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EXECUTIVE SUMMARY

The Capital District Transportation Committee (CDTC) is the designated Metropolitan Planning Organization (MPO) carrying out federal requirements for cooperative transportation planning and programming within the Albany-Schenectady-Troy metropolitan area. This study, proposed by Albany County, was funded through CDTC’s Community and Transportation Linkage Planning Program and included in CDTC’s 2000-2001 Unified Planning Work Program as a planning task.

Study Background and Purpose

The Capital District’s nature as a transportation crossroads fosters a broad range of local commercial traffic patterns, with car, truck, rail, water and air transportation all having roles in support of the region’s manufacturing, retail and service sector activities. Particularly near major interstate highways and/or major industrial areas, the potential exists for conflict between transportation operations and residential areas; in addition, long-established roadway networks and land uses can present barriers to optimal circulation for commercial vehicles. Thus, there is on the one hand the need to harmonize the relationship between transportation and land use but, on the other hand, the need to ensure that the transportation system plays a facilitative rather than limiting role in economic development.

With these considerations in mind, 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. The three study areas examined were as follow:

- The Watervliet Arsenal/Colonie Economic Development Zone area in the City of Watervliet and Town of Colonie
- The southeastern section of the Village of Menands adjacent to Broadway and Erie Boulevard
- The Port of Albany/South End neighborhood located in the City of Albany

The three study areas are located on Figure 1. All of the study areas are in older sections of the County in which the manufacturing/industrial sector has been in decline in recent decades, consistent with the broader local and national trend toward service sector dominance of the economy. That said, given the continued importance of the manufacturing sector to the area, various groups and government agencies have mobilized to prepare economic development and community revitalization plans aimed at renewing the place of manufacturing in these study areas.
Study Goals and Objectives

Creating the preconditions for a revitalization of manufacturing and other light industrial operations in the study areas cannot take place in a vacuum. As such, this study proceeded from an understanding of three planning goals which reflect a desire to promote growth, but not “growth at any cost.” The goals are as follows:

- ensuring the safe and efficient movement of goods
- improving community quality of life by better harmonizing the relationship between transportation and land use
- promoting economic development in a variety of economic sectors, in recognition of the varied skills of area residents.

To progress both the overarching goal of this Study (improvement of commercial access opportunities in the three study areas) and these three context-reflective goals, eight objectives can be articulated.

The safety and efficiency of goods movement can be promoted by:

- ensuring ease of navigation
- minimizing delay
- bypassing existing neighborhoods

Local quality of life can be promoted by:

- maximizing residents’ abilities to patronize area facilities (i.e., by promoting access)
- maximizing resident mobility by removing industrial traffic from local streets (thus making the network safer)
- minimizing confusion on the roadway system (for confusion on the parts of drivers can lead to unsafe conditions)
- reducing noise, improving air quality, and increasing pedestrian and cyclist safety

Economic development can be promoted by:

- providing direct access to developable and redevelopable land
- removing heavy truck traffic from roadways along which other types of commercial activity (e.g., smaller shops and restaurants) would be desirable

The study team used these objectives in their examinations of the relative merits of different alternatives considered for each subarea.
Study Scope

Working with the study steering committee, the study team identified and analyzed a number of potential design concepts for their potentials to address the key concerns in each project area. In addition to consideration of the eight objectives listed above, examinations included initial screenings for known environmental issues, such as the presence of endangered or threatened species and/or ecologically sensitive areas, assessments of potential effects on traffic flows (subject to the note below), and systemic feasibility (the latter largely a function of local acceptability and cost). For the alternatives identified as most appropriate in each subarea, planning level cost estimates will be presented later in this report. The cost estimates will include construction, engineering, and construction supervision services.

Steering Committee participants were as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Agency</th>
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The Creighton Manning Engineering study team consisted of John Tozzi, P.E., who served as Project Manager; Wendy Cimino, I.E., who conducted the technical analyses and examinations of environmental issues, and Steve Allocco, who prepared the study report.

The study concentrated on primarily qualitative concept explorations and sketch planning, with the study team relying on established engineering principles, professional judgment and field examinations to make preliminary determinations on the feasibilities of the various alternatives being considered for each of the three study areas. The team recommends that particularly for the actions identified as more promising for study areas 1 and 2, further technical assessments take place prior to proposal of any project concepts for funding and implementation. Using the new roadway concept identified for Study Area 1 to illustrate, explorations of the area so as to determine the most appropriate specific alignment for the roadway, any particular design or construction requirements related to the setting (e.g., unique drainage requirements) and refined right-of-way acquisition needs and costs should be established prior to the pursuit of funding.
Study Findings

- For the Watervliet Arsenal/Colonie Economic Development Zone (EDZ) study area, the development of a new roadway connecting Lincoln Avenue and First Street (near their current intersection) to Broadway at the current FedEx driveway 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.

- For the southeastern Menands study area, the development of an extension to Erie Boulevard from just south of the Albany/Menands line to the I-787 Wards Lane interchange (with access between the extension and the interchange ramps), coupled with geometric and design treatments on Broadway between Simmons Lane and Wards Lane, appears to offer the best opportunity to enhance commercial access to the lands east of Broadway in this area, while at the same time promoting bicycle and pedestrian travel and neighborhood business opportunities along Broadway between the Albany/Menands line and the I-787 access ramps.

- For the Port of Albany/South End neighborhood study area, the pending statuses of other studies and development efforts in this area render infeasible the idea of articulating an action plan for enhanced Port access that includes construction-oriented actions such as the development of new roadways, interchanges, ramps or access roads. An interim action which would provide benefit in clarifying travel routes for heavy vehicles traveling between I-787 and the Port of Albany was identified; this action would include the modification of existing signage plans and the installation of new signage to make clear what routes trucks are to use when they leave I-787 to access the Port. This action would enhance safety and environmental quality in the South End neighborhood by reducing the amount of errant or deliberate use of neighborhood streets not signed as truck routes by Port-bound trucks.

The next steps to be taken include assembling the involved municipalities and other partners so as to determine how to best proceed in pursuing these actions or some variants on them. In addition to the availability of sufficient fiscal resources either through the CDTC process or from other sources, the levels of priority of these improvements relative to others the communities may be considering will need to be taken into account in formulating any implementation strategies. Public participation in meetings on this topic will be key to establishing local acceptance of the basic concepts to be pursued, and to ensuring that the final designs of any new facilities reflect sensitivity to neighborhood settings and travel patterns. In the case of the Port/South End area, the City and its partners have the opportunity to work together with the community to develop a blueprint for the area’s transportation system akin to an areawide master plan for land development or redevelopment.

The remainder of this report presents details on the studies of each area, the determinations reached, and the necessary next steps to progress the recommended improvements.
STUDY AREA 1:
WATERVLIET ARSENAL/-Colonie Economic Development Zone,
City of Watervliet and Town of Colonie

The Economic Development Zone (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. As illustrated on Figure 1, the area examined in this planning study 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 importance of resolving the issue of truck access to the EDZ is rooted in the reality that any redevelopment of this area would stand to increase heavy vehicle traffic through the intersection of 1st Street and Broadway, based on the likelihood that trips originating in this area would attempt to access I-787 via Route 378 (at Exit 7). In addition, while there are a limited number of other routes of access to the EDZ, including Route 155 via Lincoln Avenue and/or Route 32 and other city streets, the adjacent residential neighborhood (particularly 1st Street) would benefit from removal of truck traffic from its streets. It is also important to note that heavy vehicle operations would likely benefit from the provision of a facility specifically designed for truck use for access to the rest of the system, as opposed to the less-conducive design of 1st Street.

The study team’s examinations of options for promoting commercial vehicle access to this area, as guided by project steering committee discussions, led to the determination that the development of a new roadway connecting Lincoln Avenue and First Street east of the railroad tracks to Broadway at the current FedEx driveway offered the best opportunity to enhance access to the EDZ while minimizing environmental concerns and cost issues. This section of the study report discusses the contexts in which this determination was reached, including other alternatives examined and discarded.

