherever possible
- Bus stops should be located in close proximity to crosswalks
  - Intersection stops: if necessary, ensure 15 inches distance between the stop line and the bus stop
  - Mid block stops: always locate stop on the far side of crosswalk so that pedestrians cross behind the bus, not in front
  - Avoid locating stops close to driveways, especially those with high traffic volumes
Street Furniture
- Ensure minimum 3.5 foot lateral clearance (preferred 5 feet for wheelchair clearance) and 6.5 foot headroom
- Accommodate newspaper boxes if they are well maintained and do not impede mobility
- 3.5 foot separation from other street furniture
- Locate garbage receptacles away from landing pad. Garbage receptacles should be:
  - regularly maintained
  - animal/vandal proof
  - bolted down
  - placed to avoid direct sunlight
  - designed to not allow pooling of liquids which attract insects

Benches at Bus Stops
- Install when shelter is not feasible, but demographics warrant seating
- Install where there is evidence transit patrons are sitting or standing on nearby structures
- Avoid complete exposure to elements
- Coordinate with existing or new trees for shade, wind and rain protection
- Locate away from driveways
- Separate from curb by at least 6 feet
- Ensure adequate clearance for mobility especially near landing pad
- Allow room for through pedestrian traffic

Shelters
Shelter with seating
CDTA receives more requests for shelters than program funding availability for installation and maintenance. All requests are evaluated and prioritized annually based on the following criteria:
- Threshold of 50 passengers per day boarding at the stop is desirable
- Number of routes that transfer at a stop (priority to stops with transfer activity)
- Space is available for construction in the public right-of-way
  - no obstructions
  - level
  - sufficient clearance for wheelchair movements
- Consider demographics of area/riders – seniors, physically challenged

Shelter design
- CDTA procurs standardized shelters to facilitate maintenance and to achieve bulk pricing advantages
- Four sided shelters require an opening that is a minimum width of 2.62 feet for compliance with the Americans with Disabilities Act (ADA)
- Transparent sides
- Seating oriented to view oncoming transit, pedestrians and adjacent buildings
- Lit shelters are preferred where practicable
  - Down lighting in shelter area improves safety and visibility
- Ad panels should be located far side so as not to obstruct the view of an arriving bus
- Shelter location and orientation should:
  - Be parallel and facing curb
  - Ensure bus operator can see waiting passengers
  - Should not impede landing area or pedestrian path
  - Should take into consideration snow clearance practices

For drawings of currently used bus shelters, please contact CDTA Streets Amenities Manager.

4. CURB SIDE STOPS AND TURNOUT DESIGNS

Curb Side Site Design
Curb side stops are typically installed on existing sidewalks. The length of the stop’s curb maybe painted to make the stop more visible and discourage parking.
- Ensure condition of curb lane is without potholes; grates and storm drain covers are flush with surface
7. RURAL STOPS

- Adhere to as many stop location standards as is practicable
- Install a landing pad, brushed concrete, raised, to separate from traffic
- Install curb cuts at each end – for accessible transition onto shoulder pathway
- Cut back landscaping for sightlines and personal safety
- Consistent signage with urban/suburban stops

8. PERSONAL SAFETY CONSIDERATIONS

By addressing the needs of “vulnerable users” within the built environment, the entire community benefits from improved and well cared for facilities.

Location

- Site should “feel” safe at night
- Locate where adjacent land use offers “passive surveillance” or “eyes on the street”
- Neighboring houses looking on
- Commercial businesses open late
- Bus stop for same route in opposite direction, located within easy sight distance

Landscaping

- Low shrubbery or canopied trees
- No bushes or evergreen trees

Lighting

- Adequate lighting - shining directly on waiting and surrounding areas
- Coordinate location with existing street lights
- Coordinate with lighting from adjacent land uses (i.e.: consider lighting when choosing a location)

9. INFORMATION

For more information please contact:
- CDTA Streets Amenities Manager in the Facilities Department – Existing Bus Stops & Shelters
- CDTA Business Development Department – Requests for new or modified Bus Stops, Shelters or Site Plan review.

www.cdtar.org, or 518-437-8300
Appendix K: Implementation Matrix
# Route 32 Linkage Study Implementation Strategy: Village of Menands, Town of Colonie & City of Watervliet

**Short Term = 1-2 years**  
**Medium Term: 3-5 years**  
**Long Term: 6-8 years**

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<td>Develop an inter-municipal zoning overlay district for Route 32</td>
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<td>Develop uniform design guidelines for commercial, multi-family and mixed-use development along Route 32</td>
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<td>Municipal Staff Time</td>
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### Streetscape Enhancements:
- Extend decorative street lighting north from the center of the Village of Menands, along with street trees/planting strip and full sidewalks.
- Within proposed development nodes in Menands/Colonie, add pedestrian-oriented and scaled lamps to better light existing and future sidewalks and CDTA bus facilities. Work with property owners to incorporate additional landscaping along access drives and sidewalk linkages from the Route 32 frontage into site interiors. The Town and Village will address the maintenance of sidewalks. The design of sidewalk widths and parking lot will accommodate snow storage.
- In Watervliet, incorporate pedestrian street lamps in key locations such as between 6th and 7th Streets where commercial businesses are clustered and have a consistent build to line along 3rd Avenue.
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<td>- Extend Mohawk Hudson Bike Hike Trail to the north to connect the rest of the City of Watervliet with the Hudson River waterfront and this multi-use trail.</td>
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<td>- Extend multi-use trail in Schuyler Flatts south along the Route 378 ramps to the southern end of the study area.</td>
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<td>Town of Colonie, Village of Menands</td>
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<td>- Designate 4th Street in Watervliet as a local bike route west across 3rd Avenue to 8th Avenue. Also designate either 6th or 7th Street from 8th Avenue to Broadway as a local bike route (and, ultimately, striped with bike lanes if sufficient roadway width exists).</td>
<td>Short-Term</td>
<td>City of Watervliet</td>
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<td>- Coordinate drainage improvements with future curbing and roadway improvements.</td>
<td>Long-term</td>
<td>Village of Menands, Town of Colonie, City of Watervliet</td>
<td>Municipal CIP</td>
<td>Village of Menands, Town of Colonie, City of Watervliet</td>
</tr>
<tr>
<td>Pedestrian Access/ADA enhancements:</td>
<td></td>
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<tr>
<td>- Restripe crosswalks</td>
<td>Medium-Term</td>
<td>Village of Menands, Town of Colonie, City of Watervliet</td>
<td>CDTC-TIP, NYSDOT Transportation Enhancements Program</td>
<td>Village of Menands, Town of Colonie, City of Watervliet</td>
</tr>
<tr>
<td>- Install ADA curb ramps</td>
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<tr>
<td>- Install pedestrian push buttons at intersections</td>
<td></td>
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<tr>
<td>- Sidewalk installation/replacement to complete the sidewalk network on both sides of Route 32</td>
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</tr>
</tbody>
</table>
## Route 32 Linkage Study Implementation Strategy: Village of Menands, Town of Colonie & City of Watervliet

Short Term = 1-2 years       Medium Term: 3-5 years       Long Term: 6-8 years

<table>
<thead>
<tr>
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<th>Potential Funding Source</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Access management standards to improve traffic flow:</td>
<td>Medium- to Long-Term</td>
<td>Village of Menands, Town of Colonie, NYS</td>
<td>CDTC-TIP</td>
<td>NYS DOT</td>
</tr>
<tr>
<td>▪ Develop a strategy for the location, spacing and design of driveways and provide incentives for sharing driveways and off-street parking areas</td>
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</tr>
<tr>
<td>▪ Establish a center turn lane/left turn pockets along Broadway/Route 32 in Colonie</td>
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<tr>
<td>▪ Construct a 4 leg roundabout at the 378 interchange</td>
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</tr>
<tr>
<td>Local safety campaign to improve awareness and safety:</td>
<td>Short-Term</td>
<td>Village of Menands, Town of Colonie, City of Watervliet</td>
<td>NYS Governor's Traffic Safety Committee Highway Safety Program, NYSDOT Transportation Enhancements Program, NYS Department of Health (safety campaign/injury prevention)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>▪ Conduct outreach to motorists regarding safe driving behavior, the responsibility of motorists vs. pedestrians and cyclists, and conduct a campaign to better enforce speed including use of portable speed trailers and other devices.</td>
<td></td>
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</tr>
<tr>
<td>▪ Provide educational outreach to cyclists, particularly those new to cycling, with respect to traffic laws, rights and responsibility of cyclists. This could be in partnership with local cycling group such as the Mohawk Hudson Cycling Club.</td>
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<td>------------------------------------------------------------------------</td>
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</tr>
<tr>
<td><strong>Menands to Colonie Subsection</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Pursue redevelopment of key sites:</td>
<td>Medium- to Long-Term</td>
<td>Private Developers, Village of Menands</td>
<td>NYS DHCR CDBG Small Cities Economic Development, CDBG Small Cities, Private Investment</td>
<td>Property Owners</td>
</tr>
<tr>
<td>▪ Price Chopper Plaza – 442 Broadway</td>
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</tr>
<tr>
<td>▪ Menands Shopping Center - 431 Broadway</td>
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</tr>
<tr>
<td>▪ Menands Diner – 563 Broadway</td>
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<td></td>
</tr>
<tr>
<td>▪ Redevelopment Site – 434 Broadway</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Transportation Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construct roundabout at the Route 378/Route 32 interchange</td>
<td>Medium- to Long-Term</td>
<td>NYS DOT, Village of Menands</td>
<td>CDTC-TIP</td>
<td>NYS DOT</td>
</tr>
<tr>
<td>Combine driveways at Price Chopper Plaza and adjacent parcel to the south and align with roundabout/Route 378 ramp interchange</td>
<td>Medium- to Long-Term</td>
<td>NYS DOT, Village of Menands</td>
<td>CDTC-TIP</td>
<td>NYS DOT</td>
</tr>
<tr>
<td>Construct four lane cross section (with center turn lane) and sidewalks on both sides of Route 32</td>
<td>Medium- to Long-Term</td>
<td>NYS DOT, Village of Menands</td>
<td>CDTC-TIP, NYSDOT Transportation Enhancements Program</td>
<td>NYS DOT</td>
</tr>
<tr>
<td>Add bike lanes/shoulder and bicycle parking</td>
<td>Medium- to Long-Term</td>
<td>NYSDOT, Village of Menands</td>
<td>CDTC-TIP, NYSDOT Transportation Enhancements Program</td>
<td>NYSDOT</td>
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## Route 32 Linkage Study Implementation Strategy: Village of Menands, Town of Colonie & City of Watervliet

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<tbody>
<tr>
<td>Connect off-road trail linkage just north of Route 378 ramps to corridor and via linkage to Schuyler Flatts</td>
<td>Medium-Term</td>
<td>Village of Menands, Town of Colonie</td>
<td>NYS OPRHP EPF, NYS OHRHP Recreational Trails Program</td>
<td>Village of Menands, Town of Colonie</td>
</tr>
<tr>
<td>Consider gateway signage for the Village of Menands</td>
<td>Short-Term</td>
<td>Village of Menands</td>
<td>NYS DOT</td>
<td>Not applicable</td>
</tr>
</tbody>
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**Catalyst Project - Potential Development Node at Menands Diner/Menands Shopping Center/British American**

<table>
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<tr>
<th>Project</th>
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</thead>
<tbody>
<tr>
<td>Encourage more nodal, pedestrian and transit-friendly development pattern in future redevelopment opportunities</td>
<td>Short-Term</td>
<td>Village of Menands</td>
<td>Municipal Staff Time</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Encourage mixed-use development at transit supportive densities</td>
<td>Short-Term</td>
<td>Village of Menands</td>
<td>Municipal Staff Time</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Encourage compact, pedestrian-oriented access, connections, amenities</td>
<td>Short-Term</td>
<td>Village of Menands</td>
<td>Municipal Staff Time</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Require bicycle parking in all future development as part of off-street parking requirements</td>
<td>Short-Term</td>
<td>Village of Menands</td>
<td>Municipal Staff Time</td>
<td>Property Owners</td>
</tr>
<tr>
<td>Encourage access management, including shared access, driveway spacing standards, and shared parking. Offer density bonuses and reductions in required off-street parking in exchange for shared access and shared parking arrangements</td>
<td>Short-Term</td>
<td>Village of Menands</td>
<td>Municipal Staff Time</td>
<td>Not Applicable</td>
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Route 32 Linkage Study Implementation Strategy: Village of Menands, Town of Colonie & City of Watervliet

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<tbody>
<tr>
<td>Future roadway section could transition to three lanes in this area with sidewalks and bike lane/shoulder, allowing for improved transit operations and facilities, including the possibility of bus nubs and future BRT service.</td>
<td>Long-Term</td>
<td>NYS DOT, CDTA, Village of Menands</td>
<td>CDTC-TIP, CDTA, NYSDOT Transportation Enhancements Program</td>
<td>NYSDOT</td>
</tr>
<tr>
<td>Menands Shopping Center site: Redevelopment of this site should consider mixed use, reconfiguring buildings, dividing the parking lot into a series of smaller lots with more green space and pedestrian-oriented design, as well as adding bicycle parking and connections to exiting bike trails.</td>
<td>Long-Term</td>
<td>Village of Menands, Private Developer</td>
<td>NYS DHCR CDBG Small Cities Economic Development, CDBG Small Cities, NYS OPRHP EPF, NYS OHRHP Recreational Trails Program Private Investment</td>
<td>Property Owner</td>
</tr>
</tbody>
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Colonie to Watervliet Subsection

Transportation Improvements

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<tr>
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<tbody>
<tr>
<td>The roadway section through Colonie is proposed to be one lane in each direction, with left turn pockets and/or a center turn lane, bicycle lanes and sidewalks on both sides of Route 32.</td>
<td>Long-Term</td>
<td>NYSDOT, Town of Colonie</td>
<td>CDTC-TIP, NYSDOT Transportation Enhancements Program</td>
<td>Town of Colonie</td>
</tr>
<tr>
<td>Install wayfinding signage improvements to direct visitors to Schuyler Flatts parking areas and cyclists to the Mohawk Hudson Bike Hike Trail as well as to local bike routes in Watervliet.</td>
<td>Short-Term</td>
<td>Town of Colonie</td>
<td>NYSDOT</td>
<td>Town of Colonie</td>
</tr>
</tbody>
</table>
## Route 32 Linkage Study Implementation Strategy: Village of Menands, Town of Colonie & City of Watervliet

Short Term = 1-2 years  |  Medium Term: 3-5 years  |  Long Term: 6-8 years

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<tbody>
<tr>
<td>Consider gateway signage for the Town of Colonie</td>
<td>Short-Term</td>
<td>Town of Colonie</td>
<td>NYS DOT</td>
<td>Town of Colonie</td>
</tr>
</tbody>
</table>

### Key Catalyst Projects - Potential Development Node/Future Secondary Roadway Connection at the Colonie/Menands border

This area has potential as a future development node with opportunities for compact, mixed-use, pedestrian and transit-oriented design.

- **The preferred roadway section here is also a 3-lane section with a center turn-lane/pockets and one thru lane in each direction unless four lanes with traffic calming, bike lanes and full sidewalks can be accommodated within the existing ROW. Full sidewalks on both sides of the street and bicycle lanes would complete the streets.**
  
<table>
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<tr>
<td>The preferred roadway section here is also a 3-lane section with a center turn-lane/pockets and one thru lane in each direction unless four lanes with traffic calming, bike lanes and full sidewalks can be accommodated within the existing ROW. Full sidewalks on both sides of the street and bicycle lanes would complete the streets.</td>
<td>Long-Term</td>
<td>NYS DOT, Village of Menands, Town of Colonie</td>
<td>CDTC-TIP, NYS DOT Transportation Enhancements Program</td>
<td>NYS DOT</td>
</tr>
<tr>
<td><strong>Encourage access management, including shared access, driveway spacing standards, and shared parking. Offer density bonuses and reductions in required off-street parking in exchange for shared access and shared parking arrangements.</strong></td>
<td>Short-Term</td>
<td>Village of Menands, Town of Colonie</td>
<td>Municipal Staff Time</td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Continue requiring bicycle parking in all future development as part of off-street parking requirements.</strong></td>
<td>Short-Term</td>
<td>Village of Menands, Town of Colonie</td>
<td>Municipal Staff Time</td>
<td>Property Owners</td>
</tr>
<tr>
<td><strong>Realign the transit shelters near the intersection in this area (Village One Apartments access drive) with high visibility pedestrian crossings.</strong></td>
<td>Medium-to Long-Term</td>
<td>Village of Menands, Town of Colonie, NYS DOT, CDTA</td>
<td>CDTC-TIP, NYS DOT Transportation Enhancements Program, CDTA</td>
<td>NYS DOT, CDTA</td>
</tr>
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### Route 32 Linkage Study Implementation Strategy: Village of Menands, Town of Colonie & City of Watervliet

Short Term = 1-2 years  
Medium Term: 3-5 years  
Long Term: 6-8 years

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</thead>
<tbody>
<tr>
<td>Consider/develop secondary roadway adjacent to the Federal Express Property, proceeding west and then northward to provide an alternative route for heavy vehicles.</td>
<td>Long-Term</td>
<td>Town of Colonie</td>
<td>Town of Colonie CIP, NYS DOT Industrial Access Program</td>
<td>Town of Colonie</td>
</tr>
<tr>
<td>Watervliet Subsection</td>
<td></td>
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</tr>
<tr>
<td>Update zoning ordinance</td>
<td>Short-Term</td>
<td>City of Watervliet</td>
<td>NYS DHCR CDBG Community Planning Grant</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Continue façade improvement program along 3rd Avenue</td>
<td>Short-Term</td>
<td>City of Watervliet</td>
<td>NYS DHCR CDBG-Small Cities, NYS DHCR NY Main Street Program</td>
<td>Property Owners</td>
</tr>
<tr>
<td>Pursue redevelopment of key sites:</td>
<td>Short- to Long-Term</td>
<td>City of Watervliet, Arsenal Partnership</td>
<td>NYS DHCR CDBG-Small Cities Program –Economic Development, NYS DHCR CDBG-Small Cities Program, NYS DHCR NY Main Street Program</td>
<td>Property Owners</td>
</tr>
<tr>
<td>- Vacant Lot on Third Avenue</td>
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<tr>
<td>- 632 Third Avenue</td>
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<tr>
<td>- 636 Third Avenue</td>
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<tr>
<td>- Colonie Mechanical Contractors site</td>
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<tr>
<td>- Watervliet Arsenal – EUL Program</td>
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</tr>
<tr>
<td>Encourage the Watervliet Arsenal to complete a traffic analysis and parking demand management study at the Arsenal</td>
<td>Short-Term</td>
<td>City of Watervliet</td>
<td>US Army</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
## Route 32 Linkage Study Implementation Strategy: Village of Menands, Town of Colonie & City of Watervliet

**Short Term = 1-2 years**
**Medium Term: 3-5 years**
**Long Term: 6-8 years**

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<tr>
<td><strong>Transportation Improvements</strong></td>
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</tr>
<tr>
<td>Repair and/or replace sidewalks in sections.</td>
<td>Medium-Term</td>
<td>City of Watervliet</td>
<td>City of Watervliet CIP</td>
<td>Property Owners</td>
</tr>
<tr>
<td>Maintain street trees/encourage new street trees that will not interfere with utility lines when old trees are removed; encourage maintenance of planting strip between curb and sidewalk.</td>
<td>Medium-Term</td>
<td>City of Watervliet</td>
<td>NYSDHCR NY Main Street Program</td>
<td>City of Watervliet, Property Owners</td>
</tr>
<tr>
<td>Add curb extensions and textured/high visibility cross walks at all major cross streets, to be added initially as a pilot project in one or two locations along 3rd Avenue.</td>
<td>Short-Term</td>
<td>City of Watervliet</td>
<td>CDTC-TIP, City of Watervliet CIP</td>
<td>City of Watervliet</td>
</tr>
<tr>
<td>Complete curb extensions and high visibility crosswalks along the rest of 3rd Avenue.</td>
<td>Medium-to Long-Term</td>
<td>City of Watervliet</td>
<td>CDTC-TIP, City of Watervliet CIP</td>
<td>City of Watervliet</td>
</tr>
<tr>
<td>The remaining crosswalks (those not part of pilot project area) should be re-striped with thermo-reflective paint with yield-to-pedestrian stanchions installed at locations without curb extensions.</td>
<td>Short-Term</td>
<td>City of Watervliet</td>
<td>CDTC-TIP, City of Watervliet CIP</td>
<td>City of Watervliet</td>
</tr>
<tr>
<td>Clearly sign and mark no parking zones around crosswalks and intersection</td>
<td>Short-Term</td>
<td>City of Watervliet</td>
<td>City of Watervliet CIP</td>
<td>City of Watervliet</td>
</tr>
<tr>
<td>ADA curb ramps should also be added where missing and all obstructions in the ADA path of travel removed/relocated.</td>
<td>Medium-Term</td>
<td>City of Watervliet</td>
<td>CDTC-TIP, City of Watervliet CIP</td>
<td>City of Watervliet</td>
</tr>
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<td>Lead Agency</td>
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</tr>
<tr>
<td>Clarify policy regarding sidewalks across access drives and parking areas – sidewalk grade and material to be maintained across driveways and existing planting strips to be maintained between curbing and sidewalks rather than paved over.</td>
<td>Short-Term</td>
<td>City of Watervliet</td>
<td>Municipal Staff Time</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Consider adding sharrows along 3rd Avenue to denote shared lane use by motorists and cyclists. Parking lane widths along Third Avenue range from 7 ½ to 8 feet. In the short-term, add “Share the Road” signage at Watervliet gateway, at 4th Street and at the approach to the arsenal where additional travel lanes force cyclists further into the street.</td>
<td>Short to Medium-Term</td>
<td>City of Watervliet</td>
<td>Municipal Staff Time,</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Repair pedestrian push button at 7th Street.</td>
<td>Short-Term</td>
<td>City of Watervliet</td>
<td>Municipal budget</td>
<td>City of Watervliet</td>
</tr>
<tr>
<td>Encourage maintenance of facades, landscaping, etc.</td>
<td>Short-Term</td>
<td>City of Watervliet</td>
<td>Municipal Staff Time</td>
<td>Property Owners</td>
</tr>
<tr>
<td>Restripe worn lane markings in front of the Arsenal’s South Gate (left turn lane to serve the Arsenal if approaching from the south and a right turn/thru land if coming from the north) and add signage clearly directing Arsenal-bound traffic.</td>
<td>Short-Term</td>
<td>City of Watervliet</td>
<td>Municipal Budget</td>
<td>City of Watervliet</td>
</tr>
<tr>
<td>Add/formalize sidewalks or pedestrian realm where sidewalk area has been incorporated into off-street parking lots between 8th Street and Broadway.</td>
<td>Medium-Term</td>
<td>City of Watervliet</td>
<td>CDTC-TIP, City of Watervliet CIP</td>
<td>Property Owners</td>
</tr>
<tr>
<td>Limit the ability to add new curb cuts onto 3rd Avenue and restrict the maximum width of new curb cuts.</td>
<td>Short-Term</td>
<td>City of Watervliet</td>
<td>Municipal Staff Time</td>
<td>Not Applicable</td>
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### Route 32 Linkage Study Implementation Strategy: Village of Menands, Town of Colonie & City of Watervliet

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<tr>
<td>Designate local cross-streets as bike routes to facilitate east-west access across 3rd Avenue</td>
<td>Short-Term</td>
<td>City of Watervliet</td>
<td>Municipal Staff Time</td>
<td>City of Watervliet</td>
</tr>
<tr>
<td>Consider traffic light at 4th Street or 5th Street in Watervliet</td>
<td>Long-Term</td>
<td>City of Watervliet</td>
<td>Municipal Budget</td>
<td>City of Watervliet</td>
</tr>
<tr>
<td>Reconstruction and repave 3rd Avenue</td>
<td>Long-Term</td>
<td>City of Watervliet</td>
<td>CDTC-TIP, City of Watervliet CIP</td>
<td>City of Watervliet</td>
</tr>
</tbody>
</table>

### Key Catalyst Project - Potential Development Node at the Watervliet Gateway (1st/Schuyler Lane)

**In the short-term, all faded crosswalk striping and road striping (and signage, in particular for the left turn lane for vehicles turning from Route 32 onto 1st Street) needs to be re-striped.**

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<tr>
<td>Schuyler Lane roadway to be demarcated with curbing/drainage improvements, crosswalk, roadway striping.</td>
<td>Short-Term</td>
<td>City of Watervliet, Town of Colonie</td>
<td>CDTC-TIP, Town of Colonie CIP</td>
<td>NYSDOT, Town of Colonie</td>
</tr>
<tr>
<td></td>
<td>Long-Term</td>
<td>City of Watervliet, Town of Colonie</td>
<td>CDTC-TIP, Town of Colonie CIP</td>
<td>Town of Colonie</td>
</tr>
<tr>
<td>Explore future long-term redevelopment opportunities given proximity of Schuyler Flatts to ensure a wide range of future permitted uses and allowing existing businesses to continue to operate.</td>
<td>Long-Term</td>
<td>City of Watervliet, Town of Colonie</td>
<td>NYSDHCR CDBG Small Cities – Economic Development, NYSDHCR CDBG Small Cities</td>
<td>Property Owners</td>
</tr>
<tr>
<td>Project</td>
<td>Time Frame</td>
<td>Lead Agency</td>
<td>Potential Funding Source</td>
<td>Entity Responsible for Maintenance</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------</td>
<td>---------------------------------</td>
<td>--------------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Add curb extensions and textured crosswalk at northern leg of intersection, along with gateway enhancement such as plantings or public art.</td>
<td>Medium-Term</td>
<td>City of Watervliet, Town of Colonie</td>
<td>CDTC-TIP</td>
<td>City of Watervliet, Town of Colonie, NYSDOT</td>
</tr>
</tbody>
</table>
Appendix L: Required Disclosures

Disclosure Statements

This report was prepared in cooperation with the Village of Menands, Town of Colonie, City of Watervliet, CDTA, NYSDOT, Watervliet Arsenal and the Federal Highway Administration and Federal Transit Administration of the United State Department of Transportation. The contents do not necessarily reflect the official views or policies of these governmental agencies.

The transportation recommendations presented in this report are designed to help support the existing and future land use pattern. The various transportation options identified in the report are based on an analysis of existing and expected future travel conditions in the Route 32 corridor of these municipalities town.

Many of the actions identified in the study are not intended for short-term implementation. A considerable amount of design work still remains to be done before any of these projects can be constructed. The recommendations set forth in this report are conceptual in nature and do not commit NYSDOT, CDTA, Village of Menands, Town of Colonie or the City of Watervliet to funding any of the improvements.

The concepts need to be investigated in more detail before any financial commitment can be made.

Compliance with the Americans with Disabilities Act (ADA) of 1990

Plans and programs developed by CDTC must comply with the accessibility standards in the Architectural Barriers Act (ABA) of 1968, the Rehabilitation Act of 1973 (Section 504), and the Americans with Disabilities Act (ADA) of 1990. Sidewalks, like roadways, should be planned and designed to serve all users. This includes children, older people, parents with strollers, pedestrians who have vision impairments, and people who use wheelchairs and other assistive devices. Just as a roadway will not be designed for one type of vehicle, the design of sidewalks should not be limited to only a single type of pedestrian user. Because the sidewalk is the basic unit of mobility within the overall system of transportation, every route, facility, and crossing must be usable, safe, and convenient to everyone in the community.

The Plan’s recommendations for new sidewalks, sidewalk reconstruction, protected street crossings, high visibility crosswalks, and other treatments will go a long way toward making Route 32 and connecting roadways more walkable and usable to everyone in the community.

Environmental Justice

Increased attention has been given to the National Environmental Policy Act (NEPA) related to its ability to balance overall mobility benefits of transportation projects against protecting quality of life of low-income and minority residents of a community.
President Clinton issued Executive Order 12898 to bring attention to environmental and human health impacts of low-income and minority communities – referred to as environmental justice – when federal funding is involved. The goal of environmental justice review is to ensure that any adverse human health or environmental effects of a government action, such as federally-supported roadway or transit project, does not disproportionately affect minority or low-income residents of a community or neighborhood. Environmental justice is a public policy objective that can help improve the quality of life for those whose interests have traditionally been overlooked.

The CDTC staff has completed a review of civil rights/environmental justice impacts of transportation actions proposed under this study. Based on a review of the latest socioeconomic data available, the CDTC staff has determined that there are a total of seven traffic analysis zones (TAZ’s) in the Colonie, Watervliet, Menands Route 32 Linkage Study that are identified as Environmental Justice Target Population Areas. All of the transportation recommendations for the study would provide fair access and do not result in negative impacts to any minority or low-income residents. However, additional information gathered through the public review process could suggest a different outcome. In addition, examination of regional equity impacts would be necessary if any transportation action is considered for inclusion in CDTC’s Transportation Improvement Program.

Equitable access to, consideration within, and effects of the design and implementation of federally assisted projects is also a key aspect of environmental justice. However, design and construction is the responsibility of implementing agencies in the region. For projects identified in this study, implementing agencies would either be the New York State Department of Transportation, Capital District Transportation Authority, City of Watervliet, Town of Colonie, Watervliet Arsenal, or the Village of Menands.

EJ Target Population Areas are defined as any TAZ with low income, minority, or Hispanic populations equal to or greater than the regional average.

The regional averages are as follows:

<table>
<thead>
<tr>
<th>Population</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minority Population</td>
<td>11.2%</td>
</tr>
<tr>
<td>Hispanic Population</td>
<td>2.6%</td>
</tr>
<tr>
<td>Low Income Population</td>
<td>8.9%</td>
</tr>
</tbody>
</table>
Appendix M: Graphics