# *Glens Falls Downtown Transportation Center/Parking Ramp Feasibility Study*

## *Final Report*

*July 2004*

***Prepared for***

***Adirondack/Glens Falls Transportation Council***
***City of Glens Falls, New York***
***Greater Glens Falls Transit***

*Prepared by*

*Wilbur Smith Associates*

ENGINEERS
PLANNERS
ECONOMISTS
Wilbur Smith Associates

*in association with*

*KKO and Associates, LLC*
*The Chazen Companies*
*Wallace Floyd Design Group*

ENGINEERS
PLANNERS
ECONOMISTS
Wilbur Smith Associates

Shelburne Commons
4076 Shelburne Road, Suite 7
Shelburne, Vermont 05482
(802) 985-2530
(802) 985-8175 fax
www.wilbursmith.com

July 30, 2004

Mr. Aaron Frankenfeld, Director
Adirondack/Glens Falls Transportation Council
Washington County Municipal Center, A-204
383 Upper Broadway
Ft. Edward, NY 12828

**RE: Glens Falls, NY Downtown Transportation Center/Parking Ramp Feasibility Study**

Dear Mr. Frankenfeld:

We are pleased to present our Final Report of the "Glens Falls Downtown Transportation Center/Parking Ramp Feasibility Study." We trust that the Site Selection, Preferred Site Design Concepts Financial/Funding Evaluations and Renderings assist the Transportation Council, Greater Glens Falls Transit and City of Glens Falls in advancing a multi-modal Transportation Center and Parking Ramp for downtown Glens Falls.

We appreciate the opportunity to work with you and the entire Advisory Committee on this project. Please do not hesitate to call if we can be of continued service in the next steps toward implementation of this Transportation Center.

Respectfully submitted,

**WILBUR SMITH ASSOCIATES**

Robert P. Jurasin, P.E.
Senior Vice President

Peter Plumeau
Project Manager

Attachment

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# Executive Summary

The Adirondack/Glens Falls Transportation Council (A/GFTC), in coordination with the City of Glens Falls and Greater Glens Falls Transit (GGFT) system, retained a consultant team to conduct a location analysis and feasibility study for the proposed downtown Glens Falls Transportation Center/Parking Ramp Facility. Working with these three entities and a steering committee appointed jointly by them, the consultants:

- Developed conceptual design parameters and order of magnitude cost estimates for the facility;
- Reviewed and evaluated five alternative facility sites in downtown Glens Falls identified by the steering committee;
- Recommended a site for the facility on the existing Elm Street public parking lot;
- Developed a refined conceptual design for the facility based on the selected site;
- Developed refined capital and operating cost and revenue estimates;
- Recommended a new downtown Glens Falls parking system strategy; and
- Identified potential sources of capital financing for the facility.

Two widely-announced public meetings and events were also held as part of the study process.

The consultants evaluated five sites within downtown Glens Falls and recommended the existing publicly-owned Elm Street parking lot for the new facility. This site was selected based primarily on its ease of access to downtown amenities, its minimal impact on private properties and its relative advantageous location for public transit operations.

The proposed facility would provide 514 parking spaces on five levels as well as a downtown transportation center serving both local transit and intercity or tour buses. Retail space of 1,500 square feet would also be part of the facility. The facility would provide a net gain of approximately 420 parking spaces at the Elm Street location. Automobile access and egress would be from Elm Street. Parking fees would be levied using a meter system.

The facility's estimated order of magnitude capital construction cost is $8.3 million, not including any funding or financing costs.

# 1. Purpose and Background

## Purpose

In October 2002, the A/GFTC and City of Glens Falls contracted with a consultant team led by Wilbur Smith Associates (WSA) to conduct a feasibility study and siting analysis for the Downtown Glens Falls Transportation Center and Parking Ramp. The proposed transit center-parking ramp facility is intended to both be a hub for the Greater Glens Falls Transit (GGFT) system and intercity buses (Greyhound and Trailways) and provide about 500 parking spaces for daily and special events use. In addition, the City intends for the facility to include transit-supportive space, such as indoor transit patron waiting areas, and rental retail space with street-level storefronts.

## Background

This study was conducted to two phases: In Phase 1, the consultant developed a conceptual design for the proposed transportation center/parking ramp. In Phase 2, alternative sites were evaluated, a preferred site was selected and the conceptual design was refined to fit that site. Phase 2 also included estimation of facility capital and operating costs, identification of impacts on and options for traffic operations related to the facility and outlines proposed parking strategies for downtown Glens Falls.

## Phase 1 Results – Conceptual Facility Design

In Phase 1 of the study, a conceptual design was developed without regard to a specific site. Based on the parking demand and transit operational parameters provided by the City and the Greater Glens Falls Transit System, the WSA team developed a conceptual design footprint for the proposed facility. It should be noted that WSA did not conduct any independent parking demand analysis for this project; demand estimates are based on information provided by the City of Glens Falls.

The characteristics of the conceptual design characteristics are summarized as follows:

- 250' x 180' footprint (45,000 square feet, or slightly more than 1 acre);
- 4 levels (about 40' total height);
- 514 parking spaces (including disabled spaces on 2 levels);
- Exterior local transit and intercity bus parking (5-7 vehicles) under a canopied roof;
- 2,500 sq. ft. Transportation Center, including:
    - Welcome Center & Waiting Area
    - Restrooms
    - Vending/Newstand
    - Ticketing Counter

  - Manager's Office & Crew Rest Room
  - Utility Space;
- 1,500 sq. ft. Retail Space on street level (assume subdividing into three vendor spaces).

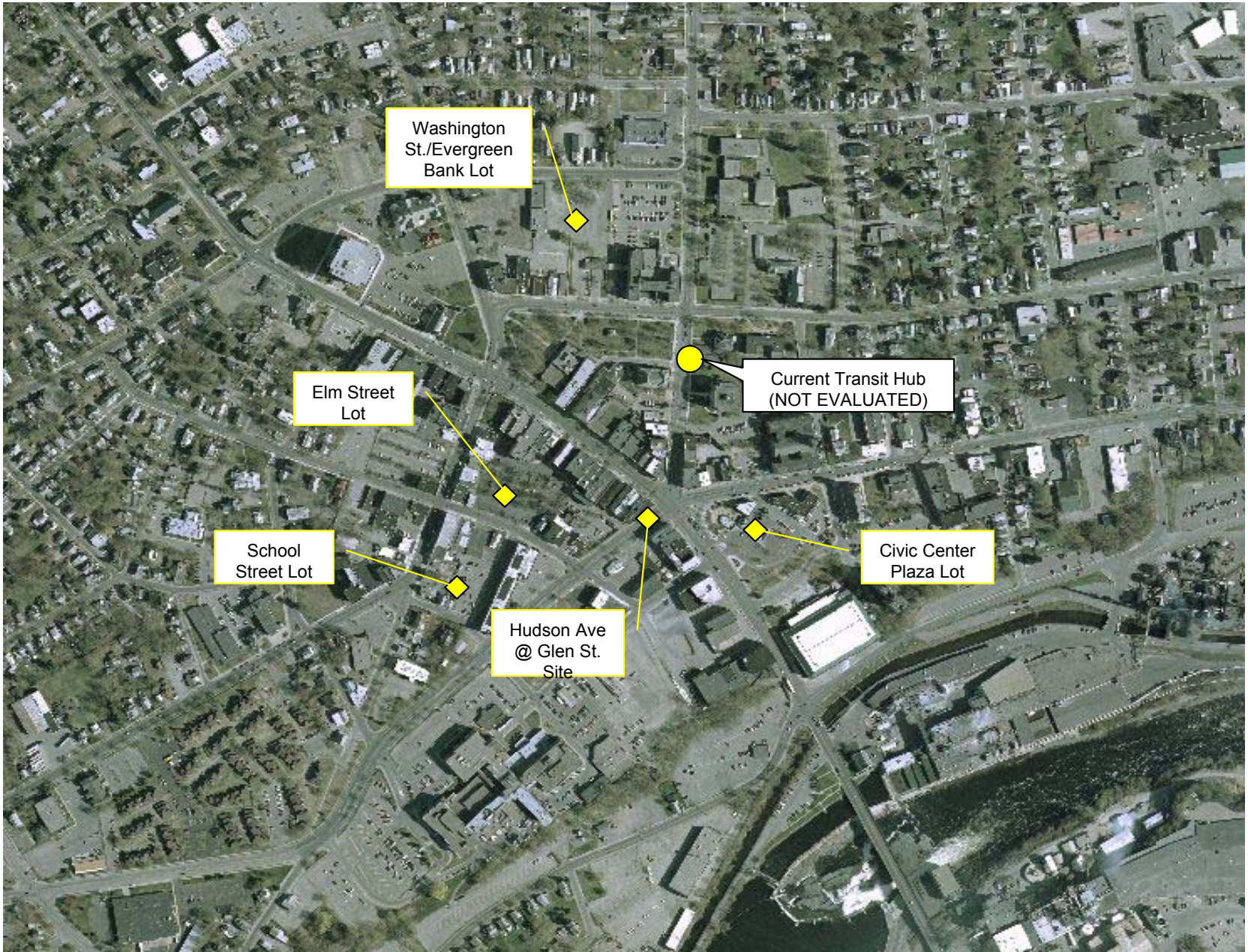
**Appendix A** contains the text of the Phase 1 Report.

## Phase 2 Results – Alternative Site Evaluation

After identifying the conceptual design parameters for the facility, the consultant team and steering committee worked together to identify candidate sites within downtown Glens Falls. As shown in **Figure 1.1**, the steering committee identified five sites for consideration. These were evaluated by the consultant team based on the ability of the site to satisfy the specified conceptual design parameters. This evaluation resulted in the steering committee selecting the Elm Street site as the most desirable location for further planning and design work. (**Appendix B** displays the site evaluation matrix.)

The remainder of this report focuses on the refined conceptual designs for the Elm Street site, operational analyses (traffic and transit) of that site, and programmatic, policy and funding strategies.

# Figure 1.1: Alternative Sites Evaluated for Glens Falls Transportation Center/Parking Ramp



# 2. Preferred Design Parameters for Elm Street Site

The conceptual design of the proposed Transportation Center is a single structure consisting of a parking garage, a 2,500 square foot transportation center and space for 1,500 square feet of retail space. The Transportation Center would include space for a manager's office, restrooms, vending machines, and a bus information area. The retail component could consist of up to three different vendors.

In a letter dated September 4, 2003, the client noted the following additional design parameters as key considerations:

- Context sensitivity with the surrounding downtown environment (to be addressed further via development of architectural renderings prior to study completion);
- On-street bus berths for GGFT services on Elm Street with a possible separate means of access for intercity buses; and
- Preservation of existing delivery access to the rear facades of Glen Street businesses.

**Figures 2.1** and **2.2** depict the preferred functional concept for the Transportation Center. This concept which encompasses the elements identified through the Phase 1 work together with the following technical design criteria in its development;

- 10 foot floor to floor dimension;
- 90 degree parking bays in most areas;
- 60 degree parking adjacent to the transportation / retail areas;
- 9 foot stall width; and,
- 12 foot handicapped parking stall width.

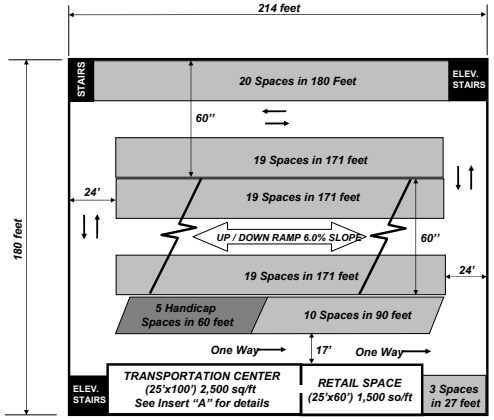
An elevator and stair tower have been proposed adjacent to the transportation center for pedestrian access to the upper levels. Two other stair towers would also be provided. These access points are located with 110 feet of any parking space.

## *Preferred Site Functional Layout*

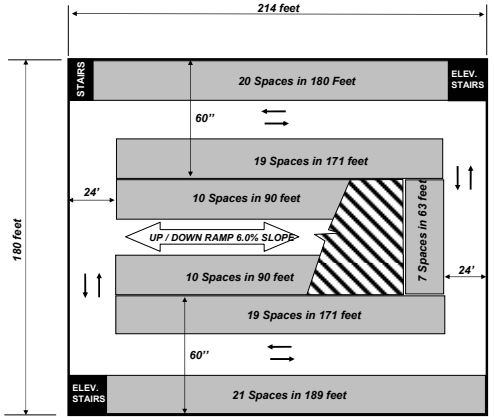
The consultant team worked with the steering committee to refine a set of alternate facility layouts for the Elm Street site. From a total five alternates, a preferred functional layout was developed. This layout incorporates a combination of features drawn from two of the five original layouts.[1] The conceptual layout of the proposed facility on the preferred Elm Street location is depicted in **Figure 2.3.**

The layout includes queuing space for five GGFT buses on Elm Street in their own lane, out of the active traffic lane. In addition, the layout provides space for up to two intercity buses (e.g., Greyhound or tour buses) to queue along a driveway on the northwest end of the

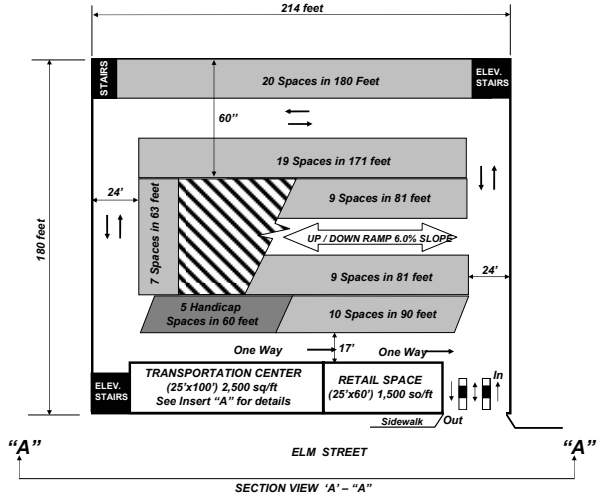
[1] See Appendix C for illustrations of the five alternate functional layouts considered for the Elm Street site.



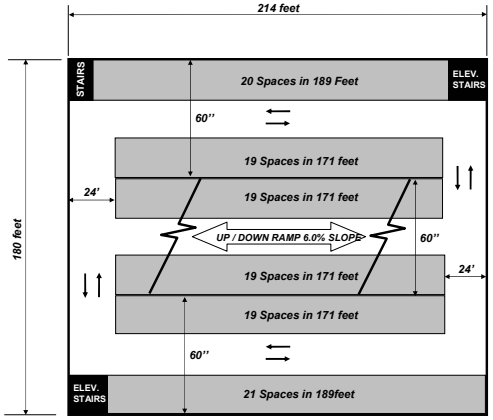

***SECOND LEVEL 94 Spaces***




***ROOF LEVEL 107 Spaces***




***FIRST LEVEL 71 Spaces***

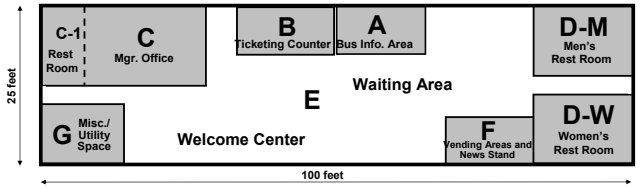



***THIRD LEVEL (Typical) 118 Spaces***
***And***
***FOURTH LEVEL (Typical) 118 Spaces***

**This Concept is based on the following:**

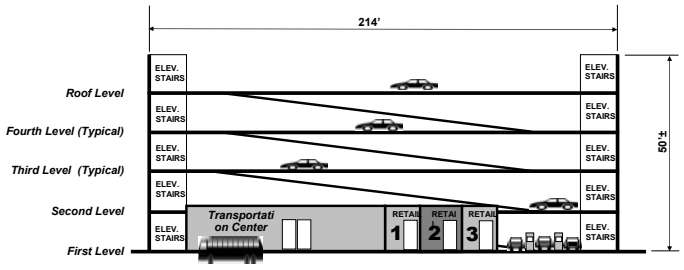
- **Mapping provided to WSA**
- **10' floor to floor dimension**
- **6 percent grade on ramps with parking**
- **60' parking bay with parking on both sides**
- **35' parking bay with 60º angle parking on one**
- **9' stall width, and**
- **12' ♿ handicap stall width**

***FIGURE 2.1***
***PREFERRED PLAN***
***ELM STREET***
***TRANSPORTATION CENTE***
***Garage Functional Concep***
*Glens Falls, New York*
*Wilbur Smith Associates*
***October 15, 2003*** ***Scale 1 in = 30 f***
***Sheet***




**Legend:**
A- Bus Info. Area (12.5' x 8.0') = 105.0 Sq/Ft.
B- Ticketing Counter (17.7' x 7.0') = 119.0 Sq/Ft.
C- Mgr. Office (12.5' x 20.0') = 250.0 Sq/Ft.
C-1 Restroom (12.5' x 8.0') = 100.0 Sq/Ft.
D-M Men's Restroom (15.0' x 12.5') = 187.5 Sq/Ft.
D-W Women's Restroom (15.0' x 12.5') = 187.5 Sq/Ft.
E- Waiting Area / Welcome Center = (1,283.5 Sq/Ft. and
F- Vending Areas and News Stand (15.0' x 7.0') = 105.0 Sq/Ft.
G-Misc./ Utility Space (12.5' x 13.0') = 162.5 Sq/Ft.
**Total Area 2,500 Sq/Ft.**

## Insert "A"
## TRANSPORTATION CENTER
### Conceptual Layout to Show Function and Scale
*Scale: 1 inch = 10 feet*




Canopy Over Sidewalk
Over Elm Street and Over
Sidewalk Along Alleyway
At Building Line

### SECTION VIEW "A-A"
*Horizontal Scale: 1 inch = 30 feet*
*Vertical Scale: 1 inch = 14 feet*

*Fifth Roof Level ……. 106 Spaces*
*Fourth level (Typical)… 117 Spaces*
*Third Level (Typical)….. 117 Spaces*
*Second Level……. 95 Spaces*
*First Level……. 79 Spaces*

*GARAGE TOTAL …… 514 Total Spaces*
*GARAGE EFFICIENCY 349 sq/ft per space*

*Total Garage Spaces … 514*
*Displaced Spaces …… 94*
*Net Gain ……. 420 Spaces*

***FIGURE 2.2***
***PREFERRED PLAN***
***ELM STREET***
***TRANSPORTATION CENTER***
***Garage Functional Concept***
*Glens Falls, New York*
*Wilbur Smith Associates*
***October 15, 2003***

***Sheet***

# Figure 2.3: Preferred Alternate Functional Layout

facility. It should be noted that several businesses on South Street currently require rear entrance access, which is achieved via the current Elm Street parking lot. If this access is to be maintained, the final design of the transportation center/garage structure will need to account for the type and frequency of vehicles that typically access those establishments. Options for accommodating access needs also include establishing delivery time "windows" during the day that are coordinated with the hours during which buses are scheduled to be parked on the northwest end of the facility.

It should also be noted that the City of Glens Falls has stated that it may consider closing Clinton Street and using that space for parking and/or bus operations related to the transportation center. If this were to occur, there would be additional flexibility for bus queuing arrangements on Elm Street.

### *Facility Access for Automobiles*

Access to the garage would be provided to and from Elm Street. A single entrance and exit would be provided along with a dual use entrance/exit lane for use during peak periods. Access to the different levels would be provided via a sloped parking ramp. The ramp gradient would be limited to 6 percent. Ninety-degree parking would be provided along the parking ramp and the outer bays.

### *Net Parking Capacity Change*

The current parking lot is capable of parking approximately 94 vehicles. The preferred alternative design is planned to handle 514 vehicles. This would result in a net increase in parking capacity on the Elm Street site of approximately 420 vehicles.

### *Parking Garage Efficiency*

"Parking garage efficiency" is a rating of the usefulness of the parking structure. An ideal rating for a parking structure is approximately 325 square feet per usable parking space. Due to site constraints, however, full build out of the ends of the parking structure are prohibited. In addition the transportation and retail components of the structure further reduce the number of available space such that the garage efficiency is lessened. The garage efficiency for the preferred alternative is 349 square feet of structure per space.

# 3. Transit Operations Associated with Facility

## *Current Operations*

GGFT currently operates nine year-round bus routes and one summer-only trolley route. Five buses are used to operate the year-round service, and two trolleys are used to operate the trolley route. Most of the year-round routes operate every 60 minutes throughout most of the day, and have round trip running times of slightly less than 30 minutes. With these times, most service is interlined, meaning that buses make a trip on one route and then a trip on a second route before returning to make a second trip on the first route (or another route). GGFT does not assign buses to specific combinations of routes; instead the interlining is among multiple routes.

This interlining strategy means that many buses, rather than turning around at the Glens Falls hub to return in the same direction from which they came, continue straight past hub as a new trip on a different route. The optimal design for bus circulation in a new facility, therefore, would be to allow buses to both turn around and continue past the facility in the same direction.

## *Assessment of Preferred Elm Street Functional Layout*

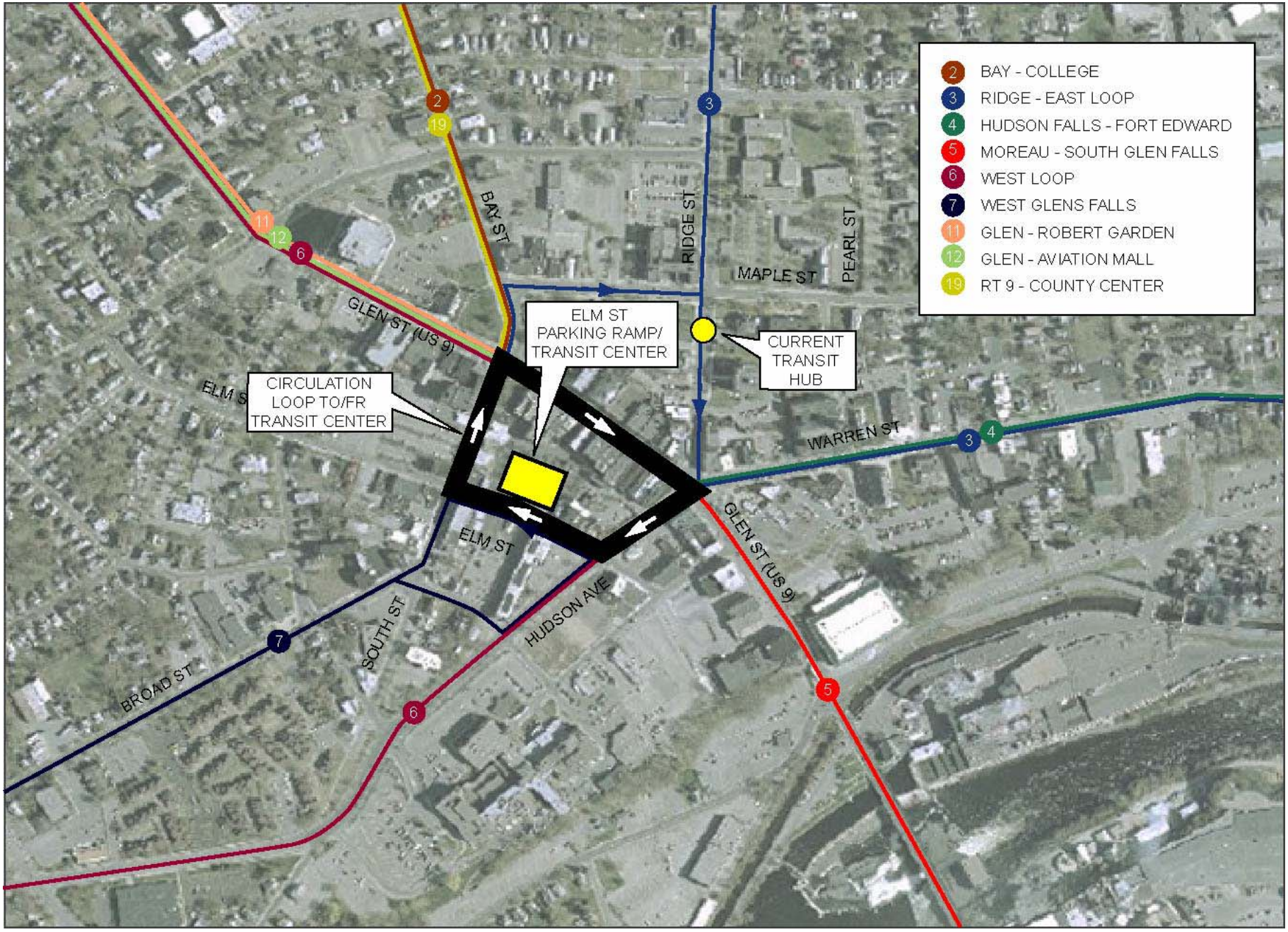
The preferred alternative is arranged with local transit services located on the north side of Elm Street, parallel berths along the south side of the new transportation center/parking ramp. Inter-city buses would also use a parallel berths arrangement, pulling off of Elm Street and parking adjacent to the west side of the transportation center. This arrangement would be convenient for passengers, as the bus berths would be located directly adjacent to the passenger waiting area. It would also be relatively easy to re-route all bus service via bus stops on the north side of Elm Street. As shown in **Figure 3.1**, Elm Street, South Street, Glen Street, and Hudson Avenue could be used as a clockwise loop, which would allow buses from all routes to easily access the bus berths.

The maximum number of GGFT buses that are currently scheduled to be at the hub at any one time is five (including one trolley). As mentioned, space for up to two intercity buses (e.g., Greyhound) is provided on the north end of the facility.

The current design, which is conceptual only, provides a somewhat restrictive turning radius for a typical 45-foot intercity coach bus at the northwest corner of the facility. Refinements and finalization of this conceptual design may therefore need to provide slightly more turning radius than currently shown. Typical options in this regard include cutting off a non-functional small corner of the structure to ensure a turning radius "cushion" for buses making that movement.

## *Ability to Accommodate Future Expansion*

# Figure 3.1: GGFT Bus Circulation with Elm Street Transportation Center/Parking Ramp as Transit Hub



An additional consideration is that the new facility should be able to accommodate both changes to and potential increases in existing services. While future levels of GGFT and intercity service are speculative, relatively large increases in service could be accommodated by adding additional bus berths on the south side of Elm Street. At this stage of development, it is reasonable to assume that the facility could accommodate large increases in GGFT service through the conversion of on-street parking spaces into additional bus berths on either side of Elm Street.

# 4. Traffic Operations Analysis

In considering the siting and operations of the transportation center/parking ramp in the center of a busy downtown, it is important to understand and accommodate potential impacts on the street system and associated traffic operations. This section assesses the potential traffic operations impacts of the facility on the street system immediately adjacent to the Elm Street site.

## *Existing Roadways*

**Elm Street** is a two-way dual-lane roadway between South Street and Hudson Avenue. The roadway width varies between 31 feet 10 inches at its southern intersection with Hudson Avenue to 37 feet at its northern intersection with South Street. In the immediate vicinity of the existing parking lot, the width of Elm Street is approximately 32 feet. There is limited on-street parking on Elm Street near to the Elm Street parking lot with only 3 parking spaces located in front of the Boston Candy Kitchen, each limited to a ten minute maximum. Parking is also provided along Elm Street west of the South Street intersection.

**Hudson Avenue** is a two-way four-lane roadway oriented in a north-south direction in the vicinity of the Transportation Center. The Hudson Avenue/Elm Street intersection is signalized. Left turn lanes are provided on Elm Street and Hudson Avenue at the intersection. Currently, parking is allowed in the area near to the intersection.

**South Street** is a two-way dual-lane roadway oriented in a north-south direction in the vicinity of the Transportation Center. West of the South Street/Elm Street intersection, South Street is approximately 47 feet wide with travel lanes approximately 11 feet-10 inches wide. East of the South Street/Elm Street intersection, South Street is approximately 40 feet wide with travel lanes approximately 9 feet-8 inches wide. A parking lane is provided along South Street on both sides east and west of the intersection.

## *Existing and Future Traffic Volumes*

Existing (2000) A.M. and P.M. peak hour traffic volume were obtained for this study from the Adirondack-Glens Falls Transportation Council at the Elm Street/Hudson Avenue and Elm Street/South Street intersections. A 2 percent per year growth factor was applied to the existing (2000) peak hour traffic volumes to project future (2004) peak hour traffic conditions. **Figure 4.1** shows future (2004) A.M. and P.M. peak hour traffic volumes at the two study area intersections in the vicinity of the Glens Falls Transportation Center.

## *Anticipated Site Generated Traffic Volumes*

The proposed parking garage will consist of 508 parking spaces. For purposes of this analysis, it was assumed that approximately 50 percent of the parking spaces will be utilized by the monthly parkers and the remaining 50 percent by hourly/daily parkers.

**Table 4.1** shows anticipated site generated traffic volumes by the proposed parking garage during the A.M. and P.M. peak hour periods.

**Table 4.1**
**Anticipated Site Generated Traffic Volumes**

| Description | A.M. Peak Hour | | | P.M. Peak Hour | | |
|---|---|---|---|---|---|---|
| | In | Out | Total | In | Out | Total |
| | | | | | | |
| Parking Garage (508 parking spaces) | 250 | 50 | 300 | 100 | 250 | 350 |
| | | | | | | |

Source: Wilbur Smith Associates based on ITE's Trip Generation Manual, Sixth Edition.

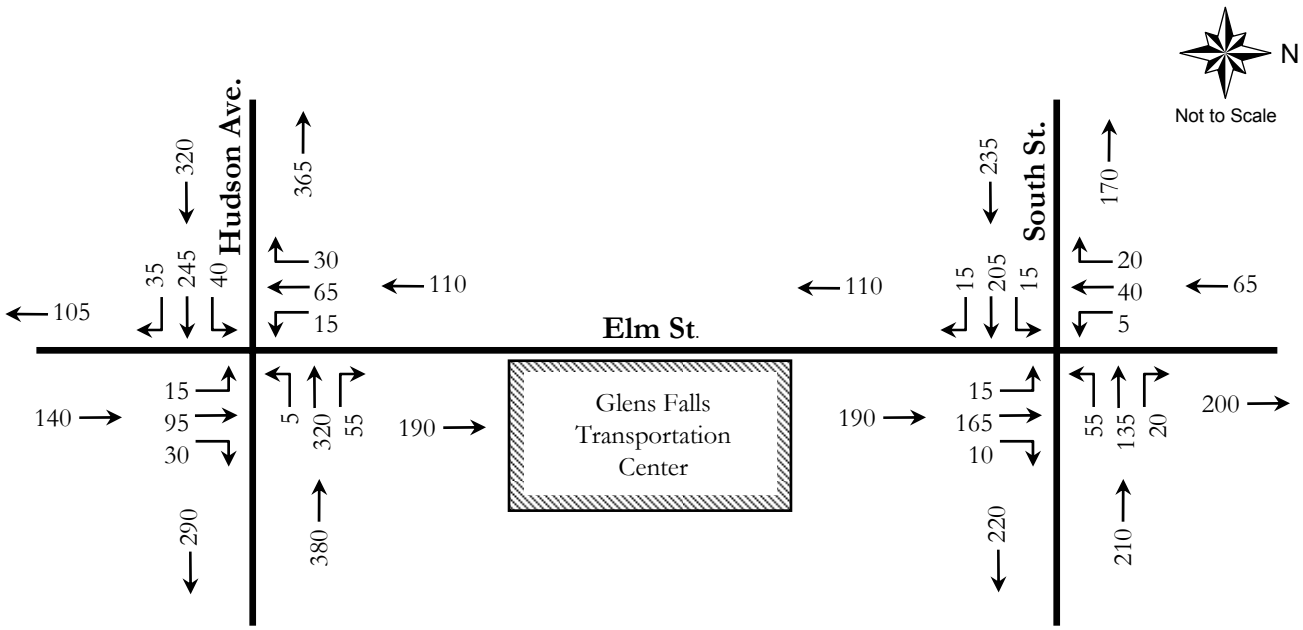
**Figure 4.2** shows the routing distribution of the site generated traffic and distribution of this traffic at the two intersections during the A.M. and P.M. peak hour volumes.

**Figure 4.3** shows the future (2004) A.M. and P.M. combined peak hour traffic volumes at the two study area intersections.

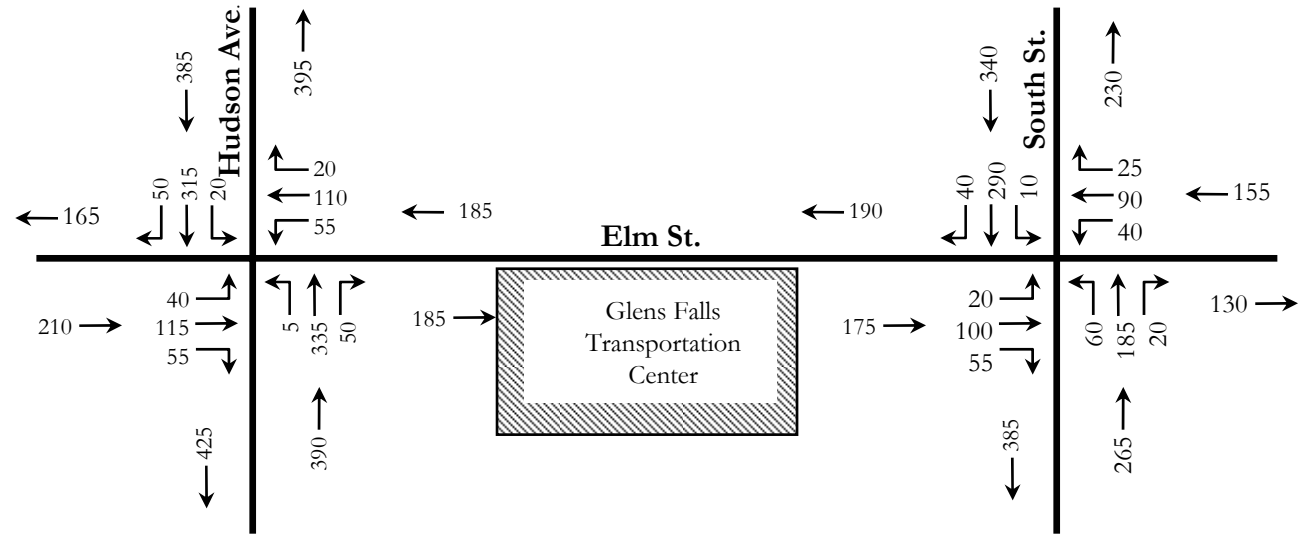
## *Level of Service Analysis*

A study of capacity is important in determining the ability of a specific roadway, intersection or freeway to accommodate traffic under various levels of service. Level of service (LOS) is a qualitative measure describing driver satisfaction with a number of factors that influence the degree of traffic congestion. These factors include speed and travel time, traffic interruption, freedom of maneuverability, safety, driving comfort and convenience, and delay.

In general there are six levels of service describing flow conditions. The highest, LOS A, describes a condition of free flow, with low volumes and high speeds. LOS B represents a stable traffic flow with operating speeds beginning to be restricted somewhat by traffic conditions. LOS C, which is normally utilized for design purposes, describes a stable condition of traffic operation. It entails moderately restricted movements due to higher traffic volumes, but traffic conditions which are not objectionable to motorists. LOS D reflects a condition of more restrictive movements for motorists and the influence of congestion becomes more noticeable. LOS E is representative of the actual capacity of the roadway or intersection and involves delays to all motorists due to congestion. The lowest level of service, LOS F, is described as force flow and is characterized by volumes greater than the theoretical roadway capacity. Complete congestion occurs, and in extreme cases, the volume passing a given point drops to zero. This is considered an unacceptable traffic operating condition.




## A.M. Peak




## P.M. Peak

**Note:**

1. Existing (2000) A.M. and P.M. peak hour traffic volumes were obtained from the Adirondack/Glens Falls Transportation Council.
2. A 2 percent per year growth factor was used to project existing (2000) traffic volumes to future (2004) traffic condition.

# FUTURE (2004) TRAFFIC VOLUMES

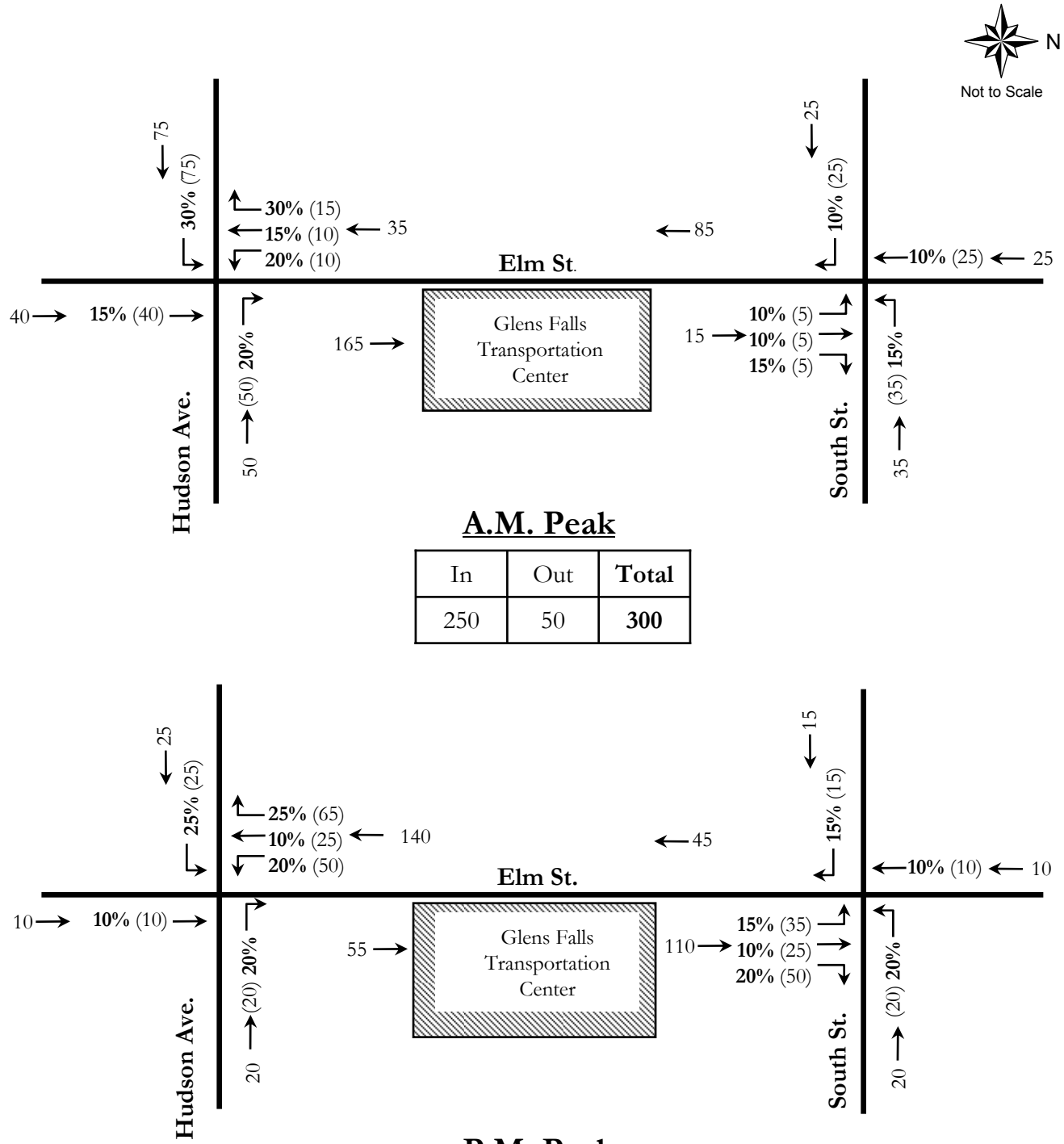
GLENS FALLS TRANSPORTATION CENTER

Glens Falls, New York

ENGINEERS PLANNERS ECONOMISTS

Wilbur Smith Associates

**FIGURE 4.1**




## A.M. Peak

| In | Out | Total |
|---|---|---|
| 250 | 50 | **300** |




## P.M. Peak

| In | Out | Total |
|---|---|---|
| 100 | 250 | **350** |

**Note:**

1. 508 Parking Spaces
2. 50 percent Monthly Parkers
3. No diversion of traffic
4. All New Traffic
5. Peak Hour Traffic Volumes Conservatively High

# SITE TRAFFIC ROUTING DISTRIBUTION

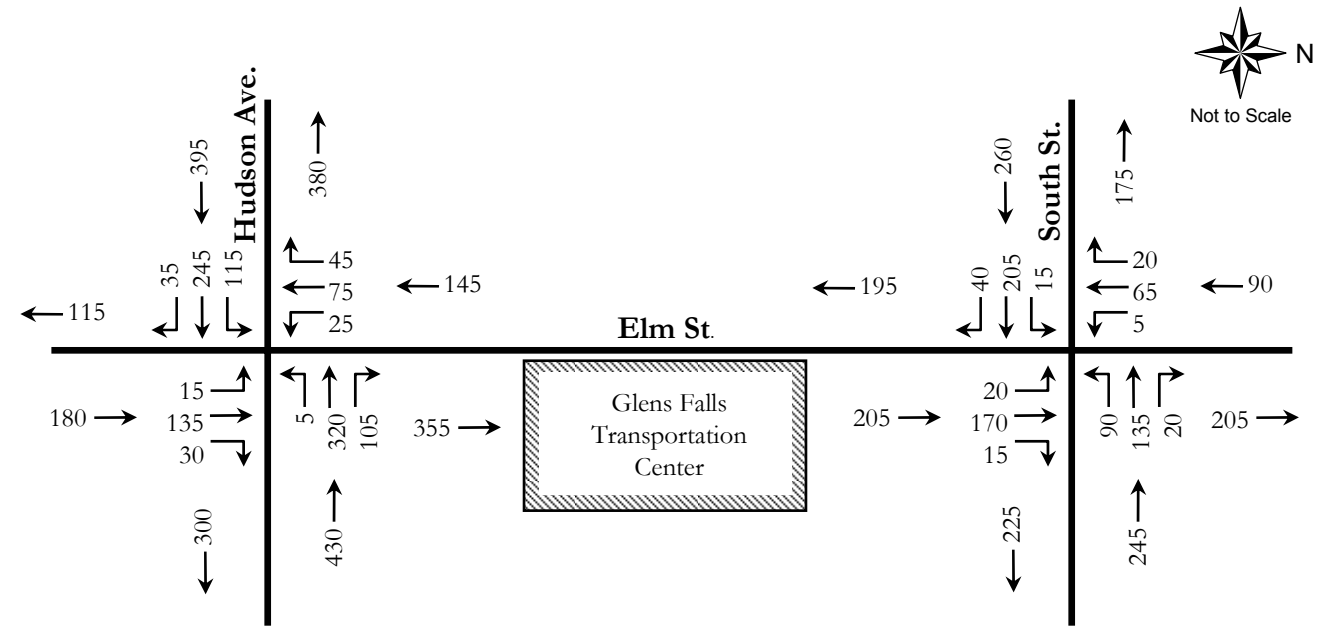
GLENS FALLS TRANSPORTATION CENTER

Glens Falls, New York

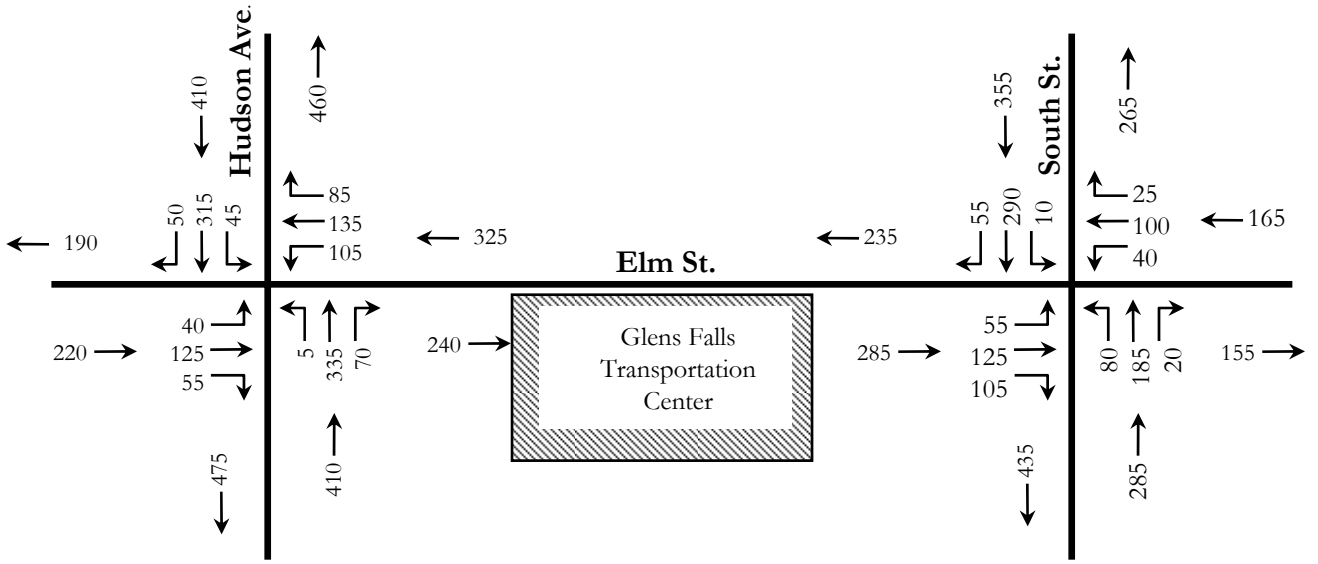
ENGINEERS PLANNERS ECONOMISTS

Wilbur Smith Associates

**FIGURE 4.2**




**A.M. Peak**




**P.M. Peak**

# FUTURE (2004) COMBINED TRAFFIC VOLUMES

GLENS FALLS TRANSPORTATION CENTER

Glens Falls, New York

ENGINEERS PLANNERS ECONOMISTS

Wilbur Smith Associates

**FIGURE 4.3**

Traffic analysis for this study was based on the 2000 Highway Capacity Manual and conducted using the Highway Capacity Software (HCS).

**Table 4.2** highlights the level of service criteria for signalized intersections. The level of service criteria for signalized intersections is based on control delay per vehicle measured in seconds.

**Table 4.2**
**LOS Criteria for Signalized Intersections**

| Level of Service | Control Delay Per Vehicle (seconds) |
|---|---|
| A | ≤10 |
| B | >10 and ≤20 |
| C | >20 and ≤35 |
| D | >35 and ≤55 |
| E | >55 and ≤80 |
| F | > 80 |

Source: 2000 Highway Capacity Manual, Transportation Research Board

Level of service was determined for the two study area intersections under future 2004 conditions with and without the new Parking Garage under the A.M. and P.M. peak hour conditions. The results are presented in Table 4.3.

**Table 4.3**
**Anticipated LOS – Future (2004) Peak Hour Conditions**

| Intersection | Without Garage | | With Garage | |
|---|---|---|---|---|
| | A.M. | P.M. | A.M. | P.M. |
| **Signalized** | | | | |
| Elm Street/Hudson Avenue | B(12.7) | B(12.9) | B(13.0) | B(13.1) |
| South Street/Hudson Avenue | B(13.4) | B(14.1) | B(13.8) | B(14.7) |
| | | | | |

Source: Wilbur Smith Associates

As shown in Table 4.3, the level of service at the two study area intersections remain at LOS B with the proposed parking garage in place under both A.M. and P.M. peak hour conditions.

## *Traffic Analysis Summary Assessment*

The results of the traffic analysis associated with the proposed Parking Garage indicate that the Elm Street/Hudson Avenue and Elm Street/South Street located in the immediate vicinity of the proposed Parking Garage are anticipated to operate at acceptable levels of service (LOS B) under all future (2004) traffic conditions.[2]

## *Suggested Traffic Improvement Strategies*

**Figure 4.4** depicts suggested traffic improvement strategies in the vicinity of the Elm Street site based on the traffic operations analysis and other characteristics of the site. The suggestions include a new striping plan, additional crosswalks and other improvements.

[2] At the time this report was published, the City of Glens Falls was considering closing Hudson Avenue at Glen Street. If this were to occur, traffic operations on Elm Street and in the intersections analyzed in this report could be significantly affected and additional study would be required to ensure transportation center operations and traffic improvement strategies were harmonized with new traffic patterns.

# Figure 4.4: Suggested Traffic Improvements in Vicinity of Elm Street Facility Site

# 5. Facility Financial Assessment

This section describes the financial aspects of the proposed transportation center/parking ramp – capital construction cost and operating costs and revenues, including transit cost implications. A strategy to manage parking resources and levy appropriate parking fees for the whole of the Glens Falls CBD is also proposed.

## Estimated Capital Construction Cost

**Table 5.1** provides estimated order of magnitude construction costs for the facility. The estimated cost of approximately $8.3 million is based on the following assumptions:

1. Parking Garage Capacity – 514 spaces
2. Capital Cost (per space) (includes construction cost per space plus land cost (if applicable), construction manager, contingencies, design, general liability) - $13,500
3. Capital Cost of $500 per each metered parking space
4. Cost of Issuance (Bond Counsel, Solicitor, Underwriter's Counsel, Trustee, Bond Printing, Official Statement Printing, Rating, Insurance, Discount) is not included in Capital Cost
5. Bond Term – 30 years; interest rate – 5%
6. Amount to be financed does not include:
    a. Capitalized interest – first year's debt service payment(s)
    b. Debt Service Reserve – maximum annual one-year debt service

## Operating Costs and Revenues

It is assumed the new transportation center/parking ramp would (a) charge a fee, through either permits or hourly rates, for parking and (b) be an element of an overall downtown Glens Falls parking system that includes a parking fee structure. This section also presents a proposal for a downtown Glens Falls parking fee and system management structure. The structure consists of estimates of parking system operating costs and revenues, including those associated with the proposed transportation center/parking ramp. It is important to note that estimated operating costs and revenues presented in this report do not assume any offset from operating funds of the Greater Glens Falls Transit (GGFT) system.

### *Downtown Parking Fees*

# Table 5.1
# Glens Falls Transportation Center/Parking Ramp
# Capital Construction Cost Estimate

*Parameters*

Site Location - Elm St. Parking Lot

Parking Structure - 5-level, 514 Parking Spaces (404 new)

Parking Garage Efficiency - 1 space per 364 square feet

Transportation Center - 2,500 square feet

Commercial/Retail - 1,500 square feet

| | ***Order of Magnitude Construction Cost Estimates*** |
|---|---|
| Construction Cost per Parking Space (Including site preparation. Special architectural façade treatments may need to be added.) | $13,500 |
| Construction Cost for Transportation Center per square foot (includes shell and full build out) | $170 |
| Construction Cost for Retail/Commercial per square foot (includes shell/excludes full build out) | $90 |
| Surveys/Engineering/Architectural Design Fees | 10% of construction costs |

**Order of Magnitude Implementation Cost Estimates**

| | |
|---|---|
| Parking structure at 514 spaces | $6,939,000 |
| Transportation Center at 2,500 square feet (full build out) | $425,000 |
| Retail/Commercial at 1,500 square feet (shell only) | $135,000 |
| Subtotal | $7,499,000 |
| Survey/Design Fees at 10% of Implementation Cost | $749,900 |
| **TOTAL** | **$8,248,900** |

NOTES:

(1) Elm Street Roadway Improvements, including Traffic Signal Upgrades at Hudson and South Street, may have an implementation cost of $150,000.

(2) Alternative E with 389 spaces (5 levels), an efficiency of 414 square feet per space, and constructoin cost estimate of $15,500 per space - $7,248,450 Implementation Cost.

(3) Does not include Funding/Financial Costs of the Transportation Center.

Establishing parking fees in Glens Falls must address two issues, namely the amount and appropriateness of fees to be charged, and the fact that all municipal parking is currently free. The latter will likely be the more difficult issue to confront considering that objections to paying for parking may have the greatest consequences.

In order for the City to realize the revitalization of the Central Business District envisioned by the Glens Falls Parking Committee in 1997, additional parking is required. Residents must accept that construction of a multi-level parking structure is the only way to satisfy that requirement. The burden of providing the parking structure, therefore, will fall on the city government. Development of this structure together with implementation of parking fees will be one segment of a comprehensive parking management strategy.

An additional factor in the development of parking fees is the understanding that the decision to charge for parking must include all municipal off-street facilities as well as all on-street parking spaces in the CBD, all of which are currently free.

Finally, because parking will be managed so that it serves all users of the CBD, implementation of parking fees will not be a deterrent to parking in the CBD, nor will it be an inhibitor to future development/revitalization. Experience with parking controls and fees in other similar locations provide supporting evidence. Therefore, recognizing that the need for a fee for parking is a reality, the question becomes what fees will be appropriate and acceptable to the citizenry who currently park in the area and are expected to park there in the future. The relatively compact size of the Glens Falls CBD and its focal points/destinations are such that only a single scale of parking fees is necessary.

To develop a suggested parking fee structure, the consultant reviewed parking fee structures in various "peer" cities in New York State, New Jersey, Vermont and Pennsylvania of comparable size and similar activity profiles. While, it is acknowledged that no two communities are precisely comparable, other similar communities have successfully implemented parking controls and fee structures. These examples include Albany and Lake George in New York, Rutland, Vermont and Williamsport, Pennsylvania.

Based on the consultant's assessment of the different factors affecting parking fee options and in consideration of the fact that parking is currently free and construction of a parking garage in downtown Glens Falls will require a substantial financial investment by the City, it is recommended that a parking fee system be implemented in the CBD using the rates shown in **Table 5.2** below.

**Table 5.2:**
**Recommended Downtown Parking Fees**

| | |
|---|---|
| **Transient/hourly/daily fee:** | **$0.50 per hour** |
| **Monthly parking fees:** | **$40.00 per month** |
| **Event parking** | **$3.00** |

## Estimated Annual Operating Expenses

**Table 5.3** summarizes the estimated annual operating expenses for overall parking system operations in the Glens Falls CBD, including the conceptual Elm Street Facility. The estimated first-year operating expense of $275,000 is based on the assumption that an overall fee-based parking system, using a combination of meters on streets and the parking ramp together with the sale of monthly permits, would be implemented by the City. Additional operating expense assumptions include the following:

1. Annual operating and maintenance expenses for the parking garage – $300 per space includes Maintenance Reserve and pro rata share of personnel costs
2. Annual operating and maintenance expenses escalate at 3% per year; no operating revenue increase during the initial five-year period of operation
3. Maintenance Reserve of $50,000 per year, held constant throughout
4. Personnel/Staffing required to service all on-street metered parking and all off-street facilities, metered or permitted, are:
    a. Administration/overhead of parking operations (e.g., accounting, issue of permits, etc.) will continue to be handled by the City without additional personnel
    b. Enforcement personnel will increase from one (1) full-time employee to a minimum of one (1) full-time (Monday-Friday) and one (1) part-time (Wednesday through Saturday)
    c. Meter collection personnel – one (1) part-time employee (24 hours per week, six (6) hours each on Monday, Tuesday, Thursday, Friday)
    d. Meter repair personnel – three (3) hours per day by part-time person, five (5) days per week
    e. Custodial – two (2) part-time employees; total four (4) hours per day, seven days per week
    f. Coin Counting – One (1) part-time employee; three (3) hours on Monday and Thursday, two (2) hours on Tuesday and Friday

The annual operating expense includes estimated costs of operating the Elm Street facility, other parking facilities and meters throughout the CBD and associated staffing requirements. Projected expenses, however, do not include any possible debt financing payments, which could substantially increase the annual cost of the facility to the City by as much as $500,000, based on similar facilities elsewhere. However, only a detailed financial analysis, which is beyond the scope of this study, can accurately determine potential financing costs. Additional detail and notes related to this study's cost estimate are shown in Table 5.3.

# Table 5.3
# Estimated Annual Operating Expenses
# CBD Parking Operations (1)
# City of Glens Falls, New York
***(All figures rounded to nearest $1,000)***

**Elm Street Transportation Center/Parking Ramp**

| | |
|---|---|
| Utilities | $30,000.00 |
| Insurance | $3,000.00 |
| Repairs, maintenance and supply | $21,000.00 |
| Operating Supplies | $10,000.00 |
| Maintenance Res. | $50,000.00 |
| Subtotal Elm Street Operating Expenses | $114,000.00 |

**Other Parking**

| | |
|---|---|
| Utilities | $5,000.00 |
| Insurance | $3,000.00 |
| Repairs, Maintenance and Supplies | $6,000.00 |
| Subtotal Other Parking Expenses | $14,000.00 |

**Staffing Requirements (2)**

| | |
|---|---|
| Salaries (3) | $120,000.00 |
| Benefits (4) | $36,000.00 |
| Subtotal Staffing | $156,000.00 |
| **TOTAL Estimated Annual Operating Expenses** | **$284,000.00** |

NOTES:

(1) Assumes all spaces on-street will have parking meters and all spaces off-street will either have parking meters or be controlled by permits.

(2) Personnel requirements are calculated on the basis of 1196 total parking spaces (732 off-street and 464 on-street) with all on-street spaces metered and all off-street spaces either metered or permits.

(3) Staffing estimated at 10,000 hours per year at an average salary of $12.00 per hour (includes security personnel)

(4) Benefits estimated at 30% of salary

## Projected Annual Revenues

**Table 5.4** highlights revenues estimated for the proposed downtown Glens Falls fee-based parking system for operating years 1 through 5, including revenues from on-street and off-street parking as well as the Elm Street facility. In years 1 through 5 of operations, it is estimated that total parking revenues would be $623,000. Annual projected revenues include on-street and off-street meters, permit sales and fees collected at the Elm Street facility. Revenue estimates are based on the occupancy and turnover rates assumed in the traffic impact analysis. These rates are held constant over the five-year period. The estimate also includes $165,000 in projected revenues from special event parking associated with the Civic Center and Charles Wood (Woolworth) Theater.[3] In addition, it has been conservatively assumed that downtown parking fees are not changed for the first five years of operations. **Tables 5.4.1 and 5.4.2** provide additional detail on the assumptions underlying the revenue projections.

### *Projected Net Revenues*

In year 1, projected net revenues are approximately $339,000. Using the assumption that parking fees will remain unchanged for the first five years, net revenue declines to approximately $320,000 by year 5 (change of -5.6%) due to slight increases in operating costs over time. After five years of operating experience, the City may choose to revise parking fees for all or certain specific facilities, thereby affecting the net revenue figure as well.

**It should be noted that the estimated revenue figures are based on the conceptual facility design and location and existing parking demand information from past studies and plans. These figures are therefore subject to revision based on additional parking demand analysis, refined facility design and the ultimate structure of the City's downtown parking system.**

[3] Based on actual and estimated event frequency information provided by the City of Glens Falls and the Glens Falls Civic Center.

# Table 5.4
# Projected Annual Net Revenues
# Proposed Downtown Parking System
# City of Glens Falls, New York

***(All figures rounded to nearest 1,000)***

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|
| **Projected Annual Revenues (1)** | | | | | |
| On-Street | $174,000 | $174,000 | $174,000 | $174,000 | $174,000 |
| Off-Street (exclusive of Elm Street Garage) | $93,000 | $93,000 | $93,000 | $93,000 | $93,000 |
| Elm Street Garage | $356,000 | $356,000 | $356,000 | $356,000 | $356,000 |
| Total Projected Annual Revenue | $623,000 | $623,000 | $623,000 | $623,000 | $623,000 |
| **Projected Operating Expenses (2)** | | | | | |
| Elm Street Garage (3) | $114,000 | $117,000 | $121,000 | $125,000 | $128,000 |
| Other Parking | $14,000 | $14,000 | $15,000 | $15,000 | $16,000 |
| Personnel Staffing | $156,000 | $161,000 | $166,000 | $171,000 | $176,000 |
| Total Projected Annual Operating Expenses (4) | $284,000 | $292,000 | $302,000 | $311,000 | $320,000 |
| **Net Revenues over Operating Expenses** | **$339,000** | **$331,000** | **$321,000** | **$312,000** | **$303,000** |

NOTES:

(1) Assumes no change in parking fees for first 5 years

(2) Assumes operating expenses increase at the rate of 3% per year, except Maintenance Reserve which remains constant at $50,000 per year

(3) Includes $50,000 per year Maintenance Reserve

(4) Does not include any costs associated with financing the project and paying debt service. These costs could exceed $500,000 per year. A detailed financial analysis should be undertaken.

(5) A detailed parking needs study should be undertaken to determine long-term (monthly) and short-term/transient (hourly) parking demands at this facility and in the entire downtown study area.

# Table 5.4.1
# Glens Falls Transportation Center/Parking Ramp
# Revenue Assumptions and Projections

**Transportation Center/Parking Ramp**
*Total parking spaces = 514*

| Revenue Source | Total |
|---|---|
| Monthly Permits<br>*(257 spaces x $40/space x 12 months)* | $123,360 |
| Transient Parking<br>*(257 spaces x $0.50/hour x 2 hours x 35% occupancy x 2.5 turnover/day x 300 days)* | $67,463 |
| Subtotal Daily Garage Parking | $190,823 |
| Event Parking (1) | |
| *Civic Center: 45 events @ 6000 people/year ~ 450 cars x $3* | $60,750 |
| *Civic Center: 45 events @ 3000 people/year ~ 225 cars x $3* | $30,375 |
| *Heritage Hall: 135 events x 100 cars/year x $3* | $40,500 |
| *Woolworth Theater: 150 events x 75 cars/year x $3* | $33,750 |
| Subtotal Event Parking | $165,375 |
| **Grand Total - Transportation Center/Parking Ramp Revenue** | **$356,198** |

NOTES:

(1) Estimates of number of events provided by officials of GF Civic Center, Woolworth Theater and City of Glens Falls

## Table 5.4.2
## Other Off-Street and On-Street Parking
## Revenue Assumptions and Projections

**Other Off-Street Parking**
*Net of 218 Spaces (Total 312 minus 94 @ Elm Street lot)*

| Revenue Source | Total |
|---|---|
| Monthly Permits<br>*(109 spaces x $40/space x 12 months)* | $52,320 |
| Transient Parking<br>*(109 spaces x $0.50/hour x 2 hours x 50% occupancy x 2.5 turnover/day x 300 days)* | $40,875 |
| **Total - Other Off-street Parking Revenue** | **$93,195** |

**On-Street Parking**
*Total 464 Spaces*

| | |
|---|---|
| *(464 spaces x $0.50/hour x 2 hours x 50% occupancy x 2.5 turnover x 300 days)* | $174,000 |
| **Total - On-Street Parking Revenue** | **$174,000** |

## Transit Operations – Cost Implications

The proposed downtown transportation center/parking ramp is projected to result in minor increases in GGFT vehicle operating costs. A proportion of utility, maintenance, and cleaning costs may also be attributable to transit operations and facilities for transit passengers. Very few of these facility-related costs, however, would be transit specific. It is suggested that once total facility operating costs have been estimated, a share of the total costs attributable to transit can be identified by the City of Glens Falls and GGFT.

### *Transit Operating Cost Components*

Transit operating cost components of the proposed parking ramp/transit center would primarily consist of:

- Changes to vehicle operating costs
- Changes to costs for ticket sales
- Personnel (if any)
- Utilities (heat, electricity, and water)
- Snowplowing
- Cleaning/routine maintenance
- Security

### *Changes to Vehicle Operating Costs*

The Elm Street location would impact GGFT vehicle operating costs to the extent that service mile, hours, or vehicle requirements are altered significantly. Since the proposed Elm Street location is less than 0.4 miles from the current Ridge Street hub, however, impacts on vehicle operations, and thus operating costs, would be low:

- Changes to round trip running times would range from –1.2 minutes to +1.3 minutes (see **Table 5.5**). Some minor service changes may be required, but it should be possible to accommodate these changes without increasing vehicle hours or vehicle requirements.

**Table 5.5: Impacts of Elm Street Location on GGFT Running Times**

| | Current Round Trip Run Time | Run Time Impact (Minutes) | Round Trip Run Time at Elm Street |
|---|---|---|---|
| 2 Bay - College | 27 | 0.6 | 27.6 |
| 3 Ridge-East Loop | 20 | 1.3 | 21.3 |
| 4 Hudson Falls-Fort Edward | 48 | 1.1 | 49.1 |
| 5 Moreau - South Glens Falls | 29 | 0.1 | 29.1 |
| 6 West Loop | 20 | -1.2 | 18.8 |
| 7 West Glens Falls | 25 | -1.1 | 23.9 |
| 11/12 Glen-Robert Garden/Aviation Mall | 28 | 0.6 | 28.6 |
| 19 Route 9 County Center | 55 | 0.6 | 55.6 |

There would be an increase in vehicle service miles operated of 20,100, or approximately 7% (see **Table 5.6**). This would increase mileage based costs (primarily vehicle maintenance) by approximately 7%, or about $7,000 per year using the actual costs for vehicle maintenance in 2000 of $95,700.

**Table 5.6: Changes in GGFT Vehicle Service Miles**

| | Change in Round Trip Mileage | Weekday Round Trips | Saturday Round Trips | Change in Annual Vehicle Service Miles (VSMs) |
|---|---|---|---|---|
| 2 Bay – College | 0.14 | 6 | 2 | 2,257 |
| 3 Ridge-East Loop | 0.32 | 11 | 8 | 9,527 |
| 4 Hudson Falls-Fort Edward | 0.28 | 11.5 | 5 | 8,642 |
| 5 Moreau - South Glens Falls | 0.03 | 9 | 5 | 610 |
| 6 West Loop | -0.29 | 12 | 8 | -9,425 |
| 7 West Glens Falls | -0.27 | 6 | 2 | -4,408 |
| 11/12 Glen-Robert Garden/Aviation Mall | 0.14 | 12 | 10 | 4,559 |
| 19 Route 9 County Center | 0.14 | 22 | 20 | 8,370 |
| Total | | | | 20,130 |

## *Ticket Sales*

The Glens Falls City Clerk's office, at City Hall on Ridge Street, currently sells GGFT tickets. With the shift of GGFT service to the transit center from the current Ridge Street hub, this location would no longer be convenient, and provision would need to be made for ticket sales at the new facility.

Relocating ticket sales could be accomplished via ticket vending machines or by a concessionaire. If tickets are to be sold via a concessionaire, this arrangement would require locating a complementary business as close as possible to the transit center, (i.e., a newsstand or convenience store).

Currently, the City Clerk's office sells approximately $500 worth of tickets per month. Assuming a 10% commission fee, the commission cost would be $50 per month.

### *Personnel*

There should be no need to assign additional personnel to the parking garage/transit center for transit operations purposes. If a staffed information kiosk is located in the facility, however, it may be appropriate to attribute a proportion of those costs to the transit component.

### *Utilities*

There would be heating, cooling, electricity, and water costs associated with the facility. Costs that would specifically apply to transit include a share of heating, cooling, and lighting of the passenger waiting room, and lighting costs for the bus berths and outside waiting areas. Overall utility costs for the entire facility could attribute a proportion to transit based on the size of the waiting area, which would be largely used by transit patrons.

### *Snowplowing*

There would be snowplowing costs for the facility, which would be attributable to the parking garage (the top level) and the bus access roads, bus berths, and outside waiting areas. The proportion attributable to transit could reasonably be based on the area of bus access roads, platforms, and outside waiting areas as a percentage of the total area that would need to be cleared of snow.

Snowplowing at GGFT's current hub on Ridge Street is performed by the city as part of its normal plowing activities. Since GGFT's bus berths at the new facility would be on the street, and outside waiting facilities on the sidewalk, it is assumed that this practice would continue, and that there would be no new direct GGFT costs.

### *Cleaning/Routine Maintenance*

A proportion of cleaning and maintenance costs for the entire facility which would also be attributable to the transit use. Transit's share of these costs may be calculated according to the area dedicated to transit operations as a percentage of the total area of the facility.

### *Security*

It is assumed that security in the passenger waiting room would be provided by the same personnel as for the entire garage. Therefore, there would be no direct cost for the transit component, but some cost sharing of overall security cost would likely be appropriate.[4]

### *Transit Revenue Generation*

The new facility would not generate any significant new transit revenue.

[4] Options for cost-effectively enhancing overall facility security include products such as "Code Blue," which is one of a number of available products that produces a variety of emergency and assistance voice communications products designed for parking lots and garages. Units are available in a variety of styles, power options and communication options, and are ADA compliant. The systems are visible and pro-active, immediately activate a blue strobe light and provide 2-way hands free communication between the customer and the police or other security personnel.

# 6. CBD Parking Management Strategies

The development of a Parking Management Program is a key factor in the success (or failure) of the City's efforts to revitalize the Central Business District and to construct and finance a multilevel parking structure. A comprehensive program to manage parking resources in the CBD, therefore, is recommended. A list of recommended strategies that would support a parking management program includes:

a. Set parking in the CBD at a level which generates parking revenues required to finance the parking garage and to cover annual operating and maintenance expenses associated with the City Parking program.

b. Conduct a parking study to collect parking accumulation data and turnover/duration of parking data as a means to identify the specific requirements for, and desired location of, transient and monthly permit parking. This information will also help the City determine appropriate times to charge for parking at both on-street and off-street facilities.

c. Eliminate or tightly control access to all free parking in the CBD. Access to private lots, for example, should be limited to employees and patrons. Anyone wishing to park in the CBD who does not have access to a private lot, therefore, would be forced to use City provided public parking.

d. Review parking enforcement opportunities available to the City.

    i. Ensure enforcement is consistent and fair;
    ii. Employ the appropriate number of enforcement personnel required; and
    iii. Review the price structure for parking violations to insure that they are adequate to force compliance with parking rules and fees. As a minimum, prices must be sufficient to defer parkers from taking a chance of not paying the parking fee and the willingness to pay a small fine.

e. Evaluate the potential of parking taxes in the event that private off-street parking becomes fee-based. This form of taxation has become a common tool used by urban communities to generate additional revenues to assist in the financing of parking programs. Parking taxes typically start at about 10% and in a number of larger metropolitan areas are in excess of 30%.

f. Review existing zoning requirements for parking to determine the adequacy of parking requirements. In particular, the potential for a payment in lieu of parking scheme specifically for redevelopment projects should be considered and evaluated. This is a useful option in cases where it is not practical to provide parking required by City ordinance.

g. Implement a parking strategy directed at employees and business owners to discourage their use of on-street parking. The objective would be to free up prime parking for visitors to the business and commercial establishments in the CBD. Tools to carry out this strategy may include reduced off-street parking fees for people who work downtown.

h. Consider a flat fee parking rate for evening and special event parking in off-street facilities as well as charging for parking at meters during evening hours if there is sufficient activity to warrant and enforcement personnel would be available.

i. Evaluate existing parking to determine if efficient improvements can be realized (e.g., efficiency of off-street facilities, angle parking versus parallel parking for on-street parking, location and utilization of loading zones).

j. Review the effectiveness of wayfinding signage to identify parking locations and key destinations. Signage may also be used to encourage park and walk opportunities for tourists and shoppers.

k. Single out an office or individual within city government responsible for all parking related matters, from parking meter collection, sale of monthly permits to enforcement. In this regard, it may be appropriate to consider the creation of a parking authority to better implement and manage the City parking management strategies.

l. Identify and assess parking needs of CBD residents, including daytime and overnight parking requirements. Assess the potential for using special permits at off-street facilities to satisfy requirements for residents of the CBD. This can be done, for example, by selling (or issuing) reduced fee permits that restrict usage of the parking facility to off-peak hours.

# 7. Funding Options

Opportunities for use of external funding sources to pay for major portions of the capital construction and operating costs of the proposed transportation center/parking ramp have been identified and evaluated. These sources represent important tools to help the City leverage its limited revenue. A variety of public, private and public-private funding sources exist, some of which potentially could be used by Glens Falls. Public funding includes federal, state, regional and local sources.

The information below, and summarized in **Table 7.1**, is intended to provide guidance to the City and its planning partners, but should not be considered exhaustive, as funding source eligibility, restrictions, amounts and requirements change from year to year. This is particularly relevant at this time because the federal government is involved with on-going efforts to craft the follow-on legislation to TEA-21, the six-year federal surface transportation legislation, which may substantially affect options and opportunities for using federal transportation funds to build and/or operate similar types of projects.

## 1. Capital Costs

### a. Tax increment Financing Districts

One means of generating revenue for public improvements is through the creation of a special taxing district where increasing increments of property taxes are dedicated to finance or pay the debt service of a specified project. Positive points: easy to formulate a district; growth potential in a developing area; simple to collect; and, has proven itself throughout the United States. Negative aspects: difficulty in gaining support from other affected parties (e.g. school districts).

### b. Business Improvement Districts

Business Improvement Districts are special assessment districts formed to levy and collect funds from property owners in order to finance public improvements such as parking garages. These types of districts generally collects funds based on an assessment per square foot of property within the district. Positive points: direct benefit to those who are paying; proven and tested; and the annual amount is known and secure. Negative aspects: time required to establish and priority of funding if there are multiple projects.

### c. General Obligation (GO) Bonds

GO bonds are the traditional type of bonds issued by government bodies which have authority to generate funds for capital investments. They are backed by the full faith and credit of the government body. Positive points: generally lower interest rates; easily marketed due to high security; understood and respected as a method of financing. Negative aspects: credit analysis can be complex and expensive; delays may increase construction costs; and impacts the government body's borrowing limits.

# Table 7.1
# Funding Options Summary

| Funding Option | Typically Used For | Type of Funding | Primary Project Application | Key Considerations & Limitations |
|---|---|---|---|---|
| Tax Increment Financing (TIF) Districts | Developing areas, especially areas targeted for economic development | Local Taxes | Capital | Must balance with other tax districts |
| Business Improvement Districts | Developing areas, especially areas targeted for economic development | Local Taxes | Capital & Operating | Has lead time, requires prioritizing fund distribution |
| General Obligation Bonds | Large capital projects | Local Taxes | Capital | Requires credit analysis; impact on gov't credit |
| Revenue Bonds | Large capital projects | User Fees | Capital | Requires credit analysis & sufficient facility revenue flow |
| Air Rights Development | Urban area with tight development market | Private / Developer Fees | Capital | Requires developer interest |
| Condominiumization | Urban area with tight development market | Selling of Assets | Capital | Requires developer interest |
| Transportation and Community and System Preservation Pilot Program (TCSP) | Community-based, multi-modal projects | Federal Grant | Capital | Competitive funds; historically 100% Congressional earmarks |
| Public Private Partnerships (PPPs) | Urban area with tight development market | Combined Sources | Capital | Lead time; requires private sector partner |
| Payment-in-Lieu of Development Fund | Urban area with tight development market | Private / Developer Fees | Capital | Requires developer interest |
| Member Items | High profile projects | State Resources | Capital | Requires "champion" in State Legislature |
| Fines/Permits/Parking Tax | New parking facilities; locations with existing fees & permit systems | User Fees | Operating | Costs of enforcement; Possible public resistance |
| Parking Revenues | New parking facilities; locations with existing fees & permit systems | User Fees | Operating | Possible public resistance |
| FTA Section 5309 "New Starts" Program | Transit supportive facilities | Federal Grant | Capital | Competitive funds; requires local match; primarily Congressional earmarks |

## Table 7.1 (continued)
## Funding Options Summary

| Funding Option | *Typical Use* | | *Funding Source* | | | | *Key Considerations* | | |
|---|---|---|---|---|---|---|---|---|---|
| | Capital | Operating | Local Taxes | User Fees | Private | State / Federal Funds* | Private Sector Participation | Special Tax / Assessment Districts | Competitive |
| Tax Increment Financing (TIF) Districts | ✓ | | ✓ | | | | | ✓ | |
| Business Improvement Districts | ✓ | ✓ | ✓ | ✓ | | | | ✓ | |
| General Obligation Bonds | ✓ | | ✓ | | | | | | |
| Revenue Bonds | ✓ | | | ✓ | | | | ✓ | |
| Air Rights Development | ✓ | ✓ | | | ✓ | | ✓ | | |
| Condominiumization | ✓ | | | ✓ | ✓ | | ✓ | | |
| Transportation and Community and System Preservation Pilot Program (TCSP)* | ✓ | | | | | ✓ | | | ✓ |
| Public Private Partnerships (PPPs) | ✓ | | ✓ | ✓ | ✓ | | ✓ | | |
| Payment-in-Lieu of Development Fund | ✓ | | | | ✓ | | ✓ | | |
| Member Items* | ✓ | | | | | ✓ | | | ✓ |
| Fines/Permits/Parking Tax | | ✓ | | ✓ | | | | | |
| Parking Revenues | | ✓ | | ✓ | | | | | |
| FTA Section 5309 "New Starts" Program* | ✓ | | | | | ✓ | | | ✓ |

**May require local and/or state matching funds up to 50%.*

**d. Revenue Bonds**

This is the most common source of funding for financing public parking because the bonds are secured by revenues (i.e., parking fees). This is generally considered riskier than property taxes, however, and may have a higher interest rate if not secured by a government body with taxing authority. Positive points: credit analysis is straight forward; users pay for the facility; default only burdens local tax payers if the government body guarantees the financing; usually no referendum; may not be subject to debt ceiling; promotes good fiscal management; and tax exempt if used for public parking.

**e. Air Rights Development**

This technique involves transferring or selling the rights to construct within the air space above a property or structure in order to develop or finance the cost of construction. The right to build on top of a parking structure, for example, may be sold to a developer seeking to build office space. While not widely used, this strategy has merit within an urban center and is an excellent means of reducing land cost for development. Positive points: creates value for under-utilized space; little downside risk; and parking garage owner usually gains ownership at some point. Negative aspects: limited experience; and willingness of developer and to accept.

**f. Condominiumization**

It may be possible to sell individual parking spaces to individuals or companies and, in a way similar to condominium, establish an owners' association to collect fees to finance management operations, maintenance, security, etc. This option may be particularly attractive to business owners since spaces represent an investment and improvements can be depreciated, offering a tax shelter for businesses. On the other hand, it also requires that the costs associated with building and maintaining parking spaces are perceived by would-be buyers as real and substantial. Positive points: appreciation; private sector pays; and conventional financing if spaces are pre-sold. Negative aspects: front-end expense at risk if project unsuccessful; lack of experience of public sector; and lack of private sector acceptance of concept.

**g. Federal Funds/Transportation and Community and System Preservation Pilot Program (TCSP)**

Federal funds have been used in the past to finance parking structures and TEA-21 established a pilot program that enables grantees to implement or plan activities that investigate and address the relationship between transportation and community and system preservation. FHWA administers the program through a working group which includes FTA and TCSP activities are coordinated with the MPO and/or state transportation planning processes. Positive points: known source of funding, relative ease of administration; and past track record. Negative aspects: limited or restricted use based on federal guidelines; competition for funding; and limited amount of funds.

### h. Public/Private Partnerships (PPPs)

PPPs are a successful method of financing used throughout the U.S. whereby the private and public sectors form a partnership or some type of arrangement which shares the responsibility and profits associated with ownership and operation of a facility. PPPs were initially popularized through UDAG programs of HUD. Positive points: financing by public sector and overall support by the private sector. Negative aspects: funding if private partner becomes insolvent; time required to structure a deal; and potential citizen opposition.

### i. Payment-in-Lieu of Development Fund

In this case, the City would establish a development or parking fund. Developers could contribute to this fund in-lieu of providing parking or other requirements associated with another project within the same jurisdiction. This development fund, in turn, could be used to finance the public parking facility. Positive points: private sector pays; citizen support high; and funding program is relatively simple to plan and administer. Negative aspects: restricts development in a soft market; existing building owners may not support; and relatively few have been implemented.

### j. Member Items

Each year, members of the New York State Legislature obtain funding for various special projects in their districts through "member items," which are special appropriations earmarked in budget bills. Typically, those seeking state funding for projects through member items communicate and work directly with their representative(s) to develop justifications and related information to support the member's request for the special appropriation. The availability and amount of funds available through member items varies from year to year and from member to member.

## 2. Operating Costs

### a. Fines/Permits/Parking Tax

These three techniques represent potential sources to fund operating expenses associated with parking structures and management programs. Fines for parking violations are collected in most cities. It is also common for cities to sell parking permits to both regulate on-street parking and generate revenue. Lastly, parking taxes have become an increasingly popular tool in urban communities with a high number of transient patrons. Positive points: follows user-pay principal; instituted nationally; administration usually in place; and sources of revenue can be increased easily and quickly. Negative aspects: public resistance to fines and taxes; high cost of enforcement and administration; and can discourage use of commercial areas.

### b. Parking Revenues

Parking fees are the single most important source of revenue to cover operating and administrative costs associated with parking facilities. Positive points: general public acceptance; rates can be adjusted as necessary; and voter approval not required. Negative aspects: often insufficient in early years to cover all costs; and, public resistance to rate increases.

**c. Other Sources**

Some sources such as Business Improvement Districts (BID) and Condominiumization can be sources of funds for both Capital Costs and Operating Costs.

## 3. Funding Specific to Transit Aspects of Facility

Certain public transit and transit-supportive facilities may be eligible for capital funding through the **Federal Transit Administration's (FTA) Section 5309 "New Starts" Program**. New Starts funds are usually allocated on an 80% federal/20% non-federal matching basis; however, there are currently Federal efforts to change the allocation to 50%/50%.

Federal law requires that proposed New Starts projects be justified based on several criteria, including the following:

- Mobility Improvements;
- Environmental Benefits;
- Operating Efficiencies;
- Cost Effectiveness;
- Transit Supportive Land Use and Future Patterns; and
- Other Factors, including, among other things, the technical capability of the project sponsor to implement and operate the proposed investment.

In addition, federal law requires that New Starts project sponsors demonstrate adequate local support for the proposed project, as measured by:

- The proposed share of total project costs from sources other than from the Section 5309 New Starts program, including Federal formula and flexible funds, the local match required by Federal law, and any additional capital funding ("overmatch");
- The strength of the proposed project's capital financing plan; and
- The ability of the sponsoring agency to fund operation and maintenance of the entire transit system as planned once the guideway project is built.

In recent years, competition for New Starts funding has grown increasingly fierce, with almost all program funding allocated to Congressional earmarks. Thus, any efforts to obtain New Starts funding for the new facility will not only need to address the criteria listed above,

but also have the strong sponsorship and advocacy of members of the region's Congressional delegation.

# 8. Architectural Renderings of Conceptual Facility Design

Based on the conceptual facility design described in Chapter 2 of this report, the consultant prepared a set of architectural renderings that depict a fully-constructed Glens Falls Transportation Center/Parking Ramp, as shown in the following pages. Assumptions were made regarding design elements such as façade treatments, window placement and other aesthetic features based on the steering committee's stated desire to develop a facility that fit into downtown Glens Falls' architectural and historic character. A total of nine (9) renderings are provided, depicting the conceptual facility from a variety of perspectives and elevations.

In addition, to illustrate how the conceptual facility might "fit" into the Elm Street streetscape, a photosimulation was also prepared (see last image in following pages). This image depicts the conceptual facility as if it were fully constructed on the preferred site and allows decision-makers, stakeholders and residents to understand and appreciate the potential visual and aesthetic impacts of the facility on the existing streetscape.

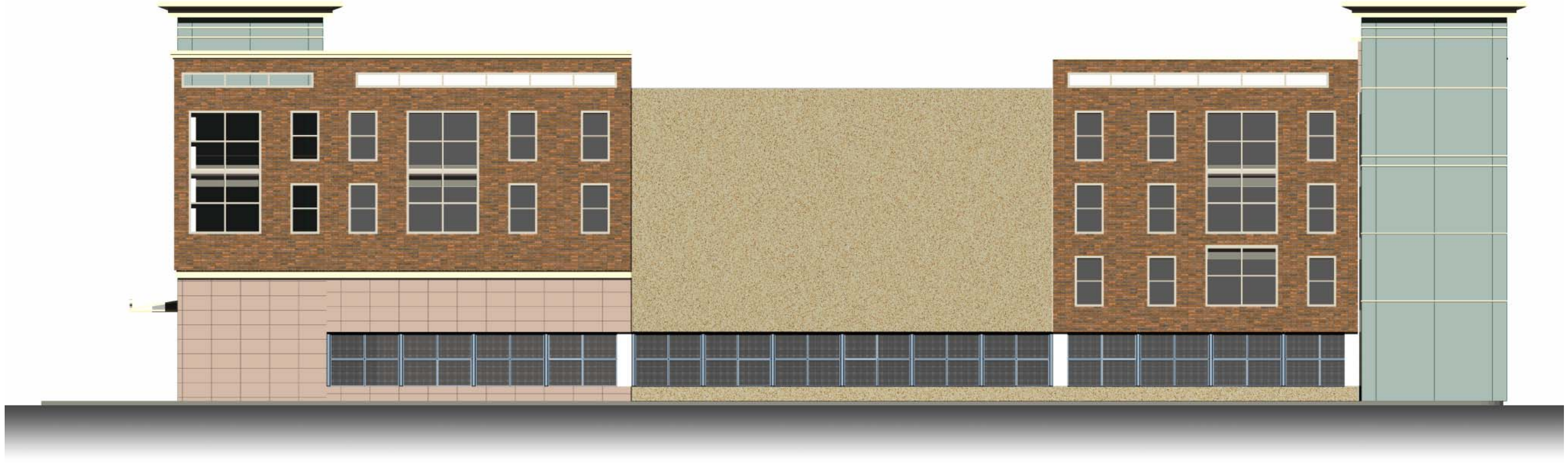
It should be noted that the architectural renderings and photosimulation are conceptual only and do not necessarily depict a final design for the proposed facility. Rather, these images are intended to inform discussions and decision-making regarding next steps in the process for developing the Glens Falls Transportation Center/Parking Ramp.


ELM STREET ELEVATION

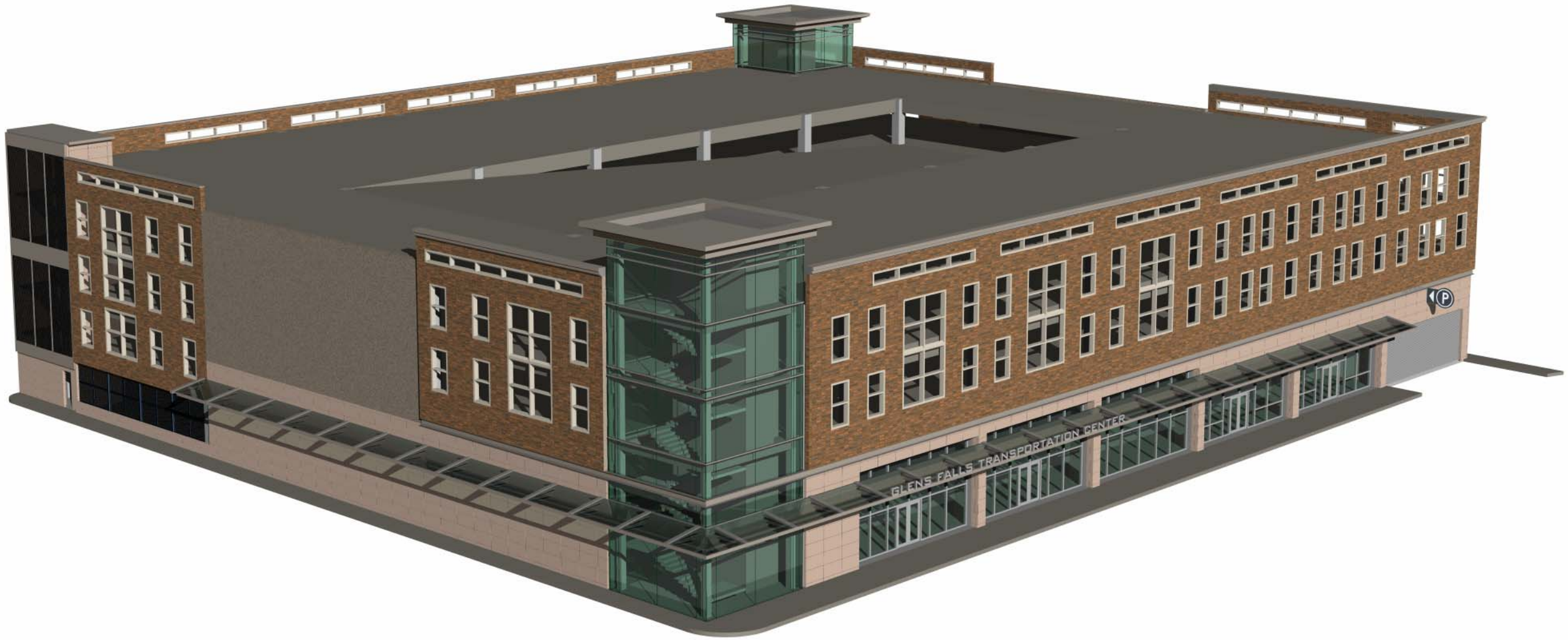
GLEN STREET ELEVATION


PERSPECTIVE FROM ELM STREET

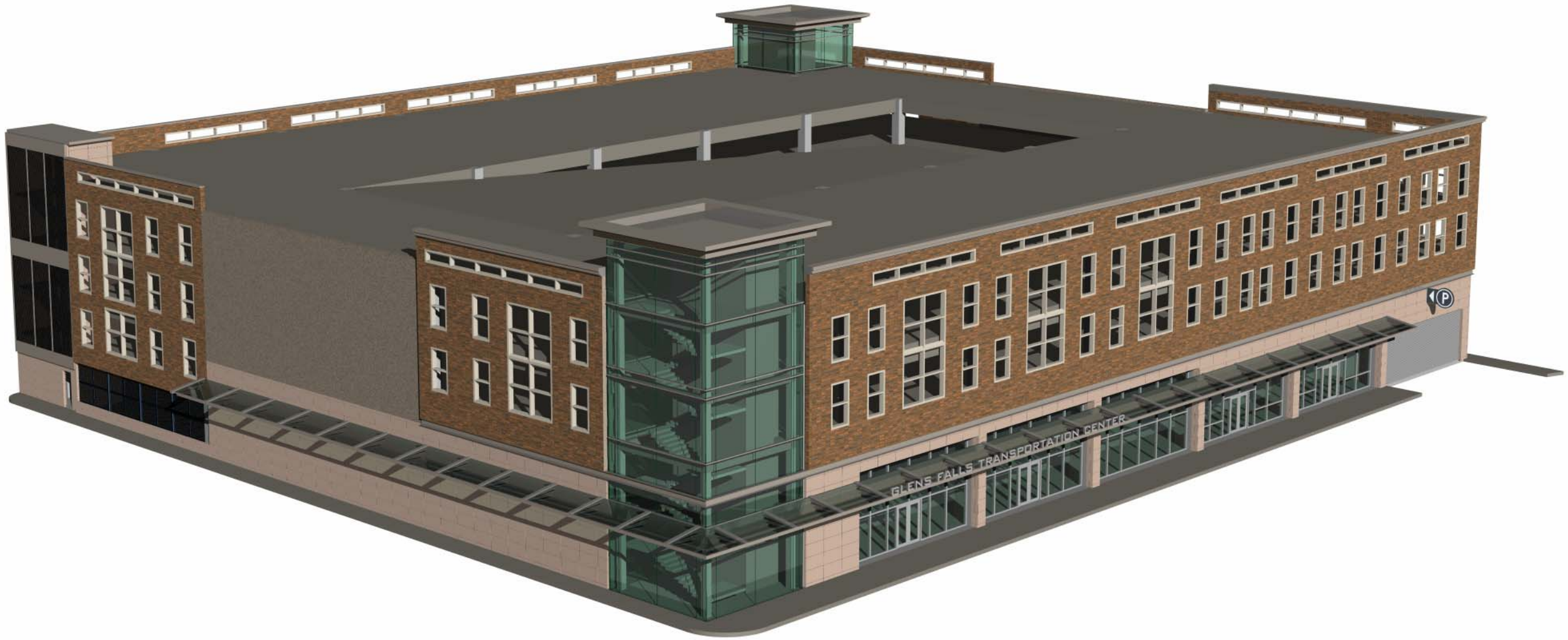

ELM STREET ELEVATION



EXCHANGE STREET ELEVATION



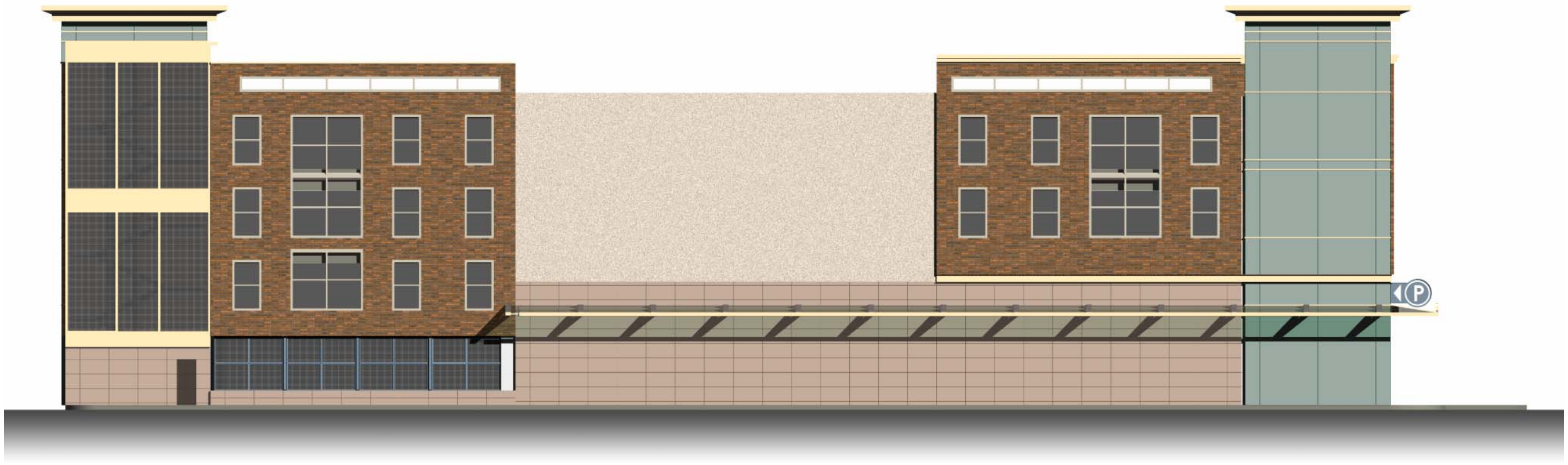

AXONOMETRIC VIEW FROM SOUTH ST. / ELM ST.




AXONOMETRIC VIEW FROM SOUTH ST. / ELM ST.

AXONOMETRIC VIEW FROM GLEN ST. / SOUTH ST.

AXONOMETRIC VIEW FROM ELM ST. / EXCHANGE ST.



SOUTH STREET ELEVATION


Wallace Floyd **Design** Group
Architecture Landscape Architecture Planning Urban Design • 273 summer street boston, massachusetts 02210-1510 • T 617-350-7400 F 617-350-00512 I www.wallacefloyd.com

**Glens Falls Transportation Center**
July 7, 2004

# Appendix A

*Phase 1 Report*

ENGINEERS
PLANNERS
ECONOMISTS
Wilbur Smith Associates

Shelburne Commons
4076 Shelburne Road, Suite 7
Shelburne, Vermont 05482
(802) 985-2530
(802) 985-8175 fax
www.wilbursmith.com

March 3, 2003

Mr. Aaron Frankenfeld, Acting Director
Adirondack/Glens Falls Transportation Council
Washington County Municipal Center, A-204
383 Upper Broadway
Ft. Edward, NY 12828

Mr. James Martin, Director
Economic Development Office
City of Glens Falls
City Hall
Glens Falls, NY 12801

**RE: Downtown Glens Falls Transportation Center Feasibility Study – Phase 1 Report**

Dear Messrs. Frankenfeld and Martin:

On behalf of Wilbur Smith Associates (WSA), I am pleased to present you with the Phase 1 Report on the Downtown Glens Falls Transportation Center Feasibility Study. The purpose of this report is to provide the A/GFTC and City of Glens Falls with preliminary information on facility design concepts and pro forma facility financial information, which will be used by those entities to determine whether to proceed with more detailed and refined facility planning and design.

## *Background*

In October 2002, the A/GFTC and City of Glens Falls contracted with a consultant team led by Wilbur Smith Associates (WSA) to conduct a feasibility study and siting analysis for a Downtown Glens Falls Transportation Center and Parking Ramp. The proposed transit center-parking ramp facility is intended to both be a hub for the Greater Glens Falls Transit (GGFT) system and intercity buses (Greyhound and Trailways) and provide about 500 parking spaces for daily and special events use. In addition, the City desires that the facility include transit-supportive space, such as indoor transit patron waiting areas, and rental retail space with street-level storefronts. It should be noted that WSA did not conduct any independent parking demand analysis for this project; demand estimates are based on information provided by the City of Glens Falls.

For Phase 1, the conceptual design footprint was to be developed without regard to a specific site. Potential facility sites are to be identified and evaluated in Phase 2.

## *Conceptual Design Footprint*

Based on the parking demand and transit operational parameters provided by the City and the Greater Glens Falls Transit System, the WSA team developed a conceptual design footprint for the proposed facility. These are displayed in **Figures 1-3**. The characteristics of the conceptual design characteristics are summarized as follows:

- 250' x 180' footprint (45,000 square feet, or slightly more than 1 acre);
- 4 levels (about 40' total height);
- 525 parking spaces (including disabled spaces on 2 levels);
- Exterior local transit and intercity bus parking (5-7 vehicles) under a canopied roof;
- 2,500 sq. ft. Transportation Center, including:
  - Welcome Center & Waiting Area
  - Restrooms
  - Vending/Newstand
  - Ticketing Counter
  - Manager's Office & Crew Rest Room
  - Utility Space;
- 1,500 sq. ft. Retail Space on street level (assume subdividing into three vendor spaces).

## *Facility Construction Cost Estimate*

Based on national averages and typical costs for facilities similar to that presented in the conceptual design footprint, the estimated capital construction cost for the structure only is about $7.4 million (see **Table 1**). This estimate is based on unit costs of $13,000 per parking space for the parking ramp element and $140 per square foot for the transportation center and retail space elements. **The $7.4 million estimated cost should be considered a planning figure only.** It does not include the costs of any land acquisition, infrastructure modifications, debt financing charges or other legal/development costs. It is also subject to significant revision based on site-specific considerations.

## *Five-Year Facility Operating Costs and Revenues*

**Table 2** displays the five-year estimated operating costs and revenues associated with the parking element of the conceptual facility. In Year 1, the estimated operating revenue is about $578,000, with estimated operating costs of about $210,000. It is assumed these costs will rise by an average of 2 percent annually. **Table 3** displays the breakout of estimated revenue streams from monthly and daily parking uses. **These are planning estimates only, and do not include key cost items that could significantly affect the facility's operating budget, including financing costs and debt service.** In addition, these estimates do not account for major changes to downtown parking demand or transit usage that might occur during the five-year timeframe used for this estimate.

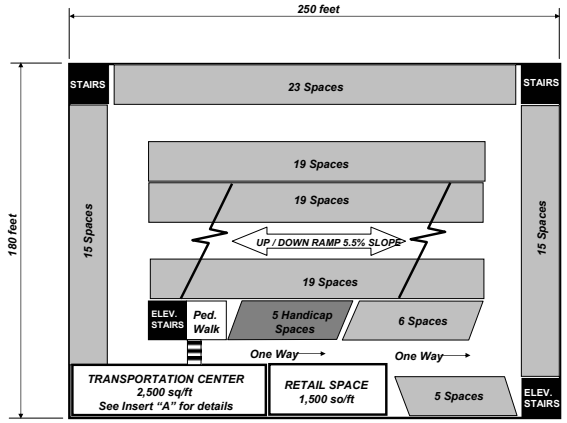
Table 2 does not include any operating costs or revenues associated with the transportation center element of the facility. However, it is reasonable to assume that transportation center operating costs would be relatively minimal. Items that would most significantly affect operating costs would include staffing, janitorial and security services. These costs could vary greatly depending on hours of staffing and intensity of facility usage. Regarding the retail spaces, it is reasonable to assume that rent would cover the costs of maintenance and upkeep of those spaces.

- - - - - - -

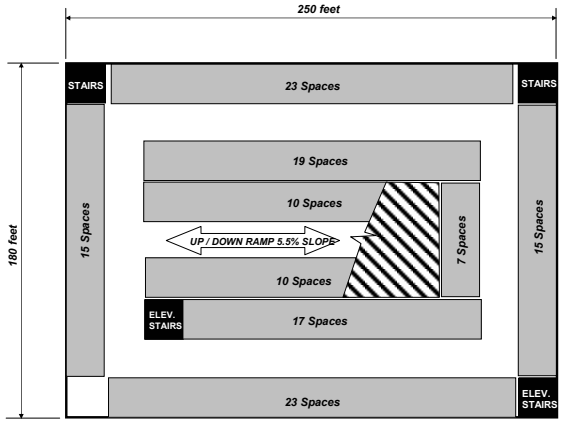
As you know, the information in this report will be discussed in detail during our March 4 steering committee meeting in Glens Falls. Assuming the A/GFTC and City wish to proceed with Phase 2 of this study, WSA is prepared to proceed with the site analysis and design and financial refinement steps needed to develop a buildable facility. Thank you for the opportunity to support the City of Glens Falls and the Greater Glens Falls Region.

Sincerely,
**WILBUR SMITH ASSOCIATES**

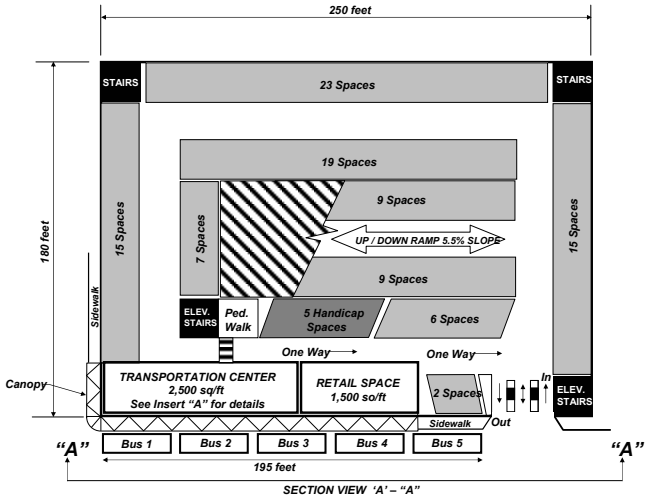
Peter E. Plumeau
Associate-in-Charge



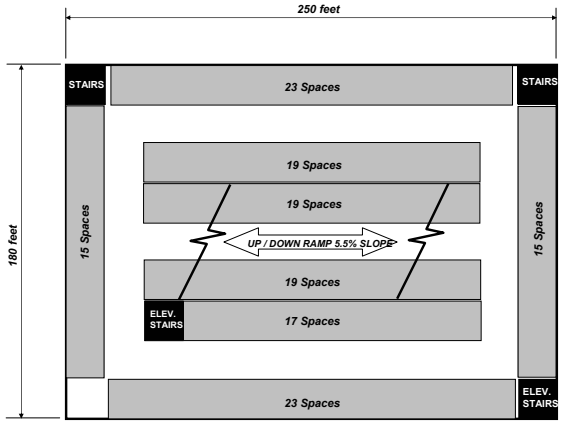

***SECOND LEVEL 126 Spaces***




***ROOF LEVEL 139 Spaces***




***FIRST LEVEL 110 Spaces***

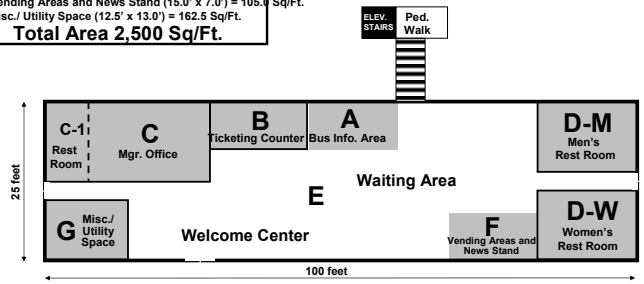



***THIRD LEVEL (Typical) 150 Spaces***

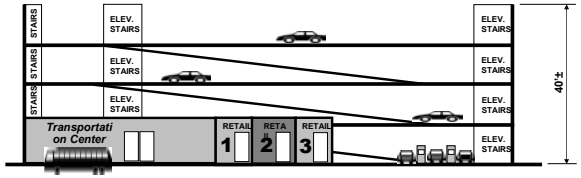
***Note:***
***Length, width, number of spaces, number of floors and efficiency is dependent upon specific site opportunities.***

***Potential Functional Conce***
***TRANSPORTATION CENTI***
*Glens Falls, New York*
*Wilbur Smith Associates*
***January 16, 2003***
***Revised: February 7, 2003*** ***Sheet 1 of***

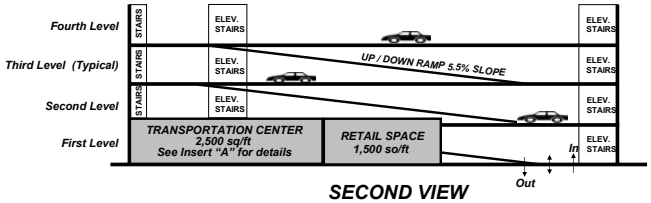
Legend:
A- Bus Info. Area (12.5' x 8.0') = 105.0 Sq/Ft.
B- Ticketing Counter (17.7' x 7.0') = 119.0 Sq/Ft.
C- Mgr. Office (12.5' x 20.0') = 250.0 Sq/Ft.
C-1 Restroom (12.5' x 8.0') = 100.0 Sq/Ft.
D-M Men's Restroom (15.0' x 12.5') = 187.5 Sq/Ft.
D-W Women's Restroom (15.0' x 12.5') = 187.5 Sq/Ft.
E- Waiting Area / Welcome Center = (1,283.5 Sq/Ft. and
F- Vending Areas and News Stand (15.0' x 7.0') = 105.0 Sq/Ft.
G-Misc./ Utility Space (12.5' x 13.0') = 162.5 Sq/Ft.
**Total Area 2,500 Sq/Ft.**




## Insert "A"
## TRANSPORTATION CENTER
**Conceptual Layout to Show Function and Scale**
***Scale: 1 inch = 10 feet***

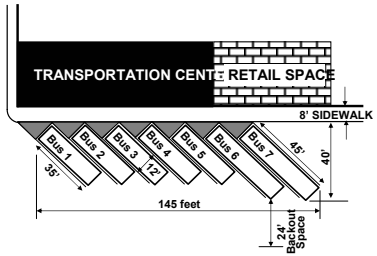



***FIRST VIEW***



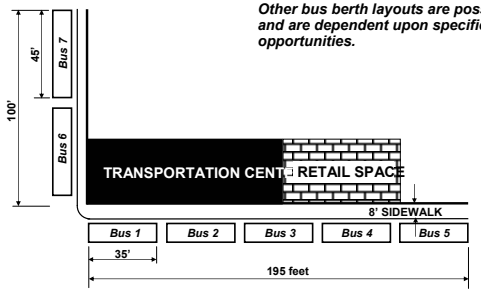

***SECOND VIEW***

## SECTION VIEW "A-A"
***Horizontal Scale: 1 inch = 30 feet***
***Vertical Scale: 1 inch = 14 feet***




## ALTERNATE BUS PARKING LAYOUT
## (45 Degrees)
***Scale: 1 inch = 30 feet***

***Note:***
***Other bus berth layouts are possible and are dependent upon specific site opportunities.***

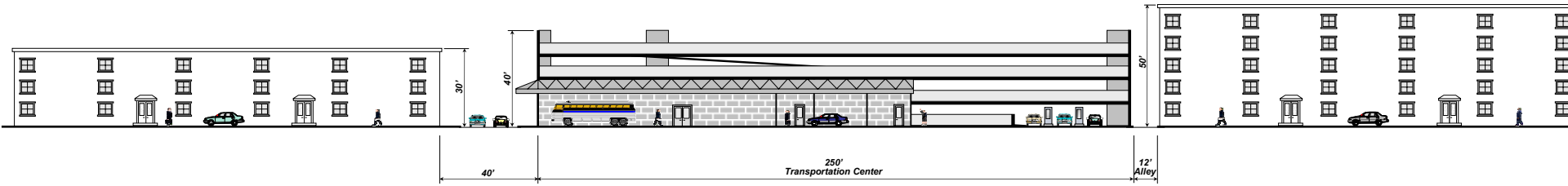



## ALTERNATE BUS PARKING LAYOUT
## Parallel Parking
***Scale: 1 inch = 30 feet***

***Fourth Level ……. 139 Spaces***
***Third Level (Typical)….. 150 Spaces***
***Second Level…… 126 Spaces***
***First Level…… 1 1 0 Spaces***

***GARAGE TOTAL …… 525 Spaces***
***GARAGE EFFICIENCY 330 sq/ft per space***

***Potential Functional Conc***
***TRANSPORTATION CENT***
*Glens Falls, New York*
*Wilbur Smith Associates*
***January 16, 2003***
***Revised: February 7, 2003***




***TRANSPORTATION CENTER IN CONTEXT WITH OTHER BUILDING***

*Glens Falls, New York*

*Wilbur Smith Associates*

*Scale: 1" = 20'*

***February 7, 2003*** ***Sheet 3 of 3***

**TABLE 1**

**TRANSPORTATION CENTER**
**GLENS FALLS, NY**
**CONCEPTUAL FACILITY DESIGN**

**ESTIMATED CAPITAL COSTS - STRUCTURE ONLY**

***FOR DISCUSSION ONLY***

***Parking Element Cost Estimate***

| Spaces | Cost per Space* | Estimated Total |
|---|---|---|
| 525 | $13,000 | $6,825,000 |

***Transportation Center Element Cost Estimate (including retail space)***

| Square Footage | Cost per Sq. Foot* | Estimated Total |
|---|---|---|
| 4,000 | $140 | $560,000 |

**Estimated Total Capital Cost - Structure Only**

| | |
|---|---|
| Parking Spaces | $6,825,000 |
| Transportation Center | $560,000 |
| ***Estimated Total*** | **$7,385,000** |

***Notes:***

*Includes contingency factor
Does not include land acquisition, infrastructure modifications, debt financing charges or other legal/development costs.
Not site-specific

## TABLE 2

## GLENS FALLS TRANSPORTATION CENTER FEASIBILITY STUDY - PHASE 1
## CONCEPTUAL FACILITY DESIGN

## PRO FORMA OPERATING REVENUE & COST ESTIMATE

***FOR DISCUSSION ONLY***

| Facility Element | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Five-year Total |
|---|---|---|---|---|---|---|
| ***Operating Revenue*** | | | | | | |
| Parking | $578,340 | $589,907 | $601,705 | $613,739 | $626,014 | **$3,009,705** |
| ***Operating Cost*** | | | | | | |
| Parking | $210,000 | $214,200 | $218,484 | $222,854 | $227,311 | **$1,092,848** |
| **Net Revenue/Cost** | **$368,340** | **$375,707** | **$383,221** | **$390,885** | **$398,703** | **$1,916,856** |

***Notes :***

Not site-specific

Does not include any financing or debt service costs

Based on information provided by City of Glens Falls - no independent needs or economic analysis conducted

Assumes 90% average parking occupancy

All figures in current (2003) dollars

Assumed 2% annual growth in operating revenues and costs

**TABLE 3**

**TRANSPORTATION CENTER**
**GLENS FALLS, NY**
**CONCEPTUAL FACILITY DESIGN**

**PRO FORMA OPERATING REVENUE ESTIMATE**

***FOR DISCUSSION ONLY***

| % of spaces | Total # of spaces | Average occupancy rate | Revenue per space | Revenue basis | Annual revenue | Notes |
|---|---|---|---|---|---|---|
| 70% | 368 | 90% | $60 | monthly | $238,140 | Monthly permit holders |
| 30% | 158 | 90% | $8 | daily | $340,200 | Equivalent of 300 days/year |
| 100% | 525 | 90% | | | $578,340 | |

Assumptions:

Not site-specific

Monthly/daily parking ratio based on typicals of similar facilities in other jurisdictions - subject to adjustment

Per unit revenue figures based on typicals of similar facilities in other jurisdictions - subject to adjustment

# Appendix B

## *Candidate Site Evaluation Matrix and Site Evaluation Results*

# GLENS FALLS DOWNTOWN TRANSPORTATION CENTER/PARKING RAMP

## CANDIDATE SITE EVALUATION MATRIX - REVISED 7/11/03

| | Priority Level | | Elm St. Lot | Individual Rating[1] | Prioritized Rating[2] | Hudson Ave. & Glen St. | Individual Rating | Prioritized Rating | Civic Center Plaza | Individual Rating | Prioritized Rating | Clinton/School Streets Lot | Individual Rating | Prioritized Rating | Evergreen Bank/Washington St. | Individual Rating | Prioritized Rating |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SITE EVALUATION CRITERIA | 1 | **Ownership** | Public - City | 1 | 1 | Public Roadway abutted by private property | 1 | 1 | Public/private mix; Need to provide commercial space and parkign to displaced businesses | 3 | 3 | Public with private rights-of-way | 3 | 3 | Private; need to provide parking to owner if land is sold. | 5 | 5 |
| | 1 | **Parking & Bus Passenger Proximity to Central Downtown Area** | Good access to downtown. 1,000'± walk to Library, City Hall, and Senior housing. 2,000'± walk to Civic Center | 1 | 1 | Good access to downtown. 2,000'± walk to Library, City Hall, Senior housing and Civic Center. | 1 | 1 | Fair access to downtown. Short walk to City Hall, Senior housing and Civic Center. 2,000'± walk to Library. Must cross Hudson/Glen intersection to access most amenities | 3 | 3 | 3,000'± walk to Library and Downtown. | 5 | 5 | 2,000'±walkto Library. 3,000'± walk to Downtown, City Hall and senior housing. 4,500'± walk to Civic Center. | 3 | 3 |
| | 1 | **Pedestrian Access** | Acceptable. Could be better from Glen and Exchange Streets. | 3 | 3 | Acceptable. Access would need to be in the location of existing sidewalks. | 3 | 3 | Good from both Glen St. and Hudson Ave. Good pedestrian connections to Ridge via Linear park, if cross walk is added on Hudson. Long delays at crosswalks around five corners would need to be corrected. | 1 | 1 | Acceptable from Clinton and Elm. | 3 | 3 | Good from Washington and Maple, with good connections to Glen St. | 1 | 1 |
| | 1 | **Facility Access and Egress for Vehicles** | Easy auto access from Elm and Glen St. Bus access convenient from west only; Tight access for buses due to narrow lanes on Elm St. | 3 | 3 | Easy access from five corners and Hudson Ave for auto and bus. | 5 | 5 | Easy access for right turn movement for bus and auto from Glen St. and Warren Ave. Left turns difficult across Glen (3 lanes) and Warren (2 lanes). | 5 | 5 | Acceptable access for autos; tight access for buses due to narrow lanes on Elm & Clinton Sts. | 3 | 3 | Easy access for auto and bus from Washington St. and from Maple St. for autos. | 1 | 1 |
| | 1 | **Context Sensitivity** | Proximity to rear of buildings on Glen St. and Exchange St. is an important issue. Potential for more pedestrian space in the alley. Can fit into facades on Elm St. | 1 | 1 | Bridging building over road could create a discordant façade | 5 | 5 | Proper design could add interesting mass to five corners area. May be possible to use the slope and portions of lower site to expand capacity. Potential to add small shops near heart of downtown. | 1 | 1 | Building mass could work well with adjacent buildings. | 1 | 1 | Structure would work well with buildings on Maple St. Parking structure may be out of scale for smaller residential (existing or former) structures on north side of Washington St. Use may not be compatible with residences on Washington | 5 | 5 |
| | 1 | **Transit Center/Bus Operations Interface** | Acceptable - location of transit center potential conflicts between north side toward on-site drop-off, or south side to face street. | 3 | 3 | Transit center on adjacent property | 3 | 3 | Acceptable - buses adjacent off-street. | 3 | 3 | Acceptable - buses adjacent on-street. | 3 | 3 | Good - buses adjacent off street. | 1 | 1 |
| | 2 | **Facility Traffic Impacts on Downtown** | Potential for some traffic impacts due to access on Elm Street. | 3 | 6 | Some disruption due to covering of Hudson Avenue | 3 | 6 | Potential for traffic impacts with left turns and access on primary roadways. | 5 | 10 | Potential for some traffic impacts on Downtown due to use. | 3 | 6 | Minimal traffic impacts on Downtown traffic. | 1 | 2 |
| | 2 | **Environmental Considerations** | Good shade trees on site. Potential hazardous waste | 3 | 6 | Potential hazardous waste | 1 | 2 | Potential hazardous waste | 1 | 2 | Potential hazardous waste | 1 | 2 | Potential hazardous waste. | 1 | 2 |
| | 2 | **Private Property Impacts/Needs** | Minimal | 1 | 2 | Could affect circulation on adjacent properties | 3 | 6 | Requires relocation of existing business and associated parking. | 5 | 10 | Could disrupt rights-of-way | 3 | 6 | Requires replacing private parking spaces; Some modification to bank drive-in. Compensation to landowner needed. | 3 | 6 |
| | 2 | **Bus Operations at Facility** | Potential for good bus circulation on-site | 1 | 2 | No turn around one way circulation. | 5 | 10 | Potential for acceptable bus circulation on-site. | 3 | 6 | Acceptable - circulation offsite | 3 | 6 | Potential for good bus circulation around parking garage on-site. | 1 | 2 |
| | 2 | **Site Preparation/Utilities Considerations** | Drainage. | 1 | 2 | Utilities in street must work with foundations. Overhead wires | 5 | 10 | Drainage; potential retaining walls; foundation issues; demolition of other buildings | 5 | 10 | Overhead wires; demolition of other buildings | 3 | 6 | Overhead wires | 3 | 6 |
| | 2 | **Bus Routing Considerations** | Central location in downtown; proximate to Glen St. & library | 1 | 2 | Central location in downtown | 3 | 6 | Central location in downtown; proximate to Civic Center | 1 | 2 | Fringe of central downtown area | 5 | 10 | Fringe of central downtown area; long walks to Civic Center. | 3 | 6 |
| | | TOTAL: | | | 32 | | | 58 | | | 56 | | | 54 | | | 40 |

**[1]Individual Ratings:**

**1 - Good**

**3 - Acceptable**

**5 - Poor**

**The lower the overall score, the more suitable the site.**

**[2]Prioritized rating = Individual Rating x Priority Level**

**PRINTED 7/14/2003**

# GLENS FALLS DOWNTOWN TRANSPORTATION CENTER/PARKING RAMP

## CANDIDATE SITE EVALUATION MATRIX - REVISED 7/11/03

| | Priority Criteria | | Elm St. Lot | Individual Rating | Prioritized Rating | Hudson Ave. & Glen St. | Individual Rating | Prioritized Rating | Civic Center Plaza | Individual Rating | Prioritized Rating | Clinton/School Streets Lot | Individual Rating | Prioritized Rating | Evergreen Bank/Washington St. | Individual Rating | Prioritized Rating |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SITE CHARACTERISTICS | | **Displaced Public Parking Spaces** | 94 | | | 0 | | | 50 | | | 38 | | | 75 | | |
| | | **Proposed Spaces** | 488 | | | 364 | | | 436 | | | 379 | | | 490 | | |
| | | **Net New Spaces** | 399 | | | 364 | | | 386 | | | 341 | | | 415 | | |
| | | **Proposed Parking Levels** | 5 | | | 7 | | | 4 | | | 5 | | | 5 | | |
| | | **Typical Spaces per level** | 113 | | | 58 | | | 131 | | | 92 | | | 115 | | |
| | | **Proposed Building Height** | 50 | | | 78 | | | 40 | | | 50 | | | 50 | | |
| | | **Garage Efficiency ( s.f./space)** | 368 | | | 440 | | | 351 | | | 330 | | | 366 | | |
| | | **Transportation Center Space** | Yes | | | Yes (on existing Greyhound site) | | | Yes | | | Yes | | | Yes | | |
| | | **Commercial Space** | Yes | | | No | | | Yes | | | No | | | Yes | | |
| | | **Number of Bus Berths (5 local & 2 intercity desired)** | 7 - Off Street | | | 4 - On Street | | | 5- Off Street | | | 5-On Street | | | 7-Off Street | | |
| | | **Construction Cost** | To Be Determined | | | To Be Determined | | | To Be Determined | | | To Be Determined | | | To Be Determined | | |

# Appendix C

*Alternative Designs for Elm Street Site*


# FUNCTIONAL LAYOUT - ALTERNATE A

## ELM STREET TRANSPORTATION CENTER

SEPTEMBER 29, 2003
WILBUR SMITH ASSOCIATES


GLEN STREET
SOUTH ST.
CLINTON ST.
ONE WAY
ELM ST.
EXCHANGE ST.
HUDSON AVE.
N
DRIVEWAY
30'
ELEV.
TRANSPORTATION CENTER
2500 S.F.
RETAIL
1500 S.F.
40'
DRIVEWAY
APPROX. SCALE IN FEET
0
20
40
FUNCTIONAL LAYOUT -
ALTERNATE B
ELM STREET TRANSPORTATION CENTER
SEPTEMBER 29, 2003
WILBUR SMITH ASSOCIATES


# FUNCTIONAL LAYOUT - ALTERNATE C

## ELM STREET TRANSPORTATION CENTER

SEPTEMBER 29, 2003
WILBUR SMITH ASSOCIATES


# FUNCTIONAL LAYOUT - ALTERNATE D

## ELM STREET TRANSPORTATION CENTER

SEPTEMBER 29, 2003
WILBUR SMITH ASSOCIATES


GLEN STREET
SOUTH ST.
CLINTON ST.
ONE WAY
ELM ST.
EXCHANGE ST.
HUDSON AVE.
N
TRANSPORTATION CENTER
20000 S.F.
RETAIL
1500 S.F.
ELEV.
STAIRS
DRIVEWAY
RAILWAY
FUNCTIONAL LAYOUT -
ALTERNATE E
ELM STREET TRANSPORTATION CENTER
SEPTEMBER 29, 2003
WILBUR SMITH ASSOCIATES