Study Area Characteristics

This study area is generally residential to commercial in character, with some amount of existing industrial activity as well. In addition to a number of free-standing homes and businesses, it includes some larger apartment complexes (the Village One and Schuyler Heights complexes, both on Broadway), residential neighborhoods (e.g., along the side streets intersecting Broadway, including 1st Street), and larger commercial/industrial presences such as the Al Tech and FedEx facilities and the Streck’s, Incorporated machine shop operations.
Key Roadways Serving the Area

As noted earlier, Broadway is the main through street in the area, with local access and some degree of through connectivity provided via 1st Street. Broadway provides connections to elsewhere in the region via I-787, Route 378 and (further to the north) Alternate Route 7.

Lincoln Avenue provides access to Route 155; in addition, for non-truck traffic, it provides access to Route 9 via Spring Street (sometimes called Spring Street Road).

1st Street is as noted earlier primarily a residential street, but provides access between the EDZ and its residential neighborhood and elsewhere in the area via a signalized intersection with Broadway.

Critical Intersections

Broadway and 1st Street is as noted earlier the main signalized access between the EDZ area and the major roadways in the surrounding area.

Lincoln Avenue and 1st Street is, practically speaking, not so much an intersection as a curved corner at which a single road’s name changes. This area also includes a gated crossing of the CP Rail main line tracks. Consideration of potential actions for the area reflected the reality that transitioning this intersection from its current configuration to a more bonafide intersection design could bring with it both operational concerns (in either increasing or reducing heavy vehicles’ abilities to navigate turns and in affecting queuing distances near the railroad crossing) and mobility...
issues (such as the way in which area residents’ abilities to make connections to Route 9, Route 155 or Broadway could be affected by decisions on geometries and traffic control and/or movement restrictions).

**Figure 3**

1st Street Approaching Lincoln Avenue and the CP Rail Railroad Tracks

**Existing Traffic Characteristics and Dynamics**

Intersection turn counts conducted by NYSDOT and Creighton Manning Engineering determined that trucks currently account for up to five percent of weekday peak hour traffic on Broadway north of the 1st Street intersection and ten percent of weekday peak hour traffic south of 1st Street. In addition, trucks account for up to ten percent of 1st Street traffic.

Project steering committee discussions over the course of the study raised ideas for enhanced traffic operations along Broadway, primarily including either the addition or the removal of traffic signals. With regard to the former, the sense was that whether or not signals were ultimately added in the corridor, the need exists to better coordinate signals so as to reduce the frequencies of stops for traffic traveling through the corridor. On a related note, the concept of adding signals needs to be considered not only in the context of enhanced local access but also in that of overall arterial operations; that is, the more signals there are along an arterial, particularly when the signalized intersections are relatively closely spaced, the greater the compromise there tends to be to the arterial’s capability to perform its through traffic carrying function.
With regard to the concept of removing traffic signals, an important consideration raised during the steering committee discussions was the City of Watervliet’s opposition to removing the existing traffic signal at the Broadway/1st Street intersection. Reasons of access and safety drive this opposition; notwithstanding the notes just made on arterial operations, this intersection’s location at the southern entrance to the City (and thus at a “gateway” point at which there is benefit to conveying the message that motorists are entering a more densely-developed area in which they should proceed with greater caution) makes this a prudent stance to take.

**Design and Environmental Issues**

The CP Rail property in the study area raised a number of questions in early steering committee discussions, chiefly involving issues of site contamination (contamination has not been identified at this site; the site will be screened for possible contamination pending landowner agreement under the County’s Brownfields pilot program being funded by the EPA), whether the property was available for purchase if needed (given the state of the rail industry and the resultant tendencies of railroad companies to hold onto their existing properties as the impacts of the CSX/Norfolk Southern acquisition of the Conrail system “shake out” over time, it presumably is not), and what the applicable policies at the state, county and local level may be with regard to the use of abandoned rights of way.

There may be streams or small wetland areas in the area which might serve to limit the number of potential alignments for any new facilities or improvements such as widenings to existing facilities. It should be noted that the potential does exist to employ context-sensitive design principles which effectively mitigate any potential adverse effects of roadway construction such as changes to natural watercourses or runoff issues.

The sense of the steering committee was that in the interests of safety and operating efficiency, it was desirable to avoid adding any new railroad crossings in the area. This point served to limit the variation among potential new facility alignments to those which either included existing crossings or did not require crossings at all.

*Natural Heritage Report on Rare Species and Ecological Communities*

The study team contacted the NYSDEC (DEC) Division of Fish, Wildlife and Marine Resources regarding the presence or absence of any rare species and/or ecological communities in the study area. The following information was provided in response.
Table 1
Rare Species in Study Area 1

<table>
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<th>Location(s)</th>
<th>Scientific name (Common name)</th>
<th>Group name</th>
<th>Legal Status</th>
<th>Year Last Seen</th>
<th>Additional Details</th>
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<tr>
<td>Cohoes, Colonie, Green Island, Watervliet</td>
<td><em>Pterospora andromedea</em></td>
<td>(Giant Pine-Drops) vascular plant</td>
<td>endangered</td>
<td>1835</td>
<td>Last collected from “woods west of Troy in Albany County”</td>
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<tr>
<td>Colonie</td>
<td><em>Arabis missouriensis</em></td>
<td>(Green Rock-Cress) vascular plant</td>
<td>threatened</td>
<td>1960</td>
<td>Last seen near “west side of Watervliet”</td>
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*Note:* In 1835, part of Troy was on the Albany County side of the Hudson River; hence, the nature of the additional detail presented for *Pterospora andromedea*.


As DEC noted in the cover letter accompanying its transmittal of this information, “(t)he presence of rare species may result in (a) project requiring additional permits, permit conditions or review.” The reviews may include additional examinations of wetland and stream issues as well as field surveys to verify the current presence or absence of any rare or endangered species. That said, given the length of time since the last recorded sighting of the endangered *Pterospora andromedea*, coupled with the current use and state of the general area under consideration in this study, it is arguably not likely that this particular concern would serve to present a significant barrier to pursuit of the recommended alternative.

### Recommended Alternative and Other Alternatives Considered

Following examination of the data compiled for this study, field visits and discussions with the steering committee, four alternatives emerged for detailed examination:

- a new roadway connecting Lincoln/1st to Broadway at FedEx
- a direct connection between a “1st Street Bypass” and I-787
- direct access to the EDZ area from I-787
- a connection to Broadway further to the south (i.e., closer to Exit 7)

The study team’s finding was that the first of these alternatives passed the initial screens for feasibility and effectiveness. It and the remaining alternatives are discussed below.

**Recommended Alternative: New Roadway Connecting Lincoln/1st to Broadway at FedEx**

As examinations progressed and were discussed with the steering committee, there was general agreement that this is the only feasible alternative of the four.
Under this alternative, as illustrated on Figure 4, a new roadway would be constructed between 1st Street just east of Lincoln Avenue and Broadway. The roadway would connect to Broadway at the existing FedEx driveway. The FedEx driveway would function as a private driveway accessing the new roadway. As illustrated below, the setback of the main building at the FedEx site would be expected to provide sufficient area for the design and construction of a roadway with adequate curve radii and width for through traffic operations including significant combination vehicle (i.e., tractor-trailer) volumes.

This alternative would allow the existing at-grade railroad crossing at the southern end of Lincoln Avenue to be retained, with no new crossings created. As illustrated on Figure 4, the west end of First Street would be modified to intersect with the new roadway as the minor approach to a T-intersection. Under such a configuration, the new alignment would be expected to carry through traffic currently traveling between Broadway and the industrial area off Lincoln Avenue, due particularly to the squared-off nature of any movements between 1st and Lincoln (as opposed to traveling essentially straight between Lincoln and the new roadway) and the stop control of the 1st Street intersection. (The stop control of 1st Street would impose delay on traffic using that approach, providing a further disincentive to its use by through traffic.) Heavy vehicles accessing the EDZ site from Broadway would do so via the new facility, a right turn onto the west end of 1st Street and then a left turn into the site. It would be advisable to post a “NO TRUCKS EXCEPT LOCAL DELIVERY” sign at the east end of 1st Street near Broadway (facing Broadway) and just east of the EDZ access (facing eastbound traffic) to reinforce the diversion intention.

Ultimately, this alignment would likely limit heavy vehicle traffic on most of 1st Street to local delivery and emergency vehicles. In addition, heavy vehicle traffic along Broadway between the FedEx driveway and 1st Street would also be significantly reduced. An added benefit would come in reductions in heavy vehicle traffic passing by the Schuyler Flatts, a site on the National Register for Historic Places (first listed in 1974) located on the east side of Broadway south of the 1st Street intersection.

In theory, even absent any new development in the EDZ, the potential does exist for this improvement to result in an increase in traffic on Lincoln Avenue due to possible “shortcutting” between Route 155 and Broadway. That said, it should be noted that while this improvement would establish a more appropriate facility for truck travel, it would also technically not be establishing a new route for such connections. In all likelihood, the expected increase would be slight at most, for the most significant effect of the new roadway from the perspective of through truck traffic would be a more comfortable route (i.e., less conflict with residential activity) between the Lincoln/1st Street intersection and Broadway.

It is expected that upon the construction of this connector roadway, a traffic signal would be warranted at the intersection of the new connector with Broadway.
It is estimated that the cost of this alternative would be approximately $1.75 million, including the cost of a new signal but not including the costs of any right-of-way acquisition or signal hardware or controller upgrades necessary to interconnect this signal with the existing signal at Broadway/1st, which as noted earlier the City expressed a desire to maintain rather than remove.

From early contacts with FedEx representatives, it appears that the company is open to discussing the potential for public acquisition of some of its property in the area for the development of this roadway. The opportunity does exist for a “win-win” situation of sorts in this sense, for the benefits FedEx would see from development of the road would include the establishment of a de facto signalized access to Broadway by way of the access road and enhanced access to Route 155.

In the way of environmental impact, one concern noted by the study team was the potential for the exposure of existing (i.e., buried or otherwise stored) hazardous materials in the vicinity of 1st Street. The initial environmental screening conducted for this area raised indications that any construction work in this area will need to be preceded by a full environmental screening for hazardous materials. Other environmental issues found to require further examination included the potential noise and air quality effects of the new roadway. Beyond this point but in further regard to environmental matters, it should be noted that the effect of the bypass route would essentially be to move existing truck traffic off of 1st Street to the new facility – particularly at its east end, the facility would potentially be moving industrial materials further away from the residential areas of 1st Street (as well as from most of the residential area west of Broadway between 1st Street and the FedEx driveway).
Discarded Alternatives

The concept of direct access to the EDZ from I-787 (i.e., through a new “Exit 7A” and either flyover or ground-level ramps) was considered but dismissed due to concerns such as the greater potential to interfere with either the environmental quality or views from the Schuyler Flatts, proximity to the existing Route 378 interchange ramps and the potential need to purchase and take down existing developments along Broadway.

A variation on the recommended alternative, extending the new roadway further to the south so as to connect with Broadway closer to the Exit 7 ramps, was also considered. While this alternative has the potential to remove heavy vehicles from more of Broadway, existing developments along Broadway would be major obstacles to finding a workable alignment for such a connection. In addition, both the Albany Rural Cemetery (listed on the National Register of Historic Places) and the St. Agnes Cemetery are in the vicinity of or immediately adjacent to the likely alignment of such a connector; there is also the functional matter of access to both of these cemeteries being provided via Cemetery Avenue, on the west side of Broadway just north of Route 378. A final constraint noted was the CP Rail line running approximately 2,000 feet parallel to Broadway to the west; this line could either be right along the alignment of the extended connection or close enough to it to pose issues of both safety and the availability of the needed property for sale.
STUDY AREA 2:

SOUTHEASTERN VILLAGE OF MENANDS, ADJACENT TO BROADWAY AND ERIE BOULEVARD

The area of emphasis for this examination from the standpoint of commercial access consists primarily of the lands between the CP Rail railroad tracks and I-787 bounded by the Exit 6 (Wards Lane) interchange ramps to the north and the Albany County waste treatment facility just north of the Albany/Menands line to the south. From a community benefit standpoint, the Broadway corridor between the Wards Lane ramp intersection and the Albany/Menands line is also significant to this study, insofar as the reduction of heavy truck volumes on Broadway could open up new opportunities for neighborhood-scale development in this area of the Village.

As illustrated on Figure 1, the area examined in this planning study is generally bounded by Oakland Avenue to the north, a short distance south of the Albany/Menands line to the south, the edge of the developable area between Broadway and I-787 to the east, and Broadway (Route 32 north of North Pearl Street) to the west.

There is a threefold importance to establishing a direct truck route between I-787 and the industrial area surrounding Erie Boulevard. First, ease of access and mobility for commercial vehicles would be promoted. Second, economic development opportunities might be enhanced due to this easier access. Third, the removal of some share of current heavy vehicle traffic from Broadway in Menands would enhance the neighborhood environment, in turn opening up new possibilities for community-level shops, restaurants and other establishments to locate in the area, and for human-scale modes of transportation such as cycling and walking to be more feasible. All of these goals further the aims of the Village of Menands’ Broadway Corridor Master Plan.

The study team’s examinations of commercial access issues, as guided by project steering committee discussions, led to the determination that the development of an extension to Erie Boulevard from just south of the Albany/Menands line to the I-787 Exit 6 interchange (with access between the extension and the interchange ramps), coupled with geometric and design treatments on Broadway between Wards Lane and the Menands/Albany line, appears to offer the best opportunity to enhance commercial access to the lands east of Broadway in this area while at the same time promoting bicycle and pedestrian travel and neighborhood business opportunities along Broadway between the Menands/Albany line and the Exit 6 access ramps. This section of the study report discusses the contexts in which this determination was reached, including other alternatives examined and discarded.

Study Area Characteristics
This study area is generally commercial to industrial in character, with some number of free-standing businesses. The current roadway configuration requires vehicles traveling between Erie Boulevard and I-787 to the north to do so via one of a number of side streets and an at-grade railroad crossing. Vehicles traveling between I-787 southbound and Erie Boulevard must do so via city streets and a service road.

North of the existing northern terminus of Erie Boulevard, a new 90,000 square foot light warehousing and distribution facility and a new composting facility exist. Both of these facilities are currently accessed from Broadway via Simmons Lane, which in addition to being similar to an alleyway in design and usage includes an active at-grade railroad crossing.

The Erie Boulevard area has been the focus of a number of studies considering concepts for the revitalization of the northern waterfront district. As examples, the City of Albany’s North Waterfront Redevelopment Study includes exploration concepts for the development of a marina at the southern end of Erie Boulevard, a sports complex, and professional office buildings. The redevelopment of this area will heighten the importance of enhanced access for heavy vehicles between Erie Boulevard and I-787, both out of necessity where heavy vehicles are related to local land uses and where the potential exists for conflicts between these vehicles and those of people patronizing any new developments. In addition, any degree to which treatments of Erie Boulevard commercial access would also enhance personal motor vehicle access to this area would be valuable, provided that compatibility between commercial and personal vehicles and neighborhood setting can be promoted through facility design and control.

There are no sites on the National Register for Historic Places within or immediately adjacent to the study area. That said, depending on the degree to which the recommended improvement reduces truck traffic in the primarily commercial/industrial area of Albany bordered by I-90 on the north, Clinton Avenue on the south, I-787 on the east and Broadway on the west, there are numerous officially designated sites and historic districts in that area which might benefit from reduced traffic, noise and vibration. In addition, in a more general sense, there are properties in both Menands and Albany which while not on the National Register are historically or culturally significant; reductions in truck traffic would serve to enhance the environments surrounding these properties.

The study steering committee made special note of the importance of considering bicycle and pedestrian access issues in the course of developing a recommendation for this study area. This is particularly important given the proximity of the study area to the Mohawk-Hudson Bike/Hike Trail, widely regarded as the Capital District’s premiere multi-use facility. (While there has been “unofficial” accessing of the trail from near the Wards Lane interchange ramps, the nearest permitted access is near Colonie Street in Albany, via Erie Boulevard.) Given the City of Albany’s current efforts to develop its waterfront area, including construction of a pedestrian bridge linking downtown Albany to the waterfront and the upcoming construction of a promenade, picnic area, new pedestrian and bicycle facilities in a more congested part of the current trail and other accommodations, the opportunities to promote access from Menands to this destination and to the rest of the offerings of the trail (as well as the opportunities to leave the trail to patronize restaurants and other establishments in Menands) should indeed be explored. Furthermore, in recent years several Hudson and Mohawk River communities have pursued projects to enhance their own connections to their riverfronts; Menands has a considerable length of waterfront within its borders,
access to which could be enhanced through the Erie Boulevard Extension area.

**Key Roadways Serving the Area**

**Broadway** provides access to facilities within the Village including Route 378, I-787 and Wards Lane, in addition to hosting a number of residential, commercial and industrial properties.

**Erie Boulevard** extends from Water Street in Albany to a point a short distance south of the Albany/Menands line. While it does not currently enter Menands, it is significant to the area in that numerous institutional and industrial activities along its length in Albany generate truck traffic on Broadway in Menands.

**Wards Lane** provides a connection between Van Rensselaer Boulevard and Broadway, by which many Menands residents access I-787. Its most significant adjacent land uses are the Dutch Village and Park Hill apartment complexes and the Menands School.

As noted earlier, **Simmons Lane** is more akin to an alleyway than a roadway in design and function, but it is important to area commercial traffic flows in providing access to a light warehousing and distribution facility and the County waste treatment facility, in addition to providing rear lot access for commercial properties fronting Broadway.

**Critical Intersections**

The intersection of **Broadway and the I-787 Exit 6 Access Ramps** is the busiest intersection in the study area. Channelized right-turn lanes remove some of the pressure from this intersection, but left turn traffic both from southbound Broadway and the westbound access ramp place periodically combine to impose delays.

**Broadway and Wards Lane** sees less stopped delay than Broadway/I-787 Exit 6, but is significant from the perspective of safe and efficient operation as it sees both school-related travel to and from Wards Lane and more general travel flows en route to I-787.

**Existing Traffic Characteristics and Dynamics**

Intersection turn counts conducted by NYSDOT and Creighton Manning Engineering determined that trucks currently account for up to twelve percent of all traffic north of the Exit 6 access ramp intersection, up to 18 percent of all traffic between the Exit 6 access ramp intersection and Wards Lane, and up to 16 percent of all traffic south of Wards Lane. In addition, trucks account for up to five percent of Wards Lane traffic and nine percent of Exit 6 access ramp traffic.
Project steering committee discussions over the course of the study raised the note that in addition to
travel out of Albany along Broadway from the vicinity of the lower end of Eric Boulevard, concerns
have been expressed regarding trucks using Lawn Avenue and Van Rensselaer Boulevard (NY 377)
to access this area. As neither of these streets are officially designated truck routes (nor are Northern
Boulevard, Loudonville Road or North First Street – the three facilities to the south which feed into
Lawn and Van Rensselaer) – there is an issue of either legal truck use (e.g., by single-unit trucks
within any posted weight limits) or illegal truck use (e.g., by tractor trailers) of these roads. The
recommendation set forth below takes up the matter of how to promote compliance with existing
local restrictions on trucks; in addition, the Lawn Avenue Gateway Design Study just getting
underway under the auspices of CDTC and the Albany Housing Authority will also explore
supplemental means of promoting proper truck use of local streets.

Design and Environmental Issues

The CP Rail railroad tracks are active, typically seeing 30 to 40 trains per day traveling through the
Simmons Lane at-grade crossing. As was noted for the EDZ area, the steering committee saw as
desirable for this area the avoidance of recommendations which included the creation of new at-
grade crossings.

The study team contacted the NYSDEC (DEC) Division of Fish, Wildlife and Marine Resources
regarding the presence or absence of any rare species and/or ecological communities in the study
area. The DEC reported that there were no records of such issues in its database. They did note,
however, that their databases are regularly updated, and as such, it was recommended that if the
subject area was still being examined one year from the time of this report, they be contacted again
for a search based on the most current database. (This note would certainly apply to any of the three
areas examined in this study, whether or not the finding for this report was that there were issues
along this line.) Again, field surveys may be in order prior to pursuit of any project pursuit to
confirm the continued absence of any rare or endangered species in the area.

That said, DEC did report a finding of a “significant habitat” in the area – the Menands Marsh
freshwater wetland, which based on its listed latitude and longitude coordinates is in the area north
of Simmons Lane, south of the I-787 Wards Lane interchange access ramps and east of the CP Rail
railroad tracks. In addition to this official designation, the area generally bounded by I-787,
Simmons Lane and the County waste treatment facility is known to exhibit wetland-type
characteristics during wetter times of the year. That said, and as was noted in the discussion of
Study Area 1, the potential does arguably exist to employ context-sensitive design principles, which
effectively mitigate any potential adverse effects of actions in this area on the habitat or unofficial
wetland area.
Recommended Alternative and Other Alternatives Considered

Following examination of the information compiled for this study, field visits and discussions with the steering committee, five alternatives emerged for detailed examination:

- an extension to Erie Boulevard from just south of the Albany/Menands line to the I-787 Exit 6 interchange ramps (with access between the extension and the interchange ramps)
- the previous alternative, coupled with geometric and design treatments (the latter e.g., streetscaping and/or traffic calming) on Broadway between Wards Lane and the Menands/Albany line
- a variant on the previous alternative including a continued extension of Erie Boulevard to Irving Place (near the Village Hall)
- variants on the second alternative involving different configurations for the point of connection between Erie Boulevard and the Exit 6 interchange ramps
- “shortcut” connections between Erie Boulevard and Broadway either in Albany or in Menands

The study team’s finding was that the second of these alternatives was the most promising based on feasibility and potential benefit. It and some of the remaining alternatives are reviewed below.
**Recommended Alternative: Erie Boulevard Extension plus Broadway Geometric Treatments**

The development of an extension to Erie Boulevard from just south of the Albany/Menands line to the I-787 Exit 6 interchange (with direct connections between the extension and the interchange ramps), coupled with geometric and design treatments on Broadway between Simmons Lane and Wards Lane, appears to offer the best opportunity to enhance commercial access to the lands east of Broadway in this area while at the same time promoting bicycle and pedestrian travel and neighborhood business opportunities along Broadway between the Albany/Menands line and the I-787 access ramps.

Under this alternative, as illustrated on Figure 9, an extension of Erie Boulevard would be constructed northward from its existing terminus in Albany to the existing I-787 Exit 6 interchange ramps. The proposed roadway would run along the east side of the existing railroad tracks and under the interchange ramp overpass, with access to and from the I-787 interchange ramps via cloverleaf ramp connections, creating connections between the extension and both I-787 and Broadway. There would be new merge/diverge points approximately 400’ west of the points at which the existing ramps split off to access I-787. To facilitate access from the Exit 6 offramp to the southbound roadway extension, the roadway would extend (parallel to the railroad) under the Exit 6 ramps.

A variation on this design, presented on Figure 9A, would use squared-off intersections between the ramps and the extension. This subalternative would not establish a connection between the extension and Broadway.

Also illustrated on Figures 9 and 9A is this extension’s potential to continue further north to connect to additional roadways that access commercial/industrial establishments. This supplemental extension could serve motor vehicle and/or bicycle and pedestrian connections between the Village Hall area and Erie Boulevard. It is not included in the cost estimate presented below.

The provision of a direct connection between I-787 and Erie Boulevard would be expected to reduce heavy vehicle traffic currently using North Ferry or Erie Streets in Albany to access I-787 via Broadway (i.e., through Menands). As all three of these streets are fronted by houses and apartment buildings, there would be the important benefit of at least partially reconciling traffic flow with neighborhood character, with enhancements to safety, comfort and environmental conditions (the latter e.g., air quality). In Menands, a related benefit would lie in the opportunity to promote neighborhood-scale economic development in such forms as smaller shops and cafes which to an extent are presently not consistent with the heavy vehicle traffic flows through the corridor.

The extension would also stand to enhance operations on Simmons Lane, for the trucks currently accessing the County waste treatment facility use Simmons Lane to do so; based on notes raised in previous sections of this report, Simmons Lane is arguably not suited to this sort of activity. Furthermore, waste treatment facility-related truck traffic would no longer need to use the Simmons Lane at-grade railroad crossing to access I-787, thus enhancing safety. Should the extension be continued on to the vicinity of Village Hall at some point in the future, thus providing a connection between the east end of Simmons Lane and Broadway, there may be the opportunity to eliminate entirely the Simmons Lane at-grade crossing.
The notes on expected impact on area streets above have emphasized directness, which while being a key consideration in truck routing is certainly not the only factor. The setting through which a route passes imposes concerns of safety for truck operators (that is, given the potential for conflicts with playing children, cars and local delivery vehicles); also, the geometric suitability of a street or route to handling truck traffic is critical, as truck operators need to look beyond the simple question of the shortest route through an area to that of what route is best suited to their use based on intersection turn radii, grades (particularly at intersections requiring stops), and the width of and presence/absence of parked vehicles. In this context, what appears to be the best route on a map may indeed not be so in practice. In this context, the recommended alternative provides the additional benefit of a new facility which stands to be a preferred route not just for truck traffic looking to access I-787 from the existing Erie Boulevard, but also from other parts of downtown and North Albany. Looking outward from the Erie Boulevard/Broadway area, it would thus be prudent to include in the final design of this extension the necessary off-site treatments (i.e., away from these two streets) which would aid truck operators in getting to the extension, particularly to the extent that truck traffic through the nearby residential neighborhoods and commercial areas currently seeing both legal and illegal truck movements can be lessened.

This concept would also provide benefit in promoting motor vehicle, bicycle and pedestrian access to the northern waterfront district. While at present the Erie Boulevard corridor is not a compelling route for bicycle and pedestrian travel, the opportunity exists to develop this new route for these modes and then retrofit the existing section of Erie Boulevard with a combination of facilities (e.g., sidewalks(paths) and “softer” treatments (e.g., crosswalks and cautionary/trailblazer signage) to establish the legitimacy of these modes in the corridor and some preferred routes for their access to the waterfront area. To initiate pursuit of this opportunity, the Erie Boulevard Extension concept should include appropriate bicycle and pedestrian accommodations. Toward this end, the cost estimate presented below reflected inclusion of sidewalks along both sides of the extension with appropriate “transition” treatments (crosswalks, signage et cetera) where the extension would meet the existing Erie Boulevard. (The aim of the transition treatments is to maximize safety should it not be possible to continue the levels of accommodation of pedestrians along the existing street, e.g., crossing pedestrians to the opposite side of the street if the sidewalks cannot be continued along both sides to the south.) The extension roadway itself as conceived for the purposes of the cost estimate would be designed for shared motor vehicle/bicycle use, with appropriate pavement width.

Transportation-related investments can have impacts well beyond simply how motor vehicles move about an area. By adding or reducing traffic – particularly truck traffic – in a neighborhood, an investment can adversely or positively impact local quality of life. It is important to ensure that communities or populations lacking the resources to mobilize and protect their neighborhoods – or to relocate to other areas with the ease that others might have – at minimum do not suffer negative impacts from investments, and preferably see an improvement in their situations. In the transportation profession, it is this concept of economic justice which has become an important consideration in the planning and implementation of projects. In this context, it is important to note that this alternative stands to provide a positive benefit in reducing truck traffic in some of the low income and minority population neighborhoods in the area, particularly in Albany for which a special emphasis on environmental justice considerations is in order.
To pursue this alternative, it would first be necessary to work with NYSDOT to secure its approval of a break in access for the I-787 ramps. The study team has contacted NYSDOT Region One regarding this alternative, with the initial response indicating that the approval of a break in access at this location would be subject to NYSDOT’s review of detailed engineering and design studies.

Additional issues to resolve prior to pursuit of this alternative include the following:

- whether it would be necessary to relocate any utility lines in the vicinity of the railroad tracks
- any supplemental design treatments needed based on eastbound weaving movements between the new entering ramp and traffic accessing the existing I-787 ramp at Broadway
- whether existing grades in the area of the ramps would necessitate construction of any retaining walls to provide additional stability to nearby landforms
- the specific boundaries of the railroad right-of-way, and the receptiveness of the rail owner to sell a portion of this right-of-way or permit roadway access over part of the right-of-way under the Interchange 6 ramps

It is estimated that the cost of the design alternative presented on Figure 9 for this study area would be approximately $3.2 million. The estimated cost of the design alternative presented on Figure 9A(without the cloverleaf ramps) is 2.8 million. These planning level cost estimates assume pedestrian and bicycle accommodations and as stated above, do not include the section of the extension that would extend north of the ramp bridge over the railroad.

**Discarded Alternatives**

A shorter extension to Simmons Lane along with improvements to Simmons Lane to make this facility better suited to handling through truck traffic was examined but discarded due to four concerns:

- the likely need to acquire and demolish structures on Broadway to provide adequate space for both the facility and an improved Broadway/Simmons intersection
- the continued imposition (if not exacerbation) of delays attendant to turning truck traffic on Broadway in Menands
- the imposition of the requirement that all vehicles using the extension also use the Simmons Lane at-grade railroad crossing
- potential conflicts with trucks destined for existing industrial and institutional land uses off Simmons Lane
FIGURE 9
RECOMMENDED IMPROVEMENTS
FOR STUDY AREA #2

POSSIBLE MENANDS
EXTENSION

POSSIBLE WETLAND
MITIGATION

POSSIBLE ELIMINATION
OF GRADE CROSSING

ERIE BLVD
EXTENSION

PROJECT NO: 01-024
DATE: 01/2002

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Engineers, Planners & Surveyors
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A number of other ramp configurations were also investigated, including a full-access intersection with the I-787 access ramp east of the existing Broadway/ramp intersection, which was dismissed due to sight distance, space availability and potential queue length concerns. Direct access between Erie Boulevard and I-787 via a new “Exit 5A” interchange was also considered, but dismissed due to concerns regarding proximity to the two nearest existing interchanges (Exit 5/I-90 and Exit 6/Wards Lane).
STUDY AREA 3:
PORT OF ALBANY/SOUTH END NEIGHBORHOOD
CITY OF ALBANY

This subarea is located in the area near Green and South Pearl Streets in the South End neighborhood adjacent to the Port of Albany. The area surrounding the Port of Albany has been the focus of much recent study aimed at identifying means of revitalizing the southern waterfront district. As these efforts have progressed, removing heavy vehicle traffic related to the Port of Albany from neighborhood streets has been identified as a priority.

As illustrated on Figure 1, the area examined in this planning study is generally bounded by I-787 to the north/northwest, the Albany/Bethlehem boundary to the south, the Hudson River to the east and Route 32 (Green/South Pearl Streets) to the west.

There is a fourfold importance to addressing truck circulation issues in this subarea. First, as just noted, the close proximity of truck and tourist destinations to a large residential area makes minimizing motorist confusion in the area critical to both safety and basic mobility. Second, promoting ease of access and mobility for commercial vehicles is a timely pursuit, with very real possibilities for expanded Port activity currently being considered (as will be discussed later in this section). Third, the current explorations of concepts for enhanced use of the waterfront area including development of a Living History District (to be discussed in some detail in the “Recommended Alternative and Other Alternatives Considered” section) make critical the accessibility of the waterfront area to motorists, for destinations need to be easily accessible to be patronized. Fourth, the recently revised Port of Albany Master Plan and the I-787 Tandem Truck Lot Study articulate visions and concerns for this area, further underscoring the need to develop a unified strategy for addressing commercial, industrial and personal mobility needs in the area.

As noted earlier, land development and/or redevelopment concepts holding the potential to revitalize the southern waterfront are currently being investigated under the Master Redevelopment Plan effort initiated by Capitalize Albany. Specific land use and transportation system-oriented concepts under consideration as part of this effort include the following:

- enhancing bicycle and pedestrian access to the waterfront area
- construction of a Living History District (LHD) combining a variety of existing and new destinations each reflecting a piece of Albany’s history with a parklike setting and a new “riverway” along the waterfront
- closing off a portion of Broadway so as to eliminate through traffic in the LHD area
- rerouting Port of Albany traffic from the Madison Avenue area to the Pearl Street area
The study team’s examinations of Port access issues, as guided by project steering committee discussions, led to the determination that given the pending status of other studies and development efforts for the study area, it is not feasible at this time to articulate an action plan for enhanced Port access that includes construction-oriented actions such as the development of new roadways, interchanges, ramps or access roads. An interim action which would provide benefit in clarifying travel routes for heavy vehicles traveling between I-787 and the Port of Albany was identified; this action would include the modification of existing signage plans and the installation of new signage to make clear what routes trucks are to travel when they leave I-787 to access the Port. This action would enhance safety, traffic operations and environmental quality in the area by reducing both the amount of errant or deliberate use of neighborhood streets not signed as truck routes by Port-bound trucks and the amount of “backtracking” activity (e.g., backing up on streets or slowly working large trucks through corners of too small a radius so as to get out of areas in which they should not be) truck operators pursue upon realizing that they are in fact on the wrong facility. This section of the study report discusses the contexts in which this determination was reached, including other alternatives examined and found more appropriate for deferral (as opposed to “discarded,” for they may in fact hold promise for future application). Furthermore, possible future scenarios for waterfront development and expanded Port activity will be discussed in the context of what additional commercial access treatments they might require.

Study Area Characteristics

This study area is generally residential and industrial in character, with some commercial activity (primarily neighborhood-scale stores and services) as well. In addition to a number of free-standing homes and businesses, it includes three sites on the National Register for Historic Places: the Schuyler Mansion (listed 1967), the South End/Groesbeckville Historic District (listed 1984) and the USS Slater Destroyer Escort (listed 1998).

Key Roadways Serving the Area

Broadway provides access to the study area from downtown Albany, in addition to being fronted by several industrial and commercial businesses. Most traffic carried by the section of this street south of the South Mall Expressway/Dunn Memorial Bridge structure is destined either for the South End neighborhood or for I-787.

Church Street intersects separately with Broadway and with Green Street on one side or the other of
I-787 and courses through the Port area to a point at which its name changes to South Seventh Street (also known as Warehouse Place) near Smith Boulevard. While these roads and Normanskill Road do combine to provide a route through the Port area to the Town of Bethlehem, they are predominantly used by Port-oriented rather than through traffic.

Figure 11
Broadway North of Church Street

Green Street is signed as Route 32 between Madison Avenue and its intersection with South Pearl Street at First Avenue. In addition to serving as one of the main thoroughfares for the South End, it provides access to and receives traffic from southbound I-787 between Broadway and South Pearl Street.

South Pearl Street, signed as Route 32 south of Green Street, is another major thoroughfare for the neighborhood, and a designated truck route southward from the ramps connecting it to I-787.

Critical Intersections

South Pearl/Green/First is a signalized intersection of concern in due in large part to its being “fed” traffic from southbound I-787 Exit 2. In addition, First Avenue provides a means of access to the South End neighborhood, as does Second Avenue via a right turn from Green to South Pearl to a left turn onto Second.
Green/Church sees significant volumes using the full range of possible turn movements due to the varied traffic flows through the area. That is, several destination areas feed traffic through this intersection (which is in fact an expanded intersection including a “slip ramp” connection serving movements between Church below the intersection and the Service Road), including the South End, the Port, downtown Albany and other points accessible via I-787 and/or the Thruway.

As illustrated in Figures 13 and 14 below, the layout of the intersection combined with the limited signage in place to guide travelers can introduce confusion. While field observations suggested that most users of the area are familiar enough with the street system to know where they need to turn, the nature of Port and other area industrial and commercial activities, with a significant “out-of-towner” presence (e.g., in tractor-trailer drivers), heightens the importance of clear navigational information in the area.

Broadway/Church sees significant Port-bound volumes turning left from Broadway to Church and through traffic on Church. The Broadway approach to the intersection segregates left and right turn movements, as does the Church Street approach from the Port.

The intersection of South Pearl and the I-787 Frontage Road (northbound side) provides access to the Port for southbound vehicles exiting I-787 at Exit 2. This intersection presents an impediment to southbound Port access in that it includes an acute left turn angle which can be difficult for combination vehicles (i.e., tractor-trailers) to navigate in one continuous movement if they do not anticipate the need for the turn far enough in advance to sufficiently reduce speed and use the slip ramp cutoff to make the turn (see Figures 17 and 18). There are no signs at or in advance of this location directing southbound traffic to make the left turn at the far end of the underpass to access.
the Port area or northbound I-787. Also, while there is coincidentally a “Port of Albany” sign above I-787 visible to operators of northbound trucks approaching the Frontage Road intersection, there is not any signage along South Pearl Street to guide these movements, as illustrated in Figure 18.

Figure 13
Green Street Approaching Intersection with Church Street
(sign below full traffic light is only navigational information; no indication of I-787 access opportunities)

Figure 14
Church Street Approaching Intersection with Green Street
(leg of intersection at left is one way leading away from intersection, but no markings on or signage along this leg results in confusion)
Figure 15
Traffic Traveling between Broadway and the Port

Figure 16
Church Street Approaching Intersection with Broadway
Figure 17
South Pearl Street (Southbound)
Approaching Intersection with I-787 Frontage Road

Figure 18
South Pearl Street (Northbound)
Approaching Intersection with I-787 Frontage Road
Existing Traffic Characteristics and Dynamics

Currently, vehicles traveling northbound on I-787 use Exit 2 (Route 32/South Pearl Street) to access the Port of Albany, while southbound vehicles can use either Exits 2 or 3 (Routes 9 and 20/Downtown Albany). Exit 2 provides access to the south end of the Port via South Pearl or Church Streets, while Exit 3 provides access to the north end of the Port from Broadway and Church Street.

Given these general parameters for truck circulation, NYSDOT and Creighton Manning Engineering traffic counts found that trucks typically account for roughly six percent of all traffic on Green Street in the study area, 24 percent of all traffic on Church Street between the Port and Broadway and 30 percent of all traffic on Route 32 south of the Port area. While the higher shares of overall traffic on Church Street and Route 32 clearly reflect the direct significance of these roads to Port activity, the six percent share on Green Street is significantly higher than what might be expected for a typical street in a residential neighborhood. Bearing in mind that the location on Green Street at which vehicle classifications were taken was well to the north of the Green/Church intersection, and allowing for the fact that some amount of this percentage is rooted in local commercial activity (e.g., trucks which deliver to businesses along and near Green Street), it is apparent that there is still also some amount of Port-oriented traffic using the residential to neighborhood commercial section of Green Street.

Project steering committee discussions over the course of the study raised the note that in addition to legal use of Green and other neighborhood streets by single-unit trucks, there is some amount of either deliberate or errant use of these streets by operators of larger trucks such as tractor-trailers. Deliberate use includes “shortcutting” either to more directly access trip destinations or to bypass congested areas; errant use includes cases in which operators fail to see signage guiding them to particular streets and/or miss turns due to geometric issues (e.g., turn angles not conducive to desired maneuvers). The recommendation set forth below takes up the matter of how to promote compliance with existing local restrictions on trucks; in addition, the Lawn Avenue Gateway Design Study just getting underway under the auspices of CDTC and the Albany Housing Authority will explore supplemental concepts for promoting proper truck use of local streets, some of which may be transferable to this area.

Design and Environmental Issues

The ongoing studies being progressed by others in the southern waterfront district and at the Port of Albany involve land use concepts with the potential to alter access routes into and out of this study area. These changes are expected on the one hand to enhance access to the waterfront for tourists and heavy vehicles, but on the other hand to also impact traffic flows in the adjacent residential area. Given the magnitudes of concern regarding these latter impacts and the statuses of these other current investigations, it was decided by the Steering Committee that this exploration would place primary emphasis on those possible interim enhancements to Port area access which would redirect trucks away from some of the residential streets in the area. In these explorations, the goal was to
identify improvements which would have some sustainable benefit based on a variety of possible outcomes for the waterfront study and of possible future designs for truck access to the Port area. Based on a review of the existing conditions of access in and out of the Port of Albany, several areas were identified for signing improvements. They will be discussed in the next section.

That said, a number of concepts for potential longer-term implementation will also be presented in this section, in light of the recognition that completely addressing the circulation needs of the area will require projects with a fairly long lead time needed to secure funding. These larger-scale concepts should be examined in the contexts of the various studies recently completed or currently underway for the area, the long-term capital programming work taking place around the CDTC table, and other regional priorities.

Natural Heritage Report on Rare Species and Ecological Communities

The study team contacted the NYSDEC (DEC) Division of Fish, Wildlife and Marine Resources regarding the presence or absence of any rare species and/or ecological communities in the study area. The information summarized in Table 2 was provided in response.

Table 2
Rare Species in Study Area 3

<table>
<thead>
<tr>
<th>Location(s)</th>
<th>Scientific name (Common name)</th>
<th>Group name</th>
<th>Legal Status</th>
<th>Year Last Seen</th>
<th>Additional Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenwood area of City of Albany</td>
<td>Gomphus vastus (Cobra Clubtail) Dragonfly/damsel fly</td>
<td></td>
<td>Unprotected</td>
<td>1876</td>
<td>---</td>
</tr>
<tr>
<td>Port District</td>
<td>Carex molesta (Troublesome Sedge) vascular plant</td>
<td></td>
<td>Threatened</td>
<td>1947</td>
<td>Small tufts last seen along railroad tracks</td>
</tr>
<tr>
<td>Port District</td>
<td>Cyperus lupulinus ssp lupulinus (Hop Sedge) vascular plant</td>
<td></td>
<td>Threatened</td>
<td>1950</td>
<td>Last seen in railyards</td>
</tr>
<tr>
<td>Port District</td>
<td>Hedeoma hispidum (Mock-Pennyroyal) vascular plant</td>
<td></td>
<td>Threatened</td>
<td>1950</td>
<td>Last seen in areas where waste materials are stored in the Port area</td>
</tr>
<tr>
<td>Port District</td>
<td>Polygonum buxiforme (Small’s Knotweed) vascular plant</td>
<td></td>
<td>Endangered</td>
<td>1974</td>
<td>Last seen in railyards</td>
</tr>
</tbody>
</table>

As DEC noted in its cover letter, “(t)he presence of rare species may result in (a) project requiring additional permits, permit conditions or review.” That said, as was noted in the case of _Pterospora andromedea_ in Study Area 1, the lengths of time since the last sightings of some of the species in the table above as well as the natures of improvements proposed in the next section would combine to render it highly unlikely that the possible presences of these species in the study area would present a barrier to implementation of the recommended interim improvements.

**Recommended Alternative and Other Alternatives Considered**

Following examination of the data compiled for this study, field visits and discussions with the steering committee, three alternatives emerged for detailed examination, as listed below. Note that these alternatives were generated _prior to_ the determination that the other studies currently taking place in the area rendered premature the latter two concepts. That said, some discussion of these two alternatives will still be presented in the “Deferred Alternatives” and “Relationship to Living History District and Potential Port Futures” sections.

The three alternatives were as follow:

- interim signage improvements to clarify existing truck routes
- designation of new truck routes
- construction of exclusive Port-oriented “bypass” facilities

Again, the study team’s finding was that the first of these alternatives was the only one appropriate for the present operating environment. At the same time, it does stand to offer some lasting benefit. It and the remaining alternatives are reviewed below.

**Recommended Alternative: Interim Signage Improvements**

An interim action which would provide benefit in clarifying travel routes for heavy vehicles traveling between I-787 and the Port of Albany was identified. Under this action existing signage plans (that is, sign size, content _and/or positioning_) would be modified and new signage installed so as to make clear what routes trucks must use when traveling between either I-787 exit and the Port. This would require both improvements at the “decision points” such as intersections and _upstream of_ these locations, perhaps including enhanced “upcoming exits” signs on I-787. The locations at which these actions appear to be needed are indicated on Figure 19.

This action would enhance safety, traffic operations and environmental quality in the area by reducing both the amount of errant or deliberate use of neighborhood streets not signed as truck routes by Port-bound trucks and the amount of “backtracking” activity truck operators pursue upon realizing that they are in fact on the wrong facility.
As this alternative is limited in scope to signage improvements, there would arguably be no issues of adverse impact associated with its implementation, provided this implementation was pursued in accordance with accepted engineering standards for sign content, size and placement. It is not expected that these improvements would significantly change travel patterns; however, it is expected that this action would improve system operations by clarifying appropriate travel patterns. That is, facilities are designed and signed with the expectation that motorists will use them properly; these improvements will address a known propensity for this not to happen at particular locations, thus enhancing safety and efficiency. While signage is not a panacea where problems of disregard of traffic regulations exist, ensuring the clarity of instruction is also the necessary first step to addressing the matter of ongoing occurrences of prohibited vehicle movements.

On a related note, this alternative would not have any adverse impacts in the context of economic justice, the concept of which was discussed in the Erie Boulevard study area section. Indeed, there stands to be a benefit in this regard, for as was noted above the potential exists to reduce the degree of heavy truck traffic in the South End neighborhood, which is another of the area’s low income and minority population neighborhoods for which a special emphasis on environmental justice considerations is in order.

As noted previously, geometric improvements in this area were not recommended in this study area due to the statuses of several ongoing investigations in and around the south waterfront and the Port of Albany. That said, it is important to note that the signage concepts presented on Figure 19 were developed so as to be compatible with existing geometries, e.g., routes to be signed included intersections of sufficient radii to accommodate truck turns, lines of sight were adequate for proposed sign placements, and sufficient deceleration distances were available for heavy vehicle operators to safely react to the instructions presented on the signage.

It is estimated that the cost of this alternative would be approximately $10,000.

Deferred Alternatives

This report’s emphasis on presentation of signage improvements as the main actions to be taken at this time should not be interpreted as diminishing the importance of considering longer-term actions which would more comprehensively address the circulation needs of the area. In particular, issues such as direct access from the Port to the interstate system, the effective segregation of Port-oriented and neighborhood traffic and the facilitation of tourist access to the appropriate parts of the study area need to be explored and a strategic plan for enhancing these operations developed. The following categories of alternatives are among the tools which might be applied in support of these goals.

Designation of new truck routes at this time was considered inappropriate not because of inherent concerns with the concept, but rather because the uncertain future of land development in the waterfront area, related to either the Living History District (LHD) or possible Port expansions (see below), renders unclear both what the reallocations of land area from transportation to development use will be and in turn what the specific demands on the transportation system will be.

The construction of new facilities to provide enhanced Port access was also considered, and found to
have some potential once future uncertainties such as those just discussed were resolved. This issue is further discussed in the next section.

Relationship to Living History District and Potential Port Futures

The LHD concept combines the preservation and/or restoration of existing waterfront attributes and attractions with the development of a number of distinct sites or exhibits related to Albany’s history, all within the confines of a defined park-type “campus” between I-787 and the Hudson River. From a transportation perspective, the LHD layout which appears at this writing to have the most currency would call for the termination of Broadway from the north at a parking lot for a Dutch Interpretive Center and Museum, roughly halfway from the South Mall Expressway underpass to where Broadway currently intersects with Church Street. Based on current and projected future volumes, this would require the diversion of up to 500 afternoon peak hour vehicles to other facilities by the year 2021 (based on existing volumes and year 2021 forecasts prepared for the City as part of the Church Street Reconstruction Study in 2000). In addition, the impressive roster of elements envisioned for the LHD (including the above examples plus the USS Slater, the Dutch Apple cruise line, a working shipyard and Dutch Barn facilities, a Mohican village, various parkland opportunities and other elements) suggests that the LHD could see substantial patronage by both visiting tourists and area residents. Thus, the sufficiency of access (and indeed, of capacity for access) needs to be considered both on its own and in light of the combined effect of the LHD, the Port and the surrounding area on the transportation system.

Exploration of potential transportation system actions in this area also needs to take into consideration potential futures for the Port. The range of potential futures is more varied than might otherwise be expected, due to the Port’s status as the furthest-inland deep-water port in the country. A number of considerations which stand to increase Port activity beyond what might be expected based on a steady, linear rate of growth are in play at present, including the following:

1. **Evolving Relationship to Port of New York and New Jersey:** For reasons of both resource utilization (i.e., getting larger cargo ships unloaded and back out to sea) and security, there is a strong chance that the Port will have an expanded role as a northern terminus for barges with cargo entering the Port of New York and New Jersey area. That is, ships could be offloaded downstate, with the cargo barged up to Albany and from there distributed to trucks and/or trains. This prospect has implications for both roadway and railroad connections to the Port of Albany.

2. **Combined Port/Tandem Facility/Rail Relationship Potentialities:** The 1998 Thruway Tandem Lot Relocation Study commissioned by the Capital District Transportation Committee reached the conclusion that one of a number of potential approaches to increasing the safety and efficiency of tandem truck movements onto and off of the Thruway was a direct connection to the Thruway from a “tandem area” at the Port, south of Church Street, at which tandem trailer pairings could be assembled and separated. The study did find that a major obstacle to this alternative was the need for legislation allowing the operation of tandems off of the Thruway system, for tandems would under this alternative leave the Thruway and get to the Port tandem area via a new ramp and Church Street. In addition, it would require acquisition of property from the Port, necessitate crossing rail tracks via an at-grade crossing and significantly increase truck miles of travel, with an estimated total construction cost of $42 million. While the study
did not conclusively eliminate this alternative from consideration (nor did it do so for any of the other alternatives being examined), funding and logistical issues combine to limit the feasibility of introducing tandem travel off of the Thruway system within the next six to ten years.

That said, the point remains that tandem truck activity is seen as very important to the area and as potentially growing in the future. In lieu of new tandem facilities, additional safety measures may need to be taken at existing facilities such as the Interchange 23 and 24 tandem lots. Improved connections to the area’s rail and roadway networks may serve to offset some of the specific demand for tandem service in the future. Beyond this possibility, there is still a more general need to enhance the overall quality of connectivity between the Port area and the rail and interstate systems, in the interest of further advancing the efficiency of goods movement.

3. **Expanded Utilization of Intelligent Transportation Systems:** The Intelligent Transportation Society of America defines intelligent transportation systems (ITS) as "(the application of) advanced and emerging technologies in such fields as information processing, communications, control and electronics to multimodal surface transportation needs." *(National Program Plan for Intelligent Vehicle-Highway Systems, 1995)* From a goods movement perspective, ITS technologies are becoming quite commonly used for shipment tracking, fleet management, real-time route optimization, in-vehicle navigation and vehicle performance monitoring. The net effect of this package of technologies, which are typically being purchased and deployed by fleet owners in the interest of controlling costs and maximizing revenues rather than as part of any broader public initiative, is that the process of goods movement becomes safer and more efficient. While these advances will not obviate the need to make physical improvements to the transportation system, they do help in making it more likely that heavy vehicle operators will make informed (and thus efficiency-promoting) decisions on where and how to proceed in their operations, with the traveling public as a whole in turn benefiting from this efficiency.

Bearing all of these points in mind, it is possible that while on the one hand increased Port-related traffic could conflict with both LHD- and South End-related traffic, the opportunity exists to look at all of these dynamics in a common framework, with the aim of identifying an overall transportation plan for this area. The degree of redevelopment of the area that would result from the LHD and/or Port development concepts would also open up opportunities (perhaps including funding opportunities) for the redevelopment of the area’s roadway system. The key may be to provide “separate spaces” for traffic related to the various destinations in this area while at the same time preserving the opportunities for internal connection (particularly to ensure access opportunities for area residents) between these destinations. It would thus be prudent for the City, the Port District and NYSDOT to work together toward integrating their land use and transportation system plans for the area into a common, harmonized whole.
CONCLUDING NOTES

It is noteworthy that the three areas examined in the course of this study could realize three distinct results through implementation of the recommended actions.

In the Watervliet Arsenal/Colonie Economic Development Zone study area, the context is somewhat unusual in that the opportunity exists to realize economic development benefits in the form of opening up a sizeable area for economic development through rather large-scale activities (that is, including light industrial land uses) without the typical adverse effect of new road development in a busy corridor. That is, it is unusual to have such a likelihood of a “pure” effect of removing truck traffic from one area without also attracting other types of traffic (particularly through traffic) as well. This reality could make the recommended concept for this study area a strong candidate for funding through industrial access and/or general economic development programs.

In the Southeastern Menands/Broadway/Erie Boulevard study area, the opportunity to promote more direct access to the commercial and industrial areas in the Erie Boulevard corridor through the recommended improvement would bring with it an opportunity to pursue community development-oriented economic development efforts along Broadway in the Village of Menands. That is, while the Watervliet Arsenal/Colonie EDZ area saw the opportunity to bring about a more immediate quality of life benefit to First Street residents in removing truck traffic from their street, this study area could see an opportunity to introduce land uses in the Broadway corridor which while desirable from a community standpoint might not be compatible with the present mix of traffic traveling through the corridor. The Village has the opportunity to pursue an economic development effort in which it examines the desires of the community (e.g., finding out what businesses residents currently travel elsewhere to patronize) so as to determine how to complement the extension of Erie Boulevard with streetscaping, zoning and/or promotional efforts aimed at facilitating the introduction of new businesses to the corridor.

In the Port of Albany/South End Neighborhood study area, the opportunity exists not only to begin the process of reconciling traffic flow with setting by ensuring clarity of directions for Port-bound traffic, there is also the clear opportunity to pursue a broader traffic study that not only articulates a common vision for transportation incorporating its three main subareas (the residential South End, the Port, and the waterfront) but could reasonably be expected to lay the groundwork for significantly reworking the major routes of the surface transportation system so as to appropriately accommodate significant changes in the nature and volumes of traffic flow likely to be seen in the area in the future. The key will be a joint effort between the City, the Port District, NYSDOT, CDTC and other parties so as to ensure that a comprehensive direction for the study area is articulated prior to pursuit of any major initiatives such as development of the Living History District or expansion of the Port.
The next steps to be taken include assembling the involved municipalities and other partners so as to determine how to best proceed in pursuing the recommended improvements or some variants on them. In addition to the availability of sufficient fiscal resources either through the CDTC process or from other sources, the levels of priority of these improvements relative to others the communities may be considering will need to be taken into account in formulating any implementation strategies. In the case of the Port/South End area, the opportunity exists for more immediate implementation of some or all of the recommended interim strategy; upon finalization of the related studies taking place in this area, the City and its partners will be in the position to work toward a blueprint for the area’s transportation system based on what would likely be akin to an areawide master plan for land development or redevelopment